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## Aboriginal and Cultural Heritage Assessment (updated)

at Lot 100 DP 717604,  
87 Oakdale Road,  
Gateshead NSW



Report to  
JW Planning  
Newcastle, NSW  
12th, September 2022

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**Myall Coast Archaeological Services**

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# **Aboriginal Cultural Heritage Assessment**

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# 1. Introduction

## 1.1 Background

This report has been prepared at the request of JW Planning, to assess the possible impact a proposed rezoning may have on Aboriginal Cultural Heritage at Lot 100 DP 717604, 87 Oakdale Road, Gateshead NSW (the study area) by:

1. Identifying whether Aboriginal objects are, or are likely to be, present in the study area.
2. Determining whether the proposed activities are likely to harm Aboriginal objects (if present); and
3. Determining whether an Aboriginal heritage Impact Permit (AHIP) application is required.

The development proposal is being assessed as a Planning Proposal under the Environmental Planning and Assessment Act (EP&A).

There is no specific proposal per se being considered under this assessment as the results of the assessment will help determine the final layout of the proposal.

Figure 1 illustrates the regional location of the study area; Figure 2 shows the study area in a local context.



Figure 1 Regional Location



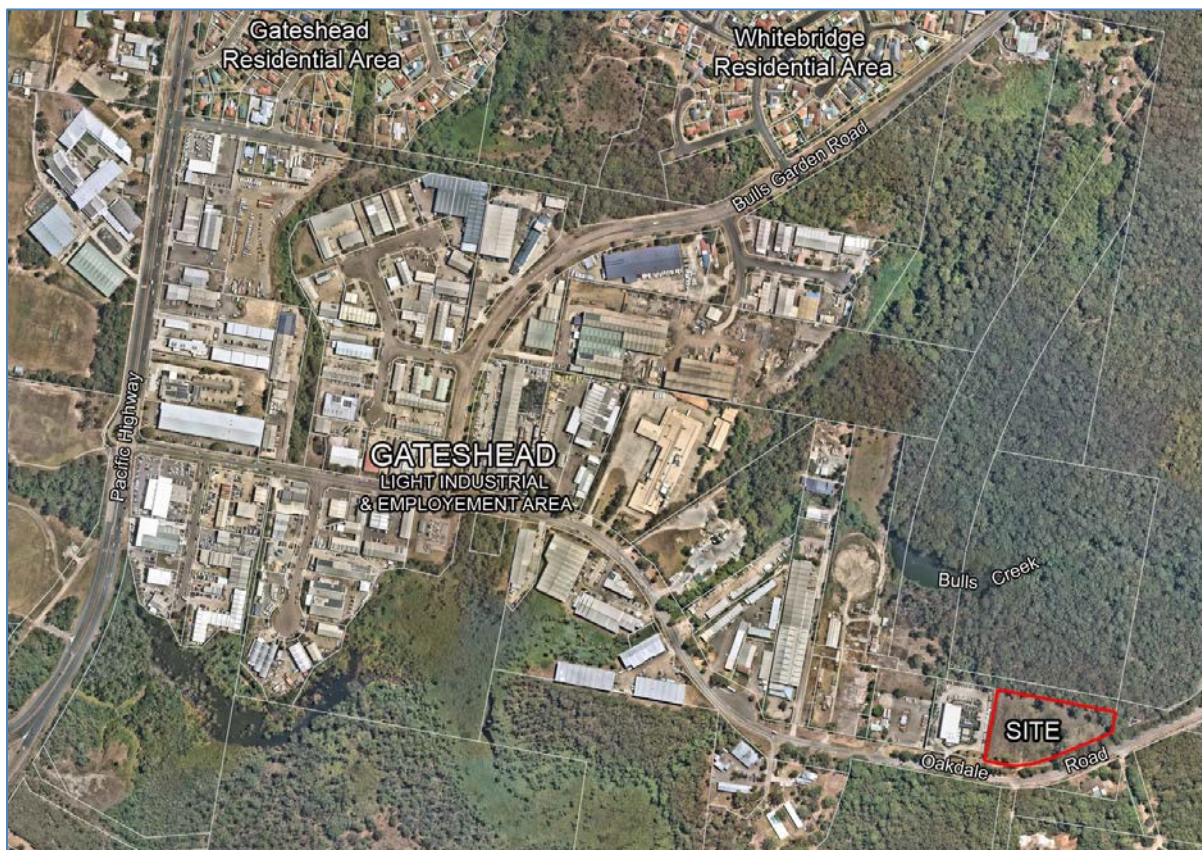


Figure 2 Study area

## 1.2 Legislative Context

Under Section 52 Aboriginal Land Rights Act 1983, a Local Aboriginal Land Council has the following functions in relation to Aboriginal culture and heritage:

- (a) to take action to protect the culture and heritage of Aboriginal persons in the Council's area, subject to any other law,
- (b) to promote awareness in the community of the culture and heritage of Aboriginal persons in the Council's area.

The primary law which affects the above functions of a land Council is The *National Parks and Wildlife Act 1974*, (NPW Act) administered by the Office of Environment and Heritage (OEH). It has as one of its Objects, the conservation of objects, places and features of significance to Aboriginal people. That is once an object, place or feature is determined to be significant to Aboriginal people it becomes protected by the NPW Act. Section 85 of that Act, vests authority in the Chief Executive to be responsible for: the proper care, preservation and protection of any Aboriginal objects, features and places. It is not the role of a land council to "care" for the object but the Chief Executive of OEH.

*'Aboriginal object'* means 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.'

Under section 86 of the NPW Act, it is an offence to 'harm' an Aboriginal object. 'Harm' means any act or omission that:

- Destroys, defaces, damages or desecrates the object
- Moves the object from the land on which it had been situated, or
- Causes or permits the object to be harmed.

Harm does not include something that is trivial or negligible.

It is section 87 that overrides the function of a Land Council to protect Aboriginal Culture and heritage.

However, before the power to take "proper care" of an Aboriginal Object by the Chief Executive of OEH, the object must first be determined that it is significant to Aboriginal people.

Such determination can only be made by Aboriginal people and ipso facto by its legislated function, an Aboriginal Land Council.

The regulations under the NPW Act set out a generic *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*, as well as a *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* to assess the significance and extent of archaeological evidence in order to apply for an AHIP.

The regulated code links to other planning processes under the EP&A Act and the applicable section in the code referring to the EP&A Act is as follows:

#### **4.1 Development under Part 4 EP&A Act and activities under Part 5 EP&A Act**

*Consideration of the potential impacts of development on Aboriginal heritage is a key part of the environmental impact assessment process under the Environmental Planning and Assessment Act 1979 (EP&A Act). The standards in this code can be used or adapted by proponents to inform the initial assessment of the environmental impacts of an activity on Aboriginal heritage. An environmental impact assessment which meets all of the requirements of this code will satisfy the due diligence test. Alternatively, you could adapt the requirements of this code, provided it still meets the ordinary meaning of exercising due diligence (see section 7.7).*

*If it is found through this initial assessment process that Aboriginal objects will or are likely to be harmed, then further investigation and impact assessment will be required to prepare information about the types of objects and the nature of the harm. If you are going to harm a known Aboriginal object you will need to apply for an AHIP. In this situation, the need to obtain the AHIP is in addition to any approval under the EP&A Act (unless the project is subject to Part 3A EP&A Act).*

As the proposal is a planning proposal, Section 117(2) Direction 2.3 of the Environmental Planning and Assessment Act 1979, must be considered,

*"A planning proposal must contain provisions that facilitate the conservation of: (a) items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or*

*place, identified in a study of the environmental heritage of the area, (b) Aboriginal objects or Aboriginal places that are protected under the National Parks and Wildlife Act 1974, and (c) Aboriginal areas, Aboriginal objects, Aboriginal places or landscapes identified by an Aboriginal heritage survey prepared by or on behalf of an Aboriginal Land Council, Aboriginal body or public authority and provided to the relevant planning authority, which identifies the area, object, place or landscape as being of heritage significance to Aboriginal culture and people.”*

Planning proposals should identify whether Aboriginal cultural heritage values are known or are likely to occur. As a minimum, there should be a preliminary assessment (desktop study with or without a site inspection) as to whether Aboriginal cultural heritage values are known or likely to occur in the area covered by the proposal. If cultural heritage values are known or are likely to occur, the planning proposal should indicate what further studies and consultation will be undertaken post Gateway determination and how Aboriginal cultural heritage values could be addressed through appropriate planning provisions.

