

Northbank Enterprise Hub Pty Limited

M

Aboriginal Cultural Heritage Management Plan

Lot 1001 Tomago Road, Tomago

LGA: Port Stephens

4 November 2018

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Date: 4 November 2018

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WORIMI STATEMENT OF SIGNIFICANCE

The land on which the project area is found has had previous occupation by our people. The cultural significance and connection to the land of this area is sensitive, mainly due to the abundant amount of resources and the travel/trade route used traditionally. This is why it is extremely important to our Worimi people to be consulted and gain the best outcome for protection or preservation of our local sites.

EXECUTIVE SUMMARY

McCardle Cultural Heritage (MCH) has been commissioned by Torque Projects Pty Limited on behalf of Northbank Enterprise Hub Pty Limited to prepare an Aboriginal Cultural Heritage Management Plan (ACHMP) for the proposed business and industrial development of Lot 1001 Tomago Road, Tomago, completing all of the requirements of Schedule 3, Conditions 37 and 38 of Project Approval MP 10-0185.

This document has been developed to manage Aboriginal Cultural Heritage within the proposed development area as stipulated in the Project Approval (MP 10-0185) granted under Section 75J of the *Environmental Planning and Assessment Act 1979*.

This document is intended to provide guidance for the management of Aboriginal cultural heritage within the Project Area both during construction and into the future. This ACHMP applies to the entire Project Area as outlined in Section 1. This ACHMP also outlines the legislative context of the project in respect to heritage and the Aboriginal consultation which has been undertaken (Section 2). For the practical management of Aboriginal cultural heritage, a clear outline of roles and responsibilities is provided along with operational flow charts to be used by Land Managers and contractors who may need to access, or conduct works, within the Project Area.

The Final ACHMP has been produced in close consultation with the Registered Aboriginal Parties (RAPs) that have expressed an interest in the project. Aboriginal participation has been requested and implemented from the earliest stages of development of this ACHMP. Additionally, prior to the finalisation of this document, RAPs were invited to provide input/comment on cultural heritage issues associated with the Project Area, and the heritage management protocols outlined in this document (Section 3 and Appendix A).

Two Aboriginal heritage sites (shell middens) and one Potential Archaeological Deposit (PAD) have been identified in the Project Area and they are described in Section 4. An AHIP will be required for the two surface sites and an archaeological test excavation (Appendix C) must be conducted prior to the commencement of construction activities within the identified PAD. Further management recommendations for the PAD will be made upon the completion of the test excavation.

Section 5 outlines the heritage management protocols which must be implemented and it is a requirement of this ACHMP that the heritage management protocols are followed.

Unexpected Finds Procedures (Section 6 and Appendix B) have been developed to provide guidance should Aboriginal objects/material be identified, or if human skeletal remains are uncovered during construction. These protocols must be followed if unexpected Aboriginal objects/material or skeletal remains are uncovered during works.

Section 7 provides protocols for compliance, dispute resolution and review procedures, Section 8 outlines the roles and responsibilities for the implementation of this ACHMP and Section 9 provides the conclusion to the ACHMP.

GLOSSARY

Aboriginal Cultural Heritage Values: traditional values of Aboriginal people, handed down in spiritual beliefs, stories and community practices and may include local plant and animal species, places that are important and ways of showing respect for other people.

Aboriginal Place: are locations that have been recognised by the Minister for Climate Change and the Environment (and gazetted under the *National Parks and Wildlife Act 1974*) as having special cultural significance to the Aboriginal community. An Aboriginal Place may or may not include archaeological materials.

Harm: is defined as an act that may destroy, deface or damage an Aboriginal object or place. In relation to an object, this means the movement or removal of an object from the land in which it has been situated

Spiritual Significance: the importance of a place in the landscape that is valued by Aboriginal people because it is part of their spiritual culture. Examples include places associated with totem species or places that are the subject of traditional cultural stories.

Traditional Aboriginal Owners: Aboriginal people who are listed in the Register of Aboriginal owners pursuant to Division 3 of the *Aboriginal Land Register Act (1983)*. The Registrar must give priority to registering Aboriginal people for lands listed in Schedule 14 of the *National Parks and Wildlife Act 1974* or land subject to a claim under 36A of the *Aboriginal Land Rights Act 1983*.

Traditional Knowledge: Information about the roles, responsibilities and practices set out in the cultural beliefs of the Aboriginal community. Only certain individuals have traditional knowledge and different aspects of traditional knowledge may be known by different people, e.g. information about men's initiation sites and practices, women's sites, special pathways, proper responsibilities of people fishing or gathering food for the community, ways of sharing and looking after others, etc.

ACRONYMS

ACHMP	Aboriginal Cultural Heritage Management Plan
AHIMS	Aboriginal Heritage Information Management System. Data base of recorded sites across NSW managed by OEH
OEH	Office of Environment and Heritage
AHIP	Aboriginal Heritage Impact Permit
RAPs	Registered Aboriginal Party

1 INTRODUCTION

1.1 INTRODUCTION

MCH have been commissioned by Northbank Enterprise Hub Pty Limited to prepare an Aboriginal Cultural Management Plan (ACHMP) for the Tomago Development Project located at Tomago. The project (Project Approval MP10_0185) is for business and industrial development of Lot 1001 DP1127780 Tomago Road, Tomago and the project is situated within Port Stephens Local Government Areas (LGA).

The 239 hectare site is subject to Project Approval (MP10_0185) issued by the NSW Department of Planning & Environment (DoP&E) in 29 June 2014. The approval allows for future development of business and industrial development and associated infrastructure and this Aboriginal Cultural Heritage Management Plan (ACHMP) pertains to the entire Project Area, informing all subsequent stages of the development, and meets the following conditions set out in Schedule 3 of the Project Approval;

- 1) Prepare and implement an Aboriginal Cultural Heritage Management Plan (ACHMP) in accordance with condition 37 that must;
 - (a) be submitted to the Secretary for approval prior to any surface disturbing work;
 - (b) be prepared by a suitably qualified person in consultation with the OEHL and registered Aboriginal parties;
 - (c) set out a strategy to implement the Statement of Commitments relating to Aboriginal cultural heritage, including but not limited to, a protocol to trigger the requirement for a sub-surface investigation of the sites identified in McCardle Cultural Heritage Pty Ltd's Aboriginal Impact Heritage Assessment dated July 2012;
 - (d) detail the involvement and responsibilities of all stakeholders, including the registered Aboriginal parties;
 - (e) detail all impact management and mitigation strategies including monitoring programs, further investigations, procedures for recording unexpected or unrecorded sites;
 - (f) include a keeping place agreement for salvaged Aboriginal objects;
 - (g) include a Cultural Awareness Program for all personnel involved in surface disturbing work;
 - (h) describe the procedures for continued consultation with Aboriginal stakeholders; and
 - (i) include contingency procedures should non-compliance with the Plan occur.
- 38) The Proponent must consult with all registered Aboriginal parties in the ongoing management of Aboriginal cultural heritage values of the site. Evidence of this consultation must be collated and submitted to the Secretary.

This document has been prepared in order to effectively manage Aboriginal cultural heritage resources within Lot 1001 Tomago Road, Tomago. This ACHMP also forms part of a Cultural Heritage Induction Package (CHIP) for implementation by land managers and onsite personnel.

1.2 OVERVIEW

This ACHMP applies to Lot 1001 Tomago Road, Tomago ("the Project Area") approximately 6 kilometres south of Raymond Terrace and 8 kilometres west of Williamstown along the Tomago

Road, Tomago (Figure 1.1). The Project Area is within the Port Stephens Local Government Area and is administered by the Councils under Part 4 of the EP&A Act 1979.

