

PORT KEMBLA BULK LIQUIDS TERMINAL
FORESHORE ROAD, PORT KEMBLA

STATEMENT OF HERITAGE IMPACT

Report to the Manildra Group of Companies

May 2022





EXECUTIVE SUMMARY

Apex Archaeology have been engaged to assist the Manildra Group of Companies to prepare a Statement of Heritage Impact (SoHI) to inform the Environmental Impact Statement (EIS) in preparation for the proposed Port Kembla Bulk Liquids Terminal. It is understood that the EIS will support a State Significant Development Application (SSDA) for the project to permit the following:

- Storage of ethanol (generally beverage grade) for export;
- Provision for storage of vegetable oil as part of future developments;
- Loading ethanol onto ships;
- Filling ISO Tanks and road tankers for export and some local markets;
- Construction of 4 million litre capacity storage tanks of 16.5m diameter with a 20m wall height;
- Construction of two 300mm stainless steel pipes to facilitate delivery of product to ships as well as system flushing;
- Installation of fire detection and protection systems;
- Inloading of approximately 65 truck loads per week;
- Outloading of approximately 20 loads of ISO tanks per week.

This SoHI has been prepared with reference to the *NSW Heritage Manual 1996* and the associated Heritage Branch guidelines *Statements of Heritage Impact and Assessing Significance for Historical Archaeological Sites and 'Relics'*, 2009. It has also been prepared with reference to the Australia ICOMOS Charter for Places of Cultural Significance 2013, known as The Burra Charter.

The study area is located within Port Kembla, NSW (Figure 1). The study area is located on Foreshore Road, approximately 5.7km south east of Wollongong and approximately 72km south west of Sydney. It is located within the Wollongong Local Government Area (LGA). The site is legally defined as Lot 1 DP 88752 and part of Lot 6 DP 1236743 and is bound by Foreshore Road to the south, the ocean to the north, and existing lots to the east and west. The study area itself comprises the location of a proposed bulk liquids terminal and associated pipeline.

A site visit was conducted on Thursday 14 April 2022.

During the assessment, it was found:

- The study area is not listed as an item of historical heritage.
- One heritage item of State significance is located approximately 120m to the south west of the proposed pipeline route, comprising 'Hill 60/Illowra Battery'. This item is also listed as the 'Historical Military Museum including Breakwater battery and concrete tank barriers' and is listed as an item of local significance.
- A third heritage item is located approximately 370m to the south east, comprising the 'Remains of Ocean Baths', which are considered to be of local significance.



- No newly identified items of historical heritage were noted within the study area.
- The proposed development would not impact on any of the listed heritage sites in the wider vicinity.
- The study area is not considered to have archaeological potential.
- Overall, it is not considered that the proposed works would have any impact on the heritage significance of the listed sites in the wider vicinity of the study area.

The following recommendations have been made for this project:

The proposed works are not considered likely to impact on the heritage values of any items within or adjacent to the study area. No further archaeological or heritage assessment is required for the project.

In the unlikely event unanticipated archaeological material is encountered during site works, all work must cease and an archaeologist contacted to make an assessment of the find. Further archaeological assessment may be required prior to the recommencement of works. Any historical objects must be reported to Heritage NSW under Division 9, Section 146 of the Heritage Act.



Apex Archaeology would like to acknowledge the Aboriginal people who are the traditional custodians of the land in which this project is located. Apex Archaeology would also like to pay respect to Elders both past and present.

DOCUMENT CONTROL

The following register documents the development and issue of the document entitled 'Port Kembla Bulk Liquids Terminal, Foreshore Road, Port Kembla – Statement of Heritage Impact', prepared by Apex Archaeology in accordance with its quality management system.

Revision	Prepared by	Reviewed by	Comment	Issue Date
1 – Draft	Jenni Bate	Leigh Bate	Client Review	2 May 2022
2 – Final	Jenni Bate	Manildra Group	Issue of final	6 May 2022



GLOSSARY OF TERMS

CHL	Commonwealth Heritage List
CHM	Cultural Heritage Management
CMP	Conservation Management Plan
DA	Development Application
DCP	Development Control Plan
Disturbed Land	If land has been subject to previous human activity which has changed the land's surface and are clear and observable, then that land is considered to be disturbed
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	The NSW <i>Environmental Planning and Assessment Act 1979</i>
GIS	Geographical Information Systems
Heritage Act	The NSW <i>Heritage Act 1977</i>
Heritage NSW	Heritage NSW in the Department of Premier and Cabinet, responsible for all heritage matters in NSW.
LEP	Local Environmental Plan
LGA	Local Government Agency
NHL	National Heritage List
NSW	New South Wales
OEH	The Office of Environment and Heritage of the NSW Department of Premier and Cabinet – now Heritage NSW
POM	Plan of Management
SEPP	State Environmental Planning Policy
SHI	State Heritage Inventory
SHR	State Heritage Register
SoHI	Statement of Heritage Impact
SSDA	State Significant Development Application



CONTENTS

1.0	Introduction.....	1
1.1	Methodology	1
1.2	Study Area	1
1.3	Objectives	1
1.4	NSW Heritage Legislation.....	6
1.4.1	Heritage Act 1977	6
1.4.2	Wollongong Local Environmental Plan 2009	7
1.4.3	Wollongong Development Control Plan 2009	8
1.5	Authorship.....	9
1.6	Limitations.....	9
2.0	Historical Context.....	10
2.1	Indigenous Context.....	10
2.2	European Settlement	11
3.0	Physical Evidence	21
3.1	Site Inspection	21
3.2	Site Description.....	25
4.0	Assessment of Significance	26
4.1	Understanding Heritage Significance.....	26
4.2	Heritage Significance	26
4.3	Assessment of Criteria.....	28
4.4	Statement of Significance.....	29
5.0	Statement of Heritage Impact.....	30
5.1	Proposed Development.....	30
5.2	Potential Impact	30
5.3	Assessment of Heritage Impacts	30
5.4	Impact Assessment.....	32
6.0	Conclusions and Recommendations.....	33
6.1	Conclusions	33
6.2	Recommendations.....	33
7.0	Bibliography	34



FIGURES

Figure 1: General location of the proposed development in its local context.....	2
Figure 2: Proposed development layout – study area outlined in red (Source: Manildra Group 2021)	3
Figure 3: Proposed bulk liquids terminal layout (Source: Manildra Group 2021).....	4
Figure 4: Artists view of proposed bulk liquids facility (Source: TFA Project Group).....	5
Figure 5: Extract from NSW State Heritage Inventory showing heritage items in relation to study area (red outline).....	7
Figure 6: Detail from Wollongong LEP Heritage Map Sheet HER_026. Approx study area shown in red	8
Figure 7: Detail of c.1908 Parish of Wollongong, County of Camden map. Study area circled in red	14
Figure 8: Plan of harbour in 1919 (Source: Port Centenary Committee 2009:17 in SMEC 2021:12)	15
Figure 9: Detail of 1938 aerial imagery of study area (source: Geoscience Australia)	15
Figure 10: Detail of 1941 aerial imagery of study area (source: Geoscience Australia)	16
Figure 11: Detail of 1951 aerial imagery of study area (outlined in red).....	17
Figure 12: detail of 1961 aerial imagery of study area (outlined in red).....	17
Figure 13: Detail of 1971 aerial imagery of study area (outlined in red).....	18
Figure 14: Detail of 1990 aerial imagery of study area (outlined in red).....	19
Figure 15: Detail of 2002 aerial imagery of study area (outlined in red).....	19
Figure 16: 2022 aerial imagery of study area (source: NearMap)	20
Figure 17: State Heritage Register – SHR 01492, Plan 2003 Hill 60/Illowra Battery heritage curtilage	27

PLATES

Plate 1: First five land grants in the Illawarra. Approx study area circled (Source: Dowd 1977)	13
Plate 2: Advertisement for the Five Island Estate in the SMH (5/9/1843:3)	13
Plate 3: View to east across study area from western boundary	21
Plate 4: View north east across study area from western side of canal	21
Plate 5: View south east across canal	22
Plate 6: View east along shoreline across mouth of canal	22
Plate 7: View across seawall.....	23
Plate 8: View north east across study area along pipeline route.....	23
Plate 9: View south along wooden wharf	24
Plate 10: View south west with pipeline route in foreground and main study area in background (spoil heap marked in yellow).....	24
Plate 11: View west across shoreline showing stockpile	25



1.0 INTRODUCTION

Apex Archaeology have been engaged to assist the Manildra Group of Companies to prepare a Statement of Heritage Impact (SoHI) to inform the Environmental Impact Statement (EIS) in preparation for the proposed Port Kembla Bulk Liquids Terminal.