It is important to note that The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010) should not be used to support a planning proposal. Due diligence is an assessment of likely harm and not a detailed assessment of Aboriginal cultural heritage values.

The planning proposal must include provisions to facilitate the conservation of Aboriginal cultural heritage values in accordance with Local Planning Direction 2.3. Provisions may include:

- appropriate land use zoning (e.g., E2 conservation)
- redesign of future development to avoid harm
- incorporating areas into passive open space
- recommendations for a Development Control Plan.

The investigation and assessment of Aboriginal cultural heritage under a planning proposal is undertaken to:

- identify whether Aboriginal cultural values and objects are present
- assess the nature and extent Aboriginal cultural values and objects
- assess the harm a proposed activity may cause to Aboriginal objects and declared Aboriginal Places.

This process provides a way to clearly identify the harm that your activities will cause, what is avoidable and what is not.

If impacts to Aboriginal cultural heritage cannot be avoided, they must be minimised and managed; any impact to Aboriginal cultural heritage can only proceed in accordance with appropriate authorisation (such as an approved Aboriginal Heritage impact Permit (AHIP)).

A cultural heritage assessment or generic due diligence assessment is basically “*exempt*” from a fuller detailed assessment if the work is under an AHIP, exempt under the Act or on disturbed land.

Disturbed land, is defined in the act as:

*"Land that has been previously subjected to any activity that has resulted in clear and observable changes to the land's surface. Examples include: soil that has been ploughed; **urban development that has occurred**; existing rural infrastructure such as dams and fences; existing roads, trails and walking tracks; and other existing infrastructure such as pipelines, transmission lines and stormwater drainage."*

In the Land Environment Court in the matter *Weriton Finance v Wollongong City Council* [2011]

NSWLEC 1046 regarding development of the Headland Hotel, the matter of disturbed land was briefly considered.

*98 This grassed area, we are satisfied on the evidence, would be the only area where we could conclude that there might possibly be surviving elements evidencing or artefacts of Aboriginal cultural connection with the site.*

*99 On the other hand, we are satisfied on the nature of the construction disturbance that must have occurred in the past for the present hotel buildings; the concrete slab to which we have referred; and the present tarsealed car park to the south of the present hotel, let alone any additional disturbance that may have occurred as part of construction and occupation of any earlier development on the site, that there is no realistic basis upon which we could conclude that there is any likelihood of Aboriginal cultural material remaining in those disturbed areas.*

*100 Whether or not the northern grassed area was disturbed as a consequence of the installation of the sign on the site or because of the existence of gardens and a fence as part of an earlier development of the site or whether there had been a shed or outbuilding on part of this grassed area in that earlier development - any of these potentially rendering it improbable that there would be any surviving elements evidencing or artefacts of Aboriginal cultural connection with the site (if such connection existed, a matter we need not determine) or, on the other hand, whether the grassed area had been established in some passive and non-interventionist fashion making it possible that Aboriginal cultural material might remain, is a matter we need not consider.*

*101 It therefore follows that the determination of any Aboriginal cultural potential for this grassed area must await some further, future development application for the portions of the land that were proposed as the sites for the bed and breakfast elements of the proposal. The disturbance of the portions of the site upon which the serviced apartment/spa resort development element of the proposal is to be located has been so disturbed in the past that Aboriginal cultural issues do not stand as a barrier to it.*

The Court has determined that disturbed land overrides cultural issues.

Some Local Environmental Plans correctly highlight likely sensitive areas of Aboriginal Heritage

possibility that need further assessment. Even in those areas, if they cover disturbed land under the NPW Act, disturbed land is exempt from assessment. This does not invalidate the LEP provisions but refines them with exemptions.

**This assessment whilst it meets the Due Diligence provisions, is an assessment of all Aboriginal cultural heritage values, as well as determining whether an Aboriginal object will be harmed.**



## 2.0 Assessment Process

According to Heritage NSW (formerly OEH) regulated codes, (Archaeological Code of Practice and Due Diligence Code of Practice for protection of Aboriginal Objects in NSW) the objective of any archaeological investigation (where necessary) is to learn about past human societies through the study of material remains and historical, oral and environmental sources. Archaeological investigations locate, identify and study Aboriginal objects, archaeological deposits and potential archaeological deposits, and historical, oral and environmental sources to provide an assessment of the archaeological significance of the objects and the subject area.

In order to fulfil this objective, the following steps need to be undertaken:

- Clearly describe the aims of the project. The rationale for the archaeological assessment must be clearly defined through these aims.
- Present a feasible and appropriate methodology for the archaeological survey and other investigations to ensure that work can be clearly linked to these aims.
- Present the findings and interpretation of the results within a wider context of archaeological knowledge and Aboriginal history.
- Ensure that the findings and interpretation of the results support the assessment of the archaeological significance of the subject area.

The purpose of the Code and Guidelines is to assist individuals and organisations to exercise due diligence when determining whether or not to obtain a permit to harm Aboriginal objects. The National Parks and Wildlife Act 1974 (NPW Act) provides that a person who exercises due diligence in determining that their actions will not harm Aboriginal objects has a defence against prosecution if they later harm an object without an Aboriginal heritage impact permit.

The Codes set out the reasonable and practicable steps which individuals and organisations can take to:

1. identify whether Aboriginal objects are present in an area
2. consider whether their activities are likely to harm Aboriginal objects (if present)
3. make a reasonable determination as to whether an Aboriginal heritage impact permit is required

The aim of this assessment is to identify the Aboriginal heritage and archaeological values of the proposed study area, in particular, and the landscape area in totality and the potential impacts on those values as a result of the proposal. Rather than only attempting to identify individual sites across the study area, the assessment also takes a landscaped approach to determine any potential Aboriginal archaeological evidence. This will require the identification of the range of landscape units, which are likely to contain Aboriginal archaeological evidence. This will ensure that the landscape context is assessed for significance. The landscape approach as well as previous archaeological work in the area will determine a predictive model of Aboriginal occupation of the study area.

This will be achieved through Aboriginal stakeholder consultation, surveys and literature.



This assessment also provides recommendations on the management and mitigation of impacts on known and unknown (uncovered through post approval work) heritage and values that may be potentially impacted by the proposal.

## **2.1 Assessment Personnel**

The research, visual assessment and report were undertaken by Len Roberts, (BA [Arch.], Grad. Dip. Comp., Dip Sp. Ed.,) who also holds a certificate in Archaeological fieldwork, from Tel Aviv University, Israel. Len has worked on archaeological projects in Australia and overseas. Len is a member (since 1990) and was Deputy Chairperson (2007 -2011) of Karuah Local Aboriginal Land Council and CEO 2016-2019. He was appointed, in 1977, (under S32AV of the Local Government Act 1919) as a part time, non- judicial expert (having, special knowledge of and experience in law, local government administration or town planning administration) member of the Local Government Appeals Tribunal from 1977 until it was replaced by the Land and Environment Court in 1980. He has been an expert witness before the Land and Environment court on Aboriginal heritage matters. Len has also taught English and Society (Australiana) at Beifang University, Yinchuan, China as an invited lecturer in second semester 2011.

