

# Chapter 22

## Historic heritage



This chapter discusses the potential impacts on historic heritage associated with the construction and operation of the Gas Import Jetty and Pipeline Project (the Project). This chapter is based on the impact assessment presented in EES Technical Report Q: *Historic heritage impact assessment*.

### 22.1 Overview

Historic heritage refers to built form and archaeological remains of buildings and places dating from after European settlement.

Historic heritage is shaped by its cultural, social, historical, political, economic and physical contexts and provides meaningful links to our past. The significance of a historic site is defined through its use and associations.

In Victoria, heritage places of state significance are recognised and protected through listing on the Victorian Heritage Register under the *Heritage Act 2017* (Heritage Act) and through Heritage Overlays in local planning schemes in accordance with the *Planning and Environment Act 1987* (Planning and Environment Act).

Places of local heritage significance are also identified and protected through Heritage Overlays. In addition, the Victorian Heritage Inventory (which is also administered under the Heritage Act) protects archaeological remains 75 years in age or older. In special circumstances archaeological remains younger than 75 years in age may also be protected.

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) protects Australian places on the World Heritage List, National Heritage List and Commonwealth Heritage List.

Construction activities associated with the Project have the potential to generate direct and indirect risks (from vibration) to heritage sites. Excavation works may result in damage or destruction of archaeological sites.

The appropriate management of heritage places enables the heritage value of the places and their contribution to the local area to be conserved for present and future generations.

### 22.2 EES evaluation objective

The scoping requirements for the EES set out the following relevant draft evaluation objective:

**Cultural heritage – To avoid or minimise adverse effects on Aboriginal and historic cultural heritage.**

To assess potential impacts of the Project on historic cultural heritage, a historic heritage impact assessment was undertaken (see EES Technical Report Q: *Historic heritage impact assessment*).

Potential impacts to Aboriginal cultural heritage are addressed in **Chapter 21** Aboriginal cultural heritage.

## 22.3 Methodology

The approach adopted for the historic heritage assessment involved the following key tasks:

- a review of relevant Commonwealth, state and local legislation and policy
- a review of relevant baseline data and reports, including searches of relevant heritage registers and the review of historical records, plans, maps and other heritage assessments
- site inspections of identified historic sites within 100 metres of the Project Area were undertaken in January 2019, October 2019 and February 2020 to ascertain what, if any, physical remains are present
- a risk assessment using the methodology in **Chapter 5 Key approvals and assessment framework**, to inform the impact assessment and development of additional mitigation measures
- assessment of potential historic heritage impacts during construction and operation of the Project
- development of mitigation measures in response to the potential impacts identified.

## 22.4 Study area

The study area for the historical assessment included a 600-metre buffer to the Project Area. The Project Area includes the construction and operation footprints for the Gas Import Jetty and Pipeline Works.

The 600-metre buffer either side was a conservative buffer distance adopted to include any historic sites that may potentially be directly or indirectly impacted. The study area for the historic heritage impact assessment is shown in **Figure 22-1**.

## 22.5 Existing conditions

The land within the study area has a diverse European history dating back to the 1800s. Much of the land has been and continues to be used for agricultural and pastoral industries.

The southern section of the study area has a strong association with industrial use since British Petroleum (BP) constructed the Western Port Refinery in 1963. The construction of the refinery and related port facilities with the two-berth jetty brought significant growth to the Crib Point region.

The artefacts and remnants of various land uses and associations can be found on a number of historic sites located throughout and within close proximity of the Project Area.

The assessment identified that no Commonwealth, National and World heritage listed places are near or in the study area.

### 22.5.1 Historic sites

The desktop review of the regional history of the study area identified 22 historic sites.

**Table 22-1** details any heritage listings that apply to each site, their proximity to the pipeline alignment and the Project Area, and the known condition of each historic site. The locations of the 22 sites are shown in **Figure 22-2**. Thirteen of the 22 sites are located within 100 metres of the Project Area:

- William (Bill) Woolleys Homestead
- Woolleys cool room
- former BP refinery administration building
- Frankston to Hastings/Hastings to Crib Point telegraph line
- Hastings State School 1098, Memorial Gateway, Trees, Hastings Primary School Memorial Gates
- Hastings rail line/corridor
- house
- Denham Road farmhouse
- Tyabb waterholes
- wattle and daub hut, Jatoki Farm (also known as 'Quiley Park')
- Balla Balla
- rail bridge and crossing on Manks Road
- Dalmore well.