1.1 METHODOLOGY

This SoHI has been prepared with reference to the *NSW Heritage Manual 1996* and the associated Heritage Branch guidelines *Statements of Heritage Impact and Assessing Significance for Historical Archaeological Sites and 'Relics'*, 2009. It has also been prepared with reference to the Australia ICOMOS Charter for Places of Cultural Significance 2013, known as The Burra Charter.

1.2 STUDY AREA

The study area is located within Port Kembla, NSW (Figure 1). The study area is located approximately 72km south west of Sydney. It is located within the Wollongong Local Government Area (LGA). The site is legally defined as Lot 1 DP 88752 and part of Lot 6 DP 1236743 and is bound by Foreshore Road to the south, the ocean to the north, and existing lots to the east and west. The study area itself comprises the location of a proposed bulk liquids terminal and associated pipeline (Figures 2 – 4).

It is understood that a State Significant Development Application (SSDA) will be lodged for the project to permit the following:

- Storage of ethanol (generally beverage grade) for export;
- Provision for storage of vegetable oil as part of future developments;
- Loading ethanol onto ships;
- Filling ISO Tanks and road tankers for export and some local markets;
- Construction of 4 million litre capacity storage tanks of 16.5m diameter with a 20m wall height;
- Construction of two 300mm stainless steel pipes to facilitate delivery of product to ships as well as system flushing;
- Installation of fire detection and protection systems;
- Inloading of approximately 65 truck loads per week;
- Outloading of approximately 20 loads of ISO tanks per week.

1.3 OBJECTIVES

The objectives of the SoHI are to:

- Confirm the heritage status of the study area and understand the history of the study area within the broader cultural landscape;
- Describe the current physical state of the study area;
- Assess the potential heritage significance of the study area;
- Assess the potential impact of the proposed redevelopment on the heritage values of the heritage listed items in the vicinity; and
- Outline an appropriate method to manage any potential impacts on heritage values.



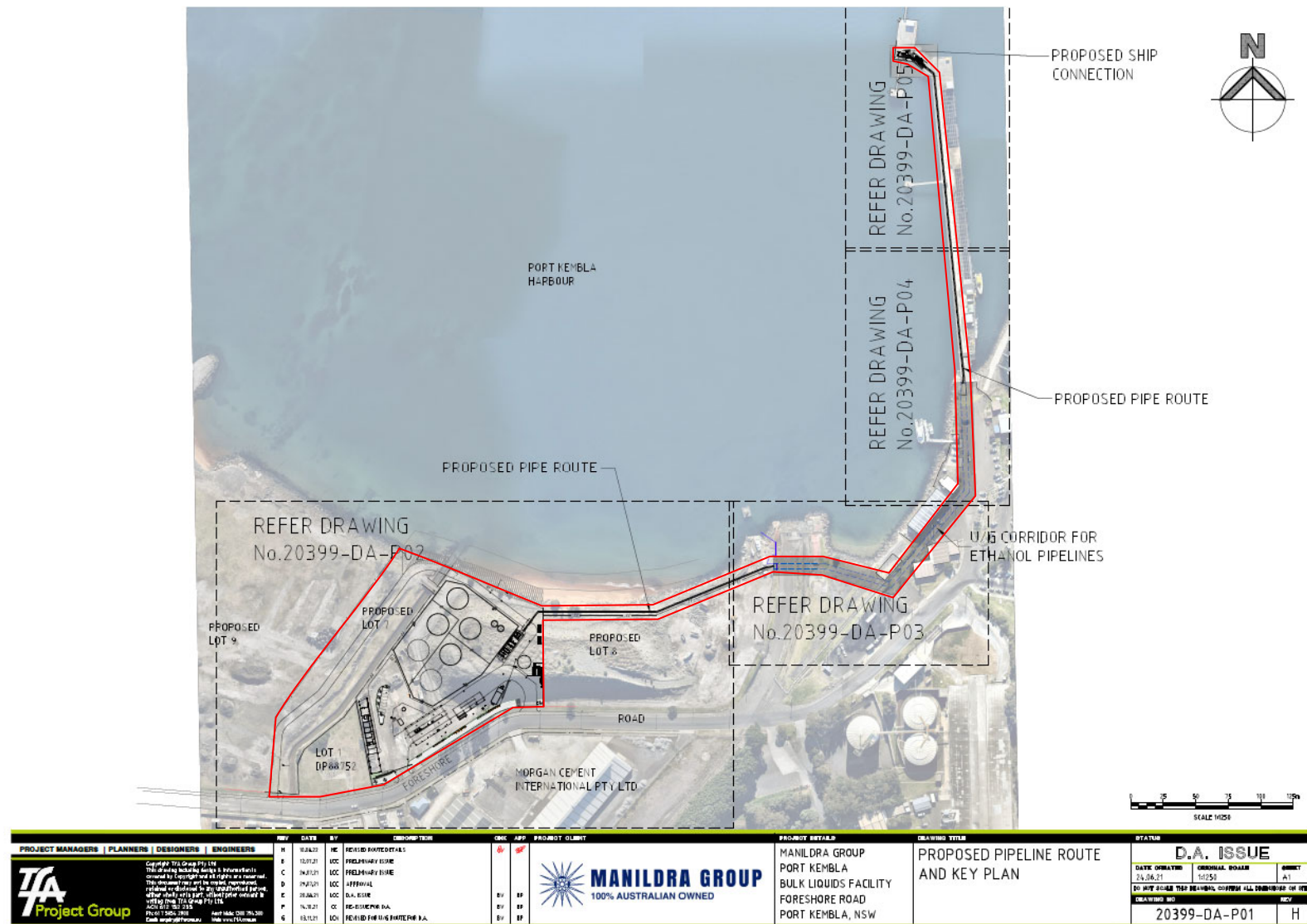


Figure 2: Proposed development layout – study area outlined in red (Source: Manildra Group 2021)



Figure 3: Proposed bulk liquids terminal layout (Source: Manildra Group 2021)



Figure 4: Artist's view of proposed bulk liquids facility (Source: Manildra Group)



1.4 NSW HERITAGE LEGISLATION

1.4.1 HERITAGE ACT 1977

The *Heritage Act 1977* (as amended) (the Heritage Act) provides protection for historical archaeological deposits, relics, structures, buildings, and features within NSW. These may be identified on the State Heritage Register (SHR) or an active Interim Heritage Order.

Under the Heritage Act, the Minister appoints the Heritage Council, which is responsible for heritage in NSW. The Council includes community, conservation and government experts. The Heritage Division provides operational support to the Council and helps communities to identify important heritage places and relics, as well as guidance on how to provide care for those items. It also provides funding and support for community heritage projects and maintains the NSW Heritage Database, which is a list of all heritage items included on statutory heritage lists within NSW.

