Australia Pacific LNG Project

Volume 3: Gas Pipeline

Chapter 19: Non-Indigenous Heritage

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19. Non-Indigenous heritage

19.1 Introduction

19.1.1 Purpose

This chapter describes the potential effects of constructing and operating the gas pipeline element of the Australia Pacific LNG Project (the Project) on non-indigenous (shared) cultural heritage. It also identifies suitable management and mitigation measures to minimise impacts. The assessment of potential impacts has been conducted in accordance with the environmental impact statement (EIS) terms of reference for the Project. The detailed non-indigenous cultural heritage assessment is provided in Volume 5 Attachment 40.

The Project will involve transporting gas produced from coal seam gas (CSG) fields in the Surat and Bowen basins to the liquefied natural gas (LNG) facility on Curtis Island near Gladstone via a buried high pressure main gas transmission pipeline (the gas pipeline).

The gas pipeline includes two lateral pipelines that connect to gas processing facilities at Condabri near Miles and Woleebee approximately 50km south-west of Wandoan. It also includes the marine crossing of Port Curtis at The Narrows between the mainland and Curtis Island. Australia Pacific LNG proposes to use horizontal directional drilling to establish the marine crossing. The fall-back option for the pipeline crossing is trenching by marine dredging, in the event that horizontal directional drilling is not possible.

Development of the gas pipeline has the potential to impact on non-indigenous cultural heritage sites located within the gas pipeline corridor. Australia Pacific LNG's sustainability principles will be applied to the planning, design, construction and operation of the gas pipeline to ensure such impacts are avoided or minimised where possible.

In the preparation of the EIS and going forward with the Project, Australia Pacific LNG will be guided by its 12 sustainability principles when identifying potential impacts the Project may have on non-indigenous heritage values and sites, and in the development and implementation of mitigation measures. Of these 12 sustainability principles, those relevant to non-indigenous heritage include:

- Minimising adverse environmental impacts and enhancing environmental benefits associated with Australia Pacific LNG's activities, products or services; conserving, protecting, and enhancing where the opportunity exists, the biodiversity values and water resources in its operational areas
- Respecting the rights, interests and diverse cultures of the communities in which Australia Pacific LNG operates
- Engaging regularly, openly and transparently with people and communities affected by its activities, considering their views in its decision-making and striving for positive social outcomes
- Working cooperatively with communities, governments and other stakeholders to achieve positive social and environmental outcomes, seeking partnership approaches where appropriate.

Under these principles, non-indigenous heritage values are reflected in a number of ways. Australia Pacific LNG has consulted widely during this assessment to identify, avoid, protect and manage non-

indigenous sites. Australia Pacific LNG commits to implementing appropriate procedures to further identify, avoid, protect and/or record areas of significant heritage value.

These principles guide the way in which Australia Pacific LNG proposes to mitigate any potential impacts that the Project may have to non-indigenous shared heritage values and sites. Australia Pacific LNG commits to identifying and avoiding, protecting and/or recording areas of significant heritage value or likely to contain artefacts and/or human remains.

19.1.2 Scope of work

The specific aims of this non-indigenous heritage assessment are to:

- Identify historical themes relevant to the non-indigenous use of the gas pipeline study area
- Identify known non-indigenous heritage sites within the gas pipeline study area
- Assess the likelihood of further items of heritage significance occurring in the gas pipeline study area
- Assess the significance of sites located in the gas pipeline study area, in terms of these meeting criteria defined for inclusion in local, state or national heritage registers
- Provide advice on appropriate measures for the mitigation of impacts to identified heritage sites, appropriate to their level of significance
- Propose a methodology for the management of non-indigenous heritage sites identified during construction of the gas pipeline.

19.1.3 Legislative framework

In Queensland, both Commonwealth and Queensland legislation protects non-indigenous heritage sites. The following section discusses both Queensland and Commonwealth legislation of relevance to this assessment.

Commonwealth legislation

Three pieces of Commonwealth legislation serve to protect Australia's heritage. These are the *Environment Protection and Biodiversity Conservation Act 1999,* the *Australian Heritage Council Act 2003* and the *Historic Shipwrecks Act 1976.* The Commonwealth authority responsible for the administration of this legislation is the Department of the Environment, Water, Heritage and the Arts.

Environment Protection and Biodiversity Conservation Act

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides protection for items and places with World, National or Commonwealth heritage values. It is the primary piece of Federal environmental legislation in Australia, providing the legal framework for the protection and management of nationally and internationally recognised flora, fauna, ecological communities and cultural heritage places defined under the Act as being of national significance.

Nominated or listed cultural heritage sites can be protected under this Act, either through inclusion on the National Heritage List or, on the Commonwealth Heritage List if these are within Commonwealth land or waters.

The criteria used for inclusion on the National (and Commonwealth) Heritage List include:

- Importance in the course of Australia's natural or cultural history.

- Possession of uncommon or endangered aspects of Australia's natural or cultural history.
- Potential to contribute to an understanding of Australia's natural or cultural history.
- Importance in demonstrating the key characteristics of a class of natural or cultural places.
- Importance in exhibiting aesthetic characteristics valued by a community or cultural group.
- Importance in demonstrating creative or technical achievement at a particular period.
- Special association with a particular community for social, cultural or spiritual reasons.
- Special association with the life or works of persons of importance in Australia's history
- Importance as part of Indigenous tradition.

Australian Heritage Council Act

The *Australian Heritage Council Act 2003* established the Australian Heritage Council, as the principal advisory body to the Australian Government for heritage matters, particularly in relation to administering the heritage registers now created under the EPBC Act. It replaced the Australian Heritage Commission, the authority previously responsible for assisting in the administration of Commonwealth Heritage legislation. The role of the Australian Heritage Council is to:

- Assess heritage items and places for inclusion in the National Heritage List or Commonwealth Heritage List
- Advise the Minister in relation to the inclusion of places in, and the removal of places from, the List of Overseas Places of Historic Significance to Australia
- Advise the Minister about matters relating to the condition of places included in the National Heritage List or Commonwealth Heritage List
- Advise the Minister about the Commonwealth's responsibilities for historic shipwrecks
- Promote the identification, assessment, conservation and monitoring of heritage
- Keep the Register of the National Estate.

The National Heritage Places Inventory is maintained by the Department of the Environment, Water, Heritage and the Arts and contains summary information about places listed in state, territory and Commonwealth heritage registers and lists. It is an online, searchable database.

Historic Shipwrecks Act

The *Historic Shipwrecks Act 1976* protects shipwrecks and associated relics more than 75 years old in Commonwealth waters. All wrecks are recorded in the Australian National Shipwrecks Database with details of their location, if known. Each of the states and the Northern Territory has complementary legislation for state waters including bays, harbours and rivers. The Minister for the Environment can also make a determination to protect historically significant wrecks or relics less than 75 years old.

Queensland cultural heritage legislation

The Queensland body responsible for non-indigenous cultural heritage protection is the Cultural Heritage Branch of the Department of Environment and Resource Management (DERM). It keeps a register of significant heritage places and sites (known as the Queensland Heritage Register) and administers the *Queensland Heritage Act 1992.*

Queensland Heritage Act

For non-indigenous heritage, the *Queensland Heritage Act 1992* provides specific pathways to protection. Its stated aim is 'to provide for the conservation of Queensland's cultural heritage for the benefit of the community and future generations'.

The Queensland Heritage Register is a record of Queensland heritage places and protected areas and since amendments in 2008 also includes archaeological sites. Register entries include details of the boundaries of the area or place, its history, a description of its fabric and whether it is the subject of a heritage agreement.

The development of state heritage listed sites requires government approval. Section 68 of the Act provides for the assessment of development applications for heritage listed sites under the *Sustainable Planning Act* 2009 (discussed in Volume 1 Chapter 2) to be consistent with the purposes of the *Queensland Heritage Act 1992*.

Not all places and objects of heritage value are known prior to development. This is particularly the case with archaeological sites, which are sometimes unearthed during construction. A person must advise the Chief Executive about any archaeological artefacts that are discovered and considered an important source of information about an aspect of Queensland's history. Once artefacts have been reported under the Act, it is an offence to interfere with these artefacts.

Places of heritage significance are not always listed on the register, but may be known to members of the public. A place can be nominated for inclusion on the Queensland Heritage Register at any time. The Minister may issue a stop order to protect from damage any place (entered within the register or not) considered to be of cultural heritage significance.

The *Queensland Heritage Act 1992* deals only with non-indigenous heritage places and those with joint indigenous and non-indigenous values.

National Trust of Queensland Act

Listing by the Queensland National Trust under the *National Trust of Queensland Act 1963* provides a major indication of a community's feeling about the value of individual buildings, precincts, natural environment places or culturally-significant artefacts. However, despite being established by an Act of parliament, listing on the Register of the Queensland National Trust provides no legal protection for places or buildings, or an obligation to owners to conserve these properties.

The Burra Charter, adopted in 1979 by the Australian Chapter of the International Council of Monuments and Sites (ICOMOS), defines the basic principles and procedures to be followed for the conservation of Australian heritage places, and became a guide for inclusion on the National Trust Register. The Charter has wide-ranging application for heritage protection in Australia, defining conservation as '…the processes of looking after a place so as to retain its cultural significance' (Article 1.4). A place is considered 'significant' if it possesses aesthetic, historic, scientific or social value for past, present or future generations (Article 1.2). Conservation of a place should identify and take into consideration all aspects of its cultural significance without unwarranted emphasis on any one aspect at the expense of others (Australia ICOMOS 1999).

Local government legislation

Amendments to the *Queensland Heritage Act 1992* introduced in 2008, required local government agencies to establish registers of heritage places.

A further amendment also provides for the integration of Queensland and local government assessment and approval processes under the Integrated Development Assessment System of the *Sustainable Planning Act 2009* (Section 121 *Queensland Heritage Act 1992* and Schedule 3 of the Sustainable Planning Regulation 2009). Sites listed on local and Queensland government heritage schedules within the Project area are subject to assessment provisions specified under this Act.

19.2 Methodology

19.2.1 Literature review

To ensure a thorough identification and assessment of the potential impacts the proposed development may have on the heritage values of the gas pipeline study area, a number of methods were employed including desktop research, consultation and site survey. These methods are further detailed below:

- Literature review including use of on-line resources and so on
- A search of the Australian Heritage Places Inventory for listed sites of international and national significance (World Heritage List, National Heritage List and Register of the National Estate)
- A search of the Queensland Heritage Register
- A search of the register of the National Trust of Queensland
- A search of the Origin cultural heritage database
- A search of data in heritage studies previously carried out in the region through which the gas pipeline passes
- A search of data in EIS cultural heritage assessments previously carried out in the area
- Requests for information to local councils and historical societies
- Publicly available books and histories
- Discussions with individuals and organisations with an interest in the region's heritage
- Localised field survey along the gas pipeline route, in areas where landowner access had been granted.

A contextual history of the area has been provided and previous studies reviewed. Site information from the various site databases and data sources have then been collated and mapped. This provides a predictive context for site types likely to occur in the vicinity of the gas pipeline route.

Field survey

Field investigations were conducted in the vicinity of Miles, Cracow, Biloela, Callide Range, Mount Alma, Targinie, Friend Point and Curtis Island. Much of the activity was confined to road reserves in the southern portions of the gas pipeline route (due to limitations as detailed below), although detailed field inspections were undertaken in forests near Cracow and the Callide Range, where land access had been provided. No non-indigenous sites were detected as a result of these field studies.

More intensive investigations were undertaken in the area around Port Curtis. A water-based survey took place around the coastline of Friend Point and in Graham Creek. A number of items of non-indigenous heritage were identified and these are documented in this report. A land-based survey of

portions of the gas pipeline route at Laird Point was undertaken, leading to the documentation of several heritage sites on Curtis Island.

Consultation

Information about non-indigenous heritage sites along the gas pipeline route came from a wide range of sources including that from consultation with long-term residents involved in the collection of and involvement with local history. Many of the sites residents identified were recorded in no other source, or were only known from vague written references. Additionally, representatives of organisations charged with protecting heritage sites, including Regional Council officers and the National Trust of Queensland, provided valuable insights into the listed sites along the route. The people contacted as part of this investigation are listed in Table 19.1.

Table 19.1 List of heritage contacts

Contact	Organisation or location	Region
Beryl and Harold Rennick	Chinchilla Field Naturalist Club	Miles district
Beryl Dwyer	Chinchilla	Miles district
Merlene Coates Freeman	Miles and District Historical Village and Museum Committee	Miles district
Dinah Frazer	Wandoan Heritage Society	Wandoan District
Hilda Heffernan	Miles and District Historical Village and Museum Committee	Miles district
Dr Val Dennis Heritage Information Officer	National Trust of Queensland	Entire gas field area
Information officer	Maranoa Regional Council	Southern portion of gas pipeline area
Information officer	Western Downs Regional Council	Southern portion of gas pipeline area
Amy Lockyer	Banana Shire Council	Banana Shire
Information Officer	Calliope River Historical Village	Port Curtis and hinterland
Information Officer	Gladstone Regional Council	Gladstone district
Neville Robertson-Hughes	Gladstone Maritime Museum	Gladstone district
Danny Aischlemann	Gladstone Maritime Museum	Gladstone district
JW Harris	Gladstone	Curtis Island, Gladstone, Calliope region
Information Officer	Miriam Vale Museum	Miriam Vale district
Dr Val Dennis Heritage Information Officer	National Trust of Queensland	Entire gas pipeline corridor

Assessing site significance

The evaluation of site significance undertaken in this study is based upon a framework identified in the Burra Charter which urges consideration of the aesthetic, historic, scientific, social and spiritual values of places in the past, present and in the future (Australia ICOMOS 1999). Within this framework, the significance assessment of locations identified within a 10km radius of the proposed gas pipeline route has been carried out using criteria laid down in Section 35 of the *Queensland Heritage Act 1992* to identify heritage items of state significance. These criteria are:

- The place is important in demonstrating the evolution or pattern of Queensland's history
- The place demonstrates rare, uncommon or endangered aspects of Queensland's cultural heritage
- The place has potential to yield information that will contribute to an understanding of Queensland's history
- The place is important in demonstrating the principal characteristics of a particular class of cultural places
- The place is important because of its aesthetic significance
- The place is important in demonstrating a high degree of creative or technical achievement at a particular period
- The place has a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons
- The place has a special association with the life or work of a particular person, group or organisation of importance in Queensland's history.

In addition to locations deemed to be of national, state or local significance, and recognised through their listing within relevant heritage lists and registers, there are other sites that do not meet register listing criteria, yet still provide a setting in which to understand the historical land use of a region. These sites, while adding to the understanding of a region's past land use, do not uniquely add to that understanding. These sites are described in some recent studies (e.g. Archaeo Cultural Heritage Services 2009) as being of 'historical interest.' This heritage value does not warrant the level of protection necessary for sites of local, state and national heritage significance.

In addition to the criteria specified in the *Queensland Heritage Act 1992* for the assessment of site significance, archaeological sites can also be assessed using additional criteria. These address the scientific values of archaeological sites and refer to site integrity, site contents and site structure.

19.2.2 Study area

The gas pipeline study area, which includes the pipeline route, is centred within a 10km wide buffer zone that traverses a diverse range of landscapes between the CSG fields near the central Queensland town of Miles and the LNG facility on Curtis Island, off the central Queensland coast. The gas pipeline passes through undulating downs of the Brigalow Belt around Miles, Wandoan and Taroom. This area was formerly covered with dense brigalow (Acacia harpophylla) scrub, but is now substantially cleared for agriculture and cattle grazing. The gas pipeline route crosses the Great Dividing Range east of Wandoan and the Calliope and Callide Ranges to the east of Biloela. In the Barakula area to the east of the gas pipeline route is the Barakula State Forest, predominantly vegetated with ironbark and cypress forests. To the west of the gas pipeline route is Precipice and Isla Gorge National Parks.

The line skirts the northern edge of the Mount Larcom Range then crosses The Narrows, a 1.5km channel separating the mainland at Friend Point from Laird Point on Curtis Island. The Narrows channel is subject to rapid water flow at the change of tide and shifting shoals have resulted in the grounding of numerous vessels (hence the need to consider shipwreck legislation).

19.3 Non-indigenous heritage values

19.3.1 Historical context

The existing environmental values and shared heritage sites present in the gas pipeline study area have been shaped by the complex history of exploration and settlement of the regions traversed by the gas pipeline. There are a number of key themes which help establish an understanding of the historical context of the gas pipeline study area and the resulting shared heritage values. These themes are:

- Exploration and mapping
- Contact with indigenous people
- Pastoral settlement
- Closer settlement
- Resource extraction
- Prickly pear
- War and depression
- Navigation of The Narrows.

Figure 19-1 shows the historic Leichhardt Tree in Taroom, with 'LL 44' carved within it. These are the initials of the region's first European explorer, Ludwig Leichhardt, who carved it in 1844.

Figure 19-1 Leichhardt Tree, Taroom

All of these aspects of history contribute to an understanding of the non-indigenous use of the gas pipeline study area and provide a context in which to evaluate known heritage sites and predict the location of potential heritage sites within it. A detailed discussion of the gas pipeline study area's history in the context of the key themes is provided in Volume 5 Attachment 40.

19.3.2 Heritage sites

Site information includes sites listed on Commonwealth, national and Queensland heritage registers and local heritage lists. Local heritage sites are sometimes included in a local heritage register or else a heritage overlay or a schedule of historic cultural places used in local planning schemes. The National Trust of Queensland lists additional sites, while others are identified from local histories, previous heritage surveys, conversations with local people, and fieldwork carried out for this review as detailed in the methodology.

A number of existing non-indigenous heritage studies and reports were reviewed to identify relevant information for this assessment. These provide valuable information on the history of land use in the region and provide site lists that indicate the range and distribution of heritage sites that might be expected in the gas pipeline study area. Key studies and reports reviewed for this assessment are outlined in the non-indigenous technical report in Volume 5 Attachment 40.

Figure 19-2 a and Figure 19-2 b show the non-indigenous cultural heritage sites identified along the gas pipeline corridor.

Registered sites

Some sites within the gas pipeline study area are registered on Commonwealth, national and Queensland heritage lists and are listed in the Australian Heritage Places Inventory and associated contributing lists such as the World Heritage List, National Heritage List, Queensland Heritage Register and the Register of the National Estate (with much overlap), although none are affected by the proposed development. Kilburnie Homestead site (near Biloela) is the only site listed within the Queensland Heritage Register. The homestead site is situated 2.2km to the north of the gas pipeline route, although the boundary of the property is approximately 300m from the gas pipeline. Details of registered sites are provided in Table 19.2.

Table 19.2 Registered non-indigenous heritage sites of significance

Site name	Location (proximity to gas pipeline route)	Source	Description
Great Barrier Reef World Heritage Area	Crossed by gas pipeline	World Heritage List, indicative listing for the National Heritage and Commonwealth Heritage lists and Register of the National Estate.	Curtis Island (World Heritage Land) and surrounding waters (World Heritage Marine)
Kilbirnie Homestead	531 Argoon-Kilburnie Road Jambin, near Biloela (2.5km north of gas pipeline route)	Queensland Heritage Register, Register of the National Estate	Scotsman John Campbell arrived in 1873 to work as overseer at Dumgree station. He later acquired a flock and took-up a section which had been part of Dumgree and named it Kilburnie. (Perry 2005:39).

Site name	Location (proximity to gas pipeline route)	Source	Description
			The complex includes the in situ house built in 1903, a prior house (used as a separate kitchen wing), fencing, sheds and gravesites. The site relates to early pastoral station life and to the resumption of portions of stations as smaller sections and includes association with generations of the Campbell family.

National shipwrecks database

Under-sea pipeline construction may impact the maritime sites, including shipwrecks. There have been a number of shipwrecks in the Gladstone Harbour area. Although the majority of sites are not located between Gladstone and Curtis Island, the consideration of potential impacts is important. Known wrecks in the Gladstone area are detailed in the non-indigenous technical report at Volume 5 Attachment 40, noting that the precise location of wrecks is not always known. Some of the vessels from these shipwrecks were repaired and remained in service, although items from these vessels may have been lost overboard. Shipwrecks more than 75 years old gain automatic protection under the *Historic Shipwrecks Act 1976.* Wrecks within the National Shipwreck Database from the Port Curtis area include a number lost around Curtis Island and these are shown in Figure 19-2 c.

Several additional shipwrecks to those registered were identified from research conducted by the Gladstone Maritime Museum. These are not of sufficient age to have gained automatic protection under the Shipwrecks Act, although these are of value to the local heritage. The vessel details reported from this region are also illustrated in Figure 19-2 c.

Other sites of heritage significance

Sites listed in local heritage registers and planning schemes, those listed by the National Trust of Queensland and others recorded in local histories and heritage studies are outlined in the non-indigenous heritage technical report at Volume 5 Attachment 40. In some cases while the sites have been identified, the exact locations are unknown. Proximity to the gas pipeline route has been calculated for each site. While some of these sites may not meet register listing criteria, the sites still provide a setting for understanding the historical land-use of a region.

The map series below illustrate the location of identified heritage sites along the gas pipeline corridor.

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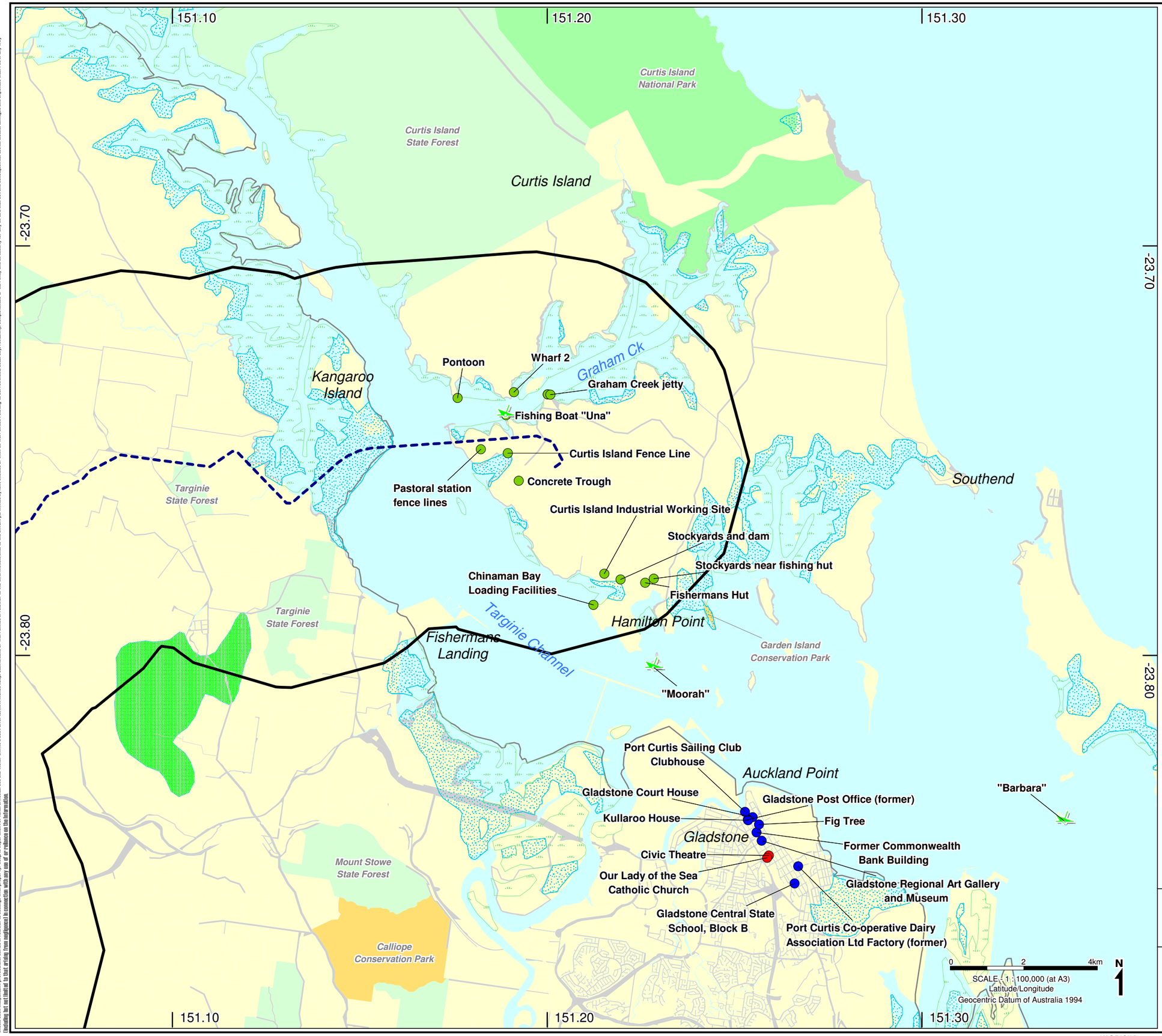

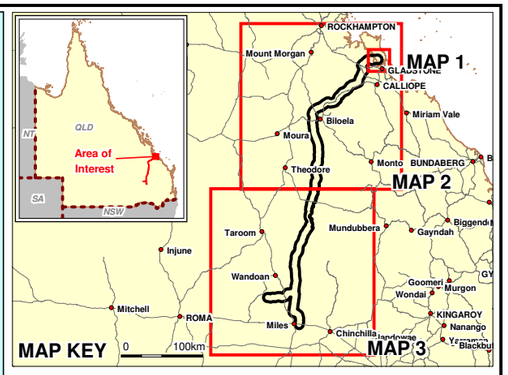

LEGEND

- Road
- Cadastral parcel
- Mangrove
- Saline coastal flat

Proposed Infrastructure
- Gas pipeline route
- Pipeline study corridor

Protected Areas
- Conservation park
- National park
- Resources reserve
- State forest

Non-indigenous Cultural Heritage
- Commonwealth listed site
- Queensland Heritage Register site
- Unlisted
- Targinie mine district

Wrecks
- Commonwealth listed site
- Local site

World Heritage Site
- Great Barrier Reef

Source Information

Cadastre and Casements
Department of Natural Resources and Water, Queensland 2009
Protected Areas (Queensland_estates)
Environmental Protection Agency 2009
World Heritage Sites
Australian Government Department of the Environment, Water, Heritage and the Arts 2009
Non-Indigenous Cultural Heritage Sites
Heritage Consulting Australia (19/11/2009 and 08/12/2009)
Archaeo Cultural Heritage Services (25/11/2009)
Wreck Sites
Heritage Consulting Australia (29/11/2009)

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Figure 19.2a Non-indigenous Cultural Heritage Sites along Pipeline Study Corridor - Map 1 of 3

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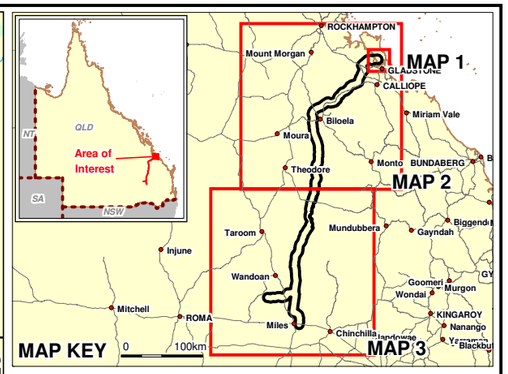
149.00 149.50 150.00 150.50 151.00

-25.50 -26.00 -26.50 -27.00

Cracow Creek camp
Cracow Creek Bridge
Grants Creek Stone Bridge
Fraser Gully Stone Bridge
Ross Creek Stone Bridge
Rubbish drain site
Cockatoo School
Corrugated iron shed
Giligulgul School
Cob and Co Road
Old Miles Cemetery

Precipice National Park
Borania State Forest
Rockybar State Forest
Barakula State Forest
Gurulmundi State Forest
Stones Country Resources Reserve

Taroom
Wandoan
Miles
Chinchilla
Jandowae



LEGEND

- Major town
- Major watercourse
- Road
- Railway

Proposed Infrastructure

- Gas pipeline route
- Pipeline study corridor

Walloons gas fields development areas

- Combabula / Ramyard
- Woleebee
- Carinya
- Condabri
- Talinga / Orana
- Dalwogan
- Kainama
- Gilbert Gully

Protected Areas

- Conservation park
- Forest reserve
- National park recovery
- National park
- National park scientific
- Resources reserve
- State forest
- Timber reserve

Non-indigenous Cultural Heritage

- Commonwealth listed site
- Queensland Heritage Register site
- Unlisted

Source Information

Protected Areas (Queensland_estates)
Environmental Protection Agency 2009
Non-Indigenous Cultural Heritage Sites
Heritage Consulting Australia (19/11/2009 and 08/12/2009)
Archaeo Cultural Heritage Services (25/11/2009)

0 12.5 25km

SCALE - 1 : 750,000 (at A3)
Latitude/Longitude
Geocentric Datum of Australia 1994

N

AUSTRALIA PACIFIC LNG PROJECT

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Figure 19.2c Non-indigenous Cultural Heritage Sites along Pipeline Study Corridor - Map 3 of 3

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19.4 Potential impacts

19.4.1 Potential impacts to known sites

A summary of previously identified sites, the significance of these sites and potential construction impacts is presented below. The analysis reveals that of the 43 known non-indigenous heritage sites and locations found within the 10km gas pipeline study corridor, only four may be impacted in a way that cannot be fully avoided through mitigation measures. These are as follows.

- The curtilage of a corrugated iron shed, located beside Roche Creek Road – the shed itself is 200m from the gas pipeline route, but associated artefacts may be found in surrounding area
- The Mount Larcom provisional mining field, situated near the Calliope River.– this mining field is crossed by the gas pipeline route
- The milking yards on Mount Larcom Station, 40m from the gas pipeline route
- The timber fence posts on Curtis Island, which will be directly impacted by gas pipeline construction.

All items are of low significance and of a local nature. The corrugated iron shed, milking yards and fences all date from the mid-late 20th century. The provisional mining field is a late 19th century feature, although the absence of physical traces and an absence of associated historical or oral historical information to corroborate its status, casts doubt that mining ever occurred in this locality. The milking yards and fences date from the mid-late 20th century.

Indirect impacts may occur to two other sites as detailed below.

- The Defence Road, located between the Eidsvold–Theodore Road and Camboon Station. Although there is only one road crossing, the gas pipeline alignment parallels the road for approximately 23km, passing within 110m of eight historic bridges and within 40meters of the Cracow Creek Camp. There may be other features associated with road construction near the road. The Defence Road was built in 1943, during World War II and is potentially a site of state heritage significance. Increased construction traffic may result in unintended impacts to the road and bridges
- The jetty on Graham Creek will not be affected by direct construction impacts, as is situated at least 700m from the nearest plant associated impacts. It is thought unlikely that indirect impacts, such as might arise from pipeline construction (560m to south), or increased wash from vessels using The Narrows or Graham Creek, will have any impact on these archaeological traces.

Table 19.3 below outlines the historical significance of each non-indigenous heritage site identified and the potential impact the construction of the gas pipeline could have, including whether this can be avoided through mitigation.

Table 19.3 Potential impacts associated with gas pipeline construction

Site name	Proximity to gas pipeline	Listing	Significance (rating)	Potential impacts
Corrugated iron shed	200m west of gas pipeline route	Nil	Local (low)	Avoided
Cockatoo School	900m east of gas pipeline route	Nil	Local (high)	Avoided
Rubbish drain site	120m east of gas pipeline route	Nil	Local (low)	Avoided
Defence Road	Crossed in one place	Nil	Local (high)	Impacts associated with road crossing.
Ross Creek stone bridge	2.7km to east of gas pipeline route	Nil	Local (high)	Indirect impacts are possible from increased construction traffic.
Fraser Gully stone bridge	1.5km east of gas pipeline route	Nil	Local (high)	Indirect impacts are possible from increased construction traffic.
Grants Creek stone bridge	280m west of gas pipeline route	Nil	Local (high)	Indirect impacts are possible from increased construction traffic.
Cracow Creek bridge	90m east of gas pipeline route	Nil	Local (high)	Avoided
Cracow Creek bridge camp	30m west of gas pipeline route	Nil	Local (high)	May be affected by gas pipeline construction.
Horse Creek Stone Bridge	230m west of gas pipeline route	Nil	Local (high)	Avoided
Delusion Creek stone bridge	440m west of gas pipeline route	Nil	Local (high)	Indirect impacts are possible from increased construction traffic.
Stone bridge	4.2m west of gas pipeline route	Nil	Local (high)	Avoided
Camboon Homestead and Station site	1.8km west of gas pipeline route	National Trust of Queensland	Local (high)	Avoided
Kilbirnie Homestead	2.5km north of gas pipeline route	QHR, RNE	State (high)	Avoided
Former Dudarcho Homestead	1.8km north of gas pipeline route	Nil	Local (high)	Avoided

Site name	Proximity to gas pipeline	Listing	Significance (rating)	Potential impacts
Mount Rainbow goldfield	1.4km to south of gas pipeline route	Nil	Local (moderate)	Avoided
Stone pitching	120m south of gas pipeline route	Nil	Local (moderate)	Avoided
The Mole Hill	900m west of gas pipeline route	Nil	Local (high)	Avoided
Mt Alma Homestead	1.5km north of gas pipeline route	National Trust of Queensland	Local (high)	Avoided
Hazel Dean homestead	1.4km south of gas pipeline route	Nil	Local (high)	Avoided
Hazel Dean graves	1.6km south of gas pipeline route	Nil	Local (high)	Avoided
Kaluda Park boiler and yards	2.3km west of gas pipeline route	Nil	Local (moderate)	Avoided
Mount Larcom goldfield	Crossed by gas pipeline route	Nil	Local (moderate)	Traversed by line, but no mining features are present.
Barmundoo Homestead, Mount Larcom		National Trust of Queensland	Local (high)	Building relocated and distant from gas pipeline. Original homestead site location is presently unknown.
Former Mount Larcom Homestead	550m north of gas pipeline route	Nil	State (high)	Avoided by route relocation to south.
Mount Larcom shepherd's hut	850m north of gas pipeline route	Nil	State (moderate)	Avoided by route relocation to south.
Mount Larcom massacre site	550m north of gas pipeline route	Nil	State (high)	Avoided by route relocation to south.
Mount Larcom Station graves	410m to north of gas pipeline route	Nil	State (high)	Avoided by route relocation to south.
Mount Larcom yards	300m north of gas pipeline route	Nil	Local (low)	Avoided
Euroa Homestead	2.03km east of gas pipeline route	National Trust of Queensland	State (moderate)	Avoided
Haybarn, Mount Larcom	2.03km south of gas pipeline route	Nil	Low (local)	Avoided