A site inspection of the historic sites within 100 metres of the Project Area was undertaken to ascertain what, if any, physical remains are present. Five of these sites were inspected on 25 January 2019, with additional site inspections undertaken of the remaining historic sites within 100 metres of the Project Area on 17 October 2019 and 12 February 2020.

A distance of 100 metres was selected as an appropriate distance from the Project Area for the physical inspection of historic sites, as this is the area within which direct and/or indirect impacts would more occur. Detailed discussion of each of the sites within 100 metres of the Project Area is provided further below.



Figure 22-1: Historic heritage study area

**Table 22-1:** Historic sites within the study area

Historic site	Current heritage listing	Location	Proximity to pipeline alignment (metre)	Proximity to Project Area (metre)	Existing condition
William (Bill) Woolley's Homestead, Crib Point	Victorian Heritage Inventory H7921-0112	50 Disney Street, Crib Point	482 m	26 m	Location overgrown, in poor condition. No archaeological remains visible
Woolley's cool room, Woolleys Beach	Mornington Peninsula Planning Scheme Heritage Overlay (HO) 322	Woolleys Beach, Crib Point	361 m	52 m	Location overgrown, in poor condition
Former BP refinery administration building	Victorian Heritage Register H1016 Mornington Peninsula Planning Scheme HO240	220-350 The Esplanade, Crib Point	17 m	0 m	Utilised as the Victorian Maritime Centre, in good condition
Jack's Tanning Pit	Mornington Peninsula Planning Scheme HO324	Jacks Beach, Hastings	282 m	261 m	Not inspected
Land gazetted for military purposes	None	Warringine Park, Bittern	214 m	204 m	Not inspected
Frankston to Hastings/Hastings to Crib Point telegraph line	None	High Street, Hastings	12 m	7 m	Not in use, in poor condition
Holy Trinity Anglican Church Complex	Mornington Peninsula Planning Scheme HO299	Church Street, Hastings	427 m	411 m	Not inspected
Former vicarage	Mornington Peninsula Planning Scheme HO142	Church Street, Hastings	495 m	471 m	Not inspected
Hastings State School 1098, Memorial Gateway, Trees, Hastings Primary School Memorial Gates	Mornington Peninsula Planning Scheme HO293 Victorian War Heritage Inventory Place ID 155504	10-20 Hodgins Road, Hastings	62 m	20 m	Utilised as a primary school, in good condition
Hastings Uniting Church Chapel	Mornington Peninsula Planning Scheme HO459	121 Marine Parade, Hastings	388 m	346 m	Not inspected
Hastings rail line/corridor	None	Reid Parade to Cool Store Road, Hastings	15 m	0 m	Utilised as working railway, in good condition
House	Mornington Peninsula Planning Scheme HO463	12 Graydens Road Tyabb	425 m	52 m	Unoccupied, in poor condition
Denham Road farmhouse	Victorian Heritage Inventory H7921-0119	28 Bayview Road, Hastings	0 m	0 m	Not in use, in poor condition
Tyabb waterholes	None	Bembridge Road, Somerville	1. 452 m 2. 111 m	1. 422 m 2. 97 m	1. Grazed paddock, also utilised for motorbike track, no evidence of site. 2. Grazed paddock, no evidence of site.
Landing Place, Watson's Inlet	None	Bembridge Road, Somerville	274 m	260 m	Not inspected