Guidance for undertaking heritage assessments is provided by the NSW Heritage Division 1996 NSW Heritage Manual, and includes criteria to assist in assessing the significance of items.

A search of the Heritage Database revealed there are no items listed under the Heritage Act within the study area itself. One item listed on the State Heritage Register, 'Hill 60/Illowra Battery', is located approximately 120m south west of the study area. One item listed as being of local heritage significance is listed within 150m of the proposed pipeline route, comprising the 'Historical Military Museum including Breakwater battery and concrete tank barriers', and another is listed approximately 370m to the south east of the proposed pipeline route, comprising 'Remains of Ocean Baths'.



Figure 5: Extract from NSW State Heritage Inventory showing heritage items in relation to study area (red outline)

1.4.2 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

The Wollongong LEP 2009 guides heritage conservation and assessment within the Wollongong LGA, with a number of heritage clauses included. Clause 5.10(2)(e) identifies that no buildings may be erected on land within a heritage conservation area or which contains an Aboriginal object, without first obtaining development consent. Further, Clause 5.10(2)(c) states that archaeological sites may not be disturbed or excavated without development consent, and Clause 5.10(2)(f) states that development consent is required for the subdivision of land within a heritage conservation area, on which a heritage item is located, on which an Aboriginal object is located, or within an Aboriginal place of heritage significance. Exceptions to the requirement for development consent are detailed by Clause 5.10(3) and include low impact activities, or activities for the maintenance of a heritage item.

Clause 5.10(4) requires that the effect of any development on a heritage item or heritage conservation area must be considered, and 5.10(5) details that a heritage assessment is required for land which is within or adjacent to a heritage item to assess the potential for the proposed development to impact on the heritage significance of the item.

The study area is not listed as an item of heritage significance on the Wollongong Local Environmental Plan 2014 (Figure 6). It is noted that item 61043, comprising “Hill 60, Fisherman’s Beach, Boilers Point, Red Point and MM Beach” and listed as being of State heritage significance, is located in the wider vicinity of the study area. A number of other listed items are located within the township of Port Kembla to the south west of the study area.

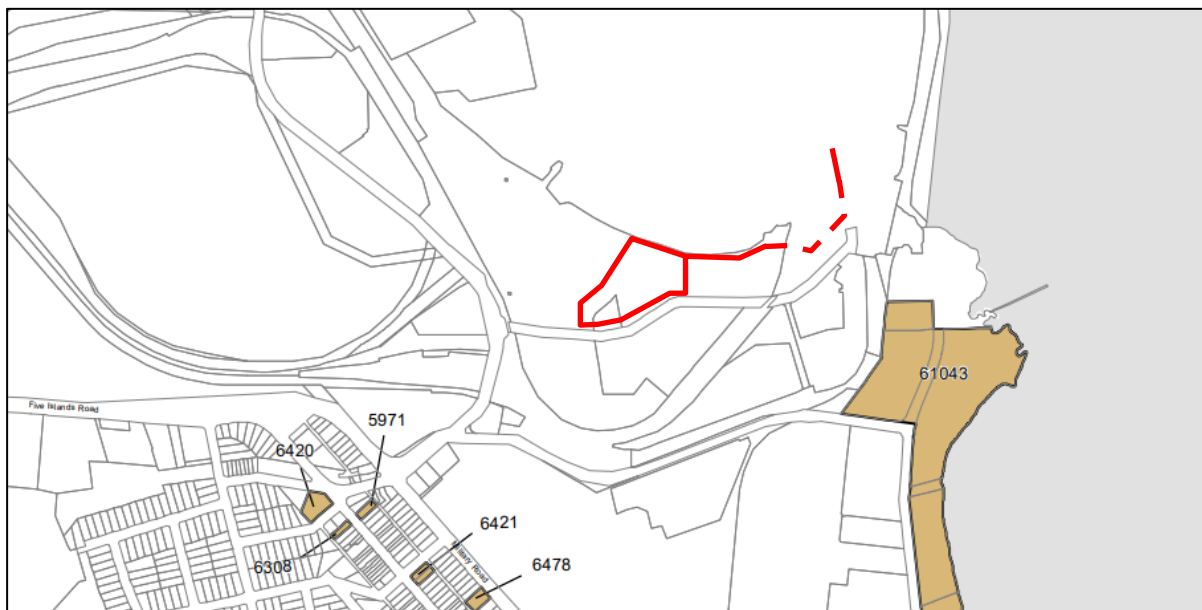


Figure 6: Detail from Wollongong LEP Heritage Map Sheet HER_026. Approx study area shown in red

1.4.3 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

The Wollongong DCP 2009 provides guidance for development within the Wollongong area. It provides guidelines for the environmental assessment of proposed developments and ensures that the developments do not adversely impact the environment.

CHAPTER E11: HERITAGE CONSERVATION

The Wollongong DCP 2009 Chapter E11 Heritage Conservation provides a brief description of the requirements for a heritage impact assessment to support a development application with regards to historic heritage. Section 10 outlines these requirements. Section 10.1.3 states the following:

A Heritage Impact Statement may also be required for any proposed development within close proximity to or within the visual catchment of a heritage item or heritage conservation area where in the opinion of Council, the proposal may pose some potential impact upon the setting or ongoing conservation of the heritage item or an adjoining heritage conservation area. In this regard, it is strongly recommended that prospective applications should contact Council's Strategic Project Officer (Heritage) for advice as to whether a Heritage Impact Statement is necessary for any proposal within proximity to a heritage item or heritage conservation area.



1.5 AUTHORSHIP

This SoHI has been prepared by Jenni Bate, Director and Archaeologist with Apex Archaeology, and Leigh Bate, Director and Archaeologist with Apex Archaeology. Both have over fifteen years of consulting experience within NSW.

Name	Role	Qualifications
Jenni Bate	Project Manager, Report Author	B.Archaeology; Grad. Dip. CHM
Leigh Bate	GIS, Field inspection, Review	B.Archaeology; Grad. Dip. Arch; Dip. GIS

1.6 LIMITATIONS

This SoHI focuses on European cultural heritage values within the study area. Apex Archaeology acknowledges that Aboriginal people have occupied this land for over sixty thousand years, and their culture is living and ongoing.

Recommendations are based on the available documentary evidence, as well as an inspection of the site. Further detailed historical research was outside the scope of this project.



2.0 HISTORICAL CONTEXT

2.1 INDIGENOUS CONTEXT

Ethnohistorical evidence is based on the reports of colonisers and do not tend to include the Aboriginal perspective, leading to a Eurocentric view of Aboriginality. Additionally, historical records can be contradictory and incomplete regarding the exact tribal boundaries and locations of ceremonial or domiciliary activities of Aboriginal people pre-contact within the Illawarra region. Boot (2002:58) notes:

The problem associated with ethnohistoric documents include their tendency to record unusual, rather than everyday events, and their focus on religious behaviour to the exclusion of woman and children (Attenbrow 1976:34; Sullivan 1983:12.4).

Although historical records can be contradictory and incomplete regarding the exact tribal boundaries and locations of ceremonial or domiciliary activities of Aboriginal people pre-contact within the Illawarra and South Coast region, the Wodi Wodi people were considered to have occupied an area extending from around Stanwell Park to the north, to the Shoalhaven River in the south, the coast to the east, and Picton, Moss Vale and Marulan in the west (Tindale 1974).

