

Chapter 21

Aboriginal cultural heritage



This chapter discusses the potential impacts on Aboriginal cultural 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 P: *Aboriginal cultural heritage impact assessment*.

21.1 Overview

Historic heritage refers to built form and archaeological Aboriginal cultural heritage consists of places and items that are considered to be of significance to Aboriginal people through their traditions, customs, beliefs and history. Aboriginal people have lived in southern Australia for thousands of years, with physical evidence of their presence now surviving as cultural heritage places and objects. Underpinning these physical elements of Aboriginal cultural heritage are the intangible places where physical evidence of past cultural activities may not be present but hold spiritual significance.

Understanding Aboriginal cultural heritage is important as it provides a meaningful link to our past. Identifying and investigating Aboriginal cultural heritage with the Traditional Owners of the land helps to provide people with a sense of their own culture as well as to reconnect and preserve links to the past land use of Victoria.



What is a Cultural Heritage Management Plan?

A Cultural Heritage Management Plan (CHMP) provides a process for protecting and managing Aboriginal cultural heritage. A CHMP is a written report that outlines the assessment undertaken to identify the potential impacts a proposed activity could have on Aboriginal cultural heritage. A CHMP is required to be prepared when a high impact activity is proposed within an area of cultural heritage sensitivity. The CHMP aims to assess the likelihood of causing harm to Aboriginal cultural heritage in the proposed area, and subsequently outlines measures to be taken to manage and protect the cultural heritage of a place.

Areas of cultural heritage sensitivity are registered Aboriginal cultural heritage places as well as landforms and land categories that are regarded as more likely to contain Aboriginal cultural heritage. Registered Aboriginal Cultural Heritage places are those that are listed on the Victorian Aboriginal Heritage Register.

The Victorian *Aboriginal Heritage Act 2006* (Aboriginal Heritage Act) provides protection for all Aboriginal cultural heritage places and objects. Under section 49 of the Aboriginal Heritage Act, a Cultural Heritage Management Plan (CHMP) is mandatory if the preparation of an EES is required. To comply with the requirements of the Aboriginal Heritage Act, three CHMPs are being prepared for the EES.

The construction of the Project would involve ground disturbance works, which has the potential to impact Aboriginal cultural heritage places and values.

21.2 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 Aboriginal cultural heritage, an Aboriginal cultural heritage impact assessment was undertaken (see EES Technical Report P: *Aboriginal cultural heritage impact assessment*).

21.3 Methodology

The approach adopted for the Aboriginal cultural heritage impact assessment involved the following key tasks:

- a review of relevant legislation and policy at Commonwealth, state and local level
- a desktop review of relevant baseline data and reports, including environmental and ethnographic data, as well as Aboriginal archaeological and Aboriginal place data
- consultation with regulatory bodies and key stakeholders, including Aboriginal Victoria, Bunurong Land Council Aboriginal Corporation (BLCAC) and other relevant Traditional Owner groups
- site inspections as a part of the CHMP Standard Assessment ground survey to identify surface Aboriginal cultural heritage material and confirm landforms of archaeological potential
- further site investigations and excavations as a part of the CHMP Complex Assessment to establish the subsurface stratigraphy and archaeological sensitivity of the landforms identified in the desktop review and Standard Assessment
- characterisation of previously registered and newly registered Aboriginal cultural heritage sites
- a risk assessment as described in **Chapter 5 Key approvals and assessment framework** to inform the impact assessment and development of additional mitigation measures
- assessment of Aboriginal cultural heritage impacts during construction and operation of the Project
- development of mitigation measures in response to the Aboriginal cultural heritage impact assessment.

21.4 Study area

The study area covers the entirety of the Project Area from the Crib Point Jetty and along the pipeline alignment to Pakenham East. To assess the study area, three CHMPs are being prepared along the proposed alignment crossing the boundaries of the BLCAC and Aboriginal Victoria:

- CHMP 15383, which covers the southern portion of the proposed pipeline alignment from Crib Point to Tooradin (BLCAC)
- CHMP 15384, which covers the northern portion of the proposed pipeline alignment from Tooradin to Pakenham (Aboriginal Victoria)
- CHMP 16300, which covers the Crib Point Receiving Facility and the existing jetty at Crib Point (BLCAC).

For the purpose of this impact assessment, the study area correlates with the Activity Areas of the CHMPs. To align with CHMP terminology, 'Activity Area' is used rather than 'study area' when referencing CHMP results, management conditions and mitigation measures. These Activity Areas are shown in **Figure 21-1**.

21.5 Existing conditions

The following section has been informed by the Project CHMPs and outlines the existing conditions for the Activity Areas.

Landforms and geomorphology

Understanding the landforms and geomorphology within the study area is important for understanding the likelihood and potential for places of Aboriginal cultural heritage to be present, as well as the types of places that may occur.

Different landforms and land types are more likely to contain Aboriginal cultural heritage, as some landscape features are more strongly linked to human use and presence. For example; gently sloping and well drained landforms were more ideal locations for camping places, and the morphology of watercourses and availability of water resources influenced where and for how long people could camp or acquire food. These environmental-archaeological relationships help to inform potential Aboriginal cultural heritage places.

The CHMPs being prepared for the EES identified six different landform types (geomorphological units (GMUs)) within the Project Area. These landforms and the percentage of the Project Area covered are shown in **Table 21-1**.



