

**Wandoan Coal Project  
Addendum to the Technical Report  
Non-Indigenous Cultural  
Heritage Assessment  
Southern Coal Seam Methane (CSM)  
Water Supply Pipeline**

**A report to:  
Parsons Brinckerhoff  
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## TABLE OF CONTENTS

<b>Executive Summary .....</b>	<b>iv</b>
<b>1.0 Introduction .....</b>	<b>1</b>
1.1 Project Description and background .....	1
1.2 Purpose of the assessment .....	1
1.3 Methodology .....	2
1.4 Regulatory Framework .....	2
<b>Refer to the EIS technical report, as given in EIS Volume 2, Chapter 20B Non-Indigenous Cultural Heritage technical report TR 20B-1-V1.5. ....</b>	<b>2</b>
<b>2.0 Heritage Assessment .....</b>	<b>3</b>
2.1 Limitations.....	3
2.2 Desktop Research.....	3
<i>Refer to the EIS technical report, TR 20B-1-V1.5.....</i>	<i>3</i>
2.2.1 Database consultation.....	3
<i>Refer to the EIS technical report, TR 20B-1-V1.5.....</i>	<i>3</i>
2.2.2 Mapping .....	3
2.2.3 Community Consultation .....	3
2.2.4 Historical context.....	3
2.2.6 Establishing and developing towns .....	6
2.2.7 Exploiting natural resources.....	7
2.2.8 Developing transport and communication networks .....	7
2.2.9 Educating a rural community.....	7
2.2.10 Summary .....	8
2.3 Field inspection .....	8
2.3.1 Results.....	8
<b>3.0 Significance, Potential Impacts and Mitigation Measures .....</b>	<b>9</b>
3.1 Significance .....	9
3.2 Potential Impacts .....	9
3.3 Mitigation Measures and Recommendations.....	9
<i>Figure 2-1 The Non-Indigenous cultural heritage sites near the entire Southern CSM Water Supply Pipeline Route .....</i>	<i>10</i>
<b>4.0 References .....</b>	<b>11</b>

### List of Figures

Figure 2-1 The Non-Indigenous cultural heritage sites near the entire Southern CSM Water Supply Pipeline Route.....	10
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### Attachments

Refer to previous technical report.

## Executive Summary

As part of the Wandoan Coal Project, Bonhomme Craib & Associates (BCA) was commissioned by Parsons Brinckerhoff to prepare a non-Indigenous Cultural Heritage Assessment for the proposed Southern Coal Seam Methane (CSM) Water Supply Pipeline route for the EIS. The purpose of the assessment was to gain an understanding of the historical heritage values that may be impacted by the proposed pipeline.

After the EIS was submitted for public comment an Addendum to the EIS Technical Report was prepared. The submission comments received on the EIS, regarding cultural heritage and the historical context of the region, have been considered for this Addendum.

Changes to the proposed route of the pipeline, particularly in the northern section between the northern end of Baileys Road to the MLA area boundary, have also been considered in this report.

The following recommendations are made:

- A cultural heritage management plan should be implemented to address the management of any historical items/material which may be located during clearing or construction work.

The mitigation measures and recommendations satisfy the statutory responsibilities and duties of care, including those under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the *Queensland Heritage Act 1992* and consider the community interest and concern as expressed during consultation.

## **1.0 Introduction**

For the Wandoan Coal Project, the Wandoan Joint Venture (WJV) proposes to develop thermal coal resources situated immediately west of the Wandoan township, located in the Dalby Regional Council area. The Project will include on-site coal handling and processing which will require a constant and reliable water supply. Bonhomme Craib & Associates (BCA) was commissioned by Parsons Brinckerhoff to prepare a non-Indigenous Cultural Heritage Assessment for the proposed Southern Coal Seam Methane (CSM) Water Supply Pipeline route for the EIS.

After the EIS was submitted for public comment an Addendum to the EIS Technical Report was prepared. This report has considered submission comments received on the EIS, regarding non-indigenous cultural heritage and the historical context of the region, as well as changes to the proposed route of the pipeline.