Aboriginal society was constructed of a hierarchy of social levels and groups, with fluid boundaries (Peterson 1976), with the smallest group comprising a family of a man and his wife/wives, children and some grandparents, referred to as a 'clan' (Attenbrow 2010). The next level consists of bands, which were small groups of several families who worked together for hunting and gathering purposes (Attenbrow 2010). The third level comprised regional networks with a number of bands, and these bands generally shared a common language dialect and/or had a belief in a common ancestor. Networks would come together for specific ceremonial purposes. The highest level is described as a tribe, which is usually described as a linguistic unit with flexible territorial boundaries (Peterson 1976); although Attenbrow (2010) argues that "these groups were not tribes in the current anthropological sense of the word".

The Wodi Wodi were considered to speak Dharawal (or Tharawal) by Tindale, although other sources attribute their language as Gurungada (Howitt 1904). Most sources consider the Dharawal language as part of the Yuin linguistic group, which covered an area from Sydney to the Victorian border. 'Wodi Wodi' was first recorded in 1875 by Ridley, when Lizzy Malone, the daughter of a woman of the Shoalhaven tribe, stated Wodi Wodi was the language spoken by the Aboriginal people of the Illawarra.

The traditional lifestyles of Aboriginal groups such as the Wodi Wodi depended largely on the environment in which they lived. Whilst hinterland groups relied on freshwater and terrestrial animals and plants, coastal groups utilised marine and estuarine resources. Port Kembla falls within the coastal region, with access to both



marine and inland resources. Animals such as kangaroos, wallabies, possums, gliders, bandicoots, wombats, quolls, fruit bats, echidnas, native rats and mice, emus, ducks, tortoises, snakes and goannas (Attenbrow, 2010), played a major role in the subsistence of hinterland groups, while other resources included shellfish such as oysters, crustacea such as crayfish and crabs, and marine animals including dolphins, dugongs and whales. Fishing was conducted from canoes with spears, or collected along the shore (Tench in Attenbrow 2010). Beached whales were eaten, as observed by the British settlers in the late 18th century. Dugong, seal and dolphin bones have been found in shell middens around the Sydney region, with evidence of butchering evident on the bones (Attenbrow 2010).

The different environments of the suburb of Port Kembla and surrounding areas contain a diverse range of plant and animal species. On creek banks and surrounds, a wide variety of game would have been found. The vegetation communities along the creeks and gullies, primarily woodlands, would have provided shelter for numerous animal and plant species that could be eaten or used for other purposes such as providing shelter and medicines.

The Wodi Wodi people utilised a range of hunting and gathering equipment, including fishing and hunting spears made of wood and barbed with shell, flaked stone blades, shark teeth, or sharpened bone; boomerangs and spear-throwers; fishing hooks made from bird talons, bone, wood and shell; ground stone axes; anvils and pounders; stone tools including blades and scrapers; shields, clubs and digging sticks made from wood; baskets made from bark; and wooden canoes (Attenbrow 2010).

Shelter is a basic need for any humans and the Wodi Wodi were reported to make use of either rockshelters or huts constructed from bark, branches and leaves. Coastal groups tended to build larger huts than the hinterland groups, and within the Port Kembla region, huts were likely the dominant choice of shelter due to the limited nature of rockshelters (Attenbrow 2010). There is some discussion regarding whether Aboriginal people moved regularly from place to place, or whether they lived at one campsite for a longer period of time and ranged out for resources, returning to their home base as necessary.

2.2 EUROPEAN SETTLEMENT

Following the establishment of the first European settlement at Sydney Cove, the need for additional agricultural land was identified, as Sydney Cove was considered unsuitable for farming. By November 1788, food supplies were running low for the settlement, and an expedition led by Governor Philip set off up the Parramatta River in search of arable land. An area known as Rose Hill (now Parramatta) was settled by a small group of 11 soldiers and 10 convicts. The grain crops at Sydney Cove failed, and the settlement at Rose Hill was ordered to be used for agriculture. These crops were luckily successful, and a further settlement comprising a convict farm was established at Toongabbie.



Exploration of the wider region continued, and in 1791, expeditions travelled the Hawkesbury and Nepean areas, identifying them as likely spots for agriculture. The Shoalhaven region had been sighted by Captain Cook in April of 1770, when he observed a protected bay which was later named Port Jervis, and he recorded evidence of smoke along the shoreline just before dark, which may have been related to Aboriginal campfires near the area now known as Bass Point.

Lieutenant James Grant recorded an account of an early meeting of Europeans and local Aboriginal people as being amicable (Grant 1801), with the Aboriginal people they encountered described as 'more robust than Sydney Blacks'.

In March 1796, George Bass and Matthew Flinders landed on Lake Illawarra, which they named 'Tom Thumb's Lagoon' after the ship they were aboard (Kass 2010: 19). Evidence of coal had been noted within the Illawarra region and settlers arrived shortly after.

Dr Charles Throsby travelled to the area with the guidance of Aboriginal people from Liverpool in 1815, utilising an existing Aboriginal trail down Bulli Mountain (Kass 2010: 19). He established a stockyard and a hut within the area that would become Wollongong. This led to further settlers arriving in the area. The first five land grants in the Illawarra area were made in 1816 and were located around Lake Illawarra, likely due to easy access via ship.

STUDY AREA

One of these early grants, made to David Allen in January 1817 (Steele & Barnett 1905:221), deputy Commissary-General of the Colony, comprised 2200 acres at Five Islands, which he named 'Illawarra Farm' (Plate 1). The study area falls within this grant. The farm was leased in 1822 following Allan's departure from the colony, and by 1828 it was offered for sale (SG 22/2/1828:1) as part of a court hearing between the 'Widow Rowe' and 'Allen [sic] and mother'.

The property was eventually sold to Richard Jones and then to William Charles Wentworth, at which point the farm was renamed 'Five Islands Estate' (Niche 2015:9). Some small portions of the land had been let by 1843 according to an advertisement in the *Sydney Morning Herald* (5 September 1843:3; Plate 2). Following Wentworth's death in 1876, the estate was inherited by his son, D'Arcy Bland Wentworth. 500 acres of the estate were resumed as part of the construction of the Port Kembla Harbour in 1899 as shown on Figure 7.

Following Federation in 1901, significant effort was put towards the defence of the population and by 1909 the area known as Hill 60 to the south east of the study area had been acquired by the government for defence purposes. Hill 60 was occupied by the local Aboriginal community and little was done with regards to defence (Dallas 2000:31) through World War I.



Plate 1: First five land grants in the Illawarra. Approx study area circled (Source: Dowd 1977)

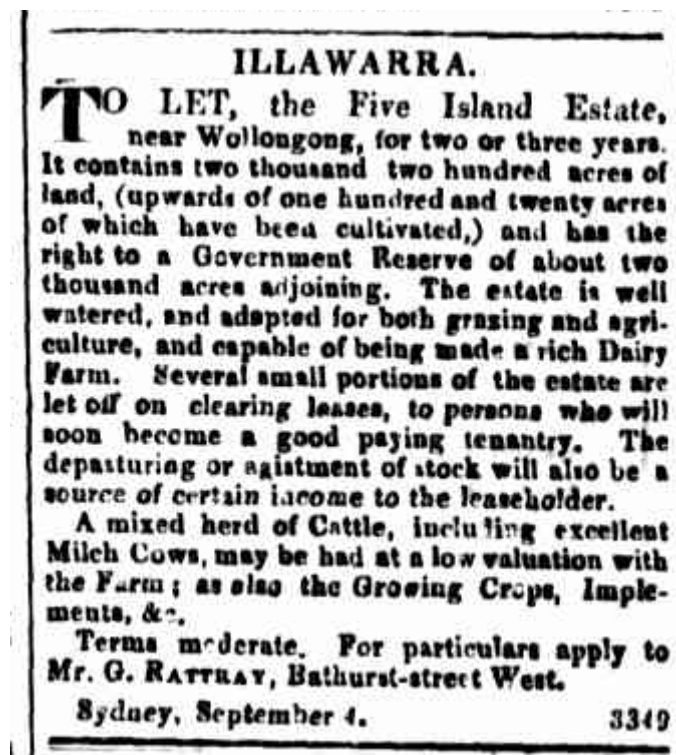


Plate 2: Advertisement for the Five Island Estate in the SMH (5/9/1843:3)



Figure 7: Detail of c.1908 Parish of Wollongong, County of Camden map. Study area circled in red

Figure 6 shows the study area as located within an area marked 'sandy beach' and within the high water mark. There is also a 'drainage swamp' identified within the western portion of the study area. Sometime between 1908 and 1919, the wharf along which the proposed pipeline is located was constructed, according to Figure 7 and Figure 8. A number of wharves visible on the 1938 plan are no longer extant. The 1938 aerial imagery (Figure 9) shows that a bar-built estuary was present within the study area, with a sheltered lagoon forming behind and parallel to the ocean. This appears to be formed in part from the discharge of the canalised drainage line to the south of the study area. It may also have resulted from the reclamation works undertaken to create Port Kembla Harbour. Unfortunately, the 1938 aerial image does not include the eastern portion of the study area through which the pipeline passes.