◀ **Figure 21-1:** Activity Areas of CHMP 15383, CHMP 15384 and CHMP 16300

Table 21-1: Geomorphological units area and percentage

GMU	Landform name	Area (ha)	Per cent of Project Area
GMU 3.3.2	Hills and Low Hills (Barwon Downs, French Island)	51.24	22.27%
GMU 7.1.1	Coastal Plains with Ridges and Dunefields (Brighton, Cranbourne)	132.48	57.59%
GMU 7.1.3	Former Swamps and Lagoonal Deposits (Koo Wee Rup, Robin Yallock, Bass River Delta, Carrum Downs)	5.2025	2.26%
GMU 7.1.2	Alluvial Plans (Nar Nar Goon, Caldermeade, Bass River Plain)	35.02	15.22%
GMU 1.3.1	Low Relief Landscapes at Low Elevation (Cann River south, Silvan, Templestowe)	3.90	1.69%
GMU 3.3.3	Basaltic Residuals (Phillip Island)	2.21	0.96%

Historical environment

The Project Area is located within the Gippsland Plain bioregion. Before European settlement and colonisation, the southern extent of the Project Area from Crib Point to Tooradin was characterised by the Lower Slopes or Hills Woodlands group consisting predominantly of Grassy Woodland (ecological vegetation class (EVC) 175). North of Tooradin towards Pakenham, Swamp Scrub (EVC 53) was the dominant vegetation class, with closed swamp paper bark and woolly tea trees defining the area. Within the Grassy Woodlands, floral resources available to Aboriginal people included the Common Apple-Berry, used as a plant food, as well as the Mat-Rush Kangaroo Grass used to manufacture string for nets, baskets and mats.

Grassy Woodland (EVC 175) and Swamp Scrub (EVC53) were the predominant vegetation communities present within the Project Area associated with GMU 7.1.1 and GMU 7.1.3. Little of these original vegetation classes remain.

Various native fauna including water birds (Black Swans and ducks), reptiles (Red-bellied Black Snake, Swamp Skink) and mammals (such as the Eastern Grey Kangaroo, Swamp Wallaby and Common Wombat) would have been accessible to Aboriginal people within the study area as food sources. A number of stone sources, including quartz, quartzite, chert, chalcedony and silcrete were used for tool making and could be accessed or traded into the Project Area.

Historical and ethno-historical accounts of Aboriginal occupation in the region

The Project Area is located within the territory of the *Bun wurrung* language group, which comprised at least six local groups who spoke the language. These groups held land that covered the coastal strip around Port Phillip and Western Port and extended west as far as Altona and eastwards to include Wilsons Promontory as shown in **Figure 21-2**.

The *Bun wurrung* have been identified as a part of the Kulin Nation, with Kulin groups sharing similarities in speech, initiation, burial practices and religious beliefs.

Social activity involving neighbouring groups was held in warmer periods, at the intersection of group boundaries. Activities would include sports and dancing with up to 500 men, women and children attending. Individuals and groups could inherit lands from their father, their mother, through their birthplace, conception place, the burial place of their ancestors, and through totemic connections. A totem is considered a natural object, animal or plant inherited by a group or family as their spiritual emblem. This inheritance informed the use of the land, such as the right to hunt in certain areas belonging to the group of people born there.

Individuals within Aboriginal groups had responsibilities assigned to them for the management of natural resources. Canoes were cut from the bark of river red gums and box trees, and stone axe heads were shaped over fire during the spring and summer months. Hooped nets crafted from fibre were used to catch crayfish, yabbies and fish, while cross-line nets strung low above the water were used for catching ducks. Reed spears with hafted bone, carved barbs, stone pieces or hardened wooden points set into the head were used for catching larger marsupials.

Post-contact history

The rapid spread of European colonisation altered Victorian Aboriginal society, with the *Bun wurrung* group among the earliest Aboriginal people in the state to feel the impact of European settlers from 1797. The increased presence of European settlers led to the dispossession of Aboriginal people from their traditional land as well as diminished access to resources.

The *Bun wurrung* suffered a great decline in population, more so than many groups, following European contact. A steep decline in population numbers was recorded from the 1830s to the 1840s, with introduced diseases and increased conflict being contributing factors. In recent decades a number of people claiming *Bun wurrung* descent have begun to reclaim their cultural heritage.

