

## Section 8

# LNG Facility Environmental Values and Management of Impacts

## 8.13 Cultural Heritage

### 8.13.1 Indigenous Cultural Heritage

#### 8.13.1.1 Introduction

Santos has established an Aboriginal Engagement Policy (AEP) as one of the tools through which the company can build sustainable relationships and support Aboriginal people and communities.

#### 8.13.1.2 Methodology

The methodology adopted for the LNG facility is outlined in Section 6.13.1.2.

#### 8.13.1.3 Regulatory Framework

The regulatory framework applicable for the assessment and management of Indigenous cultural heritage is outlined in Section 6.13.1.3.

#### 8.13.1.4 Existing Environmental Values

##### *Indigenous Cultural Heritage Values*

It is expected that cultural heritage surveys, currently underway, will define areas and sites of cultural significance that occur within the project area. These may include sites containing physical evidence, such as artifact scatters, and scarred trees. In addition, sites that contain no physical evidence of human occupation may also be defined. For example, these may include ceremonial and special sites, or may consist of varieties of native food plants.

In accordance with the Cultural Heritage Management Plan (CHMP) agreed with PCCC, the survey findings will remain confidential and will not be disclosed to the public. Rather, findings will be subject to the management and mitigation measures set out in the CHMP.

##### *Baseline Aboriginal Heritage Assessment*

###### Desktop Review

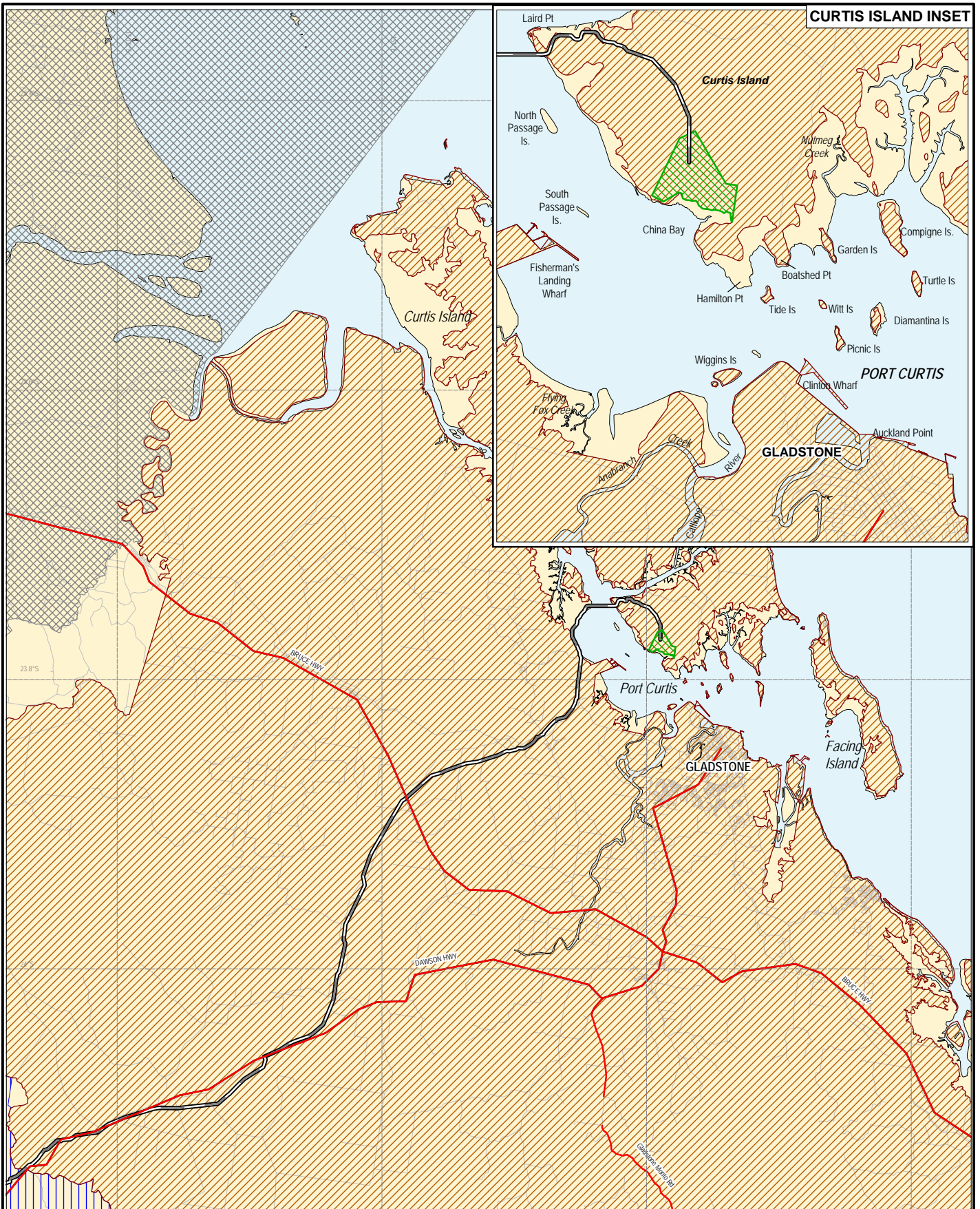
Desktop searches of the following registers and databases were undertaken: The Department of Natural Resources and Water's (DNRW) register and database; the (former) Register of the National Estate; World Heritage List; National Heritage List and the Commonwealth Heritage List.