It wasn't until the threat of WWII loomed in 1935 that areas such as Newcastle, Sydney and Wollongong were recognised as important industrial centres requiring defence (Niche 2015:14). Once WWII broke out in 1939, works in the Port Kembla area began to occur, including the extension of electricity mains to supply the military authorities based at Hill 60, and additional roads were under construction by 1940 in order to provide a safer inland route for access to the Port Kembla defence locations (Niche 2015:15). According to aerial imagery, little occurred within the study area at this time, and by 1951 the site was largely unchanged from the 1930s (Figure 11), although it is possible that the increase in water retained within the study area may have been associated with the commencement of the foreshore reclamation works.

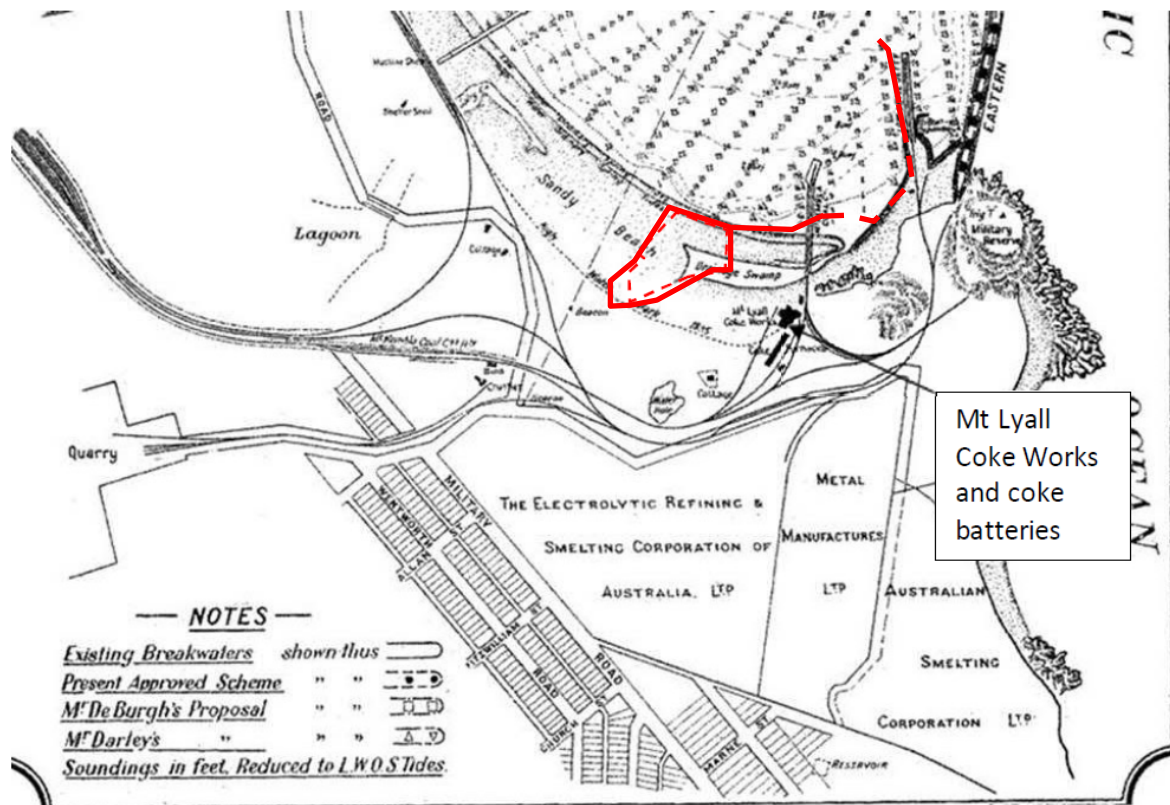


Figure 8: Plan of harbour in 1919 (Source: Port Centenary Committee 2009:17 in SMEC 2021:12)

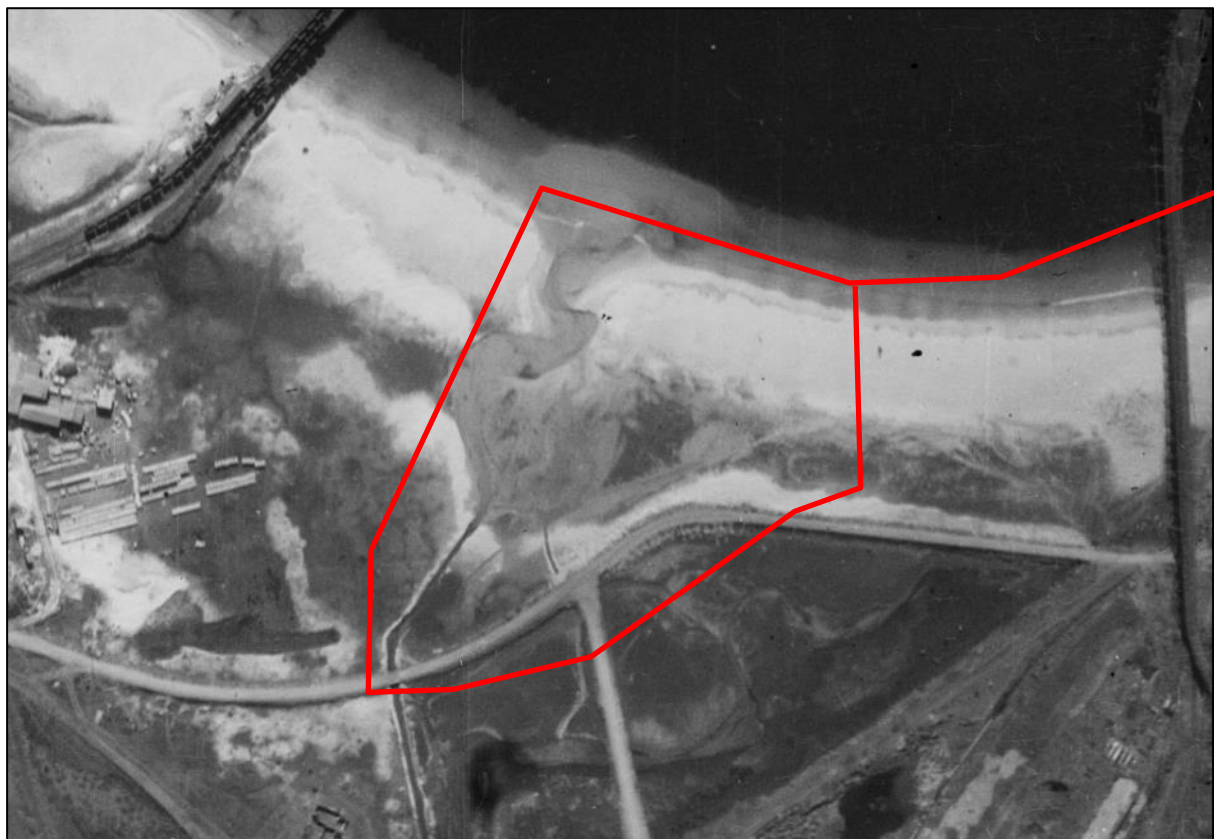


Figure 9: Detail of 1938 aerial imagery of study area (source: Geoscience Australia)

The estuary or lagoon is still visible in the 1941 aerial imagery, and Foreshore Road had been realigned to the south of the previous road alignment. Much of the study area contained water as part of the lagoon, and this continues through to the 1950s (Figure 11). By the 1970s, the area had been filled to prevent the inundation of the area, along with construction of the canal along the western boundary of the site. This channelled water out to sea rather than into the lagoon area. The canal had been constructed by 1961 and the majority of the area filled, although the path of the drainage line was still visible in aerial imagery dating to 1961 (SMEC 2021:72).



Figure 10: Detail of 1941 aerial imagery of study area (source: Geoscience Australia)



Figure 11: Detail of 1951 aerial imagery of study area (outlined in red)



Figure 12: detail of 1961 aerial imagery of study area (outlined in red)

A number of wharves within the Port Kembla Harbour had been demolished by 2002, although these were all outside of the current study area. The western portion of the

study area shows use as a hardstand area. It is noted that a quarantine area operated by the Australian Quarantine Inspection Service, a scrap metal yard operated by Frank Franke, and a timber sale yard were located within the study area around the 1980s (SMEC 2021:10). They are still visible in the 1990 aerial imagery (Figure 14) and 2002 aerial imagery (Figure 15) but have since been demolished (Figure 16). A large stockpile is present in Figure 13 across much of the western portion of the study area.

The wharf along which the proposed pipeline would be located appears to have had concrete laid on the original timber structure sometime between 1970 (Figure 13) and 1990 (Figure 14). Part of this concrete decking has been removed by 2002 (Figure 15).

Buildings located to the south west of the current administration buildings on site were apparently constructed between 1951 and 1961 (Figures 11 & 12), were still visible in 1971 (Figure 13) but appear to have been demolished by 1990 (Figure 14). These are located outside of the current study area.



Figure 13: Detail of 1971 aerial imagery of study area (outlined in red)



Figure 14: Detail of 1990 aerial imagery of study area (outlined in red)



Figure 15: Detail of 2002 aerial imagery of study area (outlined in red)

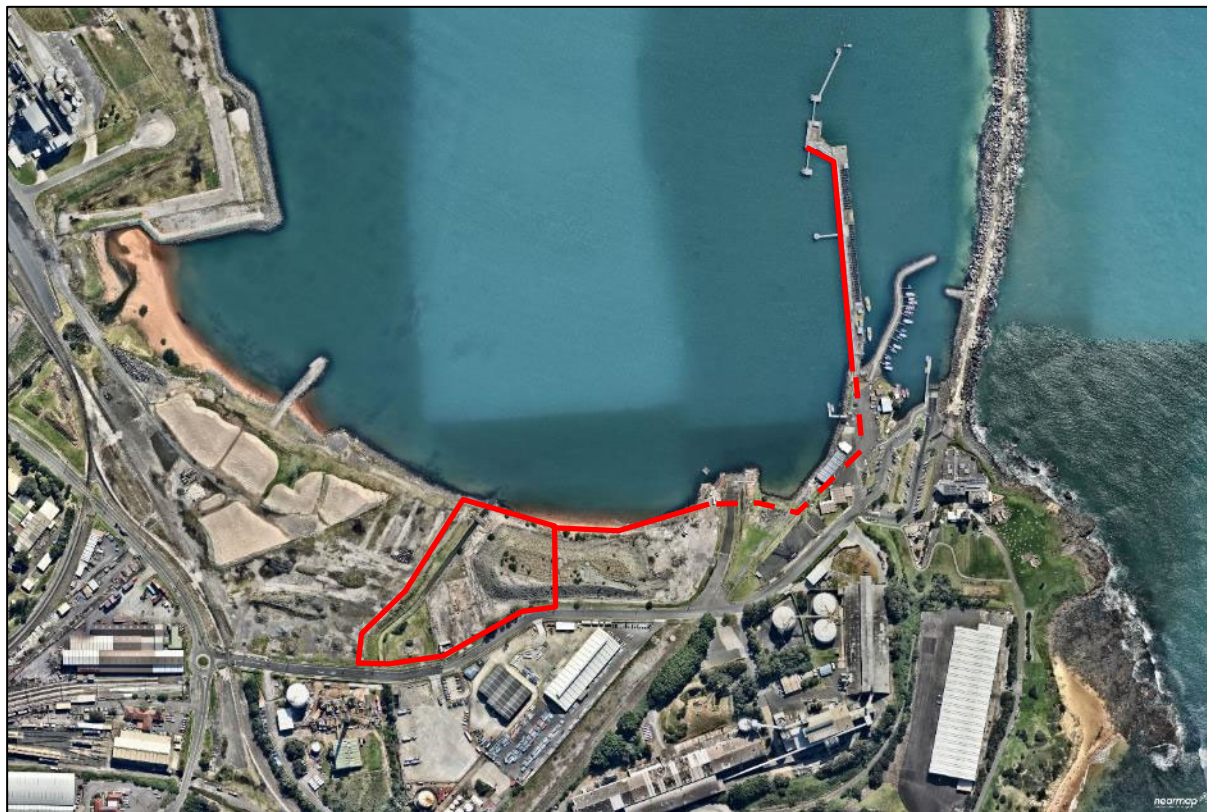


Figure 16: 2022 aerial imagery of study area (source: NearMap)

3.0 PHYSICAL EVIDENCE

3.1 SITE INSPECTION

The study area was inspected on 14 April 2022. The following photographs were taken at this time.



Plate 3: View to east across study area from western boundary



Plate 4: View north east across study area from western side of canal



Plate 5: View south east across canal



Plate 6: View east along shoreline across mouth of canal



Plate 7: View across seawall



Plate 8: View north east across study area along pipeline route



Plate 9: View south along wooden wharf



Plate 10: View south west with pipeline route in foreground and main study area in background (spoil heap marked in yellow)



Plate 11: View west across shoreline showing stockpile

3.2 SITE DESCRIPTION

The study area is formed of reclaimed land, with a considerable amount of fill present across much of the study area. A geotechnical assessment undertaken in 1994 and reported by SMEC in 2021 noted that test pits within the study area noted fill depths of up to 2.1m across the study area, overlying natural sand (SMEC 2021:10).

Much of the study area is currently open space, either grassed or covered in hardstand. A large stockpile of rock is present within the western portion of the study area, of more than 20m height. The pipeline route passes through a landscaped area, between existing buildings, and then along an existing wharf adjacent to an existing pipeline. This wharf appears to be an early timber wharf re-decked with concrete.



4.0 ASSESSMENT OF SIGNIFICANCE

4.1 UNDERSTANDING HERITAGE SIGNIFICANCE

All places have unique combinations of values, and as such it is important to understand these values prior to making decisions about the future of a heritage item. This way heritage values can be retained when making decisions relating to the future management of a place.

A statement of heritage significance is prepared to summarise an item's heritage values.

4.2 HERITAGE SIGNIFICANCE

The study area itself is not listed as an item of heritage significance. However, the proposed pipeline route passes within 120m of an item listed on the SHR, comprising Hill 60/Illowra Battery.

The Heritage Data Sheet (HDS) for Hill 60/Illowra Battery (Heritage Item ID 5052361) contains the following statement of significance for the item:

Hill 60 and its environs (MM Beach, Boilers Point, Fisherman's Beach and Hill 60 Park) contains a rare suite of Aboriginal sites which demonstrate the evolving pattern of Aboriginal cultural history and the Aboriginal land rights struggle. The quality, extent and diversity of the prehistoric archaeological remains at this place are rare on the NSW coast particularly in the local region. These include extensive shell midden deposits rich in stones, artifacts and burials (Dallas, 2000).

There is demonstrated cultural affiliation with the place by the Aboriginal community, through near continuous occupation of the place, a history of struggle to gain land tenure and ongoing association and use of the place. The historic Aboriginal occupation was characterised by a relatively isolated and self sufficient Aboriginal community that participated in the economic maintenance of the wider community by the provision of labour to local industry and produce (seafood's [sic]) at a commercial level. The people also maintained a culturally distinct Aboriginal lifestyle firmly based on the maintenance of family connections over the wider region and traditional economic practices (ibid, 2000).

The site is listed as an item of State heritage significance.

The heritage curtilage for Hill 60/Illowra Battery is shown in Figure 17.

The HDS for the Historical Military Museum including Breakwater battery and concrete tank barriers (item 61043 on the LEP; Heritage Item ID 2700585) contains the following statement of significance for the item:

(Based on Military Study 2006): The Breakwater Battery remains are an integral part of the network of coastal batteries constructed to protect NSW's two major industrial areas of Newcastle and Port Kembla. Associated with the coastal defences of NSW during World War 2, the speed of construction indicates Australia's rapid response to the threat of Japanese invasion. Part of the Kembla



State Heritage Register - SHR 01492, Plan 2003
Hill 60/Illowra Battery
Military Road, Port Kembla

Gazettal Date: 14 December 2001

0 100 200 300 400
Metres

Scale: 1:10,000@A4

Datum/Projection: GCS GDA 1994



Legend

- SHR Curtilage
- Land Parcels
- Railways
- Roads
- Rivers
- Suburbs

Figure 17: State Heritage Register – SHR 01492, Plan 2003 Hill 60/Illowra Battery heritage curtilage. Study area shown in blue.



Fortress, Breakwater Battery was one of the three coastal batteries erected to protect the steel works lining the bay, all of which partially survive.

The site is listed as an item of local heritage significance.

The HDS for the Remains of Original Ocean Baths (Heritage Item ID 5062638) contains the following statement of significance for the item:

Fishermen's Pool, created c. 1937, is of significance for the local area for historical, aesthetic, social and scientific reasons, and for reasons of representativeness. Fishermen's Pool is a part of a coastal recreational area and a heritage landscape, including Hill 60. The pool itself dates to 1937 and is part of the history of Port Kembla that has social value as a recreational facility built by local people. Fishermen's Pool is a substantial structure. Its preserved appearance of the natural rock pool, its concrete walls, its prominent setting at the base of a rocky outcrop and the preservation of its original coastal landscape, afford this site considerable aesthetic significance. It is a fine example of a tidal rock pool along the Port Kembla and NSW coast while the structure itself is a notable and attractive landscape feature providing contrast and interest in the landscape. From 1937 to c. 1970, Fishermen's Pool was visited as a place of recreation by local residents. The structure is likely to be an important place to many people for their memories of recreational and social activities. The site is held in high esteem by the community. Subsurface relics associated with Aboriginal fishing and recreational activities from the 1930s and 1940s might exist at this site; if uncovered, subsurface evidence may contribute to our knowledge of indigenous [sic] history in Port Kembla. Fishermen's Pool is representative as a general example of a recreational facility built in the early-mid twentieth century. It reflects the principal features characteristic of rock pools including their placement in a natural hollow, their robust concrete wall construction and, in this case, its function expressing cultural values with coastal recreational activities.

No other items were shown in the local area according to the LEP or SHI mapping.

4.3 ASSESSMENT OF CRITERIA

The Heritage Council of NSW prepared a set of seven criteria for use in assessing heritage significance. Items are considered significant on two levels, these being State and local significance.

The following assessment of significance for the study area specifically has been prepared in accordance with the *Assessing Heritage Significance* 2001 guidelines issued by the NSW Heritage Division.

a) An item is important in the course, or pattern, of the local area's cultural or natural history

The development of Port Kembla Harbour was an important part of the culture of the Illawarra region through providing considerable employment opportunities for the community as industry developed. The study area is a portion of the Port Kembla Harbour foreshore area but does not contain any specific industry items which contributed to the economic and social development of Port Kembla itself.



Therefore, the subject site is considered to have limited significance under this criterion.

- b) An item has strong or special associations with the life or works of a person, or a group of persons, of importance in the local area's cultural or natural history**

The study area is not considered to hold specific value under this criterion.

- c) An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area**

The study area does not include items or areas important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area. It is noted that a wharf dating to between 1908 and 1919 is still extant within the study area, but is not considered to exhibit a high degree of creative or technical achievement in the local area. Therefore, the study area is not considered to have significance under this criterion.

- d) An item has strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons**

The study area is not considered to hold strong or special associations with particular communities or cultural groups in the local area. As such, the study area is not considered to have significance under this criterion.

- e) An item has potential to yield information that will contribute to an understanding of the local area's cultural or natural history**

Review of relevant literary resources has not indicated that the study area may have potential to yield information that will contribute to an understanding of the local area's cultural or natural history. The site is considered unlikely to have archaeological potential given the level of fill across the site and the lack of former development within the site, and therefore the study area is not considered to have significance under this criterion.

- f) An item possesses uncommon, rare or endangered aspects of the local area's cultural or natural history**

The study area is not considered to have significance under this criterion.

- g) An item is important in demonstrating the principal characteristics of a class of the local area's**

- Cultural or natural places; or
- Cultural or natural environments

The study area does not exhibit principal characteristics of a class of the local area's cultural or natural places or environments.

4.4 STATEMENT OF SIGNIFICANCE

The historical research undertaken for this assessment in conjunction with a site inspection did not identify any significant heritage elements within the study area that should be conserved.

Overall, the study area is not considered to possess heritage significance.



5.0 STATEMENT OF HERITAGE IMPACT

The proposed works for development within the study area has the potential to impact on the heritage values within or adjacent to the lot. A Statement of Heritage Impact assists in the decision-making process when assessing the impact a development proposal may have on the heritage significance of heritage items.

5.1 PROPOSED DEVELOPMENT

Two distinct developments are proposed for the area, with one within the western portion of the study area and comprising storage for bulk liquids prior to loading onto ships for transport, and the other comprising a pipeline connecting the bulk liquids facility to the ship loading point along an existing wharf. Overall, this comprises the study area in its entirety. It is understood that the proposal includes the following:

- Storage of ethanol (generally beverage grade) for export;
- Provision for storage of vegetable oil as part of future developments;
- Loading ethanol onto ships;
- Filling ISO Tanks and road tankers for export and some local markets;
- Construction of 4 million litre capacity storage tanks of 16.5m diameter with a 20m wall height;
- Construction of two 300mm stainless steel pipes to facilitate delivery of product to ships as well as system flushing;
- Installation of fire detection and protection systems;
- Inloading of approximately 65 truck loads per week;
- Outloading of approximately 20 loads of ISO tanks per week.

5.2 POTENTIAL IMPACT

The proposed works have the potential to impact on the heritage values of the nearby heritage items through altering the setting in which they are located. The potential impact of the development is considered further in the following section.

5.3 ASSESSMENT OF HERITAGE IMPACTS

The Heritage NSW guideline *Statements of Heritage Impact* (1996) provides guidance on assessing the potential impact of development on the heritage values of an item. The guideline can be considered along with other policies or plans for conservation and management of a site.

A number of questions are posited in the guideline, which must be considered in a SoHI document. These questions assist in determining the potential impact of the proposed works, and ensures appropriate mitigation measures are explored. Questions applicable to the proposed works for the Port Kembla Bulk Liquids Facility are addressed below.

The proposal would generally fall under new development adjacent to a heritage item.



Table 1: Questions from Heritage NSW 1996 *Statements of Heritage Impact* Guideline

SoHI Question	Answer
How is the impact of the new development on the heritage significance of the item or area to be minimised?	The proposed bulk liquids facility itself is located at a distance greater than 500m from the heritage curtilage of the State heritage listed Hill 60/Illoowra Battery and locally listed. The pipeline route passes within 120m of the heritage curtilage, but the small scale of the pipeline reduces its potential to impact on the heritage significance of the item. There would be no physical impact to the heritage item at all. It is noted that Hill 60 is listed on the SHR predominantly for its Aboriginal cultural values and it is acknowledged that Tom Thumb Lagoon would have been an important resource for Aboriginal people in the part. However, the significant reclamation works undertaken within the study area would have reduced the likelihood of any evidence of Aboriginal occupation of the area surviving into the present day. Additionally, the proposed bulk liquids facility is proposed to be finished in generally light colours in order to reduce the overall visual impact of the facility (Figure 4). Buildings are of a generally low profile and only the storage tanks are of significant height. This is in line with the industrial nature of the Port Kembla Harbour area.
Why is the new development required to be adjacent to a heritage item?	The proposed works would facilitate the offloading and loading of ethanol onto ships. This requires access to a deep harbour, such as that at Port Kembla. Facilities for loading onto ships are present within this area and current facilities such as the existing wharf would be utilised. Alternate locations may not provide appropriate access to and for ships, and may require significant additional infrastructure to be constructed. The current proposal makes use of existing infrastructure and thus is required to be located in the wider vicinity of a heritage item.
How does the curtilage allowed around the heritage item contribute to the retention of its heritage significance?	The curtilage of Hill 60/Illoowra Battery is shown in Figure 17 and incorporates the relatively undeveloped lands associated with Hill 60 and its environs. In contrast, the study area has been significantly impacted through reclamation works. The proposed works are also listed well outside the heritage curtilage of the item and as such the potential for impact to the heritage values is significantly reduced.
How does the new development affect views to, and from, the heritage items? What has been done to minimise negative effects?	Views from the top of Hill 60 are generally 360° and include views out to sea, as well as inland across Port Kembla Harbour. A large portion of the Port Kembla Harbour is currently in use for industrial purposes and the proposed works are in line with this use. As such, the proposal would not impact on views to or from the heritage item. The distance of the bulk of the works from the heritage item (over 500m) further reduces the potential for the works to impact on views to or from the heritage item.



SoHI Question	Answer
	The fabric of the bulk liquids facility would also be generally light in colour and this would further reduce the potential for the item to impact on views to or from the heritage item.
Is the development sites on any known, or potentially significant archaeological deposits? If so, have alternative sites been considered? Why were they rejected?	The proposed development is not located on any known or potentially significant archaeological deposits, either historical or Aboriginal.
Is the new development sympathetic to the heritage item? In what way (e.g. form, siting, proportions, design)?	The proposed development is located within Port Kembla Harbour, which was developed with the view of facilitating industrial works. The proposed development has been sited at an appropriate distance from the heritage item and is generally sympathetic to the heritage item.
Will the additions visually dominate the heritage item? How has this been minimised?	The proposed development would not visually dominate the heritage item, due to the distance it is located from the heritage item, and the topography of the area whereby Hill 60 is the highest point in the area. The bulk of the proposed development is limited to the storage tanks themselves, which form discrete elements within the landscape.
Will the public, and users of the item, still be able to view and appreciate its significance?	The proposed development would not prevent the public and other users of the item from viewing and appreciating its significance.

In summary, the proposed development works would not physically impact on the any of the adjacent heritage items, as the closest item is approximately 120m south west of the proposed pipeline route.

The proposed development is considered unlikely to impact on the significance of any of these heritage items as much of their significance is associated with specific items within the heritage curtilage of the listed items, particularly Hill 60. The proposed pipeline route follows an existing pipeline route and would duplicate this pipeline; while the bulk liquids terminal development is located at a distance of over 500m to the west of the heritage items.

Further, the site is considered unlikely to contain archaeological potential, due to the lack of previous development in the area, and the location of the study area on significant fill associated with reclamation works.

5.4 IMPACT ASSESSMENT

Overall, the proposed works are considered unlikely to impact on the heritage significance of any items in the vicinity of the proposed works. No items of heritage significance are located within the study area and therefore no impact to heritage significance within the study area would occur.



6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

- The study area is not listed as an item of historical heritage.
- One heritage item of State significance is located approximately 120m to the south west of the proposed pipeline route, comprising 'Hill 60/Illowra Battery'. This item is also listed as the 'Historical Military Museum including Breakwater battery and concrete tank barriers' and is listed as an item of local significance.
- A third heritage item is located approximately 370m to the south east, comprising the 'Remains of Ocean Baths', which are considered to be of local significance.
- No newly identified items of historical heritage were noted within the study area.
- The proposed development would not impact on any of the listed heritage sites in the wider vicinity.
- The study area is not considered to have archaeological potential.
- Overall, it is not considered that the proposed works would have any impact on the heritage significance of the listed sites in the wider vicinity of the study area.

6.2 RECOMMENDATIONS

The proposed works are not considered likely to impact on the heritage values of any items within or adjacent to the study area. No further archaeological or heritage assessment is required for the project.

In the unlikely event unanticipated archaeological material is encountered during site works, all work must cease and an archaeologist contacted to make an assessment of the find. Further archaeological assessment may be required prior to the recommencement of works. Any historical objects must be reported to Heritage NSW under Division 9, Section 146 of the Heritage Act.



7.0 BIBLIOGRAPHY

- Dallas, M. 2000, *Hill 60, Port Kembla Conservation Management Plan*. Report to Wollongong City Council and Department of Land & Water Conservation.
- Dowd, BT. 1977, *The First Five Land Grantees and their Grants in the Illawarra*. Illawarra Historical Society.
- Grant, J. 1801, Extract from Ships journal in letter from Governor King to Duke of Portland. In *Historical Records of New South Wales*, Vol IV, Hunter and King 1800, 1801, 1802. Charles Potter, Government Printer, Facsimile Edition 1976.
- Howitt, AW. 1904, *The Native Tribes of South-East Australia*. Macentimetresillan & Co. London.
- Niche. 2015, *Hill 60 Reserve, Port Kembla NSW: Conservation Management Plan – Supplementary Report*.
- NSW Heritage Office and Department of Infrastructure Planning and Natural Resources. 2001, *NSW Heritage Manual*, Sydney.
- NSW Heritage Office. 2001a, *Assessing Heritage Significance*, Sydney.
- NSW Heritage Office. 2001b, *Statements of Heritage Impact*, Sydney.
- SMEC. 2021, *Part Lot 6 DP 1236743 Foreshore Road, Port Kembla Preliminary Geotechnical and Contamination Investigation*. Report to Manildra Group Pty Ltd.
- Steele, J. & Barnet, W. 1905, 'The Early History of Wollongong', in *Journal of the Royal Australian Historical Society* Vol 1 pp. 221-229.
- Tindale, N.B. 1974, *Aboriginal Tribes of Australia – Their Terrain, Environmental Controls, Distribution, Limits and Proper Names*. Online resource, accessed from <http://archives.samuseum.sa.gov.au/tribalmmap/index.html>