Len has undertaken archaeological work for various planning and surveying companies, as well as large organizations such as AMP, Department of Public Works, RTA, Local Government Authorities, Energy Australia, Australian Rail and Track Corporation, Rio Tinto, Woolworths and numerous other clients. The projects have ranged from small aquaculture (at sea), industrial and residential projects to large rezoning proposals, as well as linear surveys for sewerage treatment upgrades, pipelines, transmission lines, wind farms, rail line upgrades and highways.

The assessments have included Due Diligence assessments, gateway determinations, as well as assessments under, Parts 3A, 4 and 5 of the EP & A Act

Len has completed various S90 applications, as well as identifying and recording in excess of 1,000 Aboriginal objects and has authored in excess of 120 reports in the last 15 years.

## **2.2 Aboriginal Community Consultation**

In accordance with the Office of Environment and Heritage (OEH) requirements Aboriginal community consultation needs to be undertaken as a component of the assessment.

It is a fundamental right of Aboriginal people to determine the cultural significance of their heritage, and it is a mandated requirement for AHIP applicants (under s.87 or s.90 of the NPW Act) to consult with Aboriginal people who hold cultural knowledge that will help to determine the cultural significance of Aboriginal objects and/or places in a proposed project area. The Aboriginal community does not have a legal role in preliminary archaeological work (such as the purposes of this report). Nonetheless, it is prudent that the Local Aboriginal land Councils and/or Traditional owners are engaged from the outset. The Aboriginal Cultural Heritage Consultation Requirements for Proponents, (2010) outlines a suggested consultation process with Aboriginal people.

While the requirements provide a guide in consulting with Aboriginal parties during a cultural heritage investigation, the consultation requirements are intended for **applications to impact an Aboriginal object or place**. That is, they apply to all activities throughout

NSW that have the potential to harm Aboriginal objects or places and that require an AHIP. For reasons noted in this report, an AHIP is not a requirement for this site.

The following information is from the Consultation Guidelines for consultants (2010) (**bold added**):

### **1.1 Purpose and aim**

*The purpose of this document is to establish the requirements for consultation with the registered Aboriginal parties as part of the heritage assessment process to determine potential impacts of proposed activities on Aboriginal objects and places and to inform decision making for any application for an AHIP.*

*The aim is to facilitate positive Aboriginal cultural heritage outcomes by:*

- ***affording an opportunity for Aboriginal people*** who hold cultural knowledge relevant to determining the significance of Aboriginal objects(s) and/or place(s) in the area of the proposed project to be involved in consultation so that information about cultural significance can be provided to DECCW ***to inform decisions regarding applications for an AHIP***
- ***providing Aboriginal people*** who hold cultural knowledge relevant to determining the significance of Aboriginal objects (s) and/or place(s) in the area of the proposed project with ***the opportunity to participate*** in decision making regarding the management of their cultural heritage ***by providing proponents information regarding cultural significance and inputting into management options.***

It must be noted the mandated requirement is to "afford the opportunity" to consult. It is a matter for the Aboriginal people to take up the offer of consultation within a reasonable time. Sometimes Aboriginal people do not take up the opportunity because the area in question is not of interest for many reasons including a place being so disturbed or desecrated, it is an affront to them (culturally) to even comment upon it let alone visit the study area. If the Aboriginal people decline to participate by providing information regarding cultural significance, it must be accepted that no further consultation is required.

### *3.4 Consultation should not be confused with employment*

*The consultation process involves getting the views of, and information from, Aboriginal people and reporting on these. It is not to be confused with other field assessment processes involved in preparing a proposal and an application. Consultation does not include the employment of Aboriginal people to assist in field assessment and/or site monitoring. Aboriginal people may provide services to proponents through a contractual arrangement; however, this is separate from consultation.*

*4.4.3 The proponent must give registered Aboriginal parties a minimum of 28 days from sending the draft report to make submissions. The time allowed for comment on the draft report should reflect the project's size and complexity. Comments should be provided in writing or, where provided verbally, accurately recorded.*

*4.4.4 After considering the comments received on the draft report the proponent must finalise the report. The final report must include copies of any submissions received, including submissions on the proposed methodology and on the draft report. The final report must also include the proponent's response to each submission. The report must then be submitted to DECCW for consideration with the proponent's application for an AHIP.*

The consultation guidelines require:

1. Establishment of stakeholders

2. A period of 28 days to consider and provide feedback on the draft report.

The study area is within the Awabakal Local Aboriginal Land Council (ALALC) area. The ALALC, was established as the only stakeholder. In discussion with LMCC and Heritage NSW it was agreed that because of the assessment was undertaken during the Covid period that it would be appropriate to consult with the only known group with an interest in the area - ALALC .

It was not viable or possible to advertise in a paper circulating in the local area as no paper was in circulation within the local area and more importantly the purpose was to establish Aboriginal people with cultural knowledge of the area. There are no known Native Title groups within the area and therefore it was important to contact the Local Aboriginal Land Council who (as part of their legislated function) have a role in the protection of Aboriginal objects within their boundary. The Awabakal Local Aboriginal Land Council was "afforded" the opportunity to consult on the cultural Heritage of the study area.

ALALC was given a copy of the draft report on 25/4/2022. The ALALC responded after the 28-day period (22/06/2022) advising there was no concern with the report and would not be making a formal comment. See Consultation Log (Appendix B). Thus the consultation guidelines were met in that;

- They were afforded an opportunity for consultation and to advise of Aboriginal people who may have an interest in the study area
- They responded and gave their views (not interested)
- Their views must be respected and included in the report

To speculate as to why they hold the view they have is disrespectful. What matters is that AWABAKAL LALC who legislatively represent all Aboriginal people within their boundary have made their views known.

### ***2.3 Assessment Methodology***

Various models have been proposed by archaeologists to explain Aboriginal occupation and use of the landscape environments in NSW.

The predictive or contextual model for the archaeological assessment of the site forms the basis for developing a picture of Aboriginal occupation.

The assessment of the data enables a prediction of what form of Aboriginal occupation was likely to have existed on the study area and would show the potential for finding Aboriginal Sites. A field survey is then able to evaluate the prediction and to extrapolate reasons as to why the survey did or did not match the prediction.

The study methodology was based on data research and report compilation. The analysis and assessment of the study area's archaeological potential and the impact of the proposal required the completion of the following.

- Research

This involved a review of primary and secondary sources including written material, maps, plans, AHIMS database and other reports as outlined in the reference section (10) of this report.



- Predictive modelling.

This involved an analysis of the research to produce a model of possible archaeological deposits within the study area. To conduct the analysis of the research material in an effective and consistent manner the following aspects were examined:

1. Aboriginal heritage values
2. Archaeological record
3. Previous Studies
4. Landscape
5. Soils
6. Geological Features
7. Past land use

To ensure compliance under the S117 direction, it is proposed to undertake a 6-step process:

#### *STEP 1 Preliminary assessment*

The main purpose of a preliminary assessment is to identify whether there are Aboriginal cultural heritage values associated with the subject site. This study will use the OEH Due Diligence process for the preliminary assessment. The due diligence process is a standardised process which enables transparency and can be used for all activities across all environments.