Historic site	Current heritage listing	Location	Proximity to pipeline alignment (metre)	Proximity to Project Area (metre)	Existing condition
Wattle and daub hut, Jatoki Farm (also known as 'Quiley Park')	Casey Planning Scheme HO21	55 Craigs Lane, Pearce Dale	76 m	56 m	Residential complex, in fair condition
Balla Balla	Casey Planning Scheme HO13	1300 Baxter-Tooradin Road, Cannons Creek	69 m	27 m	Residential dwelling, in good condition
Rail bridge and crossing	None	Corner of Muddy Gates Lane and Manks Road, Koo Wee Rup	33 m	39 m	Not in use, in poor condition
E. Gunton Oval	Cardinia Planning Scheme HO157	Ballarto Road, Cardinia	720 m	428 m	Not inspected
Dalmore well	Cardinia Planning Scheme HO47	In the road reserve adjacent to 75 Hobson Road, Rythdale	66 m	56 m	Not in use, in good condition
Hobson's (Soldier Settler) House	Cardinia Planning Scheme HO115	194 Soldiers Road, Rythdale	386 m	366 m	Not inspected
Rythdale Reserve trees	Cardinia Planning Scheme HO235	205 Soldiers Road, Rythdale	472 m	451 m	Not inspected



### William (Bill) Woolley's Homestead, Crib Point

William (Bill) Woolley's Homestead is located on Disney Street in Crib Point and is 26 metres from the Project Area. The Woolley family were prominent early European settlers of the region, and while the homestead has been demolished there are remnants of a well and fruit trees at the location. The site is notable as Woolley refused to sell to BP, forcing it to construct its Western Port refinery around the homestead. The historic site is listed on the Victorian Heritage Inventory (H7921-0112).

The site is now surrounded by wire fencing and is inaccessible from Disney Street, with the former BP refinery tanks visible in the background, as shown in **Figure 22-3**. Due to access restrictions, the remnants of the well and fruit trees were unable to be determined during the site inspection.

▼ **Figure 22-3:** Site of William (Bill) Woolley's Homestead, with the former BP Western Port Refinery tanks in the background



### Woolley's cool room, Woolleys Beach

Woolley's cool room is located on Woolleys Beach in Crib Point and is 52 metres from the Project Area. As a fisherman, William Woolley built a jetty and a cool room to store fish before transporting to Melbourne to sell. The historic site has associations with the early fishing industry of Victoria and is included in the Mornington Peninsula Planning Scheme Heritage Overlay (HO322). The cool room is currently within the beach reserve and is shown in **Figure 22-4**.

▼ **Figure 22-4:** Woolley's cool room



### Former BP refinery administration building

The former BP refinery administration building shown in **Figure 22-5** is located on The Esplanade in Crib Point. The building is located within the Project Area. The refinery, including the administration building, was built in the mid-1960s and was a long-time flagship for BP operations in Australia. The building was designed by architect Don Hendry Fulton who received the 1966 RVIA Victorian Architecture Medal for the brick ground floor with a cantilevered glass first floor building.

The architecture of this building has been assessed as being of state-level significance as it is considered an example of 1960s construction, demonstrating creative accomplishment and outstanding craftsmanship. The building is included on the Victorian Heritage Register and is currently being used as the Victorian Maritime Centre by the Western Port Oberon Association. The building is well maintained and in good condition.

▼ **Figure 22-5:** Former BP administration building



Source: Victorian Heritage Database

### Frankston to Hastings/Hastings to Crib Point telegraph line

The Frankston to Hastings/Hastings to Crib Point telegraph line shown in **Figure 22-6** is located on High Street in Hastings. The telegraph line extends through the Project Area. The telegraph line was installed from the 1800s, after defence planners realised that an invasion via Western Port was possible. In 1936, many of the telegraph lines were replaced with new telephone cables. The Flinders telegraph office was demolished in 1963.

The historic site has associations with connecting Victorians via communication – in the late 19th century it was the quickest method of global communication. Today the telegraph line is within the rail reserve and in poor condition. The poles have not been maintained and there are unconnected wires trailing from some poles and other poles are askew.

### Hastings State School 1098, Memorial Gateway, Trees, Hastings Primary School Memorial Gates

The current Hastings Primary School is located at 10–20 Hodgins Road in Hastings. The closest boundary of this heritage overlay is located 20 metres from the Project Area. The first school building located on the site opened in 1872 as SS 1098, after the introduction of the Education Act in 1872. This historic site is considered to have local significance and is listed on the Mornington Peninsula Planning Scheme Heritage Overlay (HO293).