Figure 1.1 Location of the project area



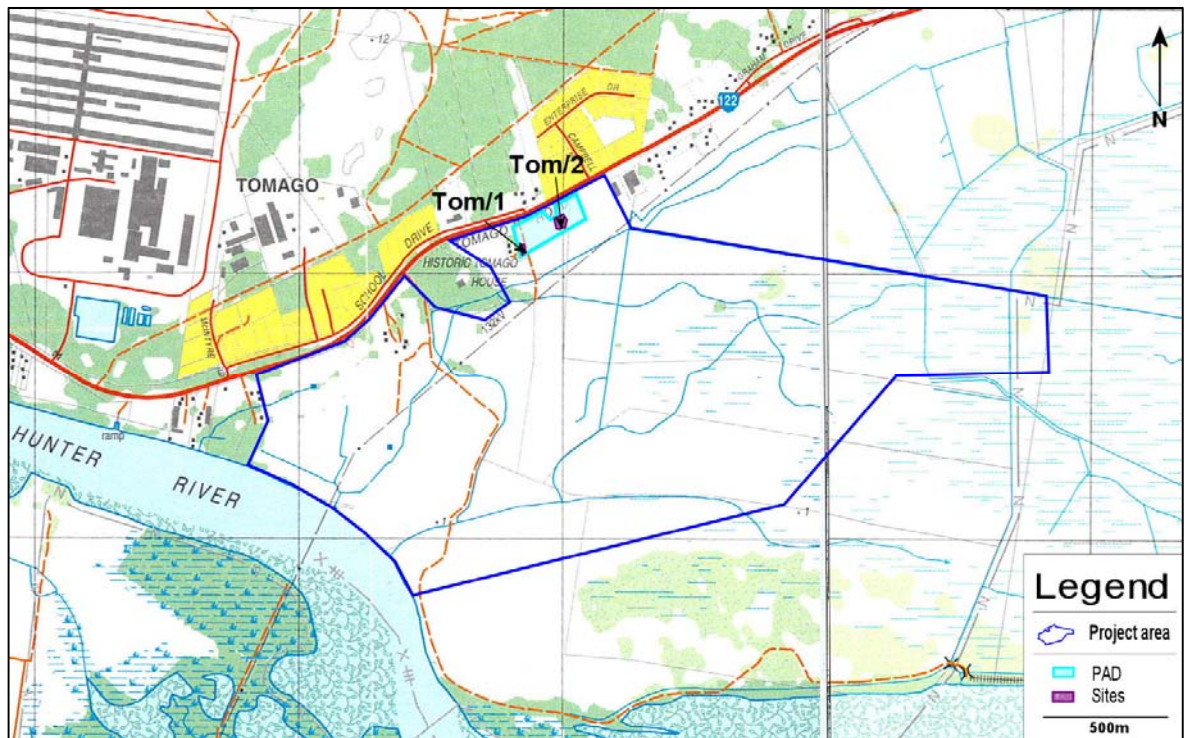
The approval for this project was granted under Section 75J of the *Environmental Planning & Assessment Act 1979* on 29 June 2014. One of the conditions of this approval requires consultation with Registered Aboriginal Parties (RAPs) and the development of an ACHMP. This ACHMP remains the heritage management document for the entire Project Area (Figure 1.1) until such time as the practical completion of the development.

Two sites and one Potential Archaeological Deposit (PAD) were identified within the Project Area on a northern dune as listed in the Table below and illustrated in Figure 1.2.

Table 1.1 Sites within the Project Area

Site	Site type	Previous Mitigation Recommemndatiosn
38-4-1964	Shell midden	AHIP surface collection
38-4-1965	Shell midden	AHIP surface collection
38-4-1963	PAD	AHIP Test excavation

Figure 1.2 Location of sites and PAD within the Project Area



1.3 PURPOSE

This document is intended to provide guidance for the management of Aboriginal cultural heritage within the Project Area for all activities prior to construction commencing, during construction works and after development is complete. For the practical management of Aboriginal cultural heritage a clear outline of roles and responsibilities is provided in this document to be used by land managers and contractors who may need to access, or conduct works within the Project Area.

1.4 PROJECT INTENDED LAND USE

The project involves the development of business and industrial development and associated infrastructure. This ACHMP relates to the entire Project Area.

2 LEGISLATIVE CONTEXT

The following overview of the legislative framework, is provided solely for information purposes for the client, and should not be interpreted as legal advice. MCH will not be liable for any actions taken by any person, body or group as a result of this general overview and MCH recommends that specific legal advice be obtained from a qualified legal practitioner prior to any action being taken as a result of the general summary below.

Land managers are required to consider the affects of their activities or proposed development on the environment under several pieces of legislation. Although there are a number of Acts and regulations protecting Aboriginal heritage, including places, sites and objects, within NSW, the three main ones include:

- National Parks and Wildlife Act (1974, as amended)
- National Parks and Wildlife Regulation (2009)
- Environmental Planning and Assessment Act (1979)

2.1 NATIONAL PARKS AND WILDLIFE ACT (1974, AS AMENDED)

The National Parks and Wildlife Act (1974), Amended 2010, is the primary legislation for the protection of Aboriginal cultural heritage in New South Wales. The NPW Act protects Aboriginal heritage (places, sites and objects) within NSW and the Protection of Aboriginal heritage is outlined in s86 of the Act, as follows:

- “A person must not harm or desecrate an object that the person knows is an Aboriginal object” s86(1)
- “A person must not harm an Aboriginal object” s86(2)
- “A person must not harm or desecrate an Aboriginal place” s86(4)

Penalties apply for harming an Aboriginal object, site or place. The penalty for knowingly harming an Aboriginal object (s86[1]) and/or an Aboriginal place (s86[4]) is up to \$550,000 for an individual and/or imprisonment for 2 years; and in the case of a corporation the penalty is up to \$1.1 million. The penalty for a strict liability offence (s86[2]) is up to \$110,000 for an individual and \$220,000 for a corporation.

Harm under the National Parks and Wildlife Act (1974, as amended) is defined as any act that; destroys defaces or damages the object, moves the object from the land on which it has been situated, causes or permits the object to be harmed. However, it is a defence from prosecution if the proponent can demonstrate that;

- 1) harm was authorised under an Aboriginal Heritage Impact Permit (AHIP) (and the permit was properly followed), or
- 2) the proponent exercised due diligence in respect to Aboriginal heritage.

The ‘due diligence’ defence (s87[2]), states that if a person or company has applied due diligence to determine that no Aboriginal object, site or place was likely to be harmed as a result of the activities proposed for the Project Area, then liability from prosecution under the NPW Act 1974 will be removed or mitigated if it later transpires that an Aboriginal object, site or place was harmed. If any

Aboriginal objects are identified during the activity, then works should cease in that area and OEH notified (DECCW 2010:13). The due diligence defence does not authorise continuing harm.

The archaeological due diligence assessment and report has been carried out in compliance with the NSW DECCW 2010 Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW.

2.2 NATIONAL PARKS AND WILDLIFE REGULATION (2009)

The National Parks and Wildlife Regulation 2009 provides a framework for undertaking activities and exercising due diligence in respect to Aboriginal heritage. The Regulation (2009) recognises various due diligence codes of practice, including the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW which is pertinent to this report, but it also outlines procedures for Aboriginal Heritage Impact Permit (AHIP) applications and Aboriginal Cultural Heritage Consultation Requirements (ACHCRs); amongst other regulatory processes.

2.3 ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979 (EP&A ACT)

EP&A Act establishes the statutory framework for planning and environmental assessment in NSW and the implementation of the EP&A Act is the responsibility of the Minister for Planning, statutory authorities and local councils. The EP&A Act contains three parts which impose requirements for planning approval:

- Part 3 of the EP&A Act relates to the preparation and making of Environmental Planning Instruments (EPIs), State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs).
- Part 4 of the EP&A Act establishes the framework for assessing development under an EPI. The consent authority for Part 4 development is generally the local council, however the consent authority may be the Minister, the Planning Assessment Commission or a joint regional planning panel depending upon the nature of the development.
- Part 4, Division 4.1 of the EP&A Act establishes the assessment pathway for State significant development (SSD) declared by the State Environmental Planning Policy (State and Regional Development) 2011 (NSW). Once a development is declared as SSD, the Director-General will issue Director-General Requirements (DGRs) outlining what issues must be considered in the EIS.
- Part 5 of the EP&A Act provides for the control of 'activities' that do not require development consent and are undertaken or approved by a determining authority. Development under Part 5 that are likely to significantly affect the environment is required to have an EIS prepared for the proposed activity.
- Part 5.1 of the EP&A Act establishes the assessment pathways for State significant infrastructure (SSI). Development applications made for SSI can only be approved by the Minister. Once a development is declared as SSI, the Director-General will issue DGRs outlining what issues must be addressed in the EIS.

The applicable approval process is determined by reference to the relevant environmental planning instruments and other controls, LEPs and State Environmental Planning Policies (SEPPs).

This project falls under Part 4.

2.4 ASK FIRST: A GUIDE TO RESPECTING INDIGENOUS HERITAGE PLACES AND VALUES

Ask First: A guide to respecting Indigenous heritage places and values (2002) was commissioned by the Australian Heritage Commission to provide a practical guide for land developers, land users and managers, cultural heritage professionals and others who may impact on Indigenous cultural heritage. Ask First is intended to be complementary to the Australia ICOMOS Burra Charter and the Australian Natural Heritage Charter. The main focus of Ask First is to emphasise that consultation and negotiation with Aboriginal parties is the best way of addressing Aboriginal cultural heritage issues.

Ask First acknowledges that maintaining Indigenous cultural values and places is a vital part of the community's sense of place, cultural identity and well-being. Indigenous Australians' heritage creates and maintains links between their ancestors, people and the land.

Ask First states that in recognising the rights and interests of Aboriginal peoples in their heritage, all parties concerned with identifying, conserving and managing this heritage should acknowledge, accept and act on the principles that Aboriginal people:

- are the primary source of information on the value of their heritage and how it is best conserved;
- must have an active role in any Aboriginal heritage planning process;
- must have input into primary decision-making in relation to Aboriginal heritage so that they can continue to fulfil their obligations towards this heritage; and
- must control intellectual property and other information relating specifically to their heritage, as this may be an integral aspect of its heritage value.

Ask First also emphasise the benefits of consultation and negotiation in the management of Indigenous cultural heritage and the need to comply with relevant Territory and Commonwealth Aboriginal cultural heritage legislation and statutory authorities, as outlined above. These guidelines have been considered in the development of this ACHMP.

3 CONSULTATION

This ACHMP has been produced in close consultation with the Registered Aboriginal Parties (RAPs) as identified throughout the Aboriginal Cultural Heritage Consultation Requirements for proponents (ACHCRs), (DECCW now OEH; April 2010). RAPs were invited to provide input/comment throughout the project on any cultural heritage issues associated with the Tomago area, the Project Area, and the ACHMP outlined in this document.

3.1 ABORIGINAL CULTURAL HERITAGE CONSULTATION REQUIREMENTS (ACHCRS)

The ACHCRs include a four staged approach of Aboriginal consultation with specific timeframes for the various components throughout the process. This process was completed as part of this ACHMP process and detailed correspondances may be found in Appendix A. The RAPs are listed in Table 3.1.

Table 3.1 List of RAPs

Stakeholders/organisations	Representative
Worimi LALC	Jamie Merrick
Nur-Run-Gee Pty Ltd	Lennie Anderson
Mur-Roo-Ma Inc.	Anthony Anderson
Worimi Traditional Owners Indigenous Corporation	Cindy Towers
Karuah Indigenous Corporation	Dave Feeney

As the RAPs did not elect to have an meeting to obtain project information, an information packet that included the original assessment (MCH 2012) and the draft ACHMP was sent to all RAPs for their review and comment. All consultation was undertaken as per the NSW Department of Environment, Climate Change and Water (DECCW), now known as the Office of Environment and Heritage (OEH), Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010), and is documented in Chapter 3 and Appendix 1.

3.2 PROTOCOL FOR CONTINUED ABORIGINAL CONSULTATION

Subject to any modifications initiated by the RAPs (listed in Section 3.1), the following protocol will be followed with respect to consultation.

- The Land Manager will advise the RAPs of the date of planned commencement of activities within the Project area;
- The Heritage Consultant will contact the RAPs every 6 months to advise of the project's progress and all consultation will be documented;
- In the event that any possible archaeological sites are identified during construction works, the Land Manager will notify the Heritage Consultant and RAPs following the Unexpected Finds Procedure in Section 6;

- The effectiveness and value of the consultation will be periodically reviewed with the RAPs. In the event there is agreement that the approach to consultation needs to change, the changed procedures would be documented in the ACHMP.

4 SITES AND AREAS OF POTENTIAL SENSITIVITY IN THE PROJECT AREA

4.1 SITES WITHIN THE PROJECT AREA

4.1.1 38-4-1964

This shell midden is located along the dune in the north and approximately 120m from an old farm drain, documented as a first order stream and the visible extent is approximately 20 metres in length and 5 metres wide, north of the creek. Exposed through creek bank erosion, this site includes pieces of pipi and oyster. Its extent is unknown as the surrounding area is covered in dense pasture grass. This site forms part of the Pad (Section 4.1.3).

Assessed as being of low scientific and cultural significance, an AHIP for a community surface collection was recommended.

4.1.2 38-4-1965

This site is located along the dune to the north. Exposed through house demolition, tracks and erosion, the visible extent of this site is spread over an area of approximately 10 metres in length and 20 metres in width. Containing large and small pieces of pipi and oyster as well as tuff artefacts, the surface material is highly disturbed through previous land uses, also covered with dense pasture grass. This site forms part of the Pad (Section 4.1.3). Assessed as being of low scientific and cultural significance, an AHIP for a community surface collection was recommended.

4.1.3 38-4-1963 (PAD)

This PAD includes the north dune overlooking the flood plain and includes the two surface sites (see above). Parts of this PAD have been subject to moderate disturbances such as the house construction and demolition and extensive pasture grasses, however, the majority appears to be relatively undisturbed.

Assessed as having unknown cultural and scientific significance an AHIP with test excavation was recommended.

5 HERITAGE MANAGEMENT PROTOCOLS

The heritage management protocols for known (previously identified) Aboriginal objects (sites) set out below must be followed for the proposed development. The implementation of the heritage management protocols and the ACHMP will be overseen by the Tomago Project Land Manager. It is the Land Manager's responsibility to ensure these protocols are implemented and an outline of the roles and responsibilities are provided in Section 8.

Protocols for the management of unexpected cultural heritage objects during construction are set out in Section 6.

A number of mandatory heritage management protocols must be implemented including;

- 1) Aboriginal cultural heritage inductions for all personnel working on site before and during construction works;
- 2) Temporary storage and transfer of Aboriginal objects;
- 3) Permanent storage of Aboriginal objects in a keeping place or re-burial in a suitable location. This location is currently being discussed with the RAPs;
- 4) An AHIP with surface collection of 38-4-1964 and 38-4-1965 will be required prior to works commencing on the dune. The dune is recognisable by the presence of sand at surface and within subsurface materials, being elevated approximately 1m above the lower lying floodplain level of the remainder of the site.
- 5) An AHIP with test excavation of the PAD will be required prior to works commencing in that location; and
- 6) Further management protocols developed in consultation with stakeholders in relation to the PAD following test excavation and based on the results of the test excavation.

5.1 ABORIGINAL CULTURAL HERITAGE INDUCTION

Aboriginal cultural heritage inductions, (referred to as a Cultural Awareness Program or an Aboriginal Cultural Education Program forming part of the overall Tomago Induction Package), will be required for all on-site personnel and contractors involved in the construction activities on site prior to any works within the project area. This includes installation of utilities or any other harm that may have the potential to harm Aboriginal objects. The induction program will be developed by the heritage consultant and RAPs and will include, but not limited to;

- 1) the content of this ACHMP;
- 2) NSW and Commonwealth legislative requirements and fines for causing harm to cultural heritage (as outlined in Section 2);
- 3) Statement explaining what cultural significance is; and
- 4) 'no go' areas within the Project Area.

The initial induction will be conducted by the site safety officer with assistance from the RAPs and heritage consultant for all management personnel. Further inductions for all remaining site workers will be conducted by the site safety officer. The induction will not exceed 30 minutes in length and attendees will acknowledge understanding and participation of the cultural heritage induction content by signing an attendee sheet. The list of attendees will be maintained on site by the Land Manager to ensure all required personnel have participated in the cultural heritage induction and will be made available to the RAPs and heritage consultant when requested.

5.2 MANAGEMENT OF AHIMS SITES

5.2.1 38-4-1964

An AHIP will be obtained for the community surface collection of this site prior to any works being undertaken in that area and a site impact card submitted to AHIMS following the collection.

5.2.2 38-4-1965

An AHIP will be obtained for the community surface collection of this site prior to any works being undertaken in that area and a site impact card submitted to AHIMS following the collection.

5.3 MANAGEMENT OF PAD 38-4-1963

The identified PAD will require further archaeological investigations under an AHIP with the participation of the RAPs prior to any works commencing in the form of test excavation in the first instance in order to identify any Aboriginal objects present, their nature and extent. The heritage investigation methodologies (research design) are provided in Appendix C.

5.4 TEMPORARY STORAGE OF ABORIGINAL OBJECTS

In the event an Aboriginal Heritage Impact Permit (AHIP) is required or artefacts are collected during the test excavation of the PAD they will be stored in an appropriate manner and in the custody of the heritage consultant engaged to undertake management activities. Artefacts may be returned to a secure on-site keeping place at the discretion of the heritage consultant in consultation with the RAPs.

5.5 KEEPING PLACE AGREEMENT

As per Condition 37 (f), the repatriation of all Aboriginal objects to a permanent keeping place will be decided by the RAPs and may involve either the re-burial of objects to a specific location that will be protected in perpetuity, or transferred to an off-site secure keeping place.

If permanent storage is decided, this will be documented in a *Transfer of Aboriginal Objects for Safekeeping* agreement which will be submitted to OEH.

If re-burial is decided, this will be undertaken in accordance with Worimi cultural protocols and tradition and documented in an AHIMS site card that will include a photographic record, field notes and GPS location that will be submitted to OEH. A culturally appropriate depositional container selected by the RAPs will be used for reburial and may include traditional bark containers for wrapping the Aboriginal objects.

With regard to the permanent re-burial of artefacts, a keeping place will be provided within the Project Area.

6 UNEXPECTED FINDS PROTOCOLS

Unexpected find protocols have been developed to provide procedures for unexpected finds including Aboriginal objects and the discovery of human remains. These protocols must be followed throughout all stages of the development.

6.1 UNEXPECTED ABORIGINAL OBJECTS

Should unexpected Aboriginal objects be uncovered during any stage of the development, Figure 6.1 illustrates the protocols. Unexpected Aboriginal objects may include, but not limited to, isolated artefacts, artefact scatters, scarred trees and hearths (descriptions of such objects are provided in Appendix B).

Work must stop immediately in that location, the objects cordoned off with at least a 5m perimeter surrounding the object(s) with high visibility fencing/barrier and the Land Manager notified immediately. The Land Manager will then contact the heritage consultant and RAPs, who in consultation with each other, will assess the object(s) and recommend appropriate mitigation measures. The Land Manager is to implement all reasonable mitigation measures recommended by the heritage consultant and in consultation with the RAPs and in accordance with OEH regulations and the NSW NPW Act.

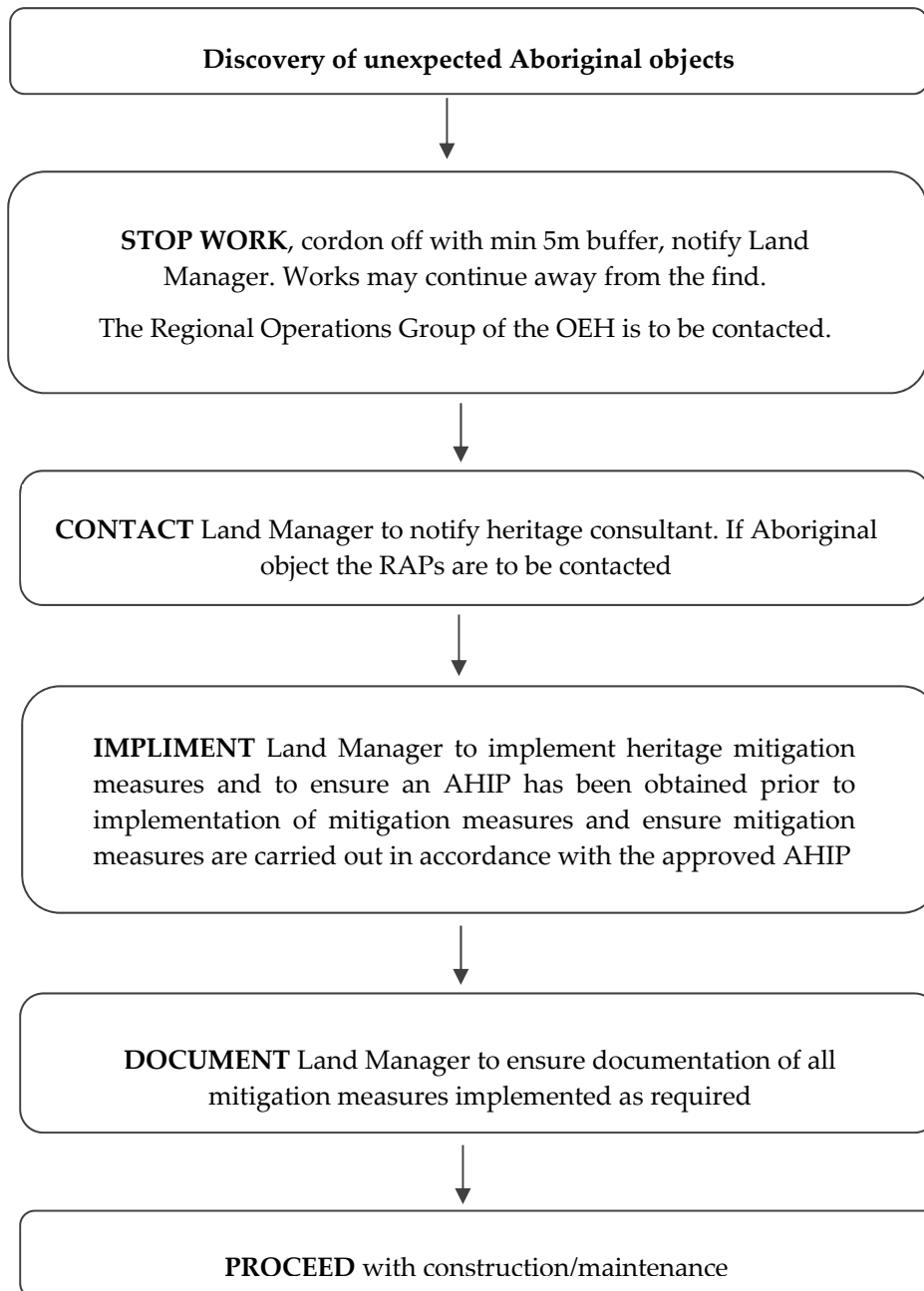
If additional works are required, such as salvage excavations, the Land Manager is to arrange for the heritage consultant and RAPs to undertake those works. The methodology for undertaking additional works will be dependant on a number of factors including, but not limited to, site/object type and disturbances. Due to the unknown nature of unexpected objects, methodologies for the salvage of unexpected Aboriginal objects will be determined during consultation with the RAPs.

Any Aboriginal objects collected must be managed in accordance with Sections 5.5 and 5.6. The mitigation measures undertaken must be reported to the RAPs and OEH and the appropriate required analysis and reporting complete. Provided these heritage unexpected finds protocols have been followed, construction/maintenance works in that location may proceed.

Additionally, Aboriginal archaeological excavation must be co-ordinated with any proposed investigation of non indigenous material.

In the event that additional Aboriginal objects are uncovered, the objects must be managed and recorded in accordance with Section 85A and 89A of the National Parks and Wildlife Act 1974.

Figure 6.1 Unexpected finds protocol flow chart



6.2 DISCOVERY OF HUMAN REMAINS

Human skeletal remains are of the highest significance and importance to Aboriginal people, and all care, respect and dignity will be extended by all parties should human remains be uncovered.

If human remains or unidentified bone are uncovered during any stage of the development and maintenance activities, the appropriate State legislation will be followed. All human remains fall under the *Coroners Act 2009* in the first instance. If they are identified as Aboriginal and younger than 100 years old, they will fall under the *NSW NPWS Act 1974* (as amended). Figure 6.2 outlines the required protocols should human remains be uncovered.

Should any human remains or unidentifiable bone be found, work is to stop in that area immediately and an area of 15m cordoned off surrounding the remains/bone in high visibility fencing. The Land Manager is to be notified immediately.

The Land Manager will contact the heritage consultant and local NSW Police immediately, who will then contact the NSW Forensic Services who will determine if they are:

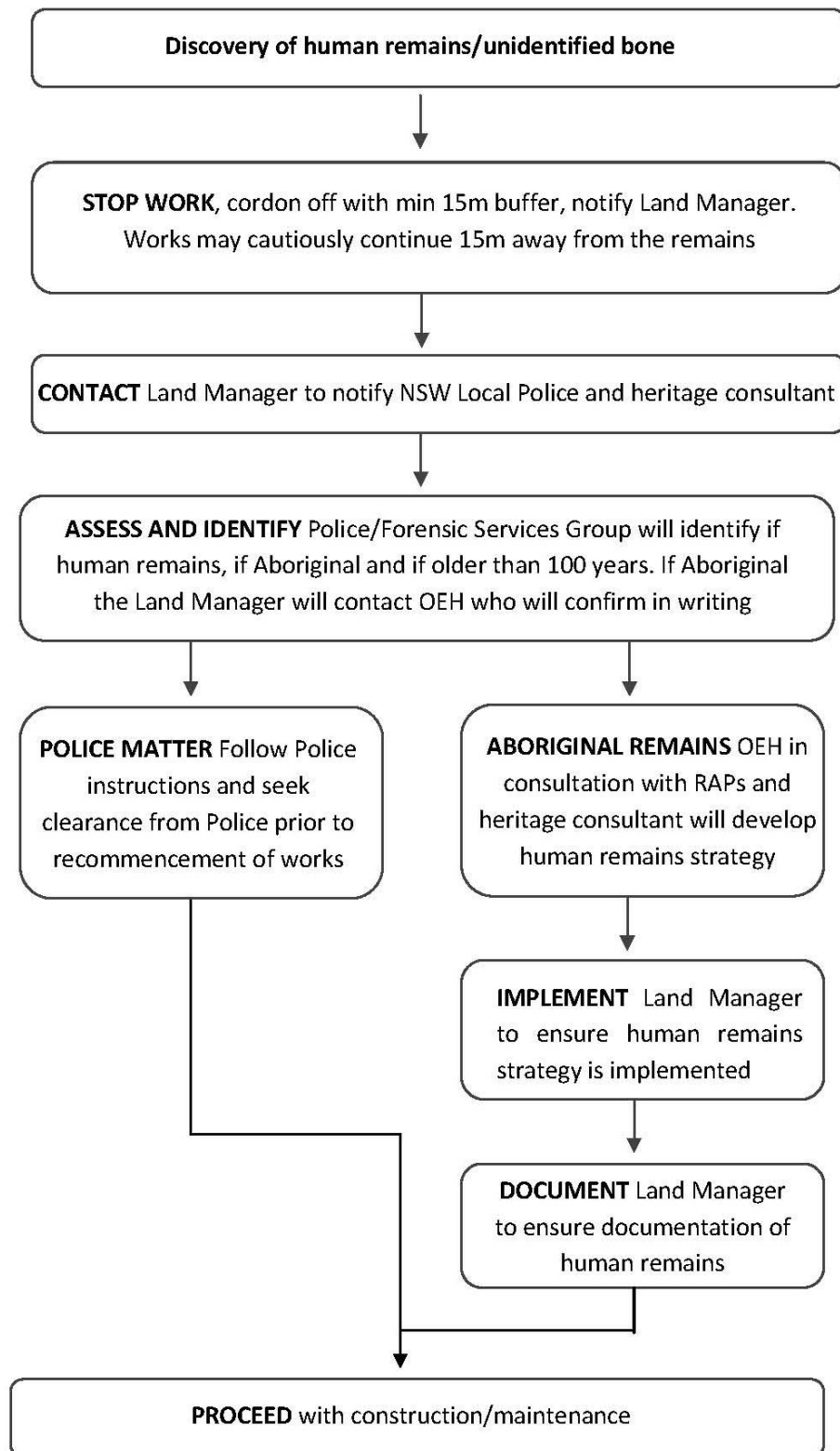
- 1) Human;
- 2) Aboriginal or non-Aboriginal;
- 3) If Aboriginal, determine antiquity (older or younger than 100 years)

If it is determined the remains are Aboriginal and older than 100 years old, the Police will notify the Land Manager who must contact OEHL immediately and an OEHL officer will confirm the identification in writing. OEHL, in consultation with the RAPs and the heritage consultant will develop a human remains management strategy and the Land Manager is to ensure this strategy is implemented. The Land Manager must also document the human remains management strategy and the heritage consultant will provide a letter of clearance prior to any works recommencing at that location.

If the remains are determined to be a Police matter, Police instructions will be followed and clearance to recommence works should be sought from the Police.

Provided the human skeletal protocols have been followed and documented, and a clearance letter from the heritage consultant has been obtained, construction/maintenance works may proceed in that location.

Figure 6.2 Human remains protocol flow chart



7 COMPLIANCE, DISPUTE RESOLUTION AND REVIEW PROCEDURES

To ensure compliance with this ACHMP, a dispute resolution process and method of reviewing and amending this document have been developed. If required, the procedures outlined below will apply.

7.1 IMPLEMENTATION AND COMPLIANCE

The Land Manager is to implement the ACHMP and ensure that it is complied with as per Section 8. Meetings between the Land Manager, RAPs and the Heritage Consultant are to occur in accordance with the following:

- The Land Manager will contact the RAPs every six months to discuss ongoing implementation and compliance of the ACHMP, or as required;
- The RAPs and Heritage Consultant will be notified in writing if there is a change in Land Manager; and
- Any AHIP applications required for development works will be informed by this ACHMP and in consultation with the RAPs.

In the event that there is a non-compliance with this plan, the non-compliance should be reported immediately to the project archaeologist for determining the environmental consequence. The extent and nature of the non-compliance will be evaluated by the project archaeologist using the Risk Matrix as outlined by NSW Department of Planning and Environment (NSW DPE) and shown in Table 7.1. If the project archaeologist determines that the non-compliance is of a Medium or High risk level, the project archaeologist shall notify NSW DPE or Office of Environment & Heritage. If the project archaeologist determines the non-compliance to be of Low Risk or an Administrative non-compliance, the archaeologist shall take appropriate action to rectify the matter and/or document and record the non-compliance in annual reporting.

Table 7.1 Non-Compliance Risk Matrix

Risk Level	Risk Level	Description
High	High	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Medium	Non-compliance with: <ul style="list-style-type: none"> • potential for serious environmental consequences, but is unlikely to occur; or • potential for moderate environmental consequences, but is likely to occur
Low	Low	Non-compliance with: <ul style="list-style-type: none"> • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, but is likely to occur
Administrative non-compliance	Administrative non-compliance	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions).

Source: "Annual Review Guideline, Post-Approval requirements for State significant mining developments (NSW DPE 2015)"

7.2 DISPUTE RESOLUTION

- Any party may advise the other of an issue of dispute verbally, whereupon the Land Manager and the Heritage Consultant will discuss and seek to resolve the issue;
- Where verbal notice does not result in resolution of an issue of dispute within 48 hours, the party that raised the issue of dispute must advise the other in writing including the details of the issue of dispute within 7 days of the event. The Land Manager will, on receipt of a written advice, liaise with the relevant parties to appoint and organise a meeting with an Independent Expert within 7 days. The Independent Expert (who might be a mutually agreeable third party heritage consultant or an officer from OEH) will be employed to mediate the dispute;
- At the meeting to be chaired by the Independent Expert, each of the parties may present their issues in the dispute to the Independent Expert for consideration and decision, and
- In so far as the Independent Expert's decision is consistent with all relevant legislative and regulatory obligations, all parties to the dispute agree to be bound by the decision of the Independent Expert in relation to the resolution of the dispute.

7.3 REVIEW AND AMENDMENTS

- Any party may advise the other of a proposed amendment to the provisions of this ACHMP, whereupon the Land Manager, RAPs and Heritage Consultant will discuss the proposed amendment/s. The ACHMP should be revisited for updating when required by the Land Manager, heritage consultant and RAPs; and
- Amendments to this ACHMP must be approved by consensus of the Land Manager, RAPs and Heritage Consultant and in consultation with, and the approval of, where required, the relevant State Government regulatory agency.

8 ROLES AND RESPONSIBILITIES

8.1 LAND MANAGER

8.1.1 DEFINITION

The Land Manager is the person who manages the land within the Project Area. For the purpose of this ACHMP, the Land Manager is the on-site manager/supervisor from the construction company.

8.1.2 RESPONSIBILITIES

- The Land Manager must read, understand and implement the practical application of this ACHMP. Any queries should be directed to the heritage consultant;
- Follow instructions outlined in the flow charts for the Heritage Management Protocols;
- Follow instructions outlined in the flow charts for the Unexpected Finds protocol (Section 6.1) and Human Remains Protocol (Section 6.2);
- Be the point of contact for all onsite personnel and maintain a list of all onsite personnel;
- Ensure the construction site is secured and all visitors and on-site personnel are directed through the site office each visit. This is to ensure that all visitors and personnel receive the correct induction prior to entering the site;
- Ensure that fair and reasonable opportunities for RAP's to monitor any initial ground disturbing work within the Low Dune area (Survey Unit 2) of the site.
- Ensure all onsite personnel undertake and understand the Cultural Heritage Induction and maintain an attendees list. A Cultural Awareness Program is part of this induction. Ensure the inductees understand their responsibilities in this ACHMP and are provided with access to a copy of this ACHMP for use within a common area on site, such as the site office and lunch room. It is the Land Manager's responsibility to ensure the site safety manager delivers the Cultural Heritage Induction to on-site personnel following his or her induction with the RAPs;
- Ensure that all staff, contractors and others involved in construction and maintenance related activities are made aware of the statutory legislation protecting sites and places of significance. Of particular importance is the National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010, under the National Parks and Wildlife Act 1974;
- Be aware of onsite activities ensuring that all areas to be protected are fenced off prior to works and must communicate to all onsite personnel that such areas are off limits (this includes vehicular movements);
- Be aware and understand there is a STOP WORK requirement in that location upon the discovery of an Aboriginal Object and/or skeletal remains or unidentified bone as outlined in the Unexpected Finds Protocols (Section 6.1) and Human Remains Protocol (Section 6.2). This includes contacting The Regional Operations Group of the OEH and coordinating for Aboriginal archaeological excavation of any proposed investigation of non indigenous material. In the event that additional Aboriginal objects are uncovered, the objects must be managed and recorded in accordance with Section 85A and 89A of the National Parks and Wildlife Act 1974.

- The Land Manager must also ensure all onsite personnel have the necessary procedures in place, equipment available and secure that location immediately;
- Must contact the appropriate individuals and organisations required under the Heritage Management, Unexpected Finds and Human Remains Protocols. This may include, but not limited to, heritage consultant, RAPs, Local Police and/or Government Authorities;
- Maintain a contact list for individuals and organisations who may need to be contacted under this ACHMP;
- Ensure the ACHMP is updated as required until the completion of works; and
- Where site meetings, other than for the Heritage Management, Unexpected Finds and Human Remains Protocols, with the RAPs, at least 2 weeks' notice will be given.

8.2 ONSITE PERSONNEL

8.2.1 DEFINITION

This includes all individuals undertaking any type of work within the development area subject to this ACHMP.

8.2.2 RESPONSIBILITIES

- Report to the site office prior to entering the site to ensure knowledge and understanding of the ACHMP is current and all personnel are aware of any changes that may have occurred;
- Undertake the Cultural Heritage Induction, including Cultural Awareness Program, prior to starting any works associated with the development of the entire Project Area;
- Read and understand this ACHMP and direct any queries to the Land Manager as required under the provisions of this ACHMP;
- Follow the instructions outlined in the flow chart under the Heritage Management Protocols section of this ACHMP (Section 6.0);
- Follow the instructions outlined in the Unexpected Finds and Human Remains Protocols section(s) of this ACHMP (Section 6.1 and 6.2 respectively) if needed;
- Be aware that there is an immediate STOP WORK requirement for the discovery of Unexpected Finds and Human Remains; and
- Be aware that all on site works and activities are to occur only within the defined Project Area, which must be visually defined prior to works being undertaken;
- Be aware that conservation areas are off limits, including all vehicular movement.

8.3 REGISTERED ABORIGINAL PARTIES (RAPs)

8.3.1 DEFINITION

The person(s) or organisations, of Aboriginal descent who have registered as holders of traditional knowledge in the Project Areas part of the consultation process undertaken for this ACHMP. The RAPs are listed in Table 8.1.

Table 8.1 List of RAPs

Stakeholders/organisations	Representative
Worimi LALC	Jamie Merrick
Nur-Run-Gee Pty Ltd	Lennie Anderson
Mur-Roo-Ma Inc.	Anthony Anderson
Worimi Traditional Owners Indigenous Corporation	Cindy Towers
Karuah Indigenous Corporation	Dave Feeney

8.3.2 RESPONSIBILITIES

- Report to the site office prior to entering the site to ensure they are aware of any site conditions that may have changed, such as safety, and obtain the relevant update of works being undertaken that day;
- Provide advice on Aboriginal cultural heritage issues that may arise during the Project in a timely manner (within 7 days);
- Assist in the identification of cultural heritage sites; and
- Participate in the cultural heritage activities in this ACHMP.
- Assist the Land Manager with the implementation of this ACHMP if required;
- Assist with the Cultural Heritage Induction if required;
- Assist with the recording, salvage (if appropriate), analysis and reporting of any new sites identified within the Project Area in accordance with the relevant legislation, consultation with the heritage consultant and this ACHMP; and
- Provide advice and assistance to the Land Manager and heritage consultant with the review and amendment(s) and/or updating of this ACHMP as required.

8.4 HERITAGE CONSULTANT

8.4.1 DEFINITION

An individual or organisation engaged by the Land Manager who possess the appropriate qualifications (minimum Honours in Archaeology) and experience to undertake the heritage assessment, management activities and consultation required for the ongoing management of the provisions of the ACHMP.

8.4.2 RESPONSIBILITIES

- Report to the site office prior to entering the site to ensure he/she are aware of any site conditions that may have changed, such as safety, and obtain the relevant update of works being undertaken that day;
- Assist the Land Manager with the implementation of this ACHMP if required;

- Assist with the Cultural Heritage Induction if required;
- Provide heritage advice to the Land Manager and RAPs in accordance with the relevant legislation;
- Undertake the assessment, recording, salvage (if appropriate), analysis and reporting of any new sites identified within the Project Area in accordance with the relevant legislation, consultation with the RAPs and this ACHMP;
- Provide advice and assistance to the Land Manager and RAPs with the review and amendment(s) and/or updating of this ACHMP as required; and
- Liaise with the RAPs as required.

8.5 CONFIDENTIALITY

All individuals and organisations as outlined above will respect that some information shared will be confidential. This may include:

- Commercial information, or
- Sensitive Aboriginal cultural information.

Other than in accordance with a written agreement by the identified individuals/ organisations, no information will be provided to any other persons other than to:

- Enable project works, or
- As required by law.

8.6 INTELLECTUAL PROPERTY RIGHTS

Some works undertaken for this development, such as, but not limited to, the interpretation strategy will contain Aboriginal cultural information. Such materials will be developed between the Land Manager and the RAPs and shall be jointly owned so that both parties may reference the material. Any culturally sensitive material or information not be included in public documents may include sacred knowledge. The RAPs will retain copyright to their cultural information.

9 CONCLUSION

This ACHMP has been prepared as a guiding document for the management of Aboriginal cultural heritage within the Tomago Project Area. This ACHMP should be used for the management of cultural heritage within the Project Areas until the practical completion of the project.

Appendix A

Aboriginal Consultation Summary

(Detailed consultation in attached Consultation Document)

Date	Consultation type	OEH requirement	Consult stage	RAP/Agency	Contact person	Description
22/6/18	Letter	4.1.2	1	MCH contacted Office of Environment & Heritage (OEH)		Letter to identify Aboriginal parties. Requested response no later C.O.B. 5/7/2018
22/6/18	Letter	4.1.2	1	MCH contacted Worimi Local Aboriginal Land Council (WLALC)		Letter to identify Aboriginal parties. Requested response no later C.O.B. 5/7/2018
22/6/18	Letter	4.1.2	1	MCH contacted Registrar of Aboriginal Owners (RAO)		Letter to identify Aboriginal parties. Requested response no later C.O.B. 5/7/2018
22/6/18	Letter	4.1.2	1	MCH contacted Port Stephens Local Council (PSLC)		Letter to identify Aboriginal parties. Requested response no later C.O.B. 5/7/2018
22/6/18	Letter	4.1.2	1	MCH contacted Native Title Tribunal (NNTT)		Letter to identify Aboriginal parties. Requested response no later C.O.B. 5/7/2018
22/6/18	Letter	4.1.2	1	MCH contacted NTSCORP Ltd		Letter to identify Aboriginal parties. Requested response no later C.O.B. 5/7/2018
22/6/18	Letter	4.1.2	1	MCH contacted Hunter Local Land Services (HLLS)		Letter to identify Aboriginal parties. Requested response no later C.O.B. 5/7/2018
25/6/18	e-mail	4.1.2	1	WLALC		Identified Aboriginal parties: 3
22/6/18	Letter/e-mail	4.1.2	1	NNTT contacted MCH		No claims
28/6/18		4.1.7, 4.1.8	1	Nur-Run-Gee Pty Ltd	Lennie Anderson	Registered for the project
NA		4.1.2	1	RAO contacted MCH		No response
NA		4.1.2	1	NTSCORP	Do not provide lists of possible stakeholders	
NA		4.1.2	1	HLLS	Do not provide lists of possible stakeholders	
6 July 2018 C.O.B. Request for groups to consult with closed						
5/7/18	Public notice	4.1.3	1	All registered Aboriginal parties (RAPs)		Public notice in Port Stephens Examiner and requested registration no later than 9/7/18
9/7/18	Email & letter	4.1.2	1	MCH contacted Office of Environment & Heritage (OEH)		Reminder email and letter to identify Aboriginal parties.

Date	Consultation type	OEH requirement	Consult stage	RAP/Agency	Contact person	Description
9/7/18	Letter & email	4.1.3, 4.1.4, 4.1.5, 4.2.1	1	All RAPs	those provided from sources above	Formal letter to identified RAPs (using previous OEH group lists). Letter requested registration of interest in the project, project outline, maps and asking for the preferred method to receive information (meeting/mail/email). Required registration by C.O.B. 23/7/18
12/7/18	Letter	4.1.2	1	OEH contacted MCH		Identified Aboriginal parties: 24 (same as previous lists)
20/7/18	Email & letter	4.1.7, 4.1.8	1	Worimi Traditional Owners Indigenous Corporation	Candy Towers	Registered for the project
20/7/18	phone	4.1.7, 4.1.8	1	Mur-Roo-Ma Inc.	Anthony Anderson	Registered for the project
20/7/18	letter	4.1.7, 4.1.8	1	Karuah Indigenous Corporation	Dave Feeney	Registered for the project
23 July 2018 C.O.B. Registration for project closed						
6/8/18	letter	4.2.1, 4.2.2, 4.2.3, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7	2 & 3	All RAPs		Formal letter and information packet sent to 4 identified RAPs. Information packet included project outline, project area, previous assessment and draft ACHMP and a response was required registration by C.O.B. 3/9/2018
21/8/18	e-mail & letter	4.2.1, 4.2.2, 4.2.3, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7	2 & 3	Mur-Roo-Ma Inc.	Rebecca Young	Responded to the information packet and fully supported the ACHMP
22/8/18	e-mail & letter	4.2.1, 4.2.2, 4.2.3, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7	2 & 3	WLALC		Responded to the information packet and agreed to the ACHMP
3/9/2018	e-mail	4.2.1, 4.2.2, 4.2.3, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7	2 & 3	Worimi Traditional Owners Indigenous Corporation	Candy Towers	Responded to the information packet and agreed to the ACHMP

Date	Consultation type	OEH requirement	Consult stage	RAP/Agency	Contact person	Description
21/8/18	e-mail	4.2.1, 4.2.2, 4.2.3, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7	2 & 3	Nur-Run-Gee Pty Ltd	Lennie Anderson	Responded to the information packet and agreed to the ACHMP
3/9/18	e-mail	4.2.1, 4.2.2, 4.2.3, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7	2 & 3	Karuah Indigenous Corporation	Dave Feeney	Responded to the information packet and agreed to the ACHMP and also suggested monitoring
3 September 2018 C.O.B. Response to information packet closed						
10/9/18	Email	4.4.4; 4.4.5	4	All RAPs		Final ACHMP sent to all RAPs
10 September 2018 C.O.B. Assessment Complete						

Appendix B

Unexpected Finds Heritage Investigation Methodologies

Verification and management of all Aboriginal objects (sites)

All potential Aboriginal sites will be verified by the heritage consultant and representatives from the RAPs.

The purpose of the verification process is to determine whether or not the objects in question are in fact Aboriginal objects to ensure appropriate management measures be implemented.

The verification process will include the following provisions:

1. One representative from each RAP may assess the Aboriginal object (site) for its cultural status and must provide evidence and justification for significance;
2. a heritage consultant may assess the scientific status of the Aboriginal object (site) and provide evidence and justification for significance;
3. an AHIMS site card and pro-forma assessment sheet will be completed for each Aboriginal object (site); and
4. management recommendations specific to each Aboriginal object (site), based on both traditional knowledge and scientific methodology, will be provided to the Land Manager. Should a potential site be either scientifically or culturally significant but no evidence or justification is provided, the matter will be put to the Office of Environment and Heritage.

Shell middens

Shell middens are places where debris from eating shell fish has accumulated. Middens preserve a range of past dietary remains which have the potential to inform about past dietary consumption and availability of food resources. Most shell middens analysed to date pertain to coastal environments with few pertaining to inland middens. In NSW, middens are located on headlands, beaches and dunes, around estuaries, swamps, the tidal stretches of creeks and rivers and along the banks of inland rivers, creeks and lakes. Shell middens may be found in the open or in rock shelters and often those in the open are disturbed through erosion and land use impacts and those in shelters are usually well preserved. The location of middens is influenced by a variety of factors including, but not limited to, the availability of shell fish, aspect, accessibility and the nature of the immediate area and are typically located within a reasonable distance from water on level, sheltered surfaces.

Ranging in size from small scatters to deep layered deposits that have built up over time, the size of the midden may relate to its location (e.g. riverbank middens tend to be smaller than estuarine and coastal middens). Small middens may represent short term occupation or the debris from a single meal. Major estuarine species include bivalves such as cockle, whelk, mud and rock oyster and both edible and hairy mussels. Rock platform species of gastropods include limpets, turban shell, periwinkles, nerits, tritons and cartrut shell fish and the most important beach species is the pipi.

Shell middens may also include fish, sea birds, sea mammals and land mammals. Stone artefact are also typically found within middens and indicate trade and/or transportation of raw materials. Bone and shell artefacts, such as fish hooks and barbs, evidence of cooking may be present in the form of charcoal, ash, fire stones, hearths, burnt clay and/or burnt earth. The midden usually occurs within a soil or sand layer that is darker than the surrounding sediment. Middens may also contain burials and if present are usually located under the midden.

Preservation varies with food stuffs such as berries and fruits leaving no archaeological traces, sea foods such as cartilageous fish, stingrays, octopus and fish eggs are likely to be equally invisible in the archaeological record. However, tissue such as shell and crustations and bone may be preserved. Preservation is also dependant on land use impacts and associated soil pH.

An important contribution to the study of coastal shell middens was made by Meehan (1975, 1977a, b) through ethnographic studies of coastal hunter and gatherers in northern Arnhem Land. Through a yearlong quantitative record of the total diet, Meehan provides unique insights into all aspects of shell fish gathering and the creation of shell middens with pertinent data to the interpretation of midden data. Shell middens may be distinguished from natural shell beds as follows (Attenbrow 1992; Bailey 1994; Gill 1951; Coutts 1966; Hughes and Sullivan 1974);

- 1) Middens contain charcoal, burnt wood, clay and/or earth, blackened shells, sone artefacts, hearth stones. These are absent from natural shell beds.
- 2) Middens are either unstratified or roughly stratified whereas natural shell deposits are well stratified and exhibit sedimentary features of water laid deposits.
- 3) Middens contain edible species and sizes whereas shell beds contain shells of varied species and sizes as well as both edible and non-edible species.
- 4) Middens do not contain worn shell resulting from transportation from the off shore or beach zone, whereas shell beds do.
- 5) Middens contain mammal bones used in food consumption, shell beds do not.
- 6) Middens do not contain certain forms of marine life not used by Aboriginal people (e.g. corals, tube worms) but shell beds do.

Interpretation of shell middens usually falls into three main categories;

- 1) Taphonomy: differential survival value of different species may be considered.
- 2) Environmental/ecological: changes in habitat may bring about changes in the availability of species (Coutts 1970).
- 3) Economic/behavioural: changes in gathering habits brought about by some purely cultural factor may be considered (Bowdler 1970, 1976).

The interpretation of shell middens is only as good as ones' analysis, which is only as good as ones' sample, all of which are typically limited during surface survey only.

- Large camp sites, where everyday activities such as habitation, maintenance of stone or wooden tools, manufacturing of such tools, management of raw materials, preparation and consumption of food and storage of tools has occurred;
- Medium/small camp sites, where activities such as a small meal was cooked and/or consumed;
- Hunting and/or gathering events;
- Other events spatially separated from a camp site, or
- Transitory movement through the landscape.

If a potential shell midden has been identified, the Unexpected Finds Protocol must be followed immediately.

Examples of shell middens (MCH)



Surface artefact scatters

Also described as open campsites, artefact scatters and open sites, these deposits have been defined at two or more stone artefacts within 50 or 200 metres of each other and may include archaeological remains such as stone artefacts, shell, and sometimes hearths, stone lined fire places and heat treatment pits. These sites are usually identified as surface scatters of artefacts in areas where ground surface visibility is increased due to lack of vegetation. Erosion, agricultural activities (such as ploughing) and access ways can also expose surface campsites. Artefact scatters may represent evidence of;

- Camp sites, where everyday activities such as habitation, maintenance of stone or wooden tools, manufacturing of such tools, management of raw materials, preparation and consumption of food and storage of tools has occurred;
- Hunting and/or gathering events;
- Other events spatially separated from a camp site, or
- Transitory movement through the landscape.

If a potential artefact scatter has been identified, the Unexpected Finds Protocol must be followed immediately.

Examples of artefact scatters (MCH)



Surface isolated finds

Isolated artefacts are usually identified in areas where ground surface visibility is increased due to lack of vegetation. Erosion, agricultural activities (such as ploughing) and access ways can also expose surface artefacts. Isolated finds may represent evidence of;

- Hunting and/or gathering events; or
- Transitory movement through the landscape.

If a potential isolated find has been identified, the Unexpected Finds Protocol must be followed immediately.

Examples of isolated artefacts (MCH)



Hearths

A hearth may also be known as an oven, earth oven, campfire or fireplace. In general, a hearth is a relatively small (<2m diameter) roughly circular piles of ash-stained, heat fractured rock and/or lumps of burnt clay (known as hearth stones) and are often associated with an ash-stained substrate and charcoal fragments found on or in open ground. Hearths are typically associated with burnt flora, faunal remains (particularly bone and shell) and other cultural material, including stone artefacts. Hearths are assumed to have been used for food cooking and/or heating and/or heat treating stone for stone tool manufacture,

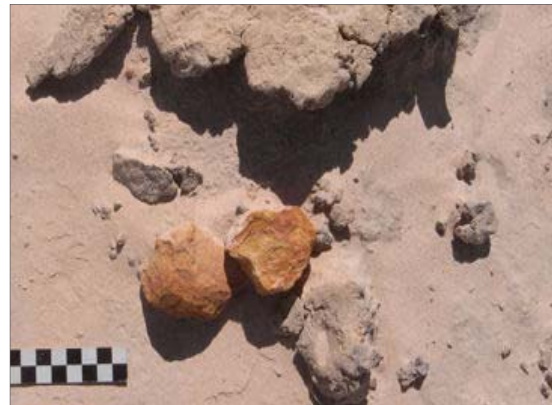
These sites are usually identified as surface and/or subsurface sites in areas where ground surface visibility is increased due to lack of vegetation. Erosion, agricultural activities (such as ploughing) and access ways can also expose hearths, although this usually results in a disturbed hearth with hearth stones dispersed over a slightly larger area than their original location.

Hearths may represent evidence of;

- Camp sites, where everyday activities such as habitation, maintenance of stone or wooden tools, manufacturing of such tools, management of raw materials, preparation and consumption of food and storage of tools has occurred; and
- Hunting and/or gathering events.

If a potential hearth has been identified, the Unexpected Finds Protocol must be followed immediately.

Examples of hearths and a hearth stone (MCH; OEH)



Burials

Burials can occur anywhere (ground, cave, and hollow tree). Cave burials usually do not survive due to both animal and human disturbances and extant tree burials are rare due to logging and land clearance. Ground burials tend to be in soft sandy soils, but can be found in soil and clay. Burials are also commonly found in association with burial goods including stone axe heads (Howitt 1996:464-465). Generally they are only identified through accidental exposure. Although factors such as land clearance and associated erosion reduce the likelihood of burials surviving intact, bone is durable and commonly survives in such environments, albeit in fragmentary form.

If a burial or skeletal remains are uncovered, the Skeletal Remains Protocol must be followed immediately. Once verified by the appropriate specialists and Police, the burial/skeletal remains will be recorded and assessment undertaken. Management recommendations will be made in consultation with the RAPs, OEH and the heritage consultant.

Appendix C

Archaeological Research Design

Subsurface investigations

As a shell midden is anticipated to be present subsurface, and AHIP is required to undertake test excavation of shell middens. The archaeological subsurface testing of the PAD will be undertaken under an AHIP and in accordance to the the NSW Office of Environment and Heritage (OEH) *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010) and the OEH *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (CoP), (DECCW, 2010).

The test excavations permitted by the OEH CoP are limited in their scope and described below. The first priority in test excavations, and recording Aboriginal objects during test excavations, must always be to avoid or minimise, as far practicable, the risk of harm to the objects under investigation. This means due care must be taken when excavating and collecting objects, and that unnecessary excavations do not comply with this Code.

The purpose of archaeological test excavations is to collect information regarding the nature and extent of sub-surface Aboriginal objects, based on a sample derived from sub-surface investigations. Test excavations contribute to the understanding of site characteristics and local and regional prehistory and they can be used to inform conservation goals and harm mitigation measures for the proposed activity. Test excavation also determines if an Aboriginal Heritage Impact Permit (AHIP) is required and what type of controlled salvage works may be required under the AHIP.

Archaeological test excavation methods

The following methods are taken from the OEH *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (CoP), (DECCW, 2010).

1. Test excavation units must be placed on a systematic grid appropriate to the scale of the PAD being investigated. The grid system will be in 15m intervals;
2. test excavations units will be excavated using hand tools only;
3. test excavations will be excavated in 50 cm x 50 cm units;
4. test excavations units may be combined and excavated as necessary to understand the site characteristics, however:
 - i. the maximum continuous surface area of a combination of test excavation units at any single excavation point conducted in accordance with point 1 (above) will be no greater than 3 m²; and
 - ii. the maximum surface area of all test excavation units will be no greater than 0.5% of the PAD being investigated.
5. where the 50 cm x 50 cm excavation unit is greater than 0.5% of the area then point ii (above) does not apply;
6. the first excavation unit will be excavated and documented in 5 cm spits at the first pit within the PAD being investigated. Based on the evidence of the first excavation unit, 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented;
7. all material excavated from the test excavation units will be sieved using a 5 mm aperture wire-mesh sieve;
8. test excavation units will be excavated to at least the base of the identified Aboriginal object-bearing units, and must continue to confirm the soils below are culturally sterile;

9. if more than 5 artefacts are uncovered in one pit, then additional test pits may be located north, south, east and west of that pit and placed at 5m from the original pit so long as the total area excavated does not exceed 0.5% of the PAD;
10. photographic and scale-drawn records of the stratigraphy/soil profile, features and informative Aboriginal objects will be made for each excavation point;
11. test excavations units will be backfilled as soon as practicable;
12. following the test excavation, an Aboriginal Site Impact Recording form will be completed and submitted to the AHIMS Registrar as soon as practicable, for each AHIMS site that has been the subject of test excavation in accordance with the CoP requirements.

A detailed artefact analysis will be undertaken at the completion of the test excavation. This will include, but not limited to artefact type, raw material, length, width, thickness, platform type, termination type, retouch and/or use-wear. A detailed shell analysis will also be undertaken and include species type and weight. This data will be analysed appropriately to identify site use, raw material use, relative dating, site integrity and any other relevant information in relation to the landscape, the local and regional environment and the local and regional archaeological spatial patterns of sites and site types.

A complete archaeological test excavation report will be completed as per the CoP and will include the following components:

- cover and title page (project title, date, LGA, geographic identifier, consultants name, proponents name); and
- report contents (table of contents, executive summary, introduction, investigator and contributors, development description, previous archaeological work, landscape context, regional character, site predictions, sampling strategy, methods, results, analysis and discussion, scientific values and significance assessment, impact assessment, management and mitigation measures, recommendations, references, appropriate detailed maps and figures and appendices).

Research questions

The test excavation and analysis is designed to address a number of research hypothesis. The research questions listed below derive from Kuskies (2005) detailed work in the region and are used here for consistency in analysis and discussions as well as local and regional comparative research.

- What past Aboriginal activities occurred within the project area?
- What types of past Aboriginal occupation occurred within the project area (e.g. transitory movement, hunting, gathering, camping etc)?
- Were the types of activity and nature of occupation related to environmental factors (e.g. landforms, proximity to reliable water)?
- Does spatial patterning of activity areas occur within the project area?
- Did single or multiple episodes of occupation occur within the project area?
- Did episodes of occupation occur at different times over the whole time-span of occupation in the region within the project area?

- Is there potential for older evidence of occupation (i.e. early Holocene)?
- How intensive was occupation of the sites, in both a local and regional context?
- Did microblade and microlith production occur on the sites?
- Were other tools manufactured on the sites?
- Was maintenance of tools conducted on site?
- Was knapping of flakes largely casual and opportunistic, meeting requirements on 'as needed' basis?
- What raw materials were favoured for use on site within the project area and why?
- Where were the raw material procured from?
- Did thermal alteration of raw materials occur within the project area?
- What shell species were present?
- Was there a preferred shell species?
- How does the evidence and inferred human behaviour represented within the project area compare with evidence from other locations in the region?
- How does the evidence relate to the regional and local models of occupation?