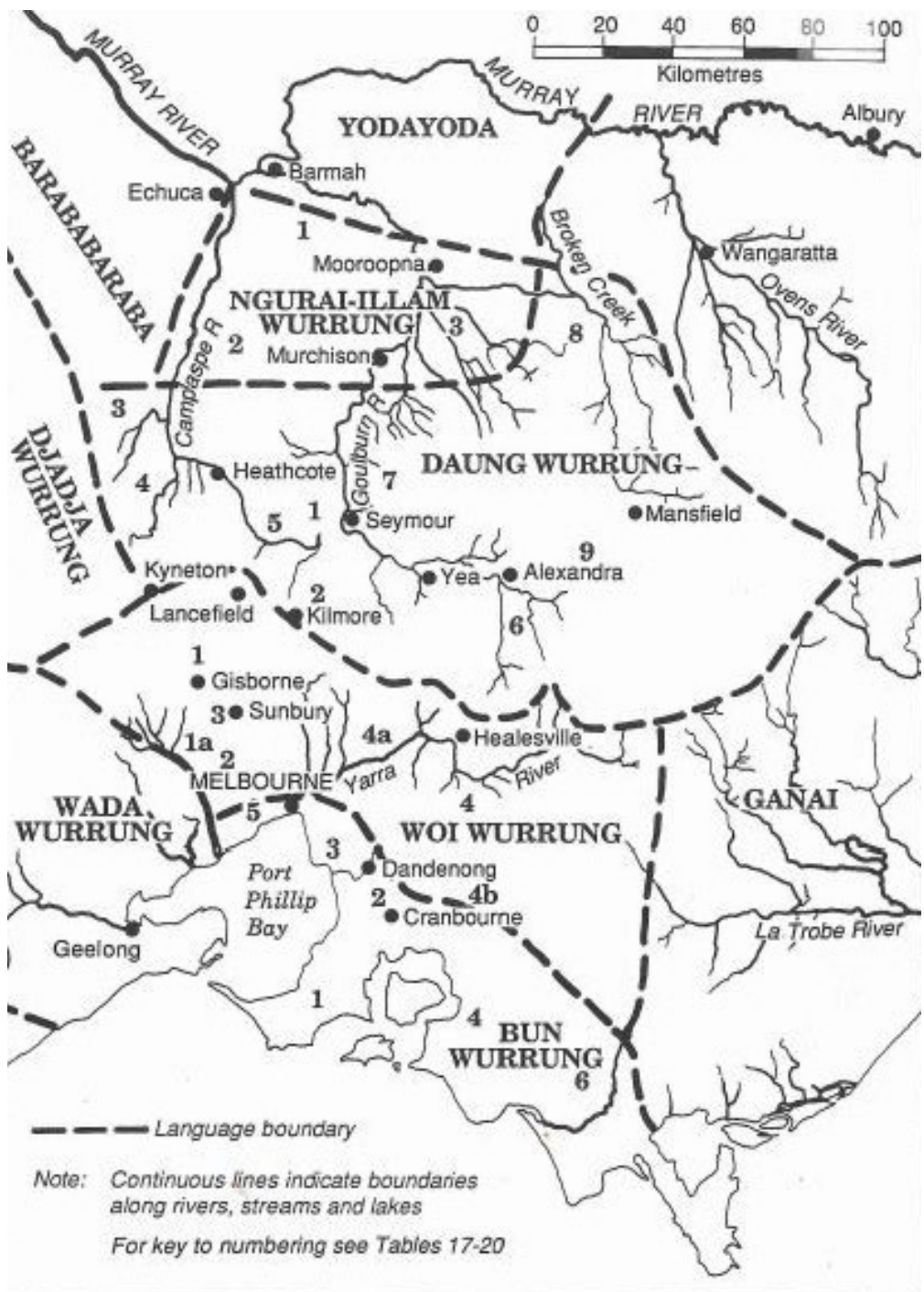
Land use history

Historical and current land uses within the CHMP Activity Areas may have disturbed Aboriginal cultural heritage.

Pipeline Works – CHMP 15384 and CHMP 15383

The Activity Area of CHMP 15384 stretches across a linear 21-kilometre section of the Project Area, generally covering agricultural areas. The extent of the Activity Area is shown in **Figure 21-3**. Currently, the Activity Area contains rural land holdings, a train maintenance depot, drains, roads and a road reserve easement.

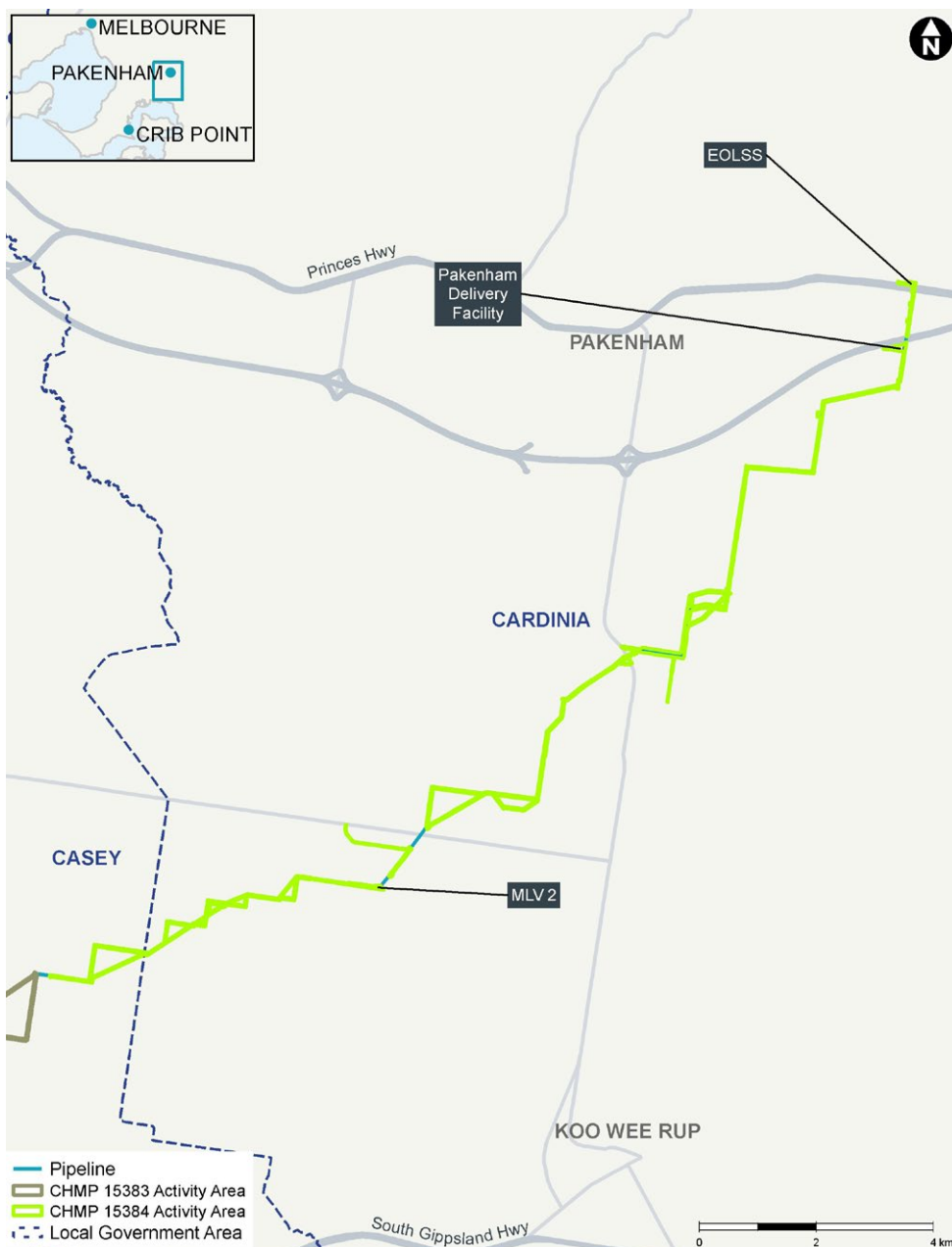
The Activity Area for CHMP 15383 covers a linear 35-kilometre section of the Project Area, comprising mostly areas used for agricultural and pastoral uses. The extent of the Activity Area is shown in **Figure 21-4**. The Activity Area currently contains rural land holdings, roads and road service easement, and the ESSO gas pipeline.