The Hastings Primary School Memorial Gates shown in **Figure 22-7** are listed on the Victorian War Heritage Inventory (155504). Also referred to as the Hastings Primary School Honour Gates, they were erected in 1948 to honour all ex-pupils of the school who served in World War I and World War II.

The historic site continues to be used as a primary school today and is considered to be in good condition.

### Hastings rail line/corridor

A section of the Hastings rail line is located within the Project Area extending from Reid Parade to Cool Store Road. The rail line opened in 1888 from Frankston to Baxter and through to Hastings, Bittern and Stony Point in 1889, when the Hastings railway station also opened.

The historic site has associations with connecting Victoria and continues to function as a working rail line for suburban and freight trains. This section of the railway is a single track as shown in **Figure 22-8**. The section accommodates trains in both directions and includes Hastings railway station and a disused crane.

▼ **Figure 22-6:** Telegraph line looking towards Hastings railway station



▼ **Figure 22-7:** Hastings State School 1098 and the Hastings Primary School Memorial Gates



▼ **Figure 22-8:** Hastings rail line/corridor from Cool Store Road



## House

The house is located at 12 Graydens Road in Tyabb and is 52 metres from the Project Area. Shown in **Figure 22-9**, the house is a rare surviving example of domestic functional construction in its use of horizontal saplings, timber posts and pug, or mud used as a packing material. The house's original form and materials particularly the pole and pug (a type of wattle and daub) construction methods employed contributes to its significance. The house is of local historic significance as it represents the ongoing use of this domestic functional construction in rural Victoria in the early 20th century. This site is included on the Mornington Peninsula Planning Scheme Heritage Overlay (HO463).

Although the house is occupied it appears to be in poor condition.

▼ **Figure 22-9:** House at 12 Graydens Road, Tyabb



## Denham Road farmhouse

The Denham Road farmhouse is located along Bayview Road in Hastings within the Project Area.

The historic site is listed on the Victorian Heritage Inventory and is considered to have archaeological significance due to its potential to yield information about early European settlement of the region.

Today the historic site includes an easement for the Esso petroleum pipeline and is otherwise located in a grazed paddock as seen in **Figure 22-10**. There is evidence of the modern construction but also broken bricks, pipe and glass distributed amongst the pasture. The remaining trees appear in good condition.

The Denham Road farmhouse is the remnant of a late 19th century farmhouse complex which originally included the farmhouse and associated outbuildings, as well as plantings of introduced species. No above-ground structures remain. An investigation of the historic site in 2016 concluded the modern foundations from 20th century occupation shown in **Figure 22-11** sit above the foundations of earlier structures.

▼ **Figure 22-10:** Denham Road farmhouse site



▼ **Figure 22-11:** Denham Road farmhouse foundations

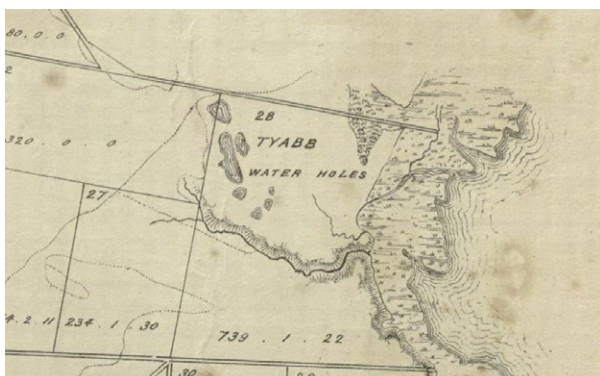


### Tyabb waterholes

The Tyabb waterholes are located on Bembridge Road in Somerville. There are waterholes within the study area located 422 metres and 97 metres from the Project Area. The Tyabb waterholes consist of a series of three large waterholes and two or three smaller waterholes to the west of Watson's Inlet. The waterholes were identified on early plans as a water reserve before the 1870s as shown in **Figure 22-12** and **Figure 22-13**, indicating the historic site has strong associations with the region's pastoral history.

The waterholes are now located on private land which has been used for grazing, during the site inspection no evidence of these waterholes at the two locations were visible as shown in **Figure 22-14** and **Figure 22-15**.