The Aboriginal parties and cultural heritage bodies within the project area are illustrated in Figure 8.13.1.

No sites of indigenous cultural heritage were identified on Curtis Island in the vicinity of the LNG facility site as a result of these searches as shown on Figure 8.13.2.

##### *Previous Studies and Academic Research*



The proposed LNG facility will be located on Curtis Island, situated approximately 5 km north-east of Gladstone. Access to the site will be either via a potential bridge linking Curtis Island (Laird Point area) with the mainland (Friend Point area) or by barging from the mainland. If the bridge is built, a new access road is also proposed to be built on the western side of Curtis Island as well as on the mainland linking the bridge with the existing regional road network. Limited archaeological research and consultancy work has been conducted on Curtis Island itself however substantial amounts of work have been conducted within the Gladstone region. A brief summary of an array of archaeological work and research undertaken in the Gladstone and Curtis Island region is provided below.



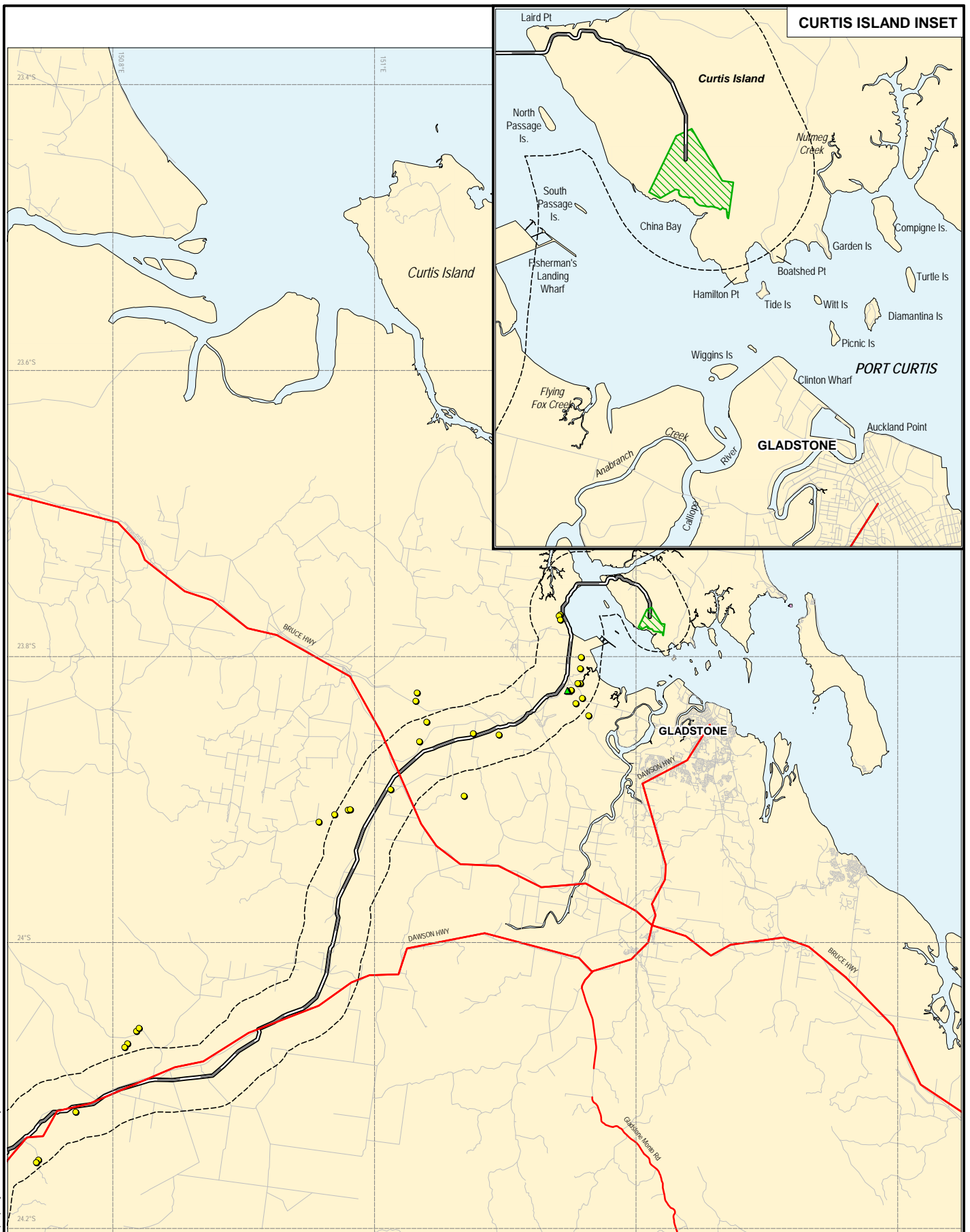
**CURTIS ISLAND INSET**



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Client  	Project <b>GLADSTONE LNG PROJECT          ENVIRONMENTAL IMPACT STATEMENT</b>		Title <b>ABORIGINAL PARTIES AND          CULTURAL HERITAGE BODIES          IN VICINITY OF LNG FACILITY</b>	
	Drawn: CA Job No: <b>4262 6220</b>	Approved: JB File No: 42626220-g-1022.wor	Date: 05-03-2009	Figure: <b>8.13.1</b>

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0 5 10km  
 Scale 1:400 000 (A4)  
 Datum : GDA94

- DNRW / Santos Sites
- ▲ EPA Reported Places

- Gas Transmission Pipeline Corridor
- LNG Facility Site

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  	<b>Project</b> GLADSTONE LNG PROJECT ENVIRONMENTAL IMPACT STATEMENT		<b>Title</b> INDIGENOUS CULTURAL HERITAGE SITES IN THE VICINITY OF THE PROPOSED LNG FACILITY	