◀ Figure 21-2: East Kulin language areas and clans (Source: Clarke, 1990, 364)

Within the CHMP 15384 and CHMP 15383, disturbance activities have been listed as having some impact on any Aboriginal cultural heritage that may be present. These disturbance activities include:

- the clearing of native indigenous vegetation during early agricultural and pastoral activities
- installation of rural infrastructure such as fences, drainage, dams and access tracks
- ground disturbance associated with the drainage of swampy, low-lying areas through construction of drains, and the realigning and modification of watercourses
- ground disturbances associated with the installation of subsurface infrastructure (water, gas, electricity)
- ground disturbance from landscaping associated with residential and commercial construction
- construction of existing roads, road reserves and the railway line
- ground disturbance at the termination of the Project Area at Pakenham, where existing gas infrastructure is present (CHMP 15384)
- extensive ground disturbance in the Activity Area at Crib Point, Warringine Park and BlueScope Steel due to existing subsurface infrastructure (ESSO pipeline) (CHMP 15383).



◀ **Figure 21-3:** CHMP 15384 Activity Area



▲ Figure 21-4: CHMP 15383 Activity Area

Gas Import Jetty Works – CHMP 16300

The Activity Area for CHMP 16300 comprises the southern region of the Project Area, located at Crib Point. The extent of the Activity Area is shown in **Figure 21-5**. The Activity Area is currently managed by the Port of Hastings Development Authority (PoHDA).

The Activity Area has been subject to extensive ground disturbance resulting in there being no potential for Aboriginal cultural heritage to be present within the CHMP 16300 Activity Area. These disturbance activities include:

- extensive ground disturbance associated with the construction of the BP Western Port refinery, port and jetty facilities in the 1960s
- the clearance of vegetation and grading for expansion and upgrade works
- the area remains in use today although the impact footprint has not been expanded.

Previously registered places within the Project Area

Before each CHMP assessment began, a search of the Victorian Aboriginal Heritage Register (VAHR) which contains all tangible and intangible Aboriginal cultural heritage places in Victoria was undertaken. Four Aboriginal cultural heritage places have been recorded within the Project Area, as outlined in **Table 21-2**. No previously registered Aboriginal places were identified within the CHMP 16300 Activity Area.



Types of Aboriginal cultural heritage sites

Low Density Artefact Distribution (LDAD): sites with distributions of up to 10 artefacts per 100 square metres

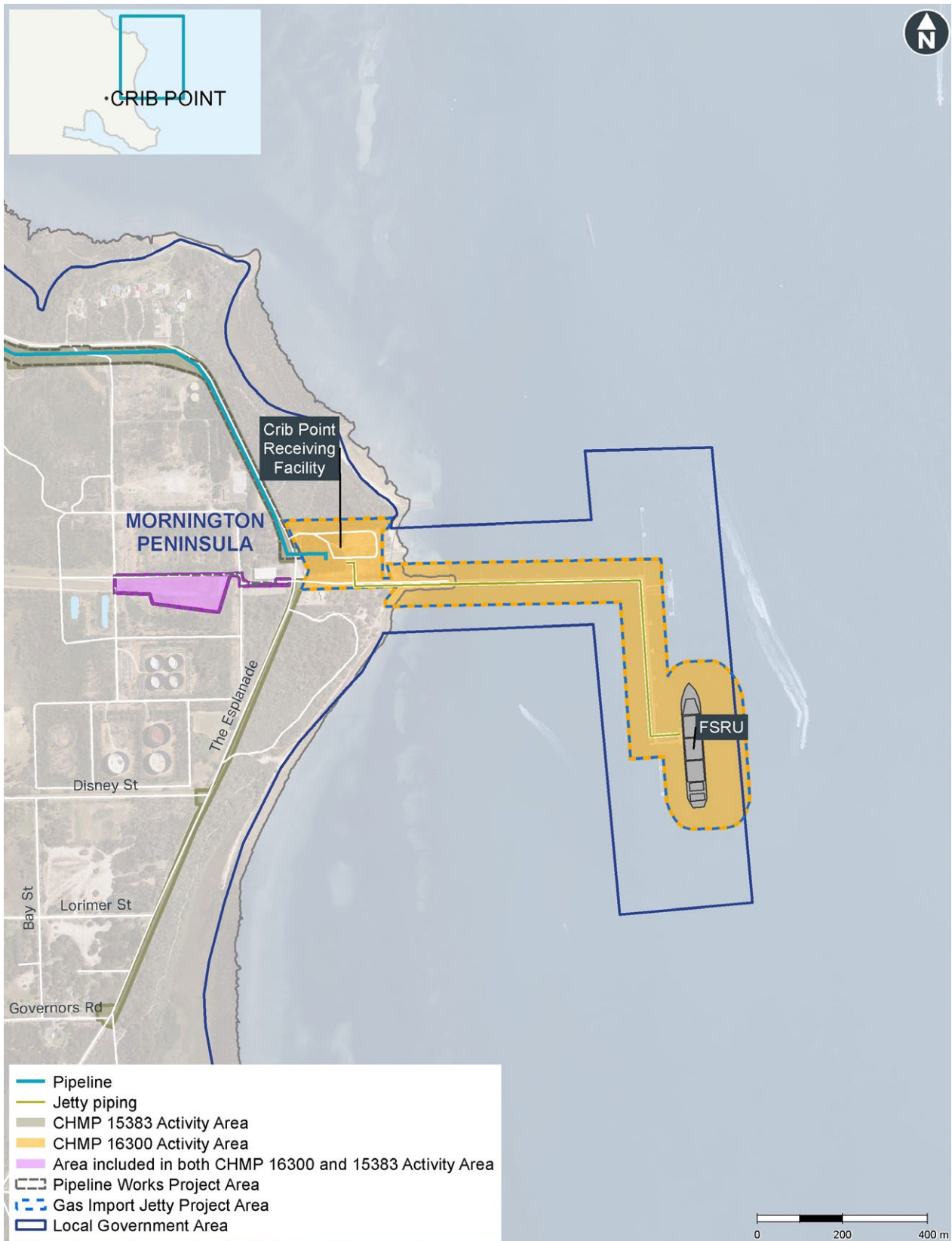
Artefact Scatters (AS): sites containing more than 10 scattered stone artefacts per 100 square metres