▼ **Figure 22-12:** Section of plan for the agricultural area of Tyabb showing the Tyabb waterholes



▼ **Figure 22-13:** Section of plan Mornington Peninsula showing Tyabb waterholes



▼ **Figure 22-14:** Tyabb waterholes 1



▼ **Figure 22-15:** Tyabb waterholes 2



### Wattle and daub hut, Jatoki Farm (also known as 'Quiley Park')

The wattle and daub hut, Jatoki Farm is located on Craigs Lane in Pearcedale. The historic site is located 56 metres from the Project Area. The wattle and daub hut was built in 1873 by David Craig, a stockman at Balla Balla. The historic site has since had later additions and modifications. It is of local significance as it is a rare example of an early construction method and is one of the oldest remaining dwellings in the region. The site is included on the Casey Planning Scheme Heritage Overlay (HO21).

The historic site is now part of a residential complex and is in a fair condition as shown in **Figure 22-16**.

▼ **Figure 22-16:** Wattle and daub hut, Jatoki Farm



### 'Balla Balla'

'Balla Balla' homestead is located on Baxter-Tooradin Road at Cannons Creek. The historical site is located 27 metres from the Project Area.

The homestead is located within the Balla Balla squatting run which is estimated to have initially covered 6,000 acres when first gazetted. The lease for the pastoral run changed hands a number of times and the land size was reduced. Sections of the homestead were built for Dr James Smith Adams and then for Alex McLean Hunter, both well-known graziers.

The homestead and its associated gardens are of local significance due to their association with the region's pastoral industry and as an example of colonial Georgian architecture. It is included in the Casey Planning Scheme Heritage Overlay (HO13).

### Rail bridge and crossing on Manks Road

The rail bridge and crossing are located on at the corner of Muddy Gates Lane and Manks Road in Koo Wee Rup and is about 39 metres from the Project Area. The Great Southern Railway served the Gippsland region from the 1890s providing goods and passenger services. The railway contributed to the development of the region and although it was decommissioned in the 1990s, remnants of its signalling equipment, level crossings and station platforms remain.

One of these remnants is the rail bridge and crossing at the corner of Muddy Gates Lane and Manks Road, shown in **Figure 22-17**. This historic site has associations with connecting Victoria by rail; it should be noted that other sections of the Great Southern Railway in the region have been turned into a walking and cycling rail trail. The rail bridge and crossing on Marks Road is abandoned and in need of maintenance to remain in fair to good condition.

▼ **Figure 22-17:** Rail bridge and crossing



### Dalmore well

Dalmore well is located on Hobson Road in Dalmore and is about 56 metres from the Project Area. The cement dome of the underground well is the only remains of the Dalmore homestead built in 1883 by Duncan MacGregor, one of the region's first European settlers. The well was constructed of locally manufactured bricks.

The well is of local significance due to its association with the region's pastoral industry and is an example of utilitarian features associated with everyday life. It is included in the Cardinia Planning Scheme Heritage Overlay (HO47). The well is located in the road reserve of Hobsons Road and is unused. While repairs and poor conservation attempts are evident, the well is in good condition, as shown in **Figure 22-18**.

▼ **Figure 22-18:** Dalmore well



### Maritime heritage HMAS Otama

The HMAS Otama is listed on the National Trust (NT B6683) and is located in Western Port Bay around 600 metres north of the Crib Point Jetty. The Scottish-built submarine Otama was launched in 1975 by Her Royal Highness, The Princess Royal, and entered service of the Royal Australian Navy in 1978. HMAS Otama was often deployed on classified operations during its operational period before its decommissioning in 2000.

Western Port Oberon Association bought the submarine after a Commonwealth Government grant was given in 2001, with the aim of bringing it ashore to be part of an exhibit commemorating Australian service at sea in the Western Port area. However, this was unable to proceed and the Otama has remained moored at sea since 2002.

No other shipwrecks or maritime heritage items were identified within the study area for this historic heritage assessment.

## 22.6 Risk assessment

The risk assessment identified the risks associated with historic heritage as a result of the Project's construction and operation in accordance with the method described in **Chapter 5** Key approvals and assessment framework.

The assessment included consideration of the environmental, social, economic and health and safety consequences of each risk and their likelihood of occurring.