Site name	Proximity to gas pipeline	Listing	Significance (rating)	Potential impacts
Mount Larcom milking yards	40m east of gas pipeline route	Nil	Low (local)	May be impacted by gas pipeline construction.
Survey tree	380m north of gas pipeline route	Nil	Low (local)	Avoided
Targinie Landing	Near gas pipeline route	Nil	Low (local)	May be impacted
Humpy Creek slipway	Near gas pipeline route	Nil	Low (local)	May be impacted
Timber barge	Near gas pipeline route	Nil	Low (local)	May be impacted
Timber barge	Near gas pipeline route	Nil	Low (local)	May be impacted
Targinie Goldfield part of Langmorn Goldfield	4.1km south of gas pipeline route	Nil	Moderate (local)	Avoided
Targinie School early	4.9km south of gas pipeline route	Nil	Moderate (local)	Avoided
Great Barrier Reef World Heritage Area	Crossed	World Heritage	International (high)	No non-identified cultural heritage sites or cultural landscapes have been identified in this portion of the gas pipeline corridor.
Una fishing vessel	Not affected	Nil	Local (low)	Not affected
Graham Creek	600m north of gas pipeline route	Nil	Local (high)	Avoided
Timber barge	1.07km north of gas pipeline route	Nil	Local (moderate)	Avoided
Jetty	700m north of gas pipeline route	Nil	Local (moderate)	Avoided
Timber fences	Crossed by gas pipeline route	Nil	Local (low)	Up to five fence posts will be removed by gas pipeline construction.
Water tank	Near gas pipeline route	Nil	Local (moderate)	Evidence from oral history. Not located during fieldwork. Will be avoided.
Grave	Near gas pipeline route	Nil	Local (low)	Evidence from oral history. Not located during fieldwork. Will be avoided.

19.4.2 Matters of National Environmental Significance

The proposed gas pipeline alignment crosses the Great Barrier Reef World Heritage area. Potential impacts to the World Heritage values are discussed in Volume 3 Chapter 23 – Matters of national environmental significance. There are no heritage sites of national or state heritage significance along the proposed gas pipeline alignment that would be affected. A registered heritage place listed on the Register of the National Estate, Cape Capricorn Lighthouse station, is situated at the northern end of Curtis Island, and is 28km from the proposed development. It would not be affected directly or indirectly by construction of the gas pipeline.

A number of shipwrecks are known from the Port Curtis district. These include 20 on the National Shipwreck database and another six less than 75 years old, and therefore not protected by Commonwealth shipwreck legislation. None of these wrecks is found near the proposed gas pipeline alignment. The nearest wreck to the gas pipeline is the Una, a fishing vessel sunk in Graham Creek in 1956, and more than 500m from the pipeline.

19.4.3 Potential impacts to undetected sites

Only localised field surveys have been undertaken along the proposed gas pipeline alignment as part of this investigation. These have mostly targeted areas of environmental sensitivity and rugged terrain in the Callide Range and Calliope Range. In light of the findings from these investigations and in conjunction with other environmental and engineering considerations, the proposed gas pipeline alignment has been moved from several sensitive locations, in some cases by a considerable distance.

As only a small portion of the route has been subject to detailed non-indigenous site survey, it is likely that previously undetected sites occur in the gas pipeline corridor. These may include a diverse range of sites associated with the various industries identified in the site history. Based upon the results of earlier site investigations and the range of sites previously documented, these could be of low to moderate heritage significance. Once the final route has been selected, a detailed field survey will be conducted to examine all areas that will be affected by construction. Sites that are located during this additional survey will be managed in accordance with the mitigation strategies detailed in the following sections.

19.4.4 Potential cumulative impacts

In addition to impacts that will arise from construction of the gas pipeline, additional infrastructure is planned at either end of the gas pipeline route. Gas field developments at the southern end of the route may result in further impacts to previously unidentified heritage sites, although flexibility in placement of facilities in the gas fields will ordinarily ensure the avoidance of sites of heritage significance.

The development of an LNG facility on Curtis Island, at the northern end of the route, will lead to the loss of several historical fence lines and a concrete stock trough, of low, local significance. A short section of fence line will remain on Laird Point between Graham Creek and the facility site and will remain as a representative sample of this site type.

The potential effects of several other projects planned by other proponents to the east and west of the Project need to be considered. If all of these projects are built, other non-indigenous sites are potentially at risk. The proposed Gladstone LNG (GLNG) proposal (Archaeo Cultural Heritage Services 2009) parallels the Australia Pacific LNG gas pipeline from west of Biloela to Curtis Island.

The only sites that are near both the Australia Pacific LNG and the GLNG projects are:

- Dudarcho Homestead site – neither project poses a threat to this site
- Two sites on Curtis Island: Chinaman's Bay loading site (HAS-29) and the Curtis Island industrial working site (HAS-30) are at risk from the GLNG project.

A further site is the disused cattle yards (Site CINICH01), which will be destroyed by the construction of the Queensland Curtis LNG facility (QCLNG EIS 2009 Volume 8: 78 (QGC Limited 2009)). Arrow Energy is proposing a similar pipeline from the Surat Basin to Gladstone, with facilities at Fisherman's Landing, north of Gladstone, rather than crossing to Curtis Island.

Through a commitment to archival recording of these impacted sites, recovery of information on the land use of the island will ensure that any loss of information on the pastoral use of the island is minimised.

19.5 Mitigation and management

There are five options available for managing development impacts to heritage sites. These are avoidance, relocation, salvage, archival recording and interpretation. In most cases a combination of these measures is the best approach to preserving a site's heritage values.

Avoidance

The simplest means of protecting heritage sites from development impacts entails relocation of facilities so the sites are avoided. Where the sites remain in close proximity to construction activities, it may be necessary to erect barriers to protect the site from accidental access and/or impacts.

Relocation

In some instances where impacts are unavoidable, it may be possible for relocation of the heritage items, either to a nearby area that is not threatened by construction impacts, or to a museum.

Salvage

Controlled archaeological excavation may be an option for recovery of information and relics from sites threatened by construction impacts. Once the site has been investigated and the information or relics recovered, development proceeds in the site area.

Archival recording

Detailed archival recording of heritage items that are to be impacted by development is a minimum requirement. The DERM has guidelines for archival photographic recording and plan drawings for heritage sites to ensure that these records accurately document threatened sites.

Interpretation

Either as part of a salvage and recovery program, or in isolation, the pubic interpretation of a site likely to be impacted by development can inform the community of the heritage values of sites that might be lost or damaged through development. In some instances, it is possible to incorporate elements of the archaeological features in public displays as part of the development.

19.5.1 Mitigation and management of potential impacts to known sites

Ideally, all non-indigenous heritage sites would be protected during construction of the gas pipeline, but impacts to previously undetected non-indigenous heritage sites may still occur. Through the initial constraints analysis stage of the Project and through the selective fieldwork stage, every effort has been made to relocate the gas pipeline through areas distant from known sites.

Once land access agreements have been finalised further detailed field studies will be conducted to identify previously undetected sites in areas traversed by the gas pipeline route. Minor route revisions may then be implemented to ensure that, wherever practicable, sites are entirely avoided. In cases where avoidance is not practicable, further consultation with DERM and/or the relevant local authority will occur to ensure the most appropriate protection, recording and remediation measures are put in place.

Procedures to be followed to ensure that non-indigenous heritage sites are protected during development of the gas pipeline are discussed below.

Design

- Avoidance, wherever practicable, of previously recorded non-indigenous heritage sites through careful placement of the gas pipeline
- Detailed field studies will take place after selection of the final proposed gas pipeline alignment
- A heritage management plan will be prepared to manage the potential impacts identified in Table 19.4, as well as any likely impacts identified during field investigations. The heritage management plan will be prepared in consultation with relevant stakeholders, including DERM as required.
- A building condition assessment will be carried out on all vibration sensitive non-indigenous heritage sites located within 100m of project activities that involve the use of rock breaking equipment, blasting or other activities likely to cause significant vibration. Specific mitigation measures will be put in place to ensure that there are no detrimental impacts.

Construction and operation

- Heritage management plans will be developed and implemented as required
- Procedures will be put in place to provide for the timely reporting and protection of heritage items and archaeological artefacts discovered during construction, consistent with requirements under the *Queensland Heritage Act 1992*
- The gas pipeline workforce will be inducted about the importance of non-indigenous heritage sites and the procedures to be followed on their discovery

Assessment of non-indigenous site significance using criteria established under the *Queensland Heritage Act 1992*, to determine the appropriate protection measures for sites identified during previous field inspections or uncovered during construction. Table 19.4 details the mitigation measures that will be put in place to ensure that impacts to known non-indigenous heritage sites associated with the proposed gas pipeline construction and operation can be avoided or minimised.

Table 19.4 Potential non-indigenous heritage impact mitigation measures

Site name	Proximity to gas pipeline	Potential impact mitigation measures

Site name	Proximity to gas pipeline	Potential impact mitigation measures
Corrugated iron shed	200m west of gas pipeline route	Minor route relocation will take place to avoid site curtilage. On-site monitoring of excavation will take place by a qualified archaeologist to ensure that uncovered sub-surface features are documented.
Cockatoo School	900m east of gas pipeline route	As this site is located at some distance from the construction corridor, there will be no direct impacts.
Rubbish drain site	120m east of gas pipeline route	Construction impacts to this site will be avoided through fencing of the site during construction to ensure that there are no accidental impacts.
Defence road	Crossed in one place	Impacts at the Defence Road crossing will be avoided by minimising the right of way in areas likely to contain heritage items. Detailed recording of the crossing location will take place prior to construction.
Ross Creek stone bridge	2.7km to east of gas pipeline route	A diversion track will be constructed for use by heavy construction vehicles, should engineering inspections reveal the structure is at risk from increased construction traffic. Appropriate remediation measures, designed in consultation with DERM, will be implemented if necessary.
Fraser Gully stone bridge	1.5km east of gas pipeline route	A diversion track will be constructed for use by heavy construction vehicles, should engineering inspections reveal the structure is at risk from increased construction traffic. Appropriate remediation measures, designed in consultation with DERM, will be implemented if necessary.
Grants Creek stone bridge	750m east of gas pipeline route	A diversion track will be constructed for use by heavy construction vehicles, should engineering inspections reveal the structure is at risk from increased construction traffic. Appropriate remediation measures, designed in consultation with the Department of the Environment, Water, Heritage and the Arts (DEWHA) will be implemented if necessary.
Cracow Creek bridge	970m east of gas pipeline route	A diversion track will be constructed for use by heavy construction vehicles, should engineering inspections reveal the structure is at risk from increased construction traffic. Appropriate remediation measures, designed in consultation with DEWHA, will be implemented if necessary.
Cracow Creek bridge camp	1.06km east of gas pipeline route	A diversion track will be constructed for use by heavy construction vehicles, should engineering inspections reveal the structure is at risk from increased construction traffic. Appropriate remediation measures, designed in consultation with DEWHA, will be implemented if necessary.
Horse Creek stone bridge	230m west of gas pipeline route	A diversion track will be constructed for use by heavy construction vehicles, should engineering inspections reveal the structure is at risk from increased construction traffic. Appropriate remediation measures, designed in consultation with DEWHA will be implemented if necessary.

Site name	Proximity to gas pipeline	Potential impact mitigation measures
Delusion Creek stone bridge	110m west of gas pipeline route	A diversion track will be constructed for use by heavy construction vehicles, should engineering inspections reveal the structure is at risk from increased construction traffic. Appropriate remediation measures, designed in consultation with DEWHA, will be implemented if necessary.
Stone bridge	2.6km west of gas pipeline route	A diversion track will be constructed for use by heavy construction vehicles, should engineering inspections reveal the structure is at risk from increased construction traffic. Appropriate remediation measures, designed in consultation with DEWHA, will be implemented if necessary.
Camboon Homestead and Station site	1.2km to west of gas pipeline route	Indirect impacts such as vibration will be monitored during construction. Appropriate remediation measures, designed in consultation with DERM, will be implemented if necessary.
Kilbirnie Homestead	2.2km north of gas pipeline route	This site will be avoided by construction activities.
Former Dudarcho homestead	1.7km north of gas pipeline route	This site will be avoided by construction activities.
Mount Rainbow goldfield	1.4km to south of gas pipeline route	This site will be avoided by construction activities.
Mt Alma Homestead	1.5km north of gas pipeline route	This site will be avoided by construction activities.
Hazel Dean homestead	1.4km south of gas pipeline route	This site will be avoided by construction activities.
Hazel Dean graves	1.6km south of gas pipeline route	This site will be avoided by construction activities.
Kaluda Park boiler and yards	2.3km west of gas pipeline route	This site will be avoided by construction activities.
Mount Larcom goldfield	Crossed by gas pipeline route	Traversed by gas pipeline, but no mining features are present. Further site investigations will be conducted to ensure any extant mining features are avoided or if impacts are unavoidable, that appropriate mitigation measures formulated in consultation with DERM, are implemented.
Barmundoo		Building has been relocated and is distant from gas pipeline. Original

Site name	Proximity to gas pipeline	Potential impact mitigation measures
Homestead, Mount Larcom		homestead site location is presently unknown
Former Mount Larcom Homestead	550m north of gas pipeline route	Avoided by route relocation to south. Site impacts will be monitored. Protective fencing will be erected along gas pipeline right of way to prevent accidental damage.
Mount Larcom massacre site	550m north of gas pipeline route	Avoided by route relocation to south. Site impacts will be monitored. Protective fencing will be erected along gas pipeline right of way to prevent accidental damage.
Mount Larcom shepherd's hut	850m north of gas pipeline route	Avoided by route relocation to south. Site impacts will be monitored. Protective fencing will be erected along gas pipeline right of way to prevent accidental damage.
Mount Larcom Station graves	410m to north of gas pipeline route	Avoided by route relocation to south. Site impacts will be monitored. Protective fencing will be erected along gas pipeline right of way to prevent accidental damage.
Mount Larcom yards	300m north of gas pipeline route	Avoided by route relocation to south. Site impacts will be monitored. Protective fencing will be erected along gas pipeline right of way to prevent accidental damage.
Euroa Homestead	2.03km east of gas pipeline route	This site will be avoided by construction activities.
Haybarn, Mount Larcom	2.03km south of gas pipeline route	This site will be avoided by construction activities.
Mount Larcom milking yards,	40m east of gas pipeline route	Further field inspection will be necessary to locate this site. Appropriate protection measures will be implemented, in consultation with DERM.
Survey tree	380m north of gas pipeline route	This site will be avoided by construction activities.
Targinie Landing	Near gas pipeline route	Further field inspection will be necessary to locate this site. Appropriate protection measures will be implemented, in consultation with DERM.
Humpy Creek slipway	Near gas pipeline route	Further field inspection will be necessary to locate this site. Appropriate protection measures will be implemented, in consultation with DERM.
Timber barge	Near gas pipeline route	Further field inspection will be necessary to locate this site. Appropriate protection measures will be implemented, in consultation with DERM.
Timber barge	Near gas pipeline route	Further field inspection will be necessary to locate this site. Appropriate protection measures will be implemented, in consultation with DERM.
Targinie Goldfield part of Langmorn Goldfield	4.1km south of gas pipeline route	Appropriate remediation measures, designed in consultation with DERM, will be implemented if necessary.

Site name	Proximity to gas pipeline	Potential impact mitigation measures
Targinie School early	4.9km south of gas pipeline route	This site will be avoided by construction activities.
Great Barrier Reef World Heritage Area.	Crossed	No non-indigenous cultural heritage sites or cultural landscapes have been identified in the portion of the gas pipeline corridor crossing the World Heritage Area.
Una fishing vessel	Not located	This site will be avoided by construction activities.
Graham Creek	600m north of gas pipeline route	This site will be avoided by construction activities.
Timber barge	1.07km north of gas pipeline route	This site will be avoided by construction activities.
Jetty	700m north of gas pipeline route	Further site recording will take place prior to construction. Indirect impacts such as vibration will be monitored during construction. Appropriate remediation measures, designed in consultation with DERM, will be implemented if necessary.
Timber fences	Crossed by gas pipeline route	Gas pipeline right of way will be minimised near fence crossing. Temporary fencing will be necessary to ensure that construction impacts are minimised.
Water tank	Near proposed gas pipeline alignment	Evidence from oral history. Not located in gas pipeline study area during targeted fieldwork. The site will be avoided.
Grave	Near proposed gas pipeline alignment	Evidence from oral history. Not located in gas pipeline study area during targeted fieldwork. The site will be avoided.

19.5.2 Mitigation and management of potential impacts to undetected sites

Previously undetected non-indigenous heritage sites may occur in the area of the proposed gas pipeline. If so, these are likely to include archaeological sites associated with a variety of historical land use practices. To ensure that these are recorded and their heritage values assessed, the following steps will be implemented during construction, should they be uncovered:

- All work in the vicinity of the suspected heritage site must cease and a temporary buffer established to ensure that impacts are avoided
- The Australia Pacific LNG Project Manager and Cultural Heritage Department Manager will be notified

- The Project's cultural heritage personnel will be advised of the finding, and will inspect the suspected heritage items to assess them and ensure that the provisions of the *Queensland Heritage Act 1992* in relation to non-indigenous archaeological sites are met
- The Australia Pacific LNG Project Manager or Cultural Heritage Manager will liaise with officers of DERM, to ensure heritage items are properly recorded, their significance assessed and appropriate management measures implemented. These measures may include the protection and avoidance of the site; investigation and recording of the heritage items; removal of the heritage items, advising about the relocation of facilities; or excavation of the historical items and the removal for safe-keeping.

19.6 Conclusion

19.6.1 Assessment outcomes

The assessment of non-indigenous heritage for the gas pipeline involved a comprehensive review of publically available information together with significant stakeholder consultation and limited site inspections of the proposed gas pipeline corridor. The assessment identified 43 sites within 5km of the proposed gas pipeline. Of these, four sites may be directly impacted by the gas pipeline and 10 sites may be indirectly impacted by the pipeline. Section 19.5.1 outlines the mitigation measures proposed to reduce potential impacts associated with the works. The gas pipeline is not expected to have impacts on the non-indigenous heritage values of the Great Barrier Reef World Heritage area (see Volume 3 Chapter 23).

A summary of the values, sustainability principles, potential impacts and mitigation measures in relation to non-indigenous heritage is presented in Table 19.5. The table also includes the residual risk levels for indigenous cultural heritage. Mitigation measures to reduce the risk have been nominated and the residual risk has been calculated. Further details on the risk assessment methodology are provided in Volume 1 Chapter 4.

Table 19.5 Summary of values, sustainability principles, potential impacts and mitigation measures

Values	Sustainability principles	Potential impacts	Possible causes	Mitigation and management measures	Residual risk level
Preservation of existing heritage sites of local, state and national significance	Minimising adverse environmental impacts and enhancing environmental benefits associated with Australia Pacific LNG's activities, products or services; conserving, protecting, and enhancing where the opportunity exists, the biodiversity values and water resources in its operational areas Respecting the rights, interests and diverse cultures of the communities in which Australia Pacific LNG operates Engaging regularly, openly and transparently with people and communities affected by its activities, considering their views in its decision-making and striving for positive social outcomes Working cooperatively with communities, governments and other stakeholders to achieve positive social and environmental outcomes, seeking partnership	Loss of or damage to non-indigenous heritage sites or values	Project personnel are not aware of location of non-indigenous heritage sites and inadvertently damage sites Project infrastructure is located in close proximity to heritage sites.	**Design** • Avoid, wherever practicable, previously recorded non-indigenous heritage sites through careful placement of the gas pipeline. • Conduct detailed field studies after selection of the final proposed gas pipeline alignment. • Preparation of a heritage management plan to manage potential impacts identified in Table 19.3 and risks identified to sites if field inspections reveal the potential for construction impacts. • Prepare heritage management plans in consultation with relevant stakeholders, including the DERM, as required. **Construction and operation** • Implement heritage management plans. • Implement procedures to ensure the timely reporting of heritage items uncovered during construction. • Induct all workers on the importance of non-indigenous heritage sites and the procedures to be followed on their discovery	Low

Values	Sustainability principles	Potential impacts	Possible causes	Mitigation and management measures	Residual risk level
	approaches where appropriate			• Assess the significance of sites and liaise with the appropriate regulatory authority to implement appropriate management, as required. • Undertake assessment of non-indigenous site significance using criteria established under the *Queensland Heritage Act 1992*, to determine the appropriate protection measures for identified sites.	

19.6.2 Commitments

Australia Pacific LNG commits to avoiding adverse impact on non-indigenous cultural heritage where practicable, and where unable to avoid impacts, develop a heritage management plan in consultation with relevant regulatory bodies.

References

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