Isolated Artefact (IA): sites containing a single isolated artefact

Shell Middens: sites with concentrations of discarded shell and bone from shellfish remains and bones of fish, birds and mammals used for food

Table 21-2: VAHR Aboriginal cultural heritage places located within the Project Area

CHMP Activity Area	VAHR number	Name	Description
15384	VAHR 8021-0408	Pakenham East LDAD 2	Subsurface Low Density Artefact Distribution
15383	VAHR 7291-1533-21/22	Warragul to Hastings LDAD 2	Subsurface Low Density Artefact Distribution
15383	VAHR 7921-0419	Warrigine Creek 1 AS	Surface Isolated Artefact
15383	VAHR 7921-0036	BlueScope Western Port 1 (Lysaght 1) AS	Subsurface Artefact Scatter



▲ Figure 21-5: CHMP 16300 Activity Area

Summary of CHMPs prepared for the Project

The purpose of developing the three CHMPs is to thoroughly examine the potential for Aboriginal cultural heritage to be identified and impacted across the Project Area.

Across all CHMP geographic regions, artefact scatters were found to be the most common site type followed by LDADs. Shell Middens were found to be the third most common Aboriginal place type in the coastal CHMPs 16300 and 15383, with scarred trees the third most common place type within the CHMP 15384 region.

The assessment for CHMP 16300 was completed at the desktop assessment level as extensive ground disturbance could be established for the entire Activity Area with no evidence of Aboriginal cultural heritage material present.

Archaeological investigations have previously been undertaken in the CHMP 15383 Activity Area which generally found that much of the landscape in the Pakenham area has been heavily modified. This has resulted in widespread ground disturbance which affected the survival and intactness of Aboriginal cultural material. However, there were areas of archaeological sensitivity identified consisting of slightly clayey rises along Warringine Creek and sandy rises found along the pipeline alignment. Previous investigations of CHMP 15384 Activity Area found that while areas had been subject to ground disturbances, this did not remove the potential for Aboriginal cultural material to remain.

Despite the level of disturbance across the three CHMP Activity Areas, areas of cultural heritage sensitivity are present. These consist of dunes, sandsheets, Koo Wee Rup Plain, coastal Crown land, named waterways (Warringine Creek, Kings Creek, Olivers Creek and Rutherford Creek), Registered Aboriginal places and declared Ramsar wetlands. Potential for Aboriginal cultural heritage to be present on elevated landforms and near watercourses has also been identified, with GMU 7.1.1 (Coastal plains with ridges and dunefields) identified as being particularly sensitive for cultural material to be present in subsurface contexts.

A Standard Assessment was completed for CHMP 15383 and CHMP 15384. During the CHMP 15384 assessment, one previously unregistered Aboriginal place was identified consisting of a single silcrete flake. This was registered as Bald Hill Rd LDAD 1 (VAHR 8021-0435).

A total of 126 flaked stone artefacts were recovered during the Complex Assessment for CHMP 15383. These were subsequently registered as six Aboriginal cultural heritage places:

- South Boundary Road East LDAD (VAHR 7921-1750)
- Warringine Creek AS (VAHR 7921-1751)
- Callanans Lane LDAD (VAHR 7921-1753)
- Craigs Lane LDAD (VAHR 7921-1754)
- Baxter-Tooradin Road AS (VAHR 7921-1755)
- Baxter-Tooradin Rd LDAD (VAHR 7921-1756).

The greatest density of archaeological materials were recovered from the Sandy Rise landform (82.5 per cent), followed by the Silty Rise Landform (16.67 per cent). The CHMP findings confirmed a correlation between elevated landforms and the increased likelihood of Aboriginal cultural material being present.

A total of 58 flaked stone artefacts were recovered during the Complex Assessment for CHMP 15384. This material was subsequently registered as components of three Aboriginal cultural heritage places:

- Mount Ararat Road South LDAD (VAHR 8021-0433)
- Bald Hill Rd LDAD 2 (VAHR 8021-0434)
- Hobson Road AS (and VAHR 7921-1762).

The greatest densities of archaeological material were recovered from the Cranbourne Sands landform (84.48 per cent), which accounted for only 2.3 per cent of the CHMP 15384 Activity Area.

Aboriginal cultural heritage places

The CHMPs being prepared for the Pipeline Works (CHMPs 15383 and 15384) and the Gas Import Jetty Works (CHMP 16300) have identified an additional 10 unregistered Aboriginal cultural heritage places, making a total of 14 Aboriginal places recorded within the Project Area. These places are outlined in **Table 21-3**.