	Drawn: LL/CA Job No: <b>4262 6220</b>	Approved: JB File No: 42626220-g-998b.wor	Date: 05-03-2009	Figure: <b>8.13.2</b>
			Rev:B <b>A4</b>	

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### Academic Research

The Gladstone region has been subjected to considerable amounts of archaeological research with a strong focus on coastal archaeology. Of particular note was the Gooreng Gooreng Cultural Heritage Project centred on the area of coastline between Baffle Creek and Hummock Hill Island (Lilley, Williams and Ulm, 1997). Dates from excavated middens place activities in the area within the last 3,000 years (BP. Ulm, 2004), following on from the Gooreng Gooreng Study, combined data from both regional archaeological surveys and the excavation of stratified coastal sites in order to reach conclusions regarding the late Holocene archaeological record of the southern Curtis Coast. Dates were obtained from a combination of excavated and eroding archaeological deposits and, according to Ulm, provided evidence that occupation of these areas spanned from around 4,000 years ago into the post-contact period.

### Previous Studies

Refer to Section 7.13.1.4 for an outline of previous studies undertaken for the Gladstone area.

#### **8.13.1.5 Potential Impacts and Mitigation Measures**

All potential impacts are assessed regarding the value or significance of the cultural heritage place. Cultural heritage significance relates to people's perspective of place and sense of value, within the context of history, environment, aesthetics and social organisation.

A range of standards and criteria are available to assist with determining cultural heritage significance. The best practice guideline *The Australian ICOMOS Burra Charter* (Marquis-Kyle and Walker 1999) was designed for the conservation of historic heritage. The addition of further guidelines that defined cultural significance and conservation policy extended the use of the Charter to Indigenous Heritage.