#### *STEP 2 Information Requirements*

Aboriginal heritage assessment requires a “multi-value” approach which includes a range of methods to satisfy data/information/reporting needs. The information required for understanding Cultural Landscape includes a range of data sets detailing the physical setting (landscape); the history of the peoples living on that land (documentation from archival and oral sources, as well archaeological information)

#### *STEP 3 Integration of information and identification of heritage values*

The synthesis and integration of the information collected will provide the description of the Cultural Landscape to provide the basis for identifying the range of heritage values present. It will also provide the basis for development of criteria to clearly support the identification of areas/places/landscapes/features and sites of high heritage value to be considered as candidates for conservation/protection and/or the consideration of suitable off-set strategies e.g., community enhancement projects. This assessment will then also support the decisions regarding which areas/places/landscapes/features and sites will be impacted and any appropriate short and long-term mitigation requirements.

#### *STEP 4 Information regarding the proposed development*

This step will identify the nature and extent of the development and impacts on the Aboriginal heritage values across the development area. The extent of impact will include both direct and indirect impacts and their effect on Aboriginal heritage needs to be quantified to ensure that appropriate management in the context of the assessed values can be determined. Indirect impacts may affect sites or features located immediately beyond the development area or within the development area.

#### *STEP 5 Integration of assessment with proposed development*

This involves using the above information as the basis for assessing the cultural values against the impacts from any proposed development to identify specific outcomes.

This will include consideration of the following:

- justification for any likely impact(s), including any alternatives considered for the proposal.
- Any measures which will be implemented to avoid, mitigate or offset the likely impact(s).
- Demonstration that the input by affected Aboriginal communities has been considered when determining and assessing impacts, developing options, and making final recommendations to ensure that Aboriginal cultural heritage outcomes can be met by the proposed development.

#### *STEP 6 Management strategy for Aboriginal heritage*

This is to include identification of the final development impacts and the places, sites and landscape areas to be avoided and protected or conserved.

It is also to include the nature of and location of any offsets, requirements for further work such as, archaeological salvage or community collection for objects of high archaeological or community value, specific on-going management protocols for both physical conservation outcomes and specific Aboriginal community requirements. This would include a contingency plan that details the measures to be taken in the event that Aboriginal objects of significance or a nature not anticipated, such as burials or ceremonial items are discovered during the course of works on the development site.

### 3.0 Step 1 Preliminary Assessment

The preliminary assessment follows the numerical sequencing and headings of the Due Diligence Code.

#### 3.1 Description of Land and Activity

The study area can generally be described as involves land known as 87 Oakdale Road Gateshead and comprises 1.34ha of land with an unformed frontage of some 173m to Oakdale Road. The site is not encumbered by easements or restrictions.

The site is vacant and predominately clear of vegetation (see Figure 3). It is understood that the land may have historically been used for the informal storage of building and



construction equipment.

Figure 3 Study area

The site is elevated above the adjoining light industrial land uses to the west. Consequently, land within the site slopes gently downward from east to west, draining naturally toward the neighbouring land parcel which contains a plant nursery and landscape supply business

The land has been cleared and modified. There are a couple of scattered trees, generally on the northern boundary. It is well cultivated and pasture improved land with introduced grass and weeds.

The proposed activity is to rezone the property to allow for appropriate landuse in keeping with the general amenity of the area such as light industrial.

Land disturbance will occur through block formation through cutting and filling, road construction and building construction. Figure 4 following is a topographical representation of the study area (site)



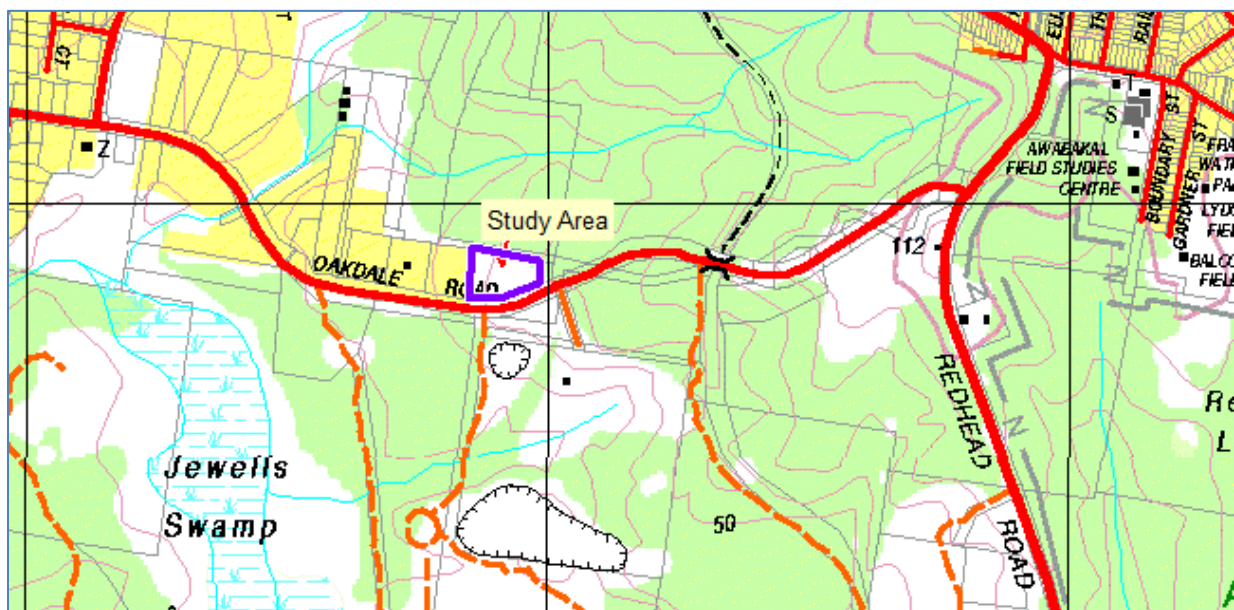


Figure 4 Study area in topographical context

### **3.2 Is the Land defined as “Disturbed Land” or an exempt or complying development?**

Yes, it is considered disturbed land.

The NPW Act defines disturbed land as:

*“ Land that has been previously subjected to any activity that has resulted in clear and observable changes to the land’s surface. Examples include **soil that has been ploughed**, urban development that has occurred; existing rural infrastructure such as dams and fences; existing roads, trails and walking tracks; and other existing infrastructure such as pipelines, transmission lines and stormwater drainage.”*

Whilst the definition, includes ploughed land as an example of disturbed land, cultivation, with the associated stick raking and stone gathering, tended to destroy surface evidence. However, cultivation and pastoral land use, also helped preserve the archaeological record. In some cases, cultivation would expose evidence in others, cover the evidence. If the definition was to be taken literally and rule out all ploughed land, then planning proposals for farmland would not require assessment. Disturbed land that is associated with farming activities, is there, as a defence to continue with routine agricultural activities. That is, the disturbance of the land will generally not be greater than what has already occurred.

Under a planning proposal, Aboriginal heritage values need to be assessed and not merely as a defence against harming an object through continuing activity. As such, disturbed land in a planning proposal context would constitute a land profile that has been clearly altered through construction, or substantial earthworks, rather than simply having been ploughed. Ploughing may destroy context whereas, construction tends to obliterate.

Cultivation and clearing have occurred and as the land profile has been altered, the land therefore meets the definition of disturbed land, that is, *there has been clear and observable changes to the land surface*. Whilst in a defence context for harming an Aboriginal context no further assessment would be required, it is important for the purpose of determining past Aboriginal use, to assume the land is non-disturbed. This approach allows for consideration of not only tangible but intangible Aboriginal Heritage values. The following plates show the disturbance and poor visibility for artefact detection.