Table 21-3: Aboriginal cultural heritage places and their existing conditions

Aboriginal cultural heritage place	Victorian Aboriginal Heritage Register	Proximity to Project Area	Existing conditions	Significance rating
Mount Ararat Road South LDAD	VAHR 8021-0433	Within the Project Area	Located in a disturbed context, considered to have been destroyed by the CHMP 15384 (Complex Assessment level)	3 (low)
Bald Hill Road LDAD 2	VAHR 8021-0434	Within the Project Area	Located in a disturbed context, considered to have been destroyed by the CHMP 15384 (Complex Assessment level)	3 (low)
Bald Hill Road LDAD 1	VAHR 8021-0435	Within the Project Area	Located in a disturbed context, considered to have been salvaged by the CHMP 13991 (Complex Assessment level)	2 (low)
Hobson Road AS	VAHR 7921-1762	Within the Project Area	Located in an in situ sandy rise landform. Place remains in good condition	7 (moderate)
Pakenham East LDAD 2	VAHR 8021-0408	Within the Project Area	Located in a disturbed context, considered to have been destroyed by works associated with a previous CHMP not related to the Project.	4 (low)
Warringine Creek 1	VAHR 7921-0419	Primary Grid Coordinate (PGC) located 53 metres from Project Area, place extends into Project Area	Located in a disturbed context, considered to have been destroyed at the time of its original recording.	3 (low)
BlueScope Western Port 1 (Lysaght 1) AS	VAHR 7921-1750	PGC located 421 metres from Project Area, place extends into Project Area	Located in an intact landform. Not considered to be disturbed. Forms part of larger Aboriginal place extending out of the CHMP 15383 activity area.	4 (low)
Warragul to Hastings LDAD 2	VAHR 7921-1533-21/22	Within the Project Area	Not considered to be disturbed. Forms part of larger Aboriginal place extending out of the CHMP 15383 activity area.	4 (low)
South Boundary Road East LDAD	VAHR 7921-1750	Within the Project Area	Place has been partially removed as part of the CHMP Complex assessment. Artefacts located below the plough zone and considered to be relatively in situ.	4 (low)
Warringine Creek AS	VAHR 7921-1751	Within the Project Area	Artefacts located below the plough zone and considered to be relatively in situ.	6 (moderate)
Callanans Lane LDAD	VAHR 7921-1753	Within the Project Area	Place has been partially removed as part of the CHMP Complex assessment. Artefacts located below the plough zone and considered to be relatively in situ.	4 (low)
Craigs Lane LDAD	VAHR 7921-1754	Within the Project Area	Place has been partially removed as part of the CHMP Complex assessment. Artefacts located below the plough zone and considered to be relatively in situ.	4 (low)

Aboriginal cultural heritage place	Victorian Aboriginal Heritage Register	Proximity to Project Area	Existing conditions	Significance rating
Baxter-Tooradin Road	VAHR 7921-1755	Within the Project Area	Artefacts located below the plough zone and considered to be relatively in situ. Forms part of larger Aboriginal place extending out of the CHMP 15383 activity area.	7 (moderate)
Baxter-Tooradin Road LDAD	VAHR 7921-1756	Within the Project Area	Place has been partially removed as part of the CHMP Complex assessment. Artefacts located below the plough zone and considered to be relatively in situ.	5 (moderate)

21.6 Risk assessment

The risk assessment identified the risks associated with potential Aboriginal cultural heritage elements of the Project during its construction and operation. These considered the environmental, social and economic and health and safety consequences of each risk and their likelihood of occurring. No risks associated with Aboriginal cultural heritage sites were identified for the operating phase of the Project.

Risk ratings were applied to each of the identified risk pathways assuming that initial mitigation measures were in place. One risk has been assigned a rating of high with a consequence rating of almost certain, where the disturbance of previously registered Aboriginal cultural heritage places is expected to occur as a result of the Project. A complete risk register, including the likelihood and consequence of each risk pathway, is provided in EES Attachment III: *Environmental risk report*.

The identified Aboriginal cultural heritage risks are outlined in **Table 21-4** and further discussed in **Section 21.7** (Construction impacts) of this chapter. Mitigation measures for Aboriginal cultural heritage are presented in **Section 21.9** (Mitigation measures) of this chapter and in **Chapter 25** *Environmental Management Framework*.

It should be noted that a CHMP gives permission to harm Aboriginal places, with mitigation works (such as salvage) in place to minimise the overall harm to the place. These mitigation measures do not remove the risk to the identified Aboriginal cultural heritage, as the physical remains of the Aboriginal cultural heritage place would be removed/destroyed through those measures, and so do not lower the risk rating in the **Table 21-4**. Additional mitigation measures have therefore not been developed.

Table 21-4: Risks – Aboriginal cultural heritage

Risk ID	Works area	Risk pathway	Initial mitigation measures	Initial risk rating	Additional mitigation measures	Residual risk rating
Construction						
ACH1	Gas Import Jetty Works and Pipeline Works	Disturbance of unknown common Aboriginal cultural heritage (ACH) places	MM-AH01 Unexpected finds procedure as stated in CHMPs 15383, 15384 and 16300 contingencies to be followed. Cultural heritage induction.	Low	No additional mitigation measures identified	Low
ACH2	Gas Import Jetty Works and Pipeline Works	Disturbance of not previously registered rare ACH places resulting in loss of heritage value	MM-AH01 Unexpected finds procedure as stated in CHMPs 15383, 15384 and 16300 contingencies to be followed. Cultural heritage induction.	Medium	No additional mitigation measures identified	Medium
ACH3	Pipeline Works	Disturbance of previously registered ACH places resulting in loss of heritage value	MM-AH01 Implement and comply with the Cultural Heritage Management Plans (CHMPs 15383 and 15384) following approval under the Aboriginal Heritage Act 2006 for the Project.	High	No additional mitigation measures identified	High
ACH4	Gas Import Jetty Works and Pipeline Works	Unauthorised disturbance of ACH places outside of Activity Areas in the CHMPs resulting in loss of heritage value (breaching an approved CHMP under the Aboriginal Heritage Act 2006)	MM-AH01 Cultural heritage induction MM-AH02 Demarcation of construction areas	Low	No additional mitigation measures identified	Low
ACH5	Pipeline Works	Disturbance of not previously registered intangible ACH places (e.g. aesthetic, social, religious, historic or cultural values) resulting in loss of heritage value	MM-AH01 Cultural heritage induction	Medium	No additional mitigation measures identified	Medium
ACH6	Gas Import Jetty Works and Pipeline Works	Disturbance of not previously registered Aboriginal ancestral remains resulting in loss of heritage value	MM-AH01 Unexpected finds procedure as stated in CHMPs 15383, 15384 and 16300 contingencies to be followed. Cultural heritage induction.	Medium	No additional mitigation measures identified	Medium

21.7 Construction impacts

Any impacts to the registered Aboriginal cultural heritage places would occur following implementation of the management conditions set out in CHMPs 15383 and 15384 to mitigate damage through salvage and other mitigation measures. These management conditions become legal requirements following approval of the CHMPs under the Aboriginal Heritage Act. Salvage measures remove or destroy the physical remains of an Aboriginal cultural heritage place, although this does not minimise the cultural significance of the place or necessitate its removal from the VAHR.