### ***1.1 Project Description and background***

Following further public consultation with landowners after submission of the EIS, a portion of the southern CSM water supply pipeline has been realigned.

Two options are currently being considered for the supply of raw water to the Project for mine operations. One of these options is the use of by-product water from coal seam methane (CSM) extraction from gas fields south of Miles. For this to occur, a new pipeline is needed to transfer CSM by-product water from the Condamine Power Station, north to the MLA areas.

The proposed route commences at the Condamine Power Station and progresses in a northerly direction to an existing high voltage transmission line easement, heading west until it intersects with the Leichhardt Highway. A turn to the north is made and the proposed pipeline travels along the eastern side of the road reserve of the Leichhardt Highway, crossing the highway into the road reserve of Baileys Road and continuing north. At the intersection of Baileys and Giligulgul Roads, the proposed pipeline proceeds in a north-east direction within the road reserve. Where Giligulgul Road intersects with the Leichhardt Highway, the alignment turns into the road reserve of the Leichhardt Highway on the western side and progresses in a northerly direction until the south-eastern corner of Lot 3 FT695. At this point, the proposed alignment traverses this allotment in a northerly direction to enter the MLA areas at the south-east corner (Figure 1-1).

This route differs from the route initially assessed in Volume 2 of the EIS, particularly in the northern section between the northern end of Baileys Road to the MLA area boundary. These differences have been assessed and included in this report.

### ***1.2 Purpose of the assessment***

The assessment was designed to investigate any potential or known non-Indigenous cultural heritage and historical sites that may potentially be impacted by the proposed pipeline.

### ***1.3 Methodology***

The assessment included a review of available desktop information data sources and consultation with agencies and communities affected by the proposal.

### ***1.4 Regulatory Framework***

Refer to the EIS technical report, as given in EIS Volume 2, Chapter 20B Non-Indigenous Cultural Heritage technical report TR 20B-1-V1.5.

## **2.0 Heritage Assessment**

A desktop study was prepared to describe the historical context and to identify any known historical resources, building on the information provided in the EIS technical report.

### ***2.1 Limitations***

Refer to the EIS technical report, TR 20B-1-V 1.5.

### ***2.2 Desktop Research***

Refer to the EIS technical report, TR 20B-1-V 1.5.

#### **2.2.1 Database consultation**

Refer to the EIS technical report, TR 20B-1-V 1.5.

#### **2.2.2 Mapping**

PB provided high resolution satellite imagery of the proposed realignment of the southern CSM water supply pipeline route for a desktop assessment. This was examined using the ArcReader programme enabling high resolution of features. The desktop inspection of the imagery confirmed that no historical structures were directly impacted by the proposed route.

#### **2.2.3 Community Consultation**

Submissions to the Coordinator-General received on the EIS have been considered in this Addendum to the Technical Report.

#### **2.2.4 Historical context**

Refer to the EIS technical report, TR 20B-1-V 1.5.

#### **2.2.5 Developing rural economies**

The following section should be read in conjunction with the EIS technical report, with information provided below either superseding or augmenting the EIS technical report.

#### ***Surveying and exploiting the landscape***

In 1844 Leichhardt entered the Wandoan district on his way north to the Upper Dawson and the Fitzroy District.<sup>1</sup>

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<sup>1</sup> Queensland Department of Environment and Heritage, *South-eastern Queensland Historical Cultural Heritage Scoping Study*, Government Printer, Brisbane, 1998, p. 24.

He named and crossed the Dawson, the Exhibition Range and the Comet region. His journey inspired further exploration by people like the Archer brothers who played a significant role in the settlement of the Bumett area. By the late 1840s the western Darling Downs was being settled. Mitchell and Kennedy had explored the Condamine and Balonne Rivers and Allan McPherson followed Mitchell's route to establish a station at Mt Abundance in 1847.

### ***Establishing pastoral empires***

Refer to the EIS technical report, TR 20B-1-V 1.5.

### ***Encouraging selection, closer settlement***

Between 1860 and 1894 a series of Bills were passed which aimed at opening the land for closer settlement. The objective was to create a viable economic basis for future development of the colony, to be achieved via a combination of land reform, developing transport infrastructure [railways] and encouraging immigration. The *Alienation of Crown Lands Act 1868* was an attempt to unlock land for agriculturalists by breaking up the runs. Large tracts of land were resumed from the pastoral holdings and the resumed sections were open for selection.

The conditions for working the properties were onerous and the government was forced to introduce the *Crown Lands Act* of 1884 which provided grazing farms where many selectors were able to acquire enough land to allow them to make a living. The *Agricultural Lands Purchase Act 1894* saw the government investing in Crown Land. The purchased land was sold to selectors in the 1890s and early 1900s. The drought of 1899 – 1902 accelerated the rate of subdivision of pastoral properties.<sup>2</sup> The principle affect of the land repurchases was the establishment of dairying as a viable commercial activity and an altered landscape as land was cleared, roads built, wells sunk, railways built and townships established.

The Agricultural Bank was established in 1902 and began providing funds to selectors. This coupled with the *Closer Settlement Act of 1906* with government support for dairying, opened up land and saw an influx of people into the Wandoan district. Following World War I, as prickly pear became a problem for selectors, many were forced to surrender their selections. The *Prickly Pear Selection Act of 1908* offered land in the hope that the selectors could clear the pear. The issue of prickly pear is the single most dominant factor affecting the development of the region. The history of prickly pear eradication is summarised here.<sup>3</sup>

The introduction of prickly pear to Australia occurred in 1788, arriving with the first fleet. Over the next 80 years, prickly pear spread from Botany Bay to Rockhampton in the north and Blackall in the west, infesting the land and rendering it useless for agriculture and grazing.

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<sup>2</sup> QDEH, Scoping Study, 1998, pp. 37 - 41

<sup>3</sup> The information contained in this section is a brief summary of; Donald Freeman, Prickly Pear Menace in Eastern Australia 1880-1940, *Geographical Review*, Vol.82, No.4, *American Geographical Society*, 1992, p.413-429 and J. G. Rechner, *Taroom Shire: Pioneers, Magic Soil and Sandstone Gorges*, Taroom Shire Council, 2003, p.163-164.



Prickly pear became an ecological disaster and at the height of the infestation (around 1925-26) approximately 250 000 square kilometers of land was infected; 80% of the land being in Queensland. Initial government response to the spread of prickly pear was slow. The pear was drought resistant, providing feed for cattle in hard times and thus was tolerated. By 1887 though, local authority boards began to declare that prickly pear was a 'nuisance'. By 1893, it was added to the list of noxious weeds.

The first legislation that mentioned prickly pear was the *Crown Lands Act of 1895*. The Act allowed for an exemption for rent payable on areas of grazing farms that were infested with pear. Selectors who cleared prickly pear were considered to have 'improved' the property and could expect compensation for their efforts upon termination of their lease.

The *Queensland Land Act 1897* also required selectors to clear the land of prickly pear however, subsequent legislation compelled tenants to eradicate prickly pear on their holdings or forfeit their leases.

This type of government legislation was ineffective for a number of reasons; tenants came to realize that clearing pear was a full time job with little time left over for making a living from farming, tenants near the end of their lease had little incentive to keep the land free of pear, the costs of clearing pear were crippling for many selectors, land overrun with pear was then overlooked for re-selection, and crown lands adjoining leases became overrun with pear which provided a ready source for re-infestation of the tenants land.

Between 1900 and 1923 further legislation was enacted to attempt to eradicate the prickly pear infestation. Initially, legislative and fiscal measures were implemented and involved the traditional labour-intensive methods of hand clearing. *The Prickly Pear Selection Act 1901* reflected these measures where by tenants were offered the deed to the land if it was kept free of pear. Prickly pear is a spiny plant causing pain and irritation to unprotected skin and consequently, hand clearing was a difficult, expensive and largely ineffective task. Some settlers had to 'walk off' their land as the prickly pear infestation had taken over and it was impossible to farm or graze cattle profitably. Even the floods, droughts and frost had no effect on the plants.

Further legislation was enacted (*The Land Act of 1910* and others) offering perpetual leases on pear infested land with rewards for keeping the land clear of pear and forfeiture of leases if the pear was not cleared.

After 1912, poisons were imported and supplied to land holders at a subsidized rate. A poisons experiment station was established at Dulacca on the western Darling Downs and trials of poisons were conducted to ascertain the most effective treatment for prickly pear. Arsenic pentoxide was the preferred poison but proved expensive, often in short supply and fraught with serious health and environmental side effects. Farmers found that if they used the poison for too long, they would break out in sores and have to wait for them to heal before they could use the poison again.

The prickly pear grew into an impenetrable mass reducing roads in the region to narrow one way winding tracks. The road from the *Cockatoo* homestead to Wandoan was merely a track through the pear, as was the Shire's main road from Taroom to Wandoan. Wandoan township

was so badly infested that paths had to be cut through the prickly pear to enable customers to get to the shops. In the early 1920s, parents of Wandoan school children had to constantly ensure that their children were able to get to school and had an area free of pear that they could play in. A thick prickly pear jungle surrounded Wandoan, and all roads leading from the town were just sets of tracks through prickly pear.

A biological agent was considered the last hope to halt this environmental disaster and at the time, the 1920s, there was little evidence of effective biological control programs anywhere in the world.

In 1927, after years of unsuccessful biological trials, a breakthrough in the form of *Cactoblastis cactorum* (prickly pear moth) occurred. Following laboratory testing of the suitability of the moth it was initially taken to Chinchilla for field testing where a local infestation was the first to be totally destroyed by the insect. Initially, the insect was distributed by putting five or six pear leaves full of *Catoblastis* grubs in an old kerosene tin and sending them by rail to anyone who requested them. The land owner/lessee then took the grubs and placed them in a pear plant and waited. Later, scientists found the eggs could be easily handled and transported and the insect was distributed as eggs from this time.

The effects of this insect on the prickly pear infestation were rapid and unprecedented. For example by 1930, 2000 square kilometers of farming land at Chinchilla had been devoured by the insect and cleared of prickly pear. Over 220 million *Cactoblastis cactorum* eggs had been distributed to land holders free of charge and released on Crown land.

By 1934, an ecological balance between numbers of *Cactoblastis cactorum* and the numbers of prickly pear plants had been established resulting in workable land largely free of prickly pear. The reclaimed land was opened up for selection under perpetual lease and selections in the Mining Lease Areas were again taken up. At Boonarga, twelve kilometres southeast of Chinchilla, there is a timber hall called the *Cactoblastis* Memorial Hall, which was erected in 1936 in honour of the *Cactoblastis* moth.

The Wandoan Closer Settlement Scheme (1952), a joint Commonwealth and State Government venture and then later the State run Group Lands Scheme (1954), were schemes introduced with the aim of re-establishing World War II servicemen onto resumed land to pursue agricultural activities. Over 100 farms in the Taroom/Wandoan region were balloted.<sup>4</sup> Wheat became an important crop in the Downfall–Gulugaba area in the 1940s and later in other areas around Wandoan.<sup>5</sup>

## **2.2.6 Establishing and developing towns**

### ***Selecting town sites***

Refer to the EIS technical report, TR 20B-1-V 1.5.

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<sup>4</sup> L. Golden, *Daughters of the Dawson*, Taroom Shire Council, 1999, p. 90-91.

<sup>5</sup> Rechner, *Taroom*, p.163-164.

### **2.2.7 Exploiting natural resources**

Refer to the EIS technical report, TR 20B-1-V1.5.

### **2.2.8 Developing transport and communication networks**

#### ***Establishing roads and rail***

Refer to the EIS technical report, TR 20B-1-V1.5.

#### ***Providing postal, telegraphic and telephone services***

Refer to the EIS technical report, TR 20B-1-V1.5.

### **2.2.9 Educating a rural community**

State involvement in primary education began in the mid 19<sup>th</sup> century with the establishment in New South Wales of the National School system. This commitment to public education saw the introduction of the *1875 Education Act* which established a system of subsidised primary education. <sup>6</sup> Mrs. Blackley of Juandah established a school in the main room of the Juandah store in 1911 after gaining approval from the Department of Education. After 1950 and the introduction of the Soldier Settlement Scheme, several schools were established in the district. The Grosmont School provided education to the Soldier Settlement children around Wandoan. The Peek a Doo School is located south-west and Cockatoo Creek School was located south-east of Wandoan Township. <sup>7</sup>

In 1916, Gulugaba locals began to petition the Education Department for schooling for the children of Gulugaba and Downfall Creek. The railway goods shed was used as a classroom and in 1917 the Gulugaba Provision School opened. As the numbers of enrolments increased there was a greater need for a more permanent arrangement. The school building at Juandah School was moved to Gulugaba and opened fulltime as State School No 1549 during 1920. Many of the pupils were the children of the railway gangers. The school has survived the closure of the rail and the changes in population and the decline of the town and is still operation.

During the construction of the rail from Miles to Taroom, Giligulgul was a main rail workers camp. The influx of railway workers and their children meant establishing a school was important. Requests were made to have some of the town allotments reserved for a school. The YMCA had established a camp and they offered the tent for a daytime school. The Giligulgul Tent School opened in 1914. In 1915 the railway goods shed became the school. As the construction of the rail line moved north most workers moved to Gulugaba and the school population declined. The school eventually closed in 1928. <sup>8</sup>

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<sup>6</sup> QDEH, *Scoping Study*, p.70.

<sup>7</sup> Rechner, *Taroom*, p.248-252.

<sup>8</sup> *Ibid.*, p. 243-247.

### **2.2.10 Summary**

The historical context has indicated that the proposed route is located in areas that may contain items relating to the development of closer settlement, the 20<sup>th</sup> century development of road and rail infrastructure and resource extraction, such as timber getting.

The revised northern portion of the proposed pipeline route mainly follows road reserve. Cultural heritage items located on the reserves may include main road survey trees and other survey markers, telegraph poles, and low level wood bridges. The proposed route was selected to avoid impacts on houses and outbuildings and as such, structures are unlikely to be impacted.

### **2.3 Field inspection**

For the purpose of this Addendum to the Technical Report, no field inspection was undertaken of the revised northern portion of the pipeline alignment. High resolution satellite imagery of the proposed realignment of the southern CSM water supply pipeline route was examined. This desktop inspection of the imagery confirmed that no historical structures were directly impacted by the proposed route.

The majority of the revised portion of the proposed pipeline route falls in the Leichhardt Highway road reserve and the likelihood of cultural heritage items occurring in the disturbed road easement is considered low.

#### **2.3.1 Results**

Refer to the EIS technical report for cultural heritage items identified along the proposed pipeline route from the Condamine Power Station to the northern end of Baileys Road.

No further cultural heritage items were identified in the revised northern portion of the proposed pipeline route between the northern end of Baileys Road to the MLA area boundary.

For the purpose of this Addendum to the technical report, the revised map of the proposed pipeline route is provided in Figure 2-1, providing an overview of the entire southern CSM water supply pipeline alignment.

## **3.0 Significance, Potential Impacts and Mitigation Measures**

### ***3.1 Significance***

Refer to the EIS technical report.

### ***3.2 Potential Impacts***

Refer to the EIS technical report.

### ***3.3 Mitigation Measures and Recommendations***

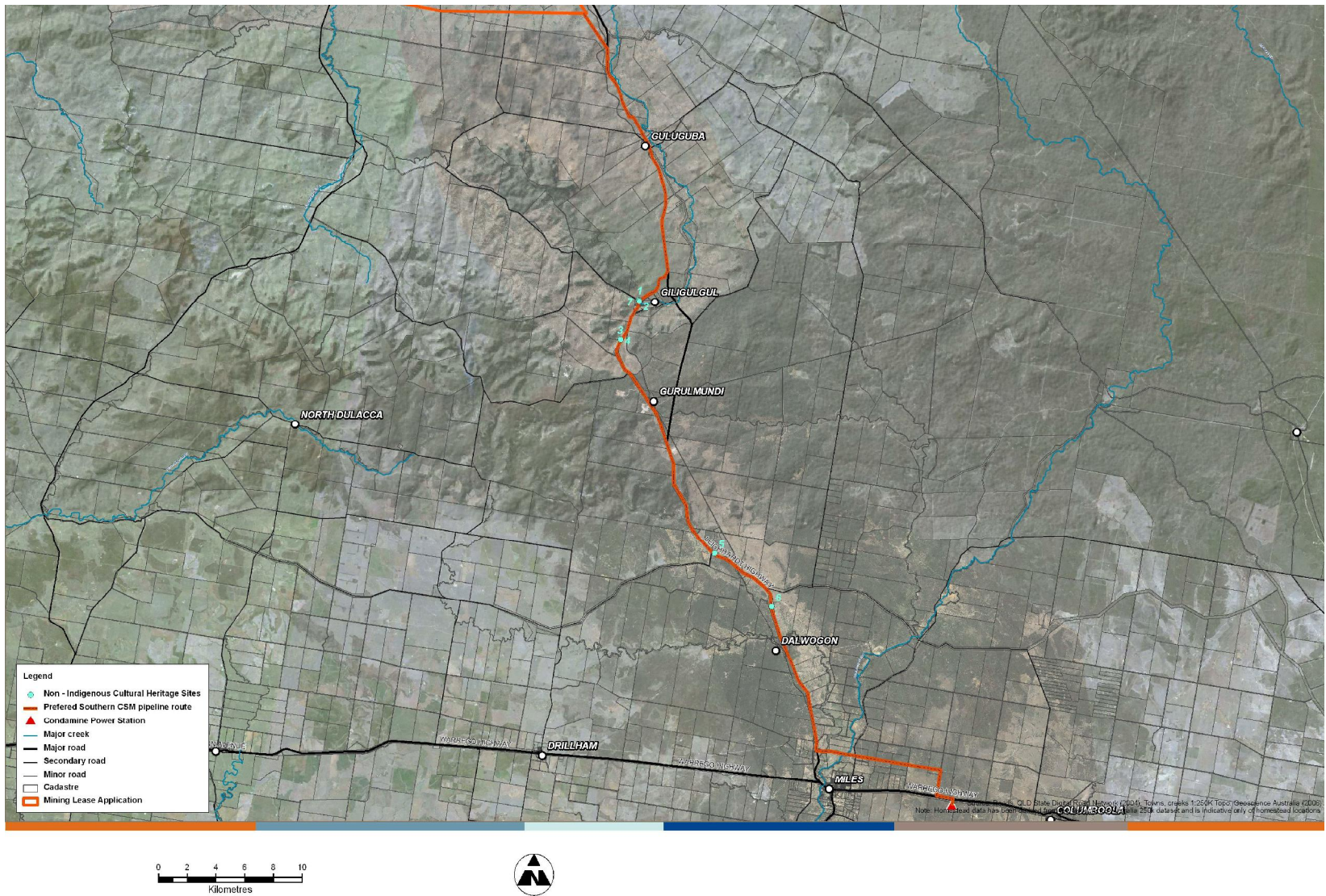
The aim of heritage management is to try to mitigate the negative impacts of a proposed development on any known or potential historical resources.

The following recommendations are made:

- a cultural heritage management plan should be implemented to address the management of any historical items/material which may be located during clearing or construction work.

The mitigation measures and recommendations satisfy the statutory responsibilities and duties of care, including those under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the *Queensland Heritage Act 1992* and consider the community interest and concern as expressed during consultation.





**Figure 2-1 The Non-Indigenous cultural heritage sites near the entire Southern CSM Water Supply Pipeline Route**

## 4.0 References

Freeman, Donald. 'Prickly Pear Menace in Eastern Australia 1880-1940', *Geographical Review*, 82, 4, *American Geographical Society*, 1992.

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