No risks associated with historic heritage sites were identified for the operation of the Project.

**Table 22-2** summarises the historic heritage risks identified. A complete risk register, including the likelihood and consequence of each risk pathway, is located in EES Attachment III *Environmental risk report*.

Risk ratings were applied to each of the identified risk pathways in assuming that initial mitigation measures were in place. Where the initial risk ratings were categorised as medium or higher, additional mitigation measures have been developed as part of the historical impact assessment.

In some circumstances the Pipeline Works would result in events that are planned to occur (Risk ID HH1), with direct disturbance of identified historic heritage places and sites by construction works resulting in the loss of heritage value. Risk ID HH1 associated with pipeline construction works was assigned an initial risk rating of high. With the implementation of horizontal directional drilling (HDD) as an additional mitigation measure, the risk rating has been reduced to low.

The remaining two historic heritage risks (Risk IDs HH2 and HH3) associated with construction of the Project have been assigned an initial risk rating of low with the appropriate mitigation measures in place.

The construction and operation impacts are discussed in **Section 22.7** (*Construction impacts*) and **Section 22.8** (*Operation impacts*) of this chapter.

**Section 22.10** (*Mitigation measures*) of this chapter and **Chapter 25** *Environmental Management Framework* set out the mitigation measures.

Table 22-2: Historic heritage risks

Risk ID	Works area	Risk pathway	Initial mitigation measures	Initial risk rating	Additional mitigation measures	Residual risk rating
<b>Construction</b>						
HH1	Pipeline Works	Direct disturbance of identified historic heritage places and sites (included in the Heritage Overlay, Victorian Heritage Register, Victorian Heritage Inventory) by works resulting in loss of heritage value	No initial mitigation measures identified	High	<b>MM-HH01</b> Horizontal directional drilling	Low
HH2	Gas Import Jetty Works and Pipeline Works	Disturbance of previously unidentified historic heritage places and sites by works resulting in loss of heritage value.	<b>MM-HH02</b> Unexpected finds procedure	Low	No additional mitigation identified	Low
HH3	Gas Import Jetty Works and Pipeline Works	Indirect disturbance of identified historic heritage places and sites (included in the Heritage Overlay, Victorian Heritage Register, Victorian Heritage Inventory) by works resulting in loss of heritage value.	<b>MM-HH03</b> Dilapidation survey for Victorian Heritage Register site (Former BP refinery administration building H1016, HO240).	Low	No additional mitigation identified	Low

## 22.7 Construction impacts

The potential impacts on historic sites within the study area due to construction of the Project are summarised in **Table 22-3**.

**Table 22-3:** Potential impacts on historic heritage sites

Historic site	Heritage listing	Potential impact from the Project
William (Bill) Woolley's Homestead, Crib Point	Victorian Heritage Inventory H7921-0112	None
Woolley's cool room, Woolleys Beach	Mornington Peninsula Planning Scheme Heritage Overlay (HO) 322	None
Former BP refinery administration building	Victorian Heritage Register H1016 Mornington Peninsula Planning Scheme HO240	Indirect
HMAS Otama	National Trust Heritage Register B6683	None
Jack's Tanning Pit	Mornington Peninsula Planning Scheme HO324	None
Land gazetted for military purposes	None	None
Frankston to Hastings/Hastings to Crib Point telegraph line	None	None
Holy Trinity Anglican Church Complex	Mornington Peninsula Planning Scheme HO299	None
Former vicarage	Mornington Peninsula Planning Scheme HO142	None
Hastings State School 1098, Memorial Gateway, Trees, Hastings Primary School Memorial Gates	Mornington Peninsula Planning Scheme HO293 Victorian War Heritage Inventory 155504	None
Hastings Uniting Church Chapel	Mornington Peninsula Planning Scheme HO459	None
Hastings rail line/corridor	None	None
Denham Road Farmhouse	Victorian Heritage Inventory H7921-0119	Direct
Tyabb waterholes	None	None
Landing Place, Watson's Inlet	None	None
Wattle and Daub Hut, Jatoki Farm (also known as 'Quiley Park')	Casey Planning Scheme HO21	None
'Balla Balla'	Casey Planning Scheme HO13	None
Rail bridge and crossing	None	None
E.Gunton Oval	Cardinia Planning Scheme HO157	None
Dalmore Well	Cardinia Planning Scheme HO47	None
Hobson's (soldier settler) House	Cardinia Planning Scheme HO115	None
Rythdale Reserve trees	Cardinia Planning Scheme HO235	None

### Denham Road farmhouse (Risk ID HH1)

The Denham Road farmhouse is the only identified historic heritage site that construction of the Project would directly impact.