The CHMPs would also contain contingency measures to provide for matters in relation to section 61 of the Aboriginal Heritage Act (whether the activity can avoid harm or minimise harm to Aboriginal cultural heritage).

Table 21-5 summarises the 14 registered Aboriginal cultural heritage places, the potential impact from the Project and the proposed CHMP mitigation measures.

Table 21-5: Registered Aboriginal cultural heritage places, potential Project impacts and proposed CHMP mitigation measures

Aboriginal cultural heritage place	Place description	Mitigation measure	Project impact
Warringine Creek 1 VAHR 7921-0419 CHMP 15383	An isolated surface artefact recorded during a former assessment within the Project Area for a former ESSO pipeline project. The place was reinvestigated during the Complex Assessment of CHMP 15383, although no additional artefacts were identified. The place was originally recorded on the ground surface in a disturbed context.	Works will utilise boring to avoid impacts to this Aboriginal place.	Nil
Warringine Creek AS VAHR 7921-1751 CHMP 15383	A moderate density artefact scatter of 21 subsurface artefacts located across an areas of approximately 1,250 m ² in size at depths between 200-400 millimetres. No discrete landform was identified by which to define the place, as such the extent is based on the locations of positive testing completed during the Complex Assessment of CHMP 15834.	The Activity Area has been reduced in size to partially avoid impacts to this Aboriginal place. Management Condition 3 specifies that manual salvage in the form of a 3 x 3 metre hand salvage must occur prior to works commencing. Management Condition 8 specifies compliance inspections to take place during works.	Partial
BlueScope Western Port 1 (Lysaght 1) AS VAHR 7921-0036 CHMP 15383	A subsurface artefact scatter recorded during CHMP 10200 complex assessment. This place consists of 268 flaked stone artefacts.	The Activity Area has been reduced in size to partially avoid impacts to this Aboriginal place. Management Conditions have not been finalised with the Registered Aboriginal Party (RAP).	Partial
Warragul to Hasting LDAD 2 VAHR 7921-1533 CHMP 15383	A surface LDAD registration recorded during CHMP 12826 assessment. The place consists of two broken silcrete flakes recorded in an open context.	Proposed to change the alignment of the Activity Area to avoid impacts to this Aboriginal place. Management Conditions have not been finalised with the RAP.	Extent of impact to be determined based on management conditions agreed with the RAP
South Boundary Road East LDAD VAHR 7921-1750 CHMP 15383	A moderate density artefact scatter of 21 subsurface artefacts located across an areas of approximately 1,250 m ² in size at depths between 200-400 millimetres. No discrete landform was identified by which to define the place, as such the extent is based on the locations of positive testing completed during the Complex Assessment of CHMP 15834.	The Activity Area has been reduced in size to partially avoid impacts to this Aboriginal place. Management Condition 3 specifies that manual salvage in the form of a 3 x 3 metre hand salvage must occur prior to works commencing. Management Condition 8 specifies compliance inspections to take place during works.	Partial
Callanans Lane LDAD VAHR 7921-1753 CHMP 15383	LDAD registration recorded during the Complex Assessment of CHMP 15383. The place consists of seven subsurface artefacts which were identified below the plough zone within an agricultural paddock, and are considered to be "relatively in situ".	The right of way has been reduced in size to partially avoid impacts to this Aboriginal place. Management Condition 2 specifies that a 10 x 1 metre mechanical salvage must occur prior to works commencing. Management Condition 8 specifies compliance inspections to take place during works.	Partial
Craigs Lane LDAD VAHR 7921-1754 CHMP 15383	LDAD registration recorded during the Complex Assessment of CHMP 15383. The place consists of three subsurface artefacts which were identified below the plough zone within an agricultural paddock at depths between 550-800 millimetres, and are considered to be "relatively in situ".	The right of way has been reduced in size to partially avoid impacts to this Aboriginal place. Management Condition 2 specifies that a 10 x 1 metre mechanical salvage must occur prior to works commencing. Management Condition 8 specifies compliance inspections to take place during works.	Partial