The Aboriginal Cultural Heritage Act (ACHA) also sets out provisions for determining cultural significance. Archaeologists place a high priority on levels of existing site preservation as a means of determining scientific integrity and therefore, the value of the contextual data found within a site. Any loss of scientific integrity, however, does not reduce the cultural significance of a place and/or item. The presence of bush food species, trees of great age, or a particular bluff in a mountain range, for example, may provide indicators of cultural importance not borne out in the archaeological record.

The Indigenous assessment of significance and impacts will be carried out as part of the CHMP process applicable to the LNG facility. As yet, this has not been finalised. Protection, management and mitigation measures will be agreed after cultural heritage surveys are complete, and will then be incorporated in the Santos cultural heritage management system.

#### **8.13.1.6 Summary of Findings**

Based on the selective summary of archaeological research and consultancy work undertaken in the Gladstone and Curtis Island region, the following predictions can be made regarding the archaeological potential of the area within which the LNG facility will be located. The likely most common site types expected to be encountered are:

- Stone artifacts, as isolates and in scatters, particularly in association with creeks and rivers;
- Open camp sites, also in association with creeks or rivers;
- Scarred trees in areas of remnant vegetation; and
- Shell middens, stone artifacts and burials in coastal and estuarine areas.

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## 8.13.2 Non-Indigenous Cultural Heritage

### 8.13.2.1 Introduction

A non-indigenous cultural heritage assessment was undertaken for the LNG facility site and surrounding area. Details of this study are given in Appendix X.

### 8.13.2.2 Methodology

The methodology adopted for the CSG fields as outlined in Section 6.13.2.2 is applicable for the LNG facility.

The results of the desktop review, stakeholder consultation and historic maps were used to develop a list of heritage and archaeological sites (HAS) for a targeted field survey. The survey was undertaken to confirm the existence of sites as well as define areas which have the potential to contain further sites and places of cultural heritage significance. The initial reconnaissance involved a targeted survey of the field areas over two days and involved both vehicle and pedestrian survey techniques. The survey was conducted on 12 - 13 May 2008.

### 8.13.2.3 Regulatory Framework

The regulatory framework applicable for the LNG facility is outlined in Section 6.13.2.3.

### 8.13.2.4 Existing Environmental Values

The history of the area encompasses maritime exploration, pastoralism and the development of the township of Gladstone and its associated infrastructure and industries. Key industries such as cattle and mining have had a profound impact on the history of the region. In the late twentieth century, the city of Gladstone was transformed from a small coastal community dependent on a butter factory and seasonally operational meatworks, to the site of Queensland's largest power station and one of the world's largest alumina plants. The presence of a deep-water port and the development of port facilities have helped drive the economic development of Gladstone and the region as a whole. Many towns in the region have also experienced significant recent changes with the advent of large-scale coal mining, and gas exploration, mining, production and exportation.

Key themes in the historic background of the study area have been divided into the following periods:

- Maritime exploration (1802-1823);
- Pastoral development (1840-1860);
- Early settlement (1850-1880);
- Railway development (1865-1965);
- Mining development (1850-1900);
- Closer settlement (1880-1900); and
- Development post 1900.

As the northern portion of the gas transmission pipeline overlaps with the LNG facility study area, some of the history of the LNG facility is covered in Section 7.13.2.4 with further details contained in Appendix X.

#### *Maritime Exploration*

Refer to Section 7.13.2.4 for details.

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### ***Pastoral Development 1840 – 1860s***

The pastoral industry encouraged settlement of the Port Curtis district driven by its potential as a port. Apart from the penal settlement established at Moreton Bay in 1823, European settlement of Queensland commenced with the arrival of squatters from the New England and Hunter districts of New South Wales, who entered the Southern Darling Downs and Maranoa district in the 1840s in search of land to pasture their stock. The spread of pastoralism was largely responsible for the opening up of new territory.

Port Curtis was proclaimed a pastoral district on 10 January 1854 opening up central coastal Queensland to eager squatters seeking to lease the vacant Crown Lands. Early leases in the area included Raglan, Carara and Calliope stations which were owned by James Landsborough. By the 1860s, the land's potential for grazing sheep and its convenient access to a deep water port was realised.