The Denham Road farmhouse includes an easement for the Esso petroleum pipeline (Esso pipeline). Previous archaeological investigations suggest the easement does not contain historic artefacts or features associated with the early occupation of the farmhouse. Although artefacts associated with the 20th century occupation were identified during the historical impact assessment, these are not considered to have archaeological significance. The Pipeline Works easement would be located to the south of the Esso pipeline.

If the Pipeline Works were to trench through the site along the Esso pipeline easement, it is considered there would be a loss of the heritage value of the site, given artefacts were discovered close to the surface when the Esso pipeline was constructed.

Due to the high risk associated with trenching along the easement, the use of horizontal directional drilling (HDD) at this location was identified as an additional mitigation measure during selection of the pipeline alignment and optimisation of the right of way (ROW). Harm to the historic value of the site would be reduced by drilling beneath the site (see mitigation measure MM-HH01), and so the risk rating has been reduced from high to low.

A Consent to Damage under Section 124 of Victoria's Heritage Act 2017, or an exemption from a Consent, would be required before the Pipeline Works start. This is because the Pipeline Works would impact the curtilage of the historic site (in this case, underneath it as a result of the HDD). However, there would be no direct impacts on the physical remains of the site, including artefacts and the farmhouse foundations. The Consent to Damage application would include detailed information on the proposed construction methodology. It would also list an archaeological investigative methodology, artefact management policy and qualifications for supervisory archaeologist and conservator, as required. Furthermore, all on-site staff and contractors must attend an archaeological induction before works start (that is, before site preparation and development works).

By implementing the above mitigation measures, including drilling underneath the site using HDD, no loss of heritage value of the Denham Road farmhouse would occur (Victorian Heritage Inventory site H7921-0119).



#### What is heritage curtilage?

The Heritage Overlay applies to both the listed heritage item and its associated land. It is usually important to include land surrounding a building, structure, tree or feature of importance to ensure that any development, including subdivision, does not adversely affect the setting, context or significance of the heritage item. The land surrounding the heritage item is known as a 'curtilage' and will be shown as a polygon on the Heritage Overlay map. In many cases, the extent of the curtilage will be the whole of the property (for example, a dwelling and its allotment). The polygon on the map is represented as a two-dimensional boundary, however curtilage refers to everything within the boundary in a three-dimensional setting, including beneath the site.

### Disturbance of unidentified historic heritage (Risk ID HH2)

Although unidentified historic sites may be present within the study area and be impacted by the Project, this is considered unlikely.

To reduce the potential for adverse impacts on unidentified historic heritage, an Unexpected Finds procedure would be developed in consultation with a heritage advisor before construction works started. The Unexpected Finds procedure would be incorporated into the Gas Import Jetty Works Environmental Management Plan (EMP) and the Pipeline Works Construction Environmental Management Plan (CEMP) (see mitigation measure MM-HH02).

This procedure would outline steps for site contractors to undertake should an unidentified historic site be encountered. An induction for all on-site staff and contractors about archaeological sites would be required before works start (that is, before preparation and development works). With this procedure in place, the risk of adverse impacts on unidentified historic heritage is low.

### Indirect disturbance of identified historic heritage (Risk ID HH3)

The results of the assessment have indicated the Former BP refinery administration building is the only identified historic heritage site the Project may indirectly impact. Indirect impacts on other sites are not considered likely due to the nature of the sites and their distance from the Project Area.

Although the Project would not directly impact this historic site, trenching and a laydown area would occur in near the building's curtilage. There is potential for indirect impacts such as vibration to impact the site. The buildings at this site are beyond the cosmetic damage safe working distances from construction vibration (see **Chapter 13 Noise and vibration**). However, as the building's sensitivity to vibration is unknown, in consultation with the Pipeline Works construction team, it was determined that a dilapidation survey of the historic site would occur pre-construction and post-construction with rectification works undertaken if required (see mitigation measure MM HH03).