Aboriginal cultural heritage place	Place description	Mitigation measure	Project impact
Baxter-Tooradin Road AS VAHR 7921-1755 CHMP 15383	A moderate density artefact scatter of 83 subsurface artefacts recorded across two sandy rise landform features during the Complex Assessment of CHMP 15383. Artefacts were identified at depths between 300-700 millimetres within an agricultural paddock, and are considered to be “relatively in situ” due to their location below the plough zone.	The right of way has been reduced in size to partially avoid impacts to this Aboriginal place. Management Condition 2 specifies that two, 3 x 1 metre and a, 2 x 1 metre manual salvage must occur prior to works commencing. Management Condition 8 specifies compliance inspections to take place during works.	Partial
Baxter-Tooradin Road LDAD VAHR 7921-1756 CHMP 15383	LDAD registration recorded during the Complex Assessment of CHMP 15383. The place consists of seven subsurface artefacts which were identified at depths between 0-800 millimetres with the majority recovered from below the plough zone within an agricultural paddock, and are considered to be “relatively in situ”.	Management Condition 2 specifies that a 10 x 1 metre mechanical salvage must occur prior to works commencing. Management Condition 8 specifies compliance inspections to take place during works.	Destroyed
Hobsons Road AS VAHR 7921-1762 CHMP 15384	A moderate density artefact scatter consisting of 49 subsurface artefacts located on a sandy rise approximately 3,048 m ² in size at depths between 200-1100 millimetres. The Complex Assessment of CHMP 15384 was limited to the extent of the CHMP Activity Area, and as such there is potential for the place to extend north and south of the Activity Area boundary.	Management Condition 2 specifies that a 50 x 1 metre mechanical salvage must occur prior to works commencing. Management Condition 2 specifies that excavation must be limited across the remainder of the place extent to a maximum depth of 200 millimetres.	Partial
Bald Hill Road LDAD 2 VAHR 8021-0434 CHMP 15384	LDAD registration recorded during the Complex Assessment of CHMP 15384. The place consists of four subsurface artefacts which were identified in a disturbed plough zone context within an agricultural paddock.	Nil.	Nil
Bald Hill LDAD 1 VAHR 8021-0435 CHMP 15384	LDAD registration recorded during the CHMP 15384. The place consists of an isolated surface artefact which was identified on the ground surface of an agricultural drain in a spoil pile.	Nil	Nil
Pakenham East LDAD 2 VAHR 8021-0408 CHMP 15384	LDAD registration recorded during the Complex Assessment of CHMP 13991 (not completed for the current Pipeline Works) and consists of five subsurface artefacts. The place was reinvestigated during the Complex Assessment of CHMP 15384, however no additional artefacts were identified. The original recording of the place identified it as occurring within the disturbed plough zone of an agricultural paddock.	Management Condition 3 specifies that two 120 x 1 metre mechanical salvage must occur prior to works commencing.	Partial
Mount Ararat Road South LDAD VAHR 8021-0433	LDAD registration recorded during the Complex Assessment of CHMP 15384. The place consists of five subsurface artefacts which were identified in disturbed contexts within the road reserve of Mount Ararat Road South and Oakview Lane and were not considered to be identified in situ.	Nil	Nil

21.8 Operation impacts

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

21.9 Mitigation measures

Table 21-6 sets out the mitigation measures developed to manage Aboriginal cultural heritage impacts during construction of the Project.

Table 21-7 outlines the proposed management conditions for each of the Project CHMPs. Development of these management conditions has been undertaken through consultation with BLCAC (CHMP 15383 and 16300), Aboriginal Victoria and Traditional Owner groups (BLCAC, BWF and WWCHAC) who have taken part in the CHMP (CHMP 15384). The CHMP management conditions must be followed as detailed in CHMP 15383, 15384 and 16300 before, during and after the works following the CHMPs approval by either Aboriginal Victoria or the RAP.

Table 21-6: Mitigation measures – Aboriginal cultural heritage

Mitigation measure ID	Mitigation measure	Works area	Stage
MM-AH01	Implement and comply with the Cultural Heritage Management Plans (CHMPs 15383, 15384 and 16300) management conditions.	Gas Import Jetty Works and Pipeline Works	Construction
MM-AH02	Construction areas will be demarcated with survey pegs, fencing or other means, to ensure works are limited to the approved CHMP Activity Areas.	Gas Import Jetty Works and Pipeline Works	Construction

Table 21-7: CHMP management conditions

CHMP 15384	
General conditions	Specific conditions
<ul style="list-style-type: none"> Repatriation/Reburial of Aboriginal cultural heritage material collected during the CHMP Assessment & associated salvage programs 	<ul style="list-style-type: none"> Salvage requirements for VAHR 7921-1762 Salvage requirements for VAHR 8021-0408 Salvage requirements for VAHR 8021-0435 Harm allowed to VAHR 8021-0433 and VAHR 8021-0434
CHMP 15383	
General conditions	Specific conditions
<ul style="list-style-type: none"> Cultural heritage awareness training Compliance inspections Repatriation & Reburial of Aboriginal cultural heritage material collected during the CHMP Assessment Completion of salvage report 	<ul style="list-style-type: none"> Salvage requirements for VAHR 7921-1750, VAHR 7921-1753, VAHR 7921-1574 and VAHR 7921-1756 Salvage requirements for VAHR 7921-1751 Salvage requirements for VAHR 7921-1755 Salvage requirements for VAHR 7921-1533 Harm allowed to VAHR 7921-0419 and VAHR 7921-0036
CHMP 16300	
General conditions	Specific conditions
<ul style="list-style-type: none"> Copy of the CHMP to be kept onsite during the works program 	<ul style="list-style-type: none"> No specific management conditions included within the CHMP

21.10 Conclusion

The Aboriginal cultural heritage impact assessment identified the risks and potential impacts of the construction and operation of the Project on Aboriginal places. The assessment identified impacts associated with construction of the Project. No impacts associated with the Project's operation were identified.

Three CHMPs are being prepared for the Project to comply with the EES process and assess the likelihood of causing harm to Aboriginal cultural heritage within the Project Area. The CHMPs being prepared for the Pipeline Works (CHMPs 15383 and 15384) and the Gas Import Jetty Works (CHMP 16300) identified a total of 14 registered Aboriginal cultural heritage places within the Project Area. The disturbance of these previously registered Aboriginal cultural heritage places is expected to occur as a result of the Project's construction.

Other risks identified included the disturbance of not previously registered Aboriginal cultural heritage places, including ancestral remains and places of intangible value and the unauthorised disturbance outside of the CHMPs Activity Areas.

Initial mitigation measures for the identified risks were developed around the relevant management conditions included in the CHMPs. These mitigation measures involve relevant salvage requirements for registered Aboriginal cultural heritage places as well as adhering to compliance inspections. The CHMP assessments identified management conditions for the Aboriginal cultural heritage places to mitigate harm and allow disturbance to the physical remains of the Aboriginal cultural heritage places following the approval of CHMPs 15383, 15384 and 16300.

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