### ***Early Settlement (1850-1880)***

Refer to Section 7.13.2.4 for details on Gladstone and Curtis Island.

### ***Railway Development (1865-1965)***

The construction of the railway branches was integral to the expansion of Queensland's mining industry. Railways were extended into Central and Western Queensland after 1865. Much of the area under study underwent significant transformation with the advent of the rail, as the rail traffic inevitably encouraged closer settlement, economic development and, above all, the opportunity to explore mining ventures that had been confined to the south east corner of Queensland.

### ***Mining Development (1850-1900)***

#### Gold Mining

Refer to Section 7.13.2.4 for details.

#### Coal

As part of the expansion of railways after 1865, the rail network not only increased the demand for coal as a fuel, but also increased accessibility to coal resources in central and northern Queensland enabling the haulage of coal for use in coastal steamers and as an export commodity.

### ***Closer Settlement (1880-1900)***

Refer to Section 7.13.2.4 for details.

### ***Development (>1900)***

Refer to Section 7.13.2.4 for further details.

### ***Baseline Non-Indigenous Cultural Heritage Assessment***

No non-indigenous heritage sites were identified in any of the world, state or local registers searched for the LNG facility study area.

#### Heritage and Archaeological Sites

Three heritage sites were identified during the field survey. Of the three sites, none were considered to be of state significance. A summary of the findings and the significance of the sites is provided below in Table 8.13.1. Archaeological sites have been assessed against Section 60 of the Queensland Heritage Act for their potential to contain archaeological artifacts of importance to Queensland history. Heritage sites have been assessed against Section 35(1) Criterion a to h.

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A detailed description of each HAS and justification for assessment is provided in Appendix X.

No heritage precincts were identified nearby the LNG facility study area.

### Places of Historical Interest

Three places of historical interest (or historical indicator- HI) were identified. While they do not provide a suitable level of heritage significance to justify further assessment, they contribute (or potentially contribute) to the broader discussion of historical archaeological places within the study area and generally add to the character of the area. A list of the HI places is provided in Table 8.13.2 and their location is indicated in Figure 8.13.3.

**Table 8.13.1 Site Investigation Results and Assessment Summary**

Site Type & HAS No.	Site Name	Registered	Site Significance	Justification (of significance assessment)
<b>Archaeological Site – N/A</b>				
<b>Heritage Site</b>				
HAS-29	Chinaman's Bay Loading Facilities.	-	Local	Criterion (a) – demonstrates historical use of Curtis Island as a pastoral station including the transfer of stock and goods between island and mainland. Criterion (c) – potential to provide information on how people lived and worked on Curtis island and indicate social status of the people (ceramics).
HAS-30	Curtis Island Working Area.	-	Local	Criterion (a) – associated with local processing of resources on Curtis island and goods transfer from mainland to the island. Criterion (c) – potential source of information on the success of industrial processing on small offshore islands. Criterion (d) – representative of industrial processing sites in QLD, with elements including machinery, engine beds, segregated site areas and loading facilities.
HAS-32	Fisherman's Hut.	-	Local	Criterion (a) – old timer hut demonstrates transient nature of fishing and need for temporary accommodation to support fishing or pastoral staff. Indicates early-mid 19 <sup>th</sup> century occupation and its associated features of cattle dip and yards demonstrate importance of pastoral industry at this time. Criterion (g) – Fisherman's huts are still used as temporary accommodation by fishermen.
<b>Precincts – N/A</b>				

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**Table 8.13.2 Historical Indicators Identified in the LNG Facility study area**

Site	Comment
HI-08	Curtis Island Fence line
HI-09	Stockyards and Dam
HI-10	Stockyards

A detailed description of each HI is provided in Appendix X.

### 8.13.2.5 Potential Impacts and Mitigation Measures

The potential for direct and indirect impacts as part of the construction and operation of the proposed LNG facility were assessed for each HAS.

#### *Avoid Known Cultural Heritage Sites*

##### Potential Impacts

Portions of HAS-29 and HAS-30 (local significant sites) will be directly impacted by the proposed MOF and haul road. HI-09 (Historical Indicator) is located on the LNG facility site; however it will not be directly impacted by the project.

##### Mitigation Measures

The location of LNG facility and associated infrastructure will be located to minimise impact on sites of local significance.

Further assessment of the LNG facility study area shall be undertaken in the event changes in footprint or the identification of additional sites during construction activities or as part of EMP obligations. Any new heritage items identified shall be assessed as part of EMPs and where necessary:

- Conduct cultural heritage surveys prior to any construction activities, commencing in the vicinity of any identified or potential cultural heritage sites; and
- Develop further site specific management recommendations for significant sites and places as required.

Santos will seek to educate its staff and contractors on the location and significance of the sites. Training of field workers will be undertaken as part of broader environmental awareness training and/or Workplace Health and Safety meetings. Training materials will inform the workers what archaeological material and cultural heritage sites may look like and provide clear instructions on what to do if they find anything.

#### *Unexpected Finds and Archaeologist 'On-Call'*

##### Potential Impacts

Construction activities have the potential to uncover further cultural heritage material, particularly in the vicinity of the archaeological sites that have not been investigated by consultation or survey.

##### Mitigation Measures

The following mitigation measures will be adopted and incorporated into site procedures including:

- EMPs to include procedure for managing unexpected cultural heritage material or sites that may be encountered. This will include:





**HAS** Heritage / Archaeological Site  
 A site which has been assessed as having potential heritage or archaeological value  
**HI** Historical Indicator  
 A site which indicates historical activity, but is not of heritage significance in its own right

■ Assessed Sites by GLNG Project  
▲ Potential Sites  
  LNG Facility Site

  Assessed Precincts by GLNG Project  
  Registered Sites  
  Gas Transmission Pipeline Corridor

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  	<b>Client</b> Project <b>GLADSTONE LNG PROJECT ENVIRONMENTAL IMPACT STATEMENT</b>	<b>Title</b> <b>NON INDIGENOUS CULTURAL HERITAGE SITES IN THE VICINITY OF THE LNG FACILITY</b>
	Drawn: LL/CA    Approved: JB    Date: 25-05-2009 Job No: <b>4262 6220</b> File No: 42626220-g-898d.wor	<b>Figure: 8.13.3</b>

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- Work will cease at the location of the potential material or site and reasonable efforts to secure the site will be made – such as a buffer zone of 20 m with no removal or further disturbance of site;
- The site manager will be informed and will notify the historical archaeologist appointed to the project; and
- The historical archaeologist shall provide management recommendations to the site manager and will liaise with the EPA to ensure that the archaeological provisions of the *Queensland Heritage Act 1992* (Heritage Act) are met.

Where it is not practicable to avoid locally significant sites, they will be recorded prior to disturbance in accordance with the best practice guidelines of the Burra Charter (Marquis-Kyle and Walker 1999). The relevant local government department will be liaised with prior to any disturbance.

If there is to be any work within a heritage precinct, a heritage study by a qualified heritage consultant will be required.

Santos will seek to actively involve the community where matters of historic cultural heritage are involved.

### **State Significant Sites**

State significant sites are protected by the Heritage Act and should be avoided in all cases.

#### Potential Impacts

There are currently no identified sites of State significance located within the LNG facility area.

#### Mitigation Measures

Should sites of State significance be located in future, any works needing to be conducted in these areas will be governed by Part 6 of the Heritage Act and a qualified heritage consultant will be engaged to advise on mitigation measures. Any works which may potentially disturb these sites will require a project specific Conservation Management Plan which considers available options to mitigate impacts on cultural heritage significance and is approved by the EPA through the IDAS.

### **Locally Significant Sites / Heritage Precincts / Places of Historic Interest.**

#### Potential Impacts

Portions of HAS-29 and HAS-30 (local significant sites) will be directly impacted by the proposed MOF and haul road. HI-09 (Historical Indicator) is located on the LNG facility site; however it will not be directly impacted by the project.

#### Mitigation Measures

Refer to mitigation measures for avoid known cultural heritage sites.

### **Potential Sites**

#### Potential Impacts

A number of potential sites within the LNG facility study area were identified (refer Figure 8.13.3).

#### Mitigations Measures

The sites will be managed as if they are of potential State significance until assessment can be completed by a qualified heritage consultant. In the interim, avoiding disturbance to these sites will be practised and all staff made aware of their location.

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Where development is planned in the vicinity of these sites, a heritage survey shall be completed prior to commencement of works to establish location, level of significance and necessary management measures.

### *Protection of Heritage in Santos Ownership*

#### Potential Impacts

Construction activities have the potential to disturb heritage sites and places in areas owned by Santos.

#### Mitigation Measures

All heritage sites and places will be protected and managed by Santos as part of best practice heritage management as per the Burra Charter. Santos will seek to educate its staff and contractors on the location and significance of the sites to avoid disturbance. All sites will be managed under the guidance of a qualified heritage consultant. Additionally, staff will be encouraged to report any new items of historic heritage significance to Santos so that a qualified heritage consultant can advise on the level of significance and the management of the item or site.

Santos will seek to actively involve the community where matters of historic cultural heritage are involved.

Santos will regularly undertake a survey of all heritage items identified on Santos owned or leased land, or on land directly affected by current operations, to ensure that the general mitigation measures outlined above and those for individual heritage items are being followed and are effective. Any damage to items will be catalogued and actions taken to protect heritage items. A heritage item database should be developed to monitor the condition, management and protection of the heritage sites.

### *Cumulative Impacts*

The proposed LNG facility is located on Curtis Island and the site is currently undeveloped with only a few tracks and stockyards in the vicinity. There are a number of industrial facilities proposed for Curtis Island. There is limited information available as to the planned development of those projects or the scale and timing of their development; however a qualitative assessment can be made of the possible cumulative impacts.

Other potential industrial projects (including potential LNG developments) will be generally confined to discrete parcels of land. It is expected that the developments will include some or all of the proposed mitigation measures in relation to management of sites of cultural significance described in this section. By utilising the mitigation methods it is expected that there will not be an impact on sites of cultural significance identified in the study area.

Table 8.13.3.3 provides a summary of potential non-indigenous cultural heritage impacts and mitigation measures for the LNG facility.

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Table 8.13.3 Potential Non-Indigenous Cultural Heritage Impacts and Mitigation Measures

Aspect	Potential Impact	Mitigation Measure	Objective
<b>Construction</b>			
Heritage sites damage.HAS-29, HAS-30.	Construction activities and transport associated with the LNG facility will cause direct disturbance (e.g. excavation and vibration).	<ul style="list-style-type: none"> <li>Minimise total area of disturbance within each site.</li> <li>Undertake archival recording of both sites prior to any disturbance.</li> <li>Demarcate and restrict access to all heritage sites and protect from further disturbance.</li> <li>Train contractors/staff in operational areas on the location of sites and their protection requirements.</li> </ul>	Minimise disturbance of HAS-29 and HAS-30.
Heritage sites damage. HAS-32.	Construction activities and transport associated with the LNG facility poses a risk of indirect disturbance (e.g. vibration).	<ul style="list-style-type: none"> <li>Adopt tiered approach of avoidance and minimisation of impacts. Where practical, sites of local significance will be avoided.</li> <li>Where potential impacts have been identified relevant mitigation measures shall be identified which may include- maintenance of offset distances (e.g. Vibration) for infrastructure positioning and access tracks.</li> <li>Avoid haulage proximate to heritage sites and utilise existing tracks only.</li> <li>Demarcate and restrict access to all heritage sites and protect from further disturbance.</li> <li>Monitor all excavation activities to enable the identification of any additional heritage sites/items discovered during construction.</li> <li>Train contractors/staff in operational areas on the location of sites and their protection requirements.</li> <li>Where new sites are identified, a Heritage professional shall be consulted for assessment of significance and recommendation of management measures.</li> </ul>	Conserve and protect both known and undiscovered items of historic cultural heritage.