Plates 1-4 Land Disturbance

### **3.3 Is the activity exempt?**

No

### **3.4 Will the activity involve harm that is trivial or negligible?**

No

### **3.5 Is the activity in an Aboriginal Place or are you already aware of Aboriginal objects on the land?**

No

**3.6 Is the activity a low impact activity for which there is a defence in the regulation?**

No

**3.7 Will the activity disturb the ground surface?**

Not the proposal per se, as the clearing, infrastructure works and erection of buildings for the proposal will occur at the subdivision and construction stages post rezoning.

**3.8 Does the Aboriginal Heritage Information Management System suggest potential?**

No. See Appendix A. There is one object within 200m and another 8 within 1km suggesting potential use of a resource area/s distant to the study area. However, the Lake Macquarie landuse mapping indicates it a sensitive Aboriginal landscape. This mapping is a broad landscape approach identifying unbuilt landscapes.

**3.9 Is there archaeological potential because the proposal is:**

- **within 200m of waters.**

No. Although an intermittent unnamed creek/ natural drainage channel does commence some 200 metres to the north of the study area. The drainage channel flows seasonally to Jewells Swamp some 60mm to the southwest of the study area.

- **located within a sand dune.**

No.

- **located on a ridge top, ridge line, or headland.**

No.

- **located within 200m below or above a cliff face.**

No

- **within 20m of or in a cave, rock shelter, or a cave mouth.**

No

**3.10 Can harm be avoided to the object or disturbance of the landscape feature?**

N/A

**3.11 Is Desktop assessment and visual inspection required?**

Yes. Desktop assessment is required and a preliminary visual inspection is beneficial to ground truth disturbance and determine archaeological visibility.

**3.12 Are further investigations and impact assessment required?**

NO.



## 4.0 Integration of Heritage Values (Steps 2-4)

An understanding of environmental factors within the local landscape provides a context for analysing past human occupation and history of an area. The analysis of environmental factors contributes to the development of the predictive modelling of archaeological sites, as well as providing a basis to contextualise the archaeological material and to interpret patterns of past human behaviour.

In particular, the nature of the local landscape including topography, geology, soils, hydrology and vegetation are factors which affect patterns of past human occupation.

Aboriginal occupation of the landscape and land use practices changed over time. Landuse has the potential to affect the visibility of archaeological material; they may obscure or expose archaeological sites. In addition, previous disturbances may have exposed archaeological material, such as excavation for dams or other ground disturbing works. It is important that such factors are also considered when making assessments of archaeological resources in an area and understanding the distribution of observed sites.

Whilst this report is primarily focussed on the archaeological aspects of Aboriginal heritage, it is important to acknowledge and assess the importance of Aboriginal cultural context regarding places and landscapes.

### 4.1 Aboriginal Cultural Context

The estimated minimum viable population of about five hundred was the average size of a so-called tribe in Australia. Several anthropologists feel that 'tribe' does not accurately reflect the interaction and make-up of Aboriginal Australia, preferring the term 'band' to be the most appropriate term to describe the basic social and economic unit of Aboriginal society. It is described as a small-scale population, comprising between 2 to 6 extended family units, who together occupied and exploited a specific area.

The band was by no means a social or cultural isolate but, rather, interacted with other bands in a variety of ways. Typically, these interactions involved visits, marriage, ceremonies and trade. As a result of these interactions, clusters of bands were formed; wherein there was a sense of collective identity, often expressed in terms of common and distinctive language.

In recent times the territories of Aboriginal bands generally encompassed the drainage basin of one river and stretched from the shoreline up to the top of an escarpment, another river or prominent landform feature.

The bands developed into regional groupings or cultural areas of interacting Aboriginal societies possessing broadly similar languages, social organisation and customs, material culture and art styles, ways of life and environment. According to the work by Peterson (1986), there is a general correlation between culture areas and major drainage basins, which has been explained on the grounds that a drainage basin is unified by its river system and bounded by its catchment. Water supply determines plant cover and therefore the availability of food and consequently, Aboriginal population density.



*open forest lands with very few areas of thick forest. The cessation of regular burning following European settlement allowed a growth of thick forest of young trees that, together with an increasing understorey, choked out the grasses."*

Other uses of fire were for longer term hunting strategies. After firing, the Bush would regenerate; new grass would spring up and attract kangaroos and other animals, on which the hunters could prey. Likewise, fire encouraged the regrowth of eucalyptus trees and of edible plant roots. The ashes acted like manure, and sweet, new green shoots would spring up after the first hard rain following the burn.

The term 'fire-stick farming' has been applied to this aspect of hunting. Aborigines never put out their fires. Campfires were left burning, as were signal fires, including those lit in a sequence to indicate the direction of travel of humans or game.

The food resources available controlled the Aboriginal population, which in turn were related to water resources: the areas with the highest rainfall were generally richest in food. When food was difficult to obtain, the food quest simply required more time and effort rather than new strategies. Thus, when times were hard, the people could simply move more often and further afield.

The typical Australian Bands economy is flexible with a wide variety of foods being sought and advantages being taken of seasonal abundance or chance events, such as the stranding of a whale. Aboriginal Australia was not vulnerable to famine through the failure of one crop.

The simplicity and self-sufficiency of Aboriginal society was observed by Captain Cook in 1770, and cited in Beaglehole, 1955 (p.399).

*"From what I have said of the natives of New Holland they may appear to some to be the most wretched people on earth, but in reality, they are far more happier than we Europeans. They live in a tranquillity which is not disturbed by the inequality of condition: the air and sea of their own accord furnishes them with all things necessary for life, they covet not magnificent houses, household stuff etc., they lie in a warm and fine climate and enjoy a very wholesome air, so that they have very little need of clothing and this may seem to be fully sensible of, for many to whom we gave cloth etc. to, left it carelessly upon the sea beach and in the Woods as a thing they had no matter of use for. In short, they seemed to set no value upon any thing we gave them, nor would they ever part with anything of their own for any one article we could offer them; this in my opinion argues that they think themselves provided with all the necessary's of life and that they have no superfluities."*

The above comment is probably the first recorded by a European with respect to Aboriginal society and culture. It sets the background or the context in which to assess the cultural significance of an area. From a first contact European perspective, it appears that items of value were carried and kept whereas, items of little value discarded. Permanent dwellings were of no interest, nor European belongings. They were not wretched but happy and content. The environment and landscape provided for their needs.



According to the Aboriginal knowledge holders, many of the artefacts found across the landscape today were generally discards and of little importance, yet they are protected by law, whilst the real value which lies in the landscape and the sense of place, which provided "all the necessary's of life," is not.

It is important in assessing the cultural significance of a place that one does not focus on the discards but on the connection to land. Whilst all land and all objects are significant to the Aboriginal community as they tell a story of place; past and present, not all objects are seen as "valuable". According to the Aboriginal knowledge holders, stone flakes (for instance) in Aboriginal society are superfluous but grinding grooves, hearths, rock shelters, carved trees and ceremonial grounds indicate a sense of connection to the past and present and valued. Cultural assessment should be seen in the context of "home" not through the nebulous value of stone discards that are generally found at the lowest point in a landscape and from not whence they originated.

By 1850 most of the coastal plain had been appropriated by Europeans and traditional social and land-use systems were severely affected. Deprived of their economic base, the Kattang speakers were forced to depend on handouts of food and blankets, many becoming fringe-dwellers on the edges of European settlements.

The history of the Aboriginals of Lake Macquarie is well documented in the book of that name by Turner and Blyton (LMCC) and various definitive studies particularly notable is the work by Haglund.

There is no question that the foreshore, confluence of creeks, headlands and rock outcrops were extensively utilised or occupied by Aboriginal people in the past. However, not all areas were equally used. Natural attributes of the landform/landscape fostered a greater use whilst other nearby areas were seldom utilised.

The Aboriginal people of Lake Macquarie used an abundance of marine life for not only food but other resources, fish bones made great hooks and other implements as did seashells and turtle shells.

The topography of the area, as well as the historical and anecdotal evidence allows an easy understanding of Aboriginal occupation for as Turner and Blyton noted(P11),

*Exploring as they moved along, pausing to enjoy sites where food was plentiful, these first families finally settled in an area dominated by a huge Lake known as Awaba. Here they found a coast rich in marine life, a Lake with enormous bird populations and a variety of plants. They were vast forests to the West and sandstone ranges to provide caves for comfortable winter shelters. Here they chose to stay, welding their hunting and gathering style of living to the rich local environment.*

*Aboriginals lived in a clan, owning and using a large area of land and treating it as a common property of all its members. In the jargon of the anthropologist, the clan of Lake Macquarie we're exogamous in patrilineal in that extended families were governed by two basic rules calling miles had to choose their wives from outside the clan and clan membership was passed on from generation to generation along the male line. Thus, the*

*clan consisted of a group of related males, their wives who came from other clans and their children.*

The probable areas of intensive Aboriginal occupation include headlands and the foreshore both lake and ocean, and at the confluence of the creeks. The less obvious today is the freshwater holding areas. Freshwater was vital for survival and unless freshwater was readily available much of the area was only seasonally or occasionally used.

#### **4.2 Archaeological Record**

The AHIMS database search area places the study area in a broad archaeological context in which to assess archaeological potential. These individual sites may contain 1 or many artefacts. The search results of the Aboriginal Heritage Management System are found at Appendix A.

There are thousands of Objects listed on the AHIMS database within the Lake Macquarie area. The majority of which are stone artefacts. There are art sites, grinding grooves and modified trees. Most Objects were located during surveys development proposals. It is not possible to list and discuss those Objects.

There are no objects located within the study area or within 50 metres. However, there are 9 Objects within 1km.

The majority of objects were located during specific cultural assessments and tend to skew results to only that land which has been investigated. However, patterns of Aboriginal land use can be postulated from that information.

It should be noted that in regard to the Database:

- Object records for many places are incomplete to varying degrees: grid references are not always accurate (due to errors on the part of field investigators or data processors) and unless the original site cards and associated reports are accompanied by detailed maps at 1:25,000 scale, it can be very difficult to check the accuracy of the grid references.
- Objects can be sometimes recorded more than once by different field investigators and registered as separate sites or not necessarily recorded.
- Not all reports and cards are available for inspection.
- Recent studies have not as yet been registered.

Within the wider region some studies revealed an abundance of Objects whilst others revealed none. Such a dichotomy of observation of artefacts may be affected by a number of possible factors singularly or in combination; and in order to adequately assess the observational record it is important to address those factors.

- Differences in observer styles

Whilst observer styles will always play a part in observation of artefacts, it must be noted that within a wide variety of landscape and area the same study teams had areas of high concentration and no concentration of artefacts. Differing archaeological survey teams had the same Aboriginal Sites Officers and therefore minimised style difference. Several

areas were surveyed by differing teams independent of each other at different times with no marked difference in the archaeological record. Despite observer styles the survey teams consistently reinforced the pattern of artefact distribution across the landscape. In addition, the archaeologists undertaking the surveys are well qualified and experienced and therefore any differences in observer styles appear not to have affected the archaeological observation.

- Survey visibility

That is, the extent to which an observer can detect the presence of archaeological material at or below a given place and is generally affected by seasonal factors such as grass cover, level of water in creeks etc. It is a given, that the archaeological record is affected by surface visibility, however the visibility across study areas has generally been consistent and therefore archaeological observation is equally consistently affected. Surface visibility is not a factor that has created the differing observational record.

- Integrity of soil profile and landscape

Whether a study area will contain archaeological evidence is dependent on the level of disturbance of a site. Filling, levelling ploughing road construction and other processes will affect observation.

- Depositional qualities of the study area

This perhaps is probably the fundamental aspect for concealing/revealing objects. Stone artefacts on slopes will be affected by natural surface processes. Initially deposited on the surface an object will be subjected to differing rates of burial and exposure, dependent upon climatic conditions and bioturbation agents. Objects are known to migrate vertically downwards within a soil profile or be carried over the surface toward a lower landscape by means of wind, rain and other natural processes. Thus, a range of natural processes will influence artefact distribution and any interpretation of such distribution must consider the effects and intensity of such natural processes. However, it is not so much where the objects are found but the densities of any finds, which will tend to indicate the degree or intensity of Aboriginal occupation.

- Aboriginal Occupation Patterns

The observation or non - observation of artefacts or objects in each place may be directly proportional to the level of Aboriginal occupation. Considering the various natural processes within a landscape and the factors as outlined previously, may suggest quite emphatically a pattern of Aboriginal occupation. Areas of danger to children, poor amenity and adverse exposure to the elements, would not be used as frequently, if at all, to more favourable locations.

**Comment:**

The Database search is not reliable in determining archaeological potential for the study area but does indicate occupation of the Lake Macquarie. An examination of the location of the landscape context of the artefacts reveals that they are generally associated with a water or food source. The artefact scatters tend to be found on elevated ground above swamplands and marsh along the creeks and estuaries.

### 4.3 Previous Studies

Locally, several archaeological surveys have been conducted, However, the principal and most significant was undertaken by Haglund in 1986, (Haglund, L. 1986 Assessment of the Prehistoric Heritage in the Lake Macquarie Area. Report to Lake Macquarie City Council) upon which, LMCC based their Aboriginal heritage assessment requirements.

Haglund commented.

*A considerable proportion of the sites actually present in the landscape is likely to remain undetected except through deliberate testing of subsurface sediments through archaeological investigation, or through future disturbance through erosion or some development. Accumulated sediment and/or a blanket of vegetation... may hide all of the archaeological site types but open sites are particularly likely to remain hidden...*

*This is an important consideration, as it is still often the Undetected sites that have been best preserved and retain most scientific potential. They will better retain this potential if discovered through controlled testing. When carrying out detailed surveys, consultants now note and record also the locations deemed most likely to contain archaeological material as PAD's (potential archaeological deposits).*

Archaeological evidence is more likely to be found in undisturbed areas.

On a state-wide basis, several studies have been undertaken which have proven to be definitive works for understanding the correlation of landscape and archaeological potential.

- **Importance of wetlands**

Archaeological investigations by Kuskie (1994), Ruig (1995) and Effenberger and Baker (1996) on margins of various wetlands indicate that artefacts could be found on all types of landscapes abutting wetlands with density in direct correlation to distance from the margin.

**Relevance:**

*The study area is some -30m AHD above the wetlands known as Jewells Swamp. Given that the margin of the wetland is some 1km from the study area it is possible that artefacts could be located within the study area but according to the studies, frequency and density would be diminished.*

- **Relationship of Objects and Distance from Water /Song trails**

A report for the Brigalow country undertaken by the Resource and Assessment Council titled Aboriginal cultural heritage assessment NSW western regional assessments final report September 2002 – Brigalow Belt South Stage 2. This large-scale landmark study analysed the finding of separate independent studies and was able to establish an information base that highlighted Aboriginal association with forests, travelling stock routes (early roads), rural properties and towns.



The study showed that of the sites recorded, 50% were within 200 metres of water and Aboriginal occupation may have occurred for prolonged periods under the right conditions, made possible by a different array of water features (chains of ponds) that existed prior to European usage of the forests.

**Relevance:**

*The study area is at its closest point 500m from the major permanent water source (Jewells Swamp). The above study suggests that there would be limited frequency and density of artefacts if at all.*

- **Relationship between Stream Order and occupation pattern**

A survey by Jo McDonald 1988 was an east west survey from Dubbo to Tamworth. The report found stream order influenced occupation pattern. Her analysis concluded that.

*"The size (density and complexity) of archaeological features will vary according to the permanence of water (i.e., stream order), landscape unit and proximity to lithic resources in that density and complexity are greater in 4<sup>th</sup> order (major creeklines and rivers)."*

Stream order is a measure of the relative size of streams. The smallest tributaries are referred to as first-order streams, while the largest river in the world, the Amazon, is a twelfth-order waterway.

**Relevance:**

*The study area has no drainage channels (1<sup>st</sup> order) commencing within its boundaries or areas of water holding capacity.*

- **Relationship of landform type and ceremonial areas**

Work by Klaver and Heffernan (1991) which was an assessment of sites in the Greater Taree Council area, identified landscape attributes for ceremonial sites. Citing an earlier work by Fitzpatrick (1986), they stated, "Ceremonial grounds were said to comprise two rings, one on top of a low ridge and the other in a level place below. The latter was..."established in a roomy place, so that all the gins could camp there close to the ring." This aligns with this author's findings at North Arm Cove and Kings Hill, Raymond Terrace.

**Relevance:**

*The study area has no attributes for ceremonial areas.*

- **Relationship between Object type and landscape**

Brayshaw, in 1986 conducted a Study of Colonial Records of the Aborigines of the Hunter Valley and was able to present an account of the environment and way of life of the Aborigines at the time of colonial settlement. Her study also indicated areas and landforms of Aboriginal use and occupation. Dean-Jones and Mitchell (1993) conducted a similar assessment of archaeological sites in the Hunter Valley.

The above studies indicated:

- Open campsites would be near water holes

- Grinding grooves are more likely to be found in rocky outcrops exposed by erosion or in creek beds.
- Scarred trees may be present in any type of landscape, but this would depend on the age and type of tree.
- Artefacts are more likely to be found along creek and drainage lines
- Stone arrangements and ceremonial artefacts are more likely to be found in significant landscape aspects such as caves and hills.
- Artefacts can be found in any landscape in proximity to an abundant food/water source.
- Archaeological evidence is more likely to occur in undisturbed areas.

#### **Relevance:**

*The study area has disturbance through extensive clearing, cultivation, excavation and filling (dumping); does not contain waterholes; has no ceremonial attributes, no rock outcrops and no drainage lines. However, it does have proximity to an abundant food/water source, Jewells swamp, albeit several hundred metres away.*

#### • **Burials**

With respect to burials, work by Donlon (1990), where she analysed skeletons uncovered on beaches on the Central Coast of NSW, ethnographic reports by Bennett 1929, along with other research cited by Mulvaney and Kamminga (1999), has tended to indicate that whilst burials could be found almost anywhere and diverse in practice, intentional or formal burials, generally in Eastern NSW, consisted of isolated burials being placed in sandy type soil, near the high water mark, and sufficient soil depth to bury the person vertically in a sitting position and with various belongings. In the Central west of NSW according to Garnsey (1942: p.23ff), the body was placed in a squatting position; with the elbows placed on the knees and the head between the hands. In this position, the body was placed at the foot of a Coolabah tree facing east. A blaze on the tree was also carved in tribal markings to show the man's status. These carved trees were apparently only associated with the graves of the spiritual leaders. For the period of mourning, the body remained out of the ground. The only recorded cemeteries are within the Murray River corridor or at Broadbeach in Queensland. Most burials are discovered by accident.

#### **Relevance:**

*The study area does not have landscape conducive to burials or adjacent to a significant burial landscape.*

#### • **Occupation Pattern**

A general pattern is emerging that more concentrated remains of Aboriginal occupation are associated with wetland or swamp resources along the principal rivers of the region and/or where resources suitable for the manufacture of tools are present.

The pattern of Aboriginal occupation was underpinned by 2 tenets:

- Aboriginal camping areas were always situated in areas of good shelter and good resources
- Base campsites would be near reliable water.

The following table summarises the occupation type and location of Aboriginal settlement east of Murrurundi was tabulated by Mary Dallas and is of value in obtaining an overview of Aboriginal settlement.

Occupation Pattern	Activity Location	Proximity to Water	Proximity to Food	Archaeological Expectations
Transitory movement	All landscape zones, often on ridge and spur crest, watercourses and valley flats	Not important	Not important	*Assemblages of low density & diversity *Evidence of tool maintenance & repair *Evidence for stone knapping
Hunting and/or gathering without camping	All landscape zones	Not important	Near food resources	*Assemblages of low density & diversity *Evidence of tool maintenance & repair *Evidence for stone knapping *High frequency of used tools
Camping by small groups	Frequently associated with permanent & temporary water	Nearby	Near food resources	*Assemblages of low to moderate density & diversity *Evidence of tool maintenance & repair *Evidence for stone knapping *Hearths
Nuclear family base camp	Level or gently undulating ground	Nearby reliable source	Near food resources	*Assemblages of high density & diversity *Evidence of tool maintenance & repair, casual knapping *Heat treatment pits, stone-lined ovens *Grindstones
Community base camp	Level or gently undulating ground	Nearby reliable source	Near food resources	*Assemblages of high density & diversity *Evidence of tool maintenance & repair, casual knapping *Heat treatment pits, stone-lined ovens *Grindstones & ochre *Evidence for heat treatment unlikely *Large area > 100sqm with isolated campsites

Table 1 Aboriginal Occupation Model

### **Comment:**

The archaeological evidence suggests that base camps were located close to freshwater and food sources. The campsites were in favourable climactic conditions, safe, not only from intruders but also for young children. Campsites were therefore not near fast, flowing rivers, dangerous swampy areas or steep cliffs. (Many Dreamtime stories were developed to keep children away from dangerous areas). Trails from campsites and to other clans were generally along creek lines or ridgelines.

Although archaeological evidence is generally associated with creeks because they are the lowest elevation and natural depositional areas, it is more likely that camping occurred on higher ground.

It would appear that provided the various natural and anthropogenic processes are taken into account, the distribution of artefacts as observed from the foregoing information

indicates archaeological evidence is more likely to occur in undisturbed areas near water supply and exposed tracks but it is important to consider all landscape elements

With respect to the study area, it appears the elevated areas overlooking estuarine swamps or creeks were favoured short term occupation or foraging areas. The study area was less likely to be used intensively, due to other favourable areas not too distant from the study area. Aboriginal objects are more likely to be found within 20cm of topsoil. Freshwater was a factor in establishing longer term camping. The study area does not have access to readily available freshwater. The study area does not contain any of the attributes for intensive use.

#### **4.4 Landscape**

The differing landscape creates different land use. For instance, swampy or poorly drained land would not be conducive to campsites or burial grounds. Whereas, caves and rock shelters would give rise to artwork, and practical purposes such as shelter or women's birthing areas. Early roads, stock routes and river crossings during European settlement often followed Aboriginal Song Trails (walking trails) and natural features adjacent to such trails were of significance for various reasons. Over the years, the main highways and roads have been realigned and adjusted, but initially the roads between settlements which were generally established around Aboriginal camping grounds, followed the Aboriginal trails.

The landscape survey and classification followed in this report is that formulated by Speight and others in the Australian Soil and Land Survey, Field Handbook, Second Edition.

Landform is basically divided into 2 classifications, the classification covering a larger area is known as Landform Pattern, which can then be subdivided into smaller areas known as Landform Elements. About 40 types of landform pattern are defined and include, for example, floodplain, dunefield and hills. Whereas, about 70 of the smaller landform elements are defined, including cliff, footslopes and valley flat. Relative elevation classes have been standardised and used throughout Australia. The landscape is divided into the following classes:

<b>Landform</b>	<b>Relative Elevation</b>
Plains	0-9 m
Rises	9-30 m
Low hills	30-90 m
Hills	90-300 m
Mountains	>300 m

Landforms as well as having morphological characteristics (surface dimensions) have been formed by processes. The formation processes can interact to produce an array of landforms. For example, plains can be separated into depositional plains of various kinds or erosional surfaces (peneplain). The formation process contributes to the concealing/revealing and the preserving/destroying of archaeological evidence. The identification of landform is paramount in predicting areas that have the potential to contain archaeological evidence.



**Comment:**

Topography, hydrology and drainage are important for understanding how accessible an area was for Aboriginal occupation, as well as providing information on available water resources vital to the sustainability of any population.

The study area landform pattern is generally part of the coastal floodplain/rise. With less than 40m AHD across the site, it has a gentle westward slope.



Figure 6 Landscape Context

#### **4.5 Soils**

Where an archaeological survey is only a surface investigation, any information relating to subsurface information is important, in that it indicates:

- The possibility of archaeological evidence beneath the surface.
- The possibility of archaeological evidence destroyed through erosion or other natural phenomena.
- The possibility of archaeological evidence preserved through soil/sand deposition.

The main soil features of interest are the depth of deposits, stability of the soil composition and the depositional age of the soil groups. Detailed analysis of the effects of different soils on the burial process of archaeological remains can only be carried out during an excavation.

The susceptibility of land to sheet and rill erosion is governed largely by the topsoil texture, slope of the land, length of slope and the probability of intense summer rainfalls. The topsoil or A horizon is where most nutrients, organic matter, seed and macroporosity so desirable for a seedbed exists. If this is stripped away through soil loss the fertility of the soil is lost and productivity reduced. The first few centimetres of soil also generally contain artefacts.

Soils over the land are generally comprised of consolidated materials. The slopes over the land are not considered steep and there is no evidence of slope instability.

The NSW government Espade soil database describes the physiography of the area as: *hillslope under dry sclerophyll forest on conglomerate lithology and used for timber/scrub/unused. Slope 5% (estimated), local relief low (30-90m), elevation 40.0 m, aspect west. Surface condition is hard set, profile drainage is mod. well drained, erosion hazard is high, and no salting evident*

The soil test was taken adjacent to the study area in 1990. It also notes that the A1 horizon is a sandy clay loam with coarse fragments of gravel as parent material.

**Comment:**

*Given the grainy loam nature of the site, the area will tend to be erosional after rain which suggests the likelihood of subsurface deposits unlikely as artefacts are more likely to washdown to lower depositional areas, such as Jewells Swamp.*

#### **4.6 Geological Features**

The geological data allows for analysis of the landscape to determine any special features that may contribute to historical Aboriginal occupation. There may be particular outcrops or features that would suggest significant Aboriginal use.

**Comment:**

There is no indication of a geological abnormality or feature that would suggest special significance to the landscape based on the geological mapping.

#### **4.7 Past Land Use**

Past Aboriginal activities are not well manifested by archaeological record because many activities did not leave material evidence or because the material evidence was not durable. Many of the implements were organic material, such as wood and bone and readily decayed when exposed to the elements. Even burials, are subject to the acidic condition of the soil.

Durable evidence, such as stone and rock implements, is affected by European land use. Easily recognisable implements such as stone axes, have found their way into many private collections, well before it became illegal to do so, with no record of the location of the find.

In general, the archaeological record is dependent on the exposure of sites through erosion, weathering, fire, drought and anthropogenic activities.

The vegetation within the study area is predominantly Open Forest dominated by various species. The majority of the trees appear to be of a similar age and would probably be less than 20 years of age.

The current vegetation does not give a good indication of the archaeological potential as it is basically regrowth or introduced grasses and pasture and is not necessarily indicative of what was there over 200 years ago.

The variety of vegetation that was probably on the subject site at European contact would also have lent itself to the fostering of animal food resource. Many of the current animal and bird species found on the subject site most probably existed on the site at European occupation although as to the abundance is speculative but probably more intense and greater variety.

- *European*

Since the 1820's the land has been used for agricultural pursuits including clearing and cultivation. Latterly, it has been on the urban industrial fringe and has been levelled and modified for landscape material stockpiling.

### **Implications**

The land in the study area has been disturbed by European Activities since 1820. The land has been used for various agricultural and rural pursuits. Although Aboriginal occupation occurred within the study area, evidence of such occupation appears remote, as the past land use has probably destroyed all but scattered and isolated stone artefacts.

- *Aboriginal*

The known archaeological evidence tends to suggest that base camps were located close to freshwater and food sources. The campsites were in favourable climactic conditions, safe, not only from intruders but also for young children. Campsites were therefore not near fast, flowing rivers, dangerous swampy areas or steep cliffs. Many Dreamtime stories were told of mythical creatures to keep children away from dangerous areas. Trails from campsites and to other clans were generally along creek lines or ridgelines.

Prior to European settlement the area was inhabited by Aboriginal people who roamed freely across the river flats and through the timbered hill country. They lived in harmony with the land, only taking what they required from the bounty of game available. They also adopted burning off practices as the new shoots which emerged after fire attracted kangaroos which they surrounded and killed with clubs and spears) barbed with sharp stones.

Historians indicate that at the time of white settlement Aboriginal people were present in 'relatively large' numbers around the lake. They were distributed over the district in local groups or Nurras approximately 8 miles apart, in villages which consisted of 8 or 9 huts or families. Each Nurra occupied a defined area of land.

"The Aboriginal population was controlled by the food resources available, which in turn was related to water resources." (Flood, p265) This would mean that the Lake Macquarie could sustain a large and healthy population particularly in areas adjacent to freshwater.

The nearby swamps (Jewells) and tributaries were home to abundant wildlife. At sunset and dawn fish, fowl, game, plants and fruit would be gathered from these areas to provide sustenance for a healthy and joyful Aboriginal population. Little time and effort were put into providing the daily essentials, leaving the day free for family times and the enjoyment and comfort of life. The people would set up camp on a sheltered, high place away from mosquitoes and the prevailing wind. They would stay there until it was time to move on for hygiene reasons or the weather changed and a more sheltered spot was required. There was never an occasion when the food or water supply was scarce.

The ridgeline and highpoints overlooking the lake were ideal occupation areas, perched above the coast and Lake gave good vantage to monitor the movement of game and unwanted visitors. It was only a short stroll down a gentle slope to the lake and swamps with its abundance of fauna or a trek to the coast. It was also only a short, but more

difficult walk to the hilltops and then a walk along the various song trails (Aboriginal walking tracks) to the tablelands of the north, west or south. Various highpoints made a great signalling area for the gathering (corrobboree) of clans from all over. Fires could be lit on the high points and the smoke seen for many, many kilometres would announce the forthcoming gathering.

As land was given as freehold to the new settlers, and as fences, farms and houses were constructed, Aboriginal people found it more and more difficult to travel from camp to camp. Many Aboriginal people were forced onto Missions and Reserves. This meant that much of the traditional areas were now occupied and a loss of historical understanding of the relationship between the land and the people has occurred. Such lack of understanding can only be overcome through the stories of the knowledge holders being related to the landscape that was once there.

#### ***4.8 Predictive Model***

According to Orton (2000), "In archaeology, predictive modelling refers to a process that considers variables that may influence the location, distribution and density of sites, features or artefacts across the landscape. As well as a review of the results of previous archaeological work and available ethnographic information (to make judgements about past Aboriginal settlement of the landscape), the variables often included in a