It is noted that a permit under Section 93 of Victoria's *Heritage Act 2017* is not required for the Project because the site would not be directly impacted. However, if impacts did occur, a permit would be required before any remediation efforts can occur.

## 22.8 Operation impacts

No impacts associated with historic heritage sites were identified for the operation of the Project.

## 22.9 Maritime heritage impacts

The construction and operational activities proposed for the Project would not impact on the known item listed on the National Trust (HMAS Otama (NT B6683)) due to the nature of the works and the separation distance to this item (around 600 metres). In addition, the HMAS Otama is marked on maritime navigational maps and so would need to be considered by arriving or departing LNG carriers or other vessels (such as tugs or pilot boats) consistent with other marked hazards.

No shipwrecks or other maritime heritage items are known to occur within the vicinity of the Crib Point Jetty based on a desktop assessment and discussions with Project stakeholders including the Port of Hastings Development Authority and the Victorian Maritime Centre.

There would be negligible potential for impacts on maritime heritage. On this basis, the risk of impacts is considered to be very low and no further assessment or mitigation is deemed necessary.

### 22.10 Mitigation measures

**Table 22-4** sets out the mitigation measures developed to manage historic heritage impacts during construction of the Project.

Potential impacts on heritage due to construction vibration would be managed as per the mitigation measures outlined in **Chapter 13 Noise and vibration**.

**Table 22-4:** Mitigation measures – historic heritage

Mitigation measure ID	Mitigation measure	Works area	Project phase
MM-HH01	<b>Horizontal directional drilling</b> Subject to further detailed geotechnical investigations confirming suitability, trenchless construction techniques will be used at the following location to minimise direct impacts on heritage values: - Denham Road farmhouse (VHI site H7921-0119) Further measures will be identified to avoid and minimise direct impacts.	Pipeline Works	Design and construction
MM-HH02	<b>Unexpected cultural heritage finds procedure</b> Procedures to implement if an unknown historic heritage site, value or object is discovered during construction will be incorporated in the EMP and CEMP. This will include guidelines on collection or salvage of historic heritage objects. This procedure will be discussed in the site(s) induction(s).	Gas Import Jetty Works and Pipeline Works	Construction
MM-HH03	<b>Condition surveys and monitoring (former BP refinery administration building H1016)</b> A condition survey of the Victorian Heritage Register site (Former BP refinery administration building H1016) will be undertaken prior to commencing construction activities at Crib Point and following completion of construction activities at Crib Point. Any damage deemed to have resulted from the Project will be rectified by the proponent.	Gas Import Jetty Works and Pipeline Works	Construction

## 22.11 Conclusion

The historic heritage impact assessment has identified the risks and potential impacts of the Project on historic heritage from the construction and operation of the Project. No impacts associated with the operation of the Project have been identified.

A total of 22 historic sites were identified in the study area. Of these 22 sites, 13 are located within 100 metres of the Project Area.

The Denham Road farmhouse, which is listed on the Victorian Heritage Inventory, is the only identified heritage site the pipeline construction works would directly impact. The historical impact assessment has concluded that potential impacts on the heritage value of the Denham Road farmhouse during construction of the Project can be reduced by trenchless construction as a mitigation measure (drilling underneath the site).

There is potential for construction works to indirectly impact the former BP refinery administration building, as trenching and a laydown area would occur in near the building's curtilage which may result in vibration impacts. Potential impacts on the Former BP refinery administration building H1016 would be managed by undertaking a condition survey of the Victorian Heritage Register site before and following construction and any damage attributable to the construction of the Project would be rectified.

The Project has avoided direct impacts on historic heritage as far as practicable, and with the implementation of the identified mitigation measures and the Gas Import Jetty Works EMP and Pipeline Works CEMP, there is a very low residual risk of direct impacts on listed heritage items during construction of the Project.

In response to the cultural heritage draft evaluation objective, impacts of the Project on historic heritage have been assessed and mitigation measures have been identified to reduce or minimise these impacts.

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK