Port Kembla Gas Terminal

Heritage Unexpected Finds Protocol
Early Enabling Works

Australian Industrial Energy

27 May 2021

→ The Power of Commitment

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Acronyms

Term	Definition
ACM	Asbestos Containing Material
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
AIE	Australian Industrial Energy
ATSHIP Act	*Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth)
BCD	Biodiversity and Conservation Division of DPIE (now NSW Heritage within Department of Premier and Cabinet)
CA Act	*Coroner's Act 2009* (NSW)
CPT	Cone Penetration Testing
CSSI	Critical State Significant Infrastructure
DAWE	Department of Agriculture, Water and the Environment
DICL	ductile iron cement lined
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EP&A Act	*Environmental Planning and Assessment Act 1979*
FSRU	Floating storage and re-gasification unit
Heritage Act	*Heritage Act 1977*
HUFP	Heritage Unexpected Finds Protocol
ILALC	Illawarra Local Aboriginal Land Council
LNG	Liquified Natural Gas
KPIs	Key Performance Indicators
MBD	Marine Berth Construction and Dredging
NGP	Pipeline installation including tie-ins
NPW Act	*National Parks and Wildlife Act 1974*
ORF	Onshore receiving facilities
PANSW	Port Authority of NSW
PKHD	Port Kembla Height Datum
PKGT	Port Kembla Gas Terminal
RAP	Registered Aboriginal Party
SRD SEPP	State Environmental Planning Policy (State and Regional Development)
TTE	Tertiary Treated Effluent

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1. Introduction

1.1 Overview

This Heritage Unexpected Finds Protocol (HUFP) for Early Enabling Works phase of the Marine Berth Construction and Dredging (MBD) package of work has been developed for the Port Kembla Gas Terminal (PKGT) Project (the Project) regarding any unexpected heritage items uncovered during the works.

This HUFP was prepared by the SCSB JV on behalf of Australian Industrial Energy (AIE) to apply to construction activities associated with the Project. GHD Pty Ltd (GHD) has updated this HUFP on behalf of AIE for application to management of heritage during the Early Enabling Works of the MBD. This HUFP does not cover management of heritage associated with Marine Berth Construction and Dredging or the construction of Onshore Receiving Facilities, or Pipeline Installation.

This HUFP interfaces with the other Management Plans for the Early Enabling Works phase of the MBD, which together describe the proposed overall management system for the Project. This HUFP addresses the requirements of the Project Infrastructure Approval (SSI 9471) and has been prepared in consultation with the Illawarra Local Aboriginal Land Council (ILALC), Heritage NSW (formerly the Biodiversity Conservation Division (BCD) within the Department of Planning, Industry and Environment),.

1.2 Background

AIE is developing the Project which involves the development of a liquefied natural gas (LNG) import terminal at Port Kembla, south of Wollongong, NSW. The Project will be the first of its kind in NSW and provide a simple and flexible solution to the State's gas supply challenges.

NSW currently imports more than 95% of the natural gas it uses from other eastern states. In recent years, gas supplies to the Australian east coast market have tightened, resulting in increased natural gas prices for both industrial and domestic users.

The Project provides an immediate solution to address the predicted shortages and will result in significant economic benefits for both the Illawarra region and NSW. The Project will have a capacity to deliver 100 petajoules of natural gas, equivalent to more than 70% of NSW gas needs and will provide between 10 to 12 days of natural gas storage in case of interstate supply interruption. LNG will be sourced from worldwide suppliers and transported by LNG carriers to the gas terminal at Port Kembla where it will be re-gasified for input into the NSW gas transmission network.

The Project has been declared Critical State Significant Infrastructure (CSSI) in accordance with Section 5.13 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and Schedule 5 of the State Environmental Planning Policy State and Regional Development (SRD SEPP). The Project received Infrastructure Approval from the Minister for Planning and Public Spaces on the 29th of April 2019.

The construction of the Project is primarily associated with the establishment of a new berth facility at Port Kembla to enable an LNG Carrier to berth alongside the Floating Storage and Re-gasification Unit (FSRU) and new infrastructure to connect the terminal to the existing gas network.

The development has progressed to the early works stage at Berth 101 (the site or MBD Site Compound), which includes the demolition and removal of all existing surface infrastructure, and disconnection and removal of all underground services. The Early Enabling Works phase is required to facilitate all future stages of development and to meet an obligation in the lease of the site to demolish existing wharf infrastructure by September 2021.

1.3 Purpose

This HUFP has been prepared in accordance with the PKGT Environmental Impact Statement (EIS) and associated Infrastructure Approval (SSI 9471) and describes how AIE and the contractor, Liberty Industrial, propose to manage unexpected Aboriginal Heritage and non-Aboriginal Heritage finds during Early Enabling Works for the MBD. Specifically, this plan includes:

– Obligations under the:
  - *Heritage Act 1977* NSW (Heritage Act)
  - *National Parks and Wildlife Act 1974* NSW (NPW Act)
  - *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* Cth (ATSHIP Act) and
  - the *Coroner's Act 2009* NSW (CA Act) (refer to Section 3).
– Consistent methodology to manage unexpected heritage items (both Aboriginal and non-Aboriginal) that may be discovered during the Early Enabling Works for the MBD.

AIE and its contractors acknowledge the importance of Aboriginal Heritage and non-Aboriginal Heritage items and that any unexpected finds must be handled with the appropriate management protocols and notification to the applicable Government body.

This HUFP is applicable to all staff, employees, subcontractors, and any statutory service authorities undertaking service relocations throughout the duration of the Early Enabling Works for the MBD. The HUFP's implementation and on-going development will be managed by the AIE Project team and contractors.

2. Project overview

2.1 Site description

The site of the Project is situated at Port Kembla within the Illawarra region of NSW, about 80 kilometres south of Sydney. Port Kembla is mainly characterised by the existing import and export terminal and multiple other business, cargo, logistics, bulk goods and heavy industrial facilities in the vicinity.

Port Kembla is situated about two kilometres south of the centre of Wollongong. Other localities surrounding Port Kembla and the Project site include Mangerton, Mount St. Thomas and Figtree to the north-west; Unanderra to the west; Berkeley to the south-west; and Cringila, Lake Heights, Warrawong and the residential region of Port Kembla to the south.

The zoned land use in the region includes special use and industrial use at Port Kembla and a mix of primarily residential and commercial uses in the surrounding localities. Major infrastructure in the region of Port Kembla includes the Princes Highway, which is a major state and regional highway connecting Sydney and Wollongong and regional areas further south. The Princes Highway provides access to Port Kembla through turnoffs at Masters Road, Five Islands Road and Northcliffe Drive and is broadly utilised including by heavy vehicles from the port.

The South Coast railway line runs along the periphery of Port Kembla including the stations Port Kembla, Port Kembla North, Cringila and Lysaghts. The rail line services commuters and is also used to transport bulk solid goods such as coal, grain, copper and steel from Port Kembla. The environmental features of Port Kembla and the surrounding region are limited given the extensive industrial, commercial and residential development. Waterways in the region include the Gurungaty Waterway, Allans Creek, American Creek and Byarong Creek. Green space includes JJ Kelly Park and Wollongong Golf Club to the north and a larger open area to the south west.

The Project will be predominantly located within land zoned for dedicated port and industrial uses. Berth and wharf facilities and the FSRU would be situated at Berth 101 at the Inner Harbour while the gas pipeline would extend around the periphery of port operations from Berth 101 to a tie-in point at Cringila.

A site overview is provided as Figure 2-1.

2.2 Existing heritage environment

The Project site has undergone significant modification for port development and extensive industrial development. Due to the highly disturbed nature of the site, there is limited Aboriginal and non-Aboriginal heritage values present. Detailed heritage assessments were undertaken for the EIS which identified the known Aboriginal and non-Aboriginal heritage values and items within the vicinity of the PKGT. The assessment determined that the site of the Early Enabling Works for the MBD has no known heritage values or items within the Early Enabling Works footprint which can be seen in Figure 2-1.

Figure 2-1 Site overview

2.3 Project construction scope of work

The Project construction scope of work has been divided into the three main packages (with associated activities), as outlined in Table 2.1. This HUFP applies only to Stage 1 Early Enabling Works..

Table 2.1 Construction work packages and applicability to this HUFP

Stage	Package	Proposed commencement	Activities	Applicability to this HUFP
1	Early Enabling Works	May 2021	Early Enabling Works. Demolition of Berth 101, removal of structures and land based excavation works, and Cone Penetration Testing (CPT) in the Outer Harbour to inform Emplacement Cell design.	Applicable.
2	Marine Berth Construction and Dredging (MBD)	November 2021	Quay wall construction.	Not applicable.
			Excavation/dredging.	Not applicable.
			Wharf facilities construction including mooring system, navigational aids and associated works.	Not applicable.
	Onshore Receiving Facilities (ORF)		Construction of the ORF, which comprises of three areas: Wharf Topside Area; Utility Area; and Common Area. Installation of a small section of pipeline within the Berth 101 site boundary.	Not applicable.
3	Pipeline Installation including tie-ins (NGP)	March 2022	Construction of an 18” onshore natural gas pipeline approximately 6.3km in length from the Berth 101 site boundary to Tie-in Facility at Cringila.	Not appliable.

2.4 Early Enabling Works for MBD

The site of the MBD is the former Port Kembla Coal Terminal Bulk Products Berth. The removal of existing structures and services is required to facilitate subsequent development stages of the Project. The scope of the Early Enabling Works will involve the following tasks:

– Excavation down to level of RL 2.5 metres Port Kembla Height Datum (PKHD) to allow removal of existing structures and services and facilitate construction of the quay wall
– Demolition/removal of Berth 101 aboveground structures.
– Demolition/removal of aboveground and underground services.
– Removal of existing stockpiles from site.
– Transport of spoil via road from the MBD Site Compound to the Emplacement Cell Construction Site.
– Platform excavation and stockpiling.
– Processing demolished materials (for re-use or recycling) by others.
– CPT in the Outer Harbour.

An outline of the tasks associated with the Early Enabling Works is provided in Section 2.4.1 through Section 2.4.5. The Early Enabling Works site includes the MBD Site Compound and the Emplacement Cell Construction Site, as shown

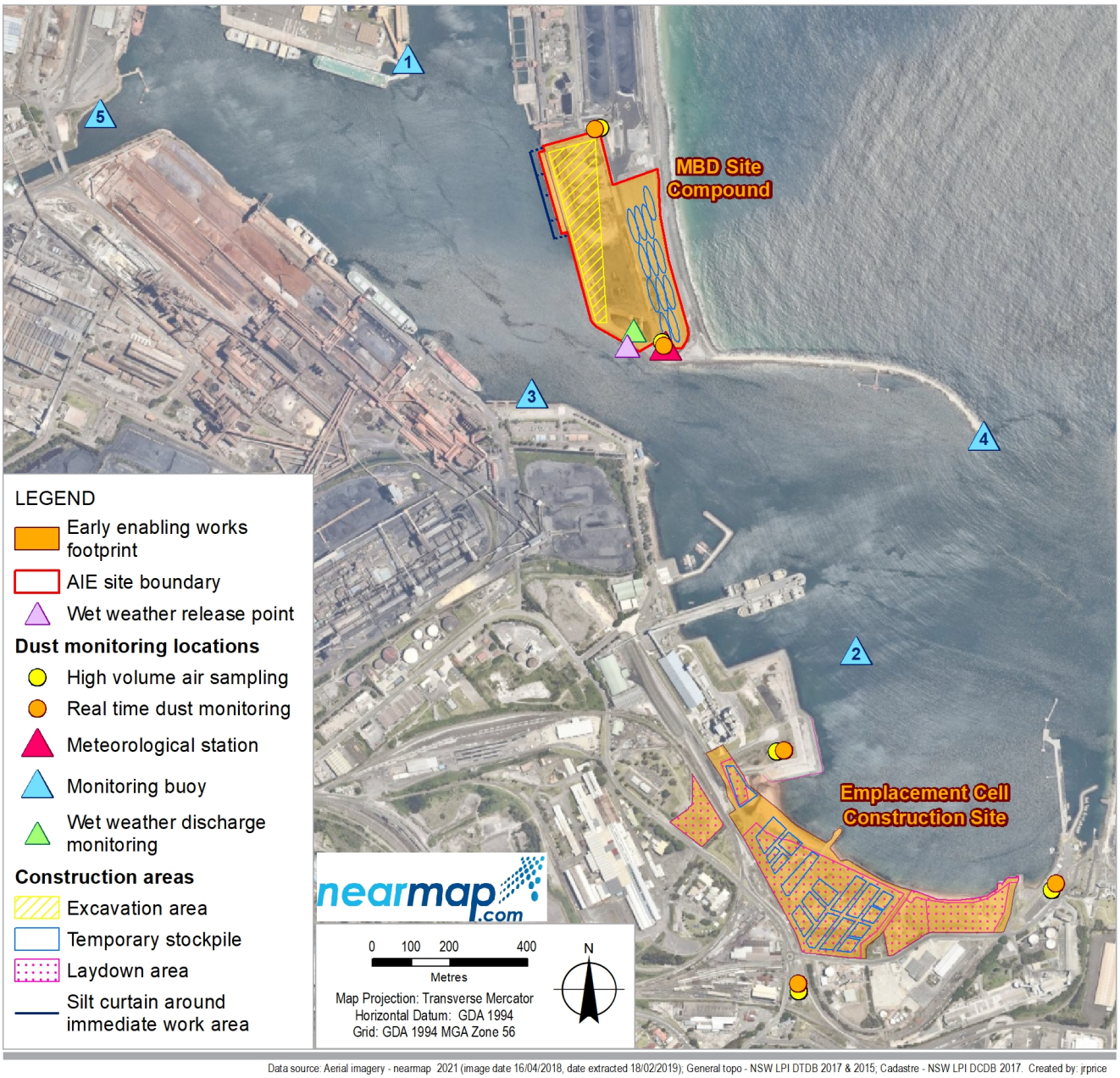


Figure 2-2 Early Enabling Works for MBD

2.4.1 Excavation

Excavation is required to facilitate the removal of existing aboveground and underground structures and services within the MBD Site Compound to a level of RL 2.5 metres on PKHD.

The proposed excavation zone generally extends from Road No. 7 at the northern end of the West Stockyard to the South Ponds and across to Road No. 9 as shown by the yellow shaded area in Figure 2-3.

Figure 2-3 Proposed excavation zone within MBD Site Compound

It is proposed to segregate, manage, stockpile and transport excavated materials into the following categories:

- Fill materials and concrete suitable for re-use for wharf construction will be crushed on-site and stockpiled at the East Stockyard (refer to Figure 2-3).
- Excess materials suitable for placement in the Outer Harbour will be transported to the Emplacement Cell Construction area (refer to Figure 2-2 and Figure 2-4).
- Revetment rock armour will be stockpiled for reuse, if removed.
- Recyclable material such as steel, cables, etc. will be transported off site for recycling.
- Waste materials that are unsuitable as fill or for recycling will be disposed off-site at an approved landfill facility.

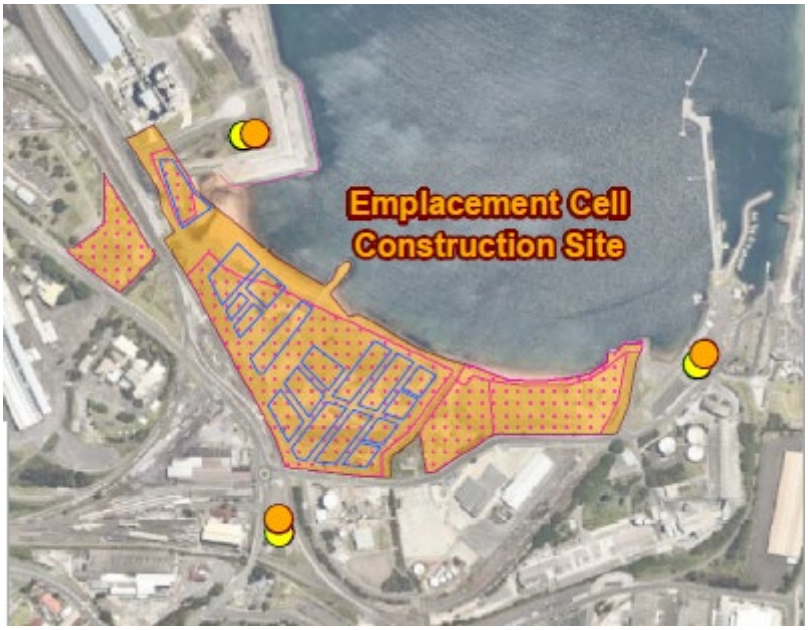


Figure 2-4 Emplacement Cell Construction Site

2.4.1.1 Demolition/removal of structures

All structures, foundations, piling, paving, site services, etc. within the excavation zone require demolition and removal. The proposed structures for demolition are summarised in Table 2.2.

Table 2.2 Structures to be demolished/removed during Early Enabling Works for MBD

Structure	Works required
Tower T1	Remove any remaining miscellaneous steel work as necessary (e.g., handrails and guardrails)
Tower T2 and T3	Demolish headstock and cut-off any piles at RL+1.5 m PKHD.
Tower T1, T3, T4 and T6 Clean Out Pits/ Drains	Demolish any remaining miscellaneous steel work, the Clean Out Pit and associated drains.
Conveyor C3	Demolish any pavement/gutter and cut-off any piling in the excavation zone
T3 Pond	Demolish any remaining miscellaneous steel work, the pit and associated drain.
Tower T5 gantries	Demolish the remaining footings and headstock and cut-off piles at RL +1.5m PKHD. The two southern gantries require complete removal of the headstock and piles.
Conveyor C5 Gantry Walls	Demolish the remaining West Stockyard walls (inverted precast concrete T sections).
Reclaim conveyors C6 and C7	Demolish all remaining parts including the reclaim hopper, paving and any foundations/piling/footings.
West shore clean out pit	Demolish any remaining miscellaneous steel work, the pit and associated drain.
West Stockyard Hardstand Area	Demolish and excavate the hardstand to RL + 2.5 m PKHD. The excavation of the hardstand shall extend to 3 m beyond the tie rod anchors (the hardstand area is constructed of 300 mm heavily bound base course (road building material), 340 mm lightly bound base course (80% blast furnace slag and 20% granulated blast furnace slag) and 200 mm of engineered fill.
Light Towers	Demolish the foundations and remove associated cabling. Demolish and remove all other light towers from the site.
Berth 101	Berth 101 comprises a concrete deck supported by 568 concrete and timber piles, tie rods and dead man blocks. There is also a fendering system comprising timber piling, timber waling and rubber fenders, various utilities and a sheet pile cut-off wall (approximately 175 m long) along the landside of the berth. Works required include cut and remove the concrete deck, remove tie rods and anchor blocks. Removal of piles will be via a crane positioned on a barge immediately

Structure	Works required
	adjacent to the wharf structure. Silt curtains will be positioned surrounding the work area during the removal of piles. AIE has an obligation under its lease agreement NSW Ports to demolish the Wharf at Berth 101 by 29 September 2021.
Substation	Undertake asbestos containing materials (ACM) inspections and testing of materials prior to demolition (as required). Where ACM is confirmed, remove and dispose off-site by licensed contractor with clearance certificate. Demolish building and transformer bays including underground foundations and conduits. Remove and dispose of any remaining cables from Substation within the site.
Mooring lines	Remove lines and blocks.
Sewer tanks	Two underground concrete sewer tanks are located on the south side of Tower TS8. Demolish the tanks following pump out and flushing.

2.4.1.2 Demolition/removal of services

Numerous services are currently located in the excavation zone and will be demolished and removed generally down to RL +1.5 metres PKHD as part of the excavation process. The services that will be demolished/removed are summarised in Table 2.3.

Table 2.3 Services to be demolished/removed during Early Enabling Works for MBD

Structure	Works required
Bunker oil pipeline	The existing bunker oil pipeline extends from storage facilities on the southern shore of Port Kembla, under The Cut to the oil berth at the northern breakwater. A 300 mm carbon steel pipeline extends underground (approximately 600 mm clear cover) along the western shore of the site to Berth 101. An above ground section then passes under Berth 101 and on to Berth 102 to the north. The pipeline sections, both underground and running under Berth 101 require removal with management and disposal of any residual hydrocarbons. It is proposed to cut the pipeline into transportable lengths and removed from site to an appropriate and approved location. Beyond the excavation zone, the pipeline will remain in-situ and will be capped at both ends with suitable identification.
Domestic water pipeline	An underground potable water supply pipeline currently runs underground on the eastern side of Tower TS8 to supply Berth 101 and a ductile iron cement lined (DICL) pipeline continues along the western shore of Berth 101 supplying the Port Authority of NSW (PANSW) meter compound at the south of the site. An abandoned pipeline formed from ACM runs parallel to the DICL pipeline. A licenced removal company shall be engaged to remove and transport the asbestos material in a safe manner to an approved disposal site. An asbestos clearance certificate shall be provided following removal. All abandoned domestic water piping is to be removed within the excavation zone. Beyond the excavation zone, the pipeline shall remain in the ground and be capped at both ends.
Electricity supply	Electricity is supplied from the PKCT 11 kV South Substation and distributed in Substation B (south of Berth 101). These supplies include: An underground 11 kV electricity cable (approximately 900 mm cover) from Substation B to the PANSW pad-mounted transformer at the southern end of the site. Several 415 V cables from Substation B to Pumps 01 at the South Ponds, to Pumps 09 and 17 at drain pit sumps and to light poles across the site Control cabling for pumps, lights and water spray nozzles. The substation building will be demolished with all cables in the excavation zone removed.
Telecommunications	The telecommunications cable extends from a pit near PKCT South Substation to a pit near the PANSW meter compound. The route of the cable is uncertain; however, it is understood to follow the western shore. During demolition works, the cable is required

Structure	Works required
	to be removed and disposed of. Any cable beyond the excavation zone, is to remain in-situ.
Tertiary treated effluent	Tertiary Treated Effluent (TTE) is supplied to PKCT for firefighting and dust suppression sprays. An interconnected ring main circles around both the East and West Stockyards supplying dust suppression sprays and fire hydrants. The pipelines and sprays serving the West Stockyard will be demolished and removed. The western incoming supply shall be capped near Tower TS7 and at the branch from West Stockyard to the PKCT truck wash. The spray system for the East Stockyard is not required and will be demolished. The TTE pipeline along the eastern side (Seawall Road) is to remain in-service. The TTE pipeline along Road No. 9 shall be capped on the western side of PANSW meter compound.

During demolition, stormwater from the site will be directed to the Southern Pond. The overflow pipes at the Southern Pond is AIE's licensed discharge point into Port Kembla Harbour.

As the demolition work proceeds, the contractor will ensure stormwater runoff always flows to the Southern Pond in accordance with AIE's Environment Protection Licence conditions.

2.4.2 Removal of stockpiles

Two large stockpiles, approximately 700 metres^3 to 800 metres^3 of mixed sandy gravel material are present in the south-western section of the site. The stockpiles also contain inclusions of slag gravel, cobbles, concrete and boulders. Both stockpiles will be removed as part of the Early Enabling Works and will be characterised (visual and sampling, as required) for re-use as part of the Project.

2.4.3 Transport of spoil from MBD Site Compound to Emplacement Cell Construction Site

Approximately 50,000 metres^3 of spoil will need to be transported via road from the MBD Site Compound and stockpiled at the Emplacement Cell Construction Site.

The activities associated with this task will involve loading, road transportation via truck and trailer (approx. 30 tonne capacity), unloading, stockpiling, and management of the stockpiles.

Spoil will be characterised prior to transport based on the source location, the availability of any existing data and additional sampling and analysis, as required.

2.4.4 Processing of demolished materials (reuse and recycling)

Demolished materials which are suitable may be re-used in the works, subject to approval by AIE and the Auditor.

Materials for re-use may include:

– Uncontaminated excavated material as fill.
– Crushed concrete as fill.

Excavation of a platform to stockpile up to 70,000 metres^3 of material will be undertaken in the East Stockyard.

Materials for re-use are to be stockpiled and stored in the East Stockyard until further stages of the works proceed.

Materials suitable for recycling will be preserved during the demolition works and removed and stored on-site in the eastern stockyard as directed by AIE until collected or removed from site by appropriate contractors.

2.4.5 Cone Penetration Testing

CPT will be undertaken at 50 to 60 locations within the Outer Harbour to inform the design and alignment of the Emplacement Cell. CPT locations will target alignment of Emplacement Cell and proposed fill area. Works comprise of surveying the seabed level and geotechnical testing (including CPT) via a purpose-built CPT rig attached to a small jack barge, portable 15t CPT rig and jack up barge.

2.5 Program for Early Enabling Works of MBD

Early Enabling Works for the MBD is anticipated to commence in May 2021. It is estimated to be completed in six months.

3. Roles and responsibilities

AIE and the Project team is responsible for all activities associated with the Early Enabling Works, including the implementation and maintenance of the various heritage/management measures. The Project team is outlined in the Organisational Chart in the covering Environmental Management Strategy (EMS). Relevant roles and responsibilities for the HUFP are outlined in Table 3.1.

Table 3.1 Heritage roles and responsibilities

Role	Responsibility
AIE Project Director	– Responsible for the overall funding and direction of the Early Enabling Works. – Ensuring provision of adequate resources to achieve the environmental objectives for the project including ensuring sufficient resourcing for the Environmental Team, Engineering and Construction Teams.Ensure the HUFP is developed in consultation with Heritage NSW and the ILALC.
AIE Construction Manager	– Proactively stewards the effective implementation of the Early Enabling works in accordance with requirements of the Infrastructure Approval (SSI9471), Environmental Strategy and all related sub-plans – Demonstrate proactive support for environmental requirements
AIE HS&E Manager	– Implementation and updates of all Health, Safety and Environmental Management Strategies and sub-plans – Ongoing liaison and engagement with government agencies and point of escalation for any environmental incidents – Identifying environmental issues as they arise and proposing solutions – Environmental Reporting
Liberty Industrial Project Manager	– On-site Project management and control. – Decision-making authority relating to environmental performance of the construction program – Authority over Project construction and site activities in accordance with the EMS. – Ensure relevant training is provided to all Project staff prior to commencing individual activities. – Reports to AIE Construction Manager on environmental matters. – Ensures appropriate Contractor resources are allocated to implement the environmental requirements. – Responsible for planning and scheduling of construction, and to ensure operations are conducted in accordance with statutory requirements and the EMS. – Monitors performance against environmental Key Performance Indicators (KPI's). – Ensures that all environmental objectives associated with the Project are achieved. – Day-to-day decision-making authority relating to environmental performance of construction activities and direct site activities and construction. – To provide resources to ensure environmental compliance and continuous improvement. – Ensure all personnel are aware of any changes to EMS, HUFP and improved procedures. – Ensure this HUFP is implemented for the duration of the Early Enabling Works
Liberty Industrial Construction Foreman	– Implement requirements contained in the EMS and Sub-Plans, work procedures and standard drawings. – Maintaining open and transparent communication with other Project discipline managers and other areas of the Project. – Reporting of hazards and incidents and implementing any rectification measures. – Ensures appropriate contractor resources are allocated. – Orders STOP WORK for any environmental breaches and reports incidents to the Project Manager. – Ensure this HUFP is implemented for the duration of the Early Enabling Works.

Role	Responsibility
Liberty Industrial Environmental Representative	– Delivers environmentally focussed toolbox talks. – Provides environmental advice, assistance, and direction to Project Manager to ensure construction activities are conducted in accordance with regulatory legislation and this HUFP. – Develop strong working relationships with the AIE team and Consultants. – Ensure environmental risks are appropriately identified, communicated, and effectively managed. – The Environmental Rep can order Stop Work for any unacceptable environmental risk or breach of conditions. – Ensure communication of relevant environmental information to Project personnel. – Provide specialist advice and input as required – Ensure construction manager, superintendents and field supervisors fully understand the environmental constraints and how construction practices must ensure any such constraints are considered and mitigated against during construction. – Orders STOP WORK for any environmental breaches and immediately reports incidents to Liberty Industrial Project Manager and AIE HS&E Manager.
AIE Environmental Representative	– Develop strong working relationships with the Demolition Team and Consultants. – Ensure environmental risks are appropriately identified, communicated, and effectively managed. – Instruct and advise management team on compliance issues. – Provide specialist advice and input as required. – Co-ordinate internal audits of the HUFP. – Conduct audit review as required. – Reports on the performance of the HUFP and recommends changes or improvements to Project Manager. – Orders STOP WORK for any environmental breaches and immediately reports incidents to the AIE Construction Manager and AIE HS&E Manager. – Conducts investigation and response to environmental complaints and inquiries, where required
Consultant archaeologist	– Be available for ongoing advice and response to heritage management issues throughout Early Enabling works implementation – Undertake site inspections and management response in accordance with this HUFP.
Subcontractors and construction personnel	– Undertake an environmental and heritage induction prior to accessing to site. – Comply with legislative requirements. – Participate in weekly inspections and audits. – Follow environmental procedures. – Report all environmental incidents and hazards. – Introduce environmental topics to prestart meetings. – Ensure that all relevant permits and clearances are in place prior to commencing work.

4. Legislative requirements

The legislative requirements applicable to the Early Enabling Works for the MBD are listed in Table 4.1.

Table 4.1 Legislation applicable to the HUFP

Legislation	Description	Applicability
Commonwealth		
Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (ATSIHP Act)	The ATSIHP Act provides protection for areas in Australia and Australian waters that are of particular significance to Aboriginals in accordance with Aboriginal traditions. This includes areas and objects. The Act also provides provisions for the discovery and disposal of Aboriginal remains.	The Port Kembla harbour area is not considered to be an area of Aboriginal significance. The Project does not require approval from the Department of Agriculture, Water and the Environment (DAWE) Minister. Division 3 of the Act provides the process for the discovery and disposal of Aboriginal remains. In the event that unexpected Aboriginal remains are uncovered during the Early Enabling Works for the MBD a report to the Minister must be made.
NSW		
National Parks and Wildlife Act 1974 (NPW Act)	The NPW Act provides for the protection of Aboriginal objects (sites, objects and cultural material) and Aboriginal places. Under the NPW Act, an Aboriginal object is defined as any deposit, object or material evidence relating to indigenous and non-European habitation, being habitation both prior to and concurrent with the occupation of that area by persons of European extraction and includes Aboriginal remains. It is an offence under Section 86 of the NPW Act to harm or desecrate an object the person knows is an Aboriginal object. It is also a strict liability offence to harm an Aboriginal object or to harm or desecrate an Aboriginal place, whether knowingly or unknowingly. Section 87 of the NPW Act provides a series of defences against the offences listed in Section 86 which includes if the harm was authorised by and conducted in accordance with the requirements of an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the NPW Act. Early Enabling Works	An AHIP was not required for the Project under Section 5.23 of the EP&A Act. An AHIP is not required for the Early Enabling Works for the MBD as they were approved as part of the overall Infrastructure Approval.
Heritage Act 1977 (Heritage Act)	The Heritage Act is concerned with all aspects of heritage conservation ranging from basic protection against indiscriminate damage and demolition of buildings and sites, through to restoration and enhancement. Heritage places and items of particular importance to the people of NSW are listed on the State Heritage Register. Approval under Section 60 of the Heritage Act is required for any direct impacts on an item on the register. Approval from the NSW Heritage Council under Section 139 of the Heritage Act is required prior to any activities likely to disturb a relic while Section 140 of the Heritage Act provides for the application for a permit for excavation likely to disturb a relic.	Approval under Section 139 or an excavation permit under Section 140 of the Heritage Act is not required for CSSI under Section 5.23 of the EP&A Act. The Project assessed in the PKGT EIS to anticipate a low potential impact on known heritage items.

Legislation	Description	Applicability
Coroners Act 2009 (CA Act)	The CA Act provides provisions related to the investigation of certain kinds of death and enables coroners to make recommendations in connection with an inquest or inquiry.	Chapter 9, Section 100 states that a person must not dispose of human remains unless the appropriate disposal authorisation has been given. In the unlikely even human remains are discovered during the Early Enabling Works the applicable provisions of Chapter 4 Section 35 of the Act must be followed in reporting the remains to the NSW Police and coroner/assistant coroner as soon as possible.

5. Planning requirements

The planning requirements and the corresponding heritage management measures applicable to the Early Enabling Works for the MBD are outlined in Table 5.1. Further management measures are outlined in Section 6 through Section 7, and in Appendix A

Table 5.1 Approval Conditions

Heritage management - implementation				
Requirement	**Reference**	**Responsibility**	**Evidence**	**Applicability to this HUFP**
Infrastructure Approval Requirements (SSI 9471)				
Protection of Heritage Items The Proponent must ensure the development does not cause any direct or indirect impacts on heritage items located outside the approved development footprint.	Infrastructure Approval Schedule 3, Condition 17	– AIE HS&E Manager	Section 2.2	Applicable
Unexpected Finds Protocol – Heritage Prior to commencement of construction, the Proponent must prepare an Unexpected Finds Protocol for managing heritage items identified during construction of the development, in consultation with BCD and the ILALC, to the satisfaction of the Planning Secretary.	Infrastructure Approval Schedule 3, Condition 18	– AIE HS&E Manager	Section 7	Applicable
Discovery of Human Remains If human remains are discovered on site, then all work surrounding the area must cease, and the area must be secured. The Proponent must notify BCD as soon as possible following the discovery, and work must not recommence in the area until this is authorised by BCD.	Infrastructure Approval Schedule 3, Condition 19	– AIE HS&E Manager – AIE Environmental Representative – Liberty Industrial Project Manager – Liberty Industrial Environmental Representative – Liberty Industrial Construction Foreman – Subcontractors and construction personnel	Section 6.1.3 Section 7	Applicable
PKGT EIS Management Measures				
The construction workforce would be given a heritage induction and supporting material to be able to identify materials of potential heritage value and how to respond.	EIS Measure H1 Unexpected finds	– AIE Environmental Representative – Liberty Industrial Environment Representative – Liberty Industrial Construction Foreman	Section 6.2	Applicable

Heritage management - implementation				
A protocol to be followed in the event of an unexpected find would be developed and would include clear lines of communication and stop work procedures to be followed.	EIS Measure H2 Unexpected finds	– AIE HS&E Manager – Liberty Industrial Project Manager – Liberty Industrial Environmental Representative – Liberty Industrial Construction Foreman	Section 7	Applicable

6. Unexpected heritage items and heritage induction

6.1 Unexpected heritage items

An ‘unexpected heritage item’ means any unanticipated discovery of an actual or potential heritage item, for which AIE and its contractor, does not have approval to disturb or does not have a safeguard in place (apart from this procedure) to manage the disturbance.

Unanticipated discoveries are categorised as either:

a. Aboriginal objects.
b. Historic (non-Aboriginal) heritage items.
c. Human skeletal remains.

Images of examples of Aboriginal and non-Aboriginal heritage items are provided in Appendix A.

6.1.1 Aboriginal objects

The NPW Act protects Aboriginal objects which are defined as:

“any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains”

Examples of Aboriginal objects include:

– Stone tool artefacts.
– Shell middens.
– Axe grinding grooves.
– Pigment or engraved rock art.
– Burial sites.
– Scarred trees.

6.1.2 Non-Aboriginal heritage items

The Heritage Act protects non-Aboriginal heritage items which are defined as:

“any deposit, artefact, object or material evidence that relates to the settlement of the area that comprises NSW, not being Aboriginal settlement; and is of State or local heritage significance”.

Non-Aboriginal heritage items may include:

– Archaeological ‘relics.
– Other historic items (i.e. works, structures, buildings or movable objects).

Relics are archaeological items of local or state significance which may relate to past domestic, industrial or agricultural activities in NSW, and can include bottles, remnants of clothing, pottery, building materials and general refuse.

6.1.3 Human skeletal remains

Human skeletal remains can be identified as either an Aboriginal object or non-Aboriginal relic depending on ancestry of the individual (Aboriginal or non-Aboriginal) and burial context (archaeological or non-archaeological). Remains are considered to be archaeological when the time elapsed since death is suspected of being 100 years or more.

All bones must be treated as potential human skeletal remains and work around them must stop while they are protected and investigated urgently. Under the applicable legislation outlined in Section 4, the following agencies must be notified in the event of human remains being discovered:

– NSW Police.
– NSW Coroner's office.
– Heritage NSW within the Department of Premier and Cabinet..
– DAWE Minister (in the event Aboriginal remains are uncovered).

In the event that work must stop due to human remains being uncovered, works will not recommence within the area until authorised by NSW Heritage.

6.2 Heritage induction

Prior to the Early Enabling Works for the MBD commencing, all individuals involved with the works will be given an induction on heritage matters related to the works and unexpected finds included in the general induction package. This includes any person involved in undertaking or supervising ground disturbance works.

Personnel will be provided with supporting material with descriptions of potential heritage features and relics, how to visually identify materials of potential heritage value (both Aboriginal and non-Aboriginal) and how to appropriately respond to the unexpected find.

The induction will also include the protocols in the event of unexpected human remains being uncovered during the Early Enabling Works and the appropriate notification and response process to be undertaken. The unexpected finds procedure is provided in Section 7.

7. Unexpected finds protocol

The Unexpected Finds Protocol that must be followed by any work personnel in the event of an unexpected heritage item being discovered is outlined in Table 7.1. This procedure has been prepared in consultation with Heritage NSW and the ILALC.

Table 7.1 Unexpected Heritage items find procedure

Step	Action
1	**Stop work, protect item and inform the site supervisor**
1.1	– Stop all work in the immediate area of the item and notify the AIE Project Manager.
1.2	– Establish a 'no-go zone' around the item. Use high visibility fencing, where practical.
1.3	– Inform all site personnel about the no-go zone.
1.4	– Inspect, document and photograph the item.
1.5	*Is the item likely to be bone?* – Where it is obvious that the bones are human remains, you must notify the local police by telephone immediately. They may take command of all or part of the site. Where human remains are likely to be Aboriginal ancestral remains, also contact Heritage NSW on (02) 9873 8500.
1.6	– Confirm with the site environment representative that the site is unexpected and if a permitis in place
2	**Contact and engage an Aboriginal or Historical archaeologist and/or an Aboriginal heritage consultant**
2.1	– Contact a qualified Aboriginal or Historical archaeologist to discuss the location and extent of the item and arrange a site inspection, if required. Preference will be given to using an archaeologist supplied by the ILALC for local context or assigned Consultant Archaeologist who completed the heritage assessments for the EIS – If requested, provide photographs.
3	**Preliminary assessment and recording of the find**
3.1	– In a minority of cases, the Aboriginal or Historical archaeologist or ILALC Representative may determine from the photographs that no site inspection is required because no archaeological constraint exists for the Project (e.g., the item is not a 'relic', a 'heritage item' or an 'Aboriginal object'). Any such advice should be provided in writing to the AIE HS&E Manager (e.g., via email)
3.2	– Arrange site access for the Aboriginal or Historical archaeologist/Aboriginal heritageconsultant to inspect the item as soon as practicable.
3.3	– Subject to the Aboriginal or Historical archaeologist/Aboriginal heritage consultant's assessment, work may recommence at a set distance from the item. Existing protective fencing established in Step 1 may need to be adjusted to reflect the extent of the newly assessed protective area. No works are to take place within this area once established.
3.4	– The Aboriginal or Historical archaeologist/Aboriginal heritage consultant may provide advice after the site inspection and preliminary assessment that no heritage constraint exists for the Project (e.g., the item is not a 'relic' or a 'heritage item' or an 'Aboriginal item'. Any such advice should be provided in writing (e.g., via email or letter with the consultant's name and company details clearly identifiable) to the AIE HS&E Manager.
3.5	– Where required, seek additional specialist technical advice (such as a forensic or physical anthropologist to identify skeletal remains. – The Aboriginal or Historical archaeologist/Aboriginal heritage consultant can provide contacts for such specialistconsultants.
3.6	– Where the item has been identified as a 'relic' or 'heritage item' or an 'Aboriginal object' the Aboriginal or Historical archaeologist should formally record the item. – Where an Aboriginal object is recorded it must be registered on the Aboriginal Heritage Information Management System (AHIMS) in accordance with section 89A of the NPW Act.

Step	Action
3.7	– Heritage NSW (Heritage Division for non-Aboriginal relics and Planning and Aboriginal Heritage Section for Aboriginal objects) can be notified informally by telephone at this stage by the AIE HS&E Manager Any verbal conversations with regulators must be noted on the Project file for future reference. – Heritage NSW Environment Line ph. (02) 9873 8500. – Email: heritagemailbox@environment.nsw.gov.au – Registered Aboriginal Parties (RAP) will be notified at this point to inform them of unexpected find.
4	– **Aboriginal or Historical Archaeologist to prepare management requirements for site**
4.1	– An archaeological or heritage management plan is developed outlining management actionsto ensure damage to the site is minimised and work can recommence. – This plan will be developed by the Aboriginal or Historical archaeologist in consultation with the RAP's, Heritage NSW and DPIE as required.
5	**Notify the regulator, if required.**
5.1	– If notification is required, complete the template notification letter, including the archaeological/heritage management plan and other relevant supporting information. For historical relics a Section 146 notification form will be required to be submitted to the HeritageDivision.
5.2	– Forward the signed notification letter to Heritage NSW and the Planning Secretary.
5.3	– A copy of the final signed notification letter, archaeological or heritage management plan and the site recording form is to be kept on file and a copy sent to the Project Manager
6	**Resume work**
6.1	– The management plan is implemented, and the Project's EMS is updated to reflect any additional controls and requirements
6.2	– Seek written clearance to resume Project work from the AIE HS&E Manager and the Aboriginal or Historical Archaeologist/Aboriginal heritage consultant. – Clearance would only be given once all archaeological excavation and/or heritage recommendations and approvals (where required) are complete. – Resumption of Project work must be in accordance with all relevant Project/heritage approvals/determinations.
6.3	– If required, ensure archaeological excavation/heritage reporting and other heritage approval conditions are completed in the required timeframes. This includes artefact retention repositories, conservation and/or disposal strategies

8. Contact details

Contact details applicable to this HUFP are listed in Table 8.1.

Table 8.1 Contact details

Position	Name	Phone Number
Project Manager	Liberty Industrial	1300 100 180
AIE	Alex Lovell	0413 250 961
Wollongong Local Police station		(02) 4226 7899
Consultant Archaeologist	Asher Ford Maaci (GHD)	(03) 8687 8891
Illawarra LALC		(02) 4226 3338
NSW Heritage		(02) 9873 8500

References

GHD 2018, Port Kembla Gas Terminal Environmental Impact Statement.

Infrastructure Approval (SSI 9471).

Appendices

Appendix A

Identifying unexpected heritage items

Identifying unexpected heritage items

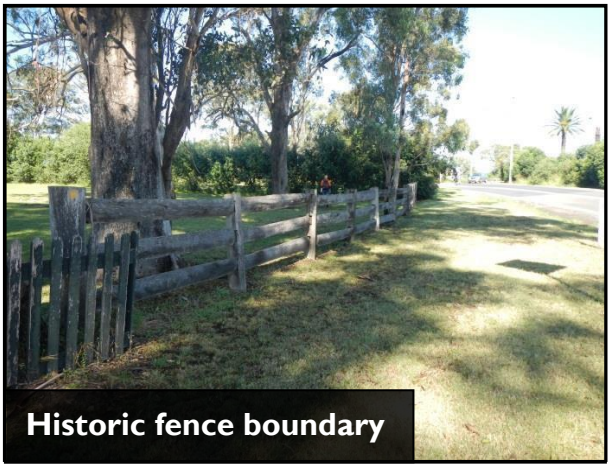
The following images can be used to assist in the preliminary identification of potential unexpected items (both Aboriginal and non-Aboriginal) during construction and maintenance works. Please note this is not a comprehensive typology.

Top left hand picture continuing clockwise: Stock camp remnants (Hume Highway Bypass at Tarcutta); Linear archaeological feature with post holes (Hume Highway Duplication), Animal bones (Hume Highway Bypass at Woomargama); Cut wooden stake; Glass jars, bottles, spoon and fork recovered from refuse pit associated with a Newcastle Hotel (Pacific Highway, Adamstown Heights, Newcastle area).

Top left hand picture continuing clockwise: Woodstave water pipe with tar and wire sealing (Horsley Drive); Tram tracks (Sydney); Brick lined cistern (Clyde); Retaining wall (Great Western Highway, Leura).

Top left hand picture continuing clockwise: Road pavement (Great Western Highway, Lawson); Sandstone kerbing and guttering (Parramatta Road, Mays Hill); Telford road (sandstone road base, Great Western Highway, Leura); Ceramic conduit and sandstone culvert headwall (Blue Mountains, NSW); Corduroy road (timber road base, Entrance Road, Wamberai).

Top left hand corner continuing clockwise: Alignment Pin (Great Western Highway, Wentworth Falls); Survey tree (MR7, Albury); Survey tree (Kidman Way, Darlington Point, Murrumbidgee); Survey tree (Cobb Highway, Deniliquin); Milestone (Great Western Highway, Kingswood, Penrith); Alignment Stone (near Guntawong Road, Riverstone). Please note survey marks may have additional statutory protection under the *Surveying and Spatial Information Act 2002*.



Top left hand corner continuing clockwise: Remnant bridge piers (Putty Road, Bulga); Wooden boundary fence (Campbelltown Road, Denham Court); Dairy shed (Ballina); Golden Arrow Mine Shaft.

Top left hand corner: Culturally modified stone discovered on Main Road 92, about two kilometres west of Sassafras. The remaining images show a selection of stone artefacts retrieved from test and salvage archaeological excavations during the Hume Highway Duplication and Bypass projects from 2006-2010.

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