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Aspect	Potential Impact	Mitigation Measure	Objective
LNG facility increased traffic (including marine).	Direct disturbance to sites and indirect impacts associated with vibration (construction trucks).	<ul style="list-style-type: none"> <li>Avoid haulage proximate to heritage sites and utilise existing tracks only.</li> <li>Demarcate and restrict access to all heritage sites and protect from further disturbance.</li> <li>Training of contractors/staff in operational areas on the location of sites and their protection requirements shall also be undertaken.</li> </ul>	Conserve existing items of historic cultural heritage.
	Indirect impacts associated with vibration (construction trucks).	<ul style="list-style-type: none"> <li>Tiered approach of avoidance and minimisation of impacts.</li> <li>Avoid haulage proximate to heritage sites and utilise existing tracks only.</li> <li>Demarcate and restrict access to all heritage sites and protect from further disturbance.</li> <li>Training of contractors/staff in operational areas on the location of sites and their protection requirements shall also be undertaken.</li> </ul>	Conserve existing items of historic cultural heritage.
<b>Operation</b>			
LNG facility heritage sites damage.	Ongoing vibration impacts or unauthorised access to remaining undisturbed portion of HAS.	<ul style="list-style-type: none"> <li>Tiered approach of avoidance and minimisation of impacts.</li> <li>Items of local heritage significance shall be managed by a heritage professional.</li> <li>Avoid haulage proximate to heritage sites and utilise existing tracks only.</li> <li>Demarcate and restrict access to all heritage sites and protect from further disturbance.</li> <li>Training of contractors/staff in operational areas on the location of sites and their protection requirements shall also be undertaken.</li> </ul>	Conserve and protect both known and undiscovered items of historic cultural heritage.
	Ongoing vibration impacts or unauthorised access to remaining undisturbed portion of HAS.	<ul style="list-style-type: none"> <li>Refer to mitigation measures for direct disturbance to sites for the LNG facility increased traffic.</li> </ul>	Conserve and protect both known and undiscovered items of historic cultural heritage.

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Aspect	Potential Impact	Mitigation Measure	Objective
LNG facility Bushfires HAS-29, HAS-30, HAS-32.	Direct or indirect fire caused by plant or surrounding land use. Potential for explosion or acceleration of bushfire intensity due to plant and its associated infrastructure eg hydrocarbon storage.	<ul style="list-style-type: none"> <li>Prepare Emergency Management Plan.</li> <li>Implement risk reduction measures to prevent impacts to surrounding environment including heritage sites.</li> </ul>	<p>Conserve known items of historic cultural heritage.</p> <p>Ensure operations do not place any items of heritage at risk from emergency situations.</p>
LNG facility fire ball / jet fire HAS-29, HAS-30, HAS-32.	Direct or indirect impact due to explosion proximate to a HAS site.	<ul style="list-style-type: none"> <li>Refer to mitigation measures for the LNG facility bushfires.</li> </ul>	<p>Conserve known items of historic cultural heritage.</p> <p>Ensure operations do not place any items of heritage at risk from emergency situations.</p>
<b>Decommissioning</b>			
LNG facility heritage sites damage.HAS-29, HAS-30, HAS-32.	Decommissioning activities and transport associated with the LNG facility poses a risk of direct (soil excavation) and indirect disturbance (e.g. vibration/ blasting).	<ul style="list-style-type: none"> <li>Adopt tiered approach of avoidance and minimisation of impacts. Where practical, sites of local significance will be avoided.</li> <li>Where potential impacts have been identified relevant mitigation measures shall be identified which may include- maintenance of offset distances (e.g. Vibration) for infrastructure positioning and access tracks.</li> <li>Avoid haulage proximate to heritage sites and utilise existing tracks only.</li> <li>Demarcate and restrict access to all heritage sites and protect from further disturbance.</li> <li>Monitor all excavation activities to enable the identification of any additional heritage sites/items discovered during construction.</li> <li>Train contractors/staff in operational areas on the location of sites and their protection requirements.</li> <li>Where new sites are identified, a Heritage professional shall be consulted for assessment of significance and recommendation of management measures.</li> </ul>	<p>Conserve and protect both known and undiscovered items of historic cultural heritage.</p>

**Section 8****LNG Facility Environmental Values and Management of Impacts****8.13.2.6 Summary of Findings**

The non-indigenous cultural heritage assessment identified three sites of historic cultural heritage significance and three sites of historical interest within the LNG facility study area. Sites located as part of this assessment relate to transient pastoral activities including the transfer of goods between the mainland and Curtis Island.

None of the three sites were assessed to be of state significance based on the criteria of the Queensland Heritage Act or listed on heritage registers.

HAS-29 and HAS-30 will be directly impacted by the construction of the MOF and haul road.

General mitigation measures include the adoption of appropriate buffer distances to avoid construction and operational impacts to heritage sites. Where additional heritage sites are identified, assessments shall be undertaken as part of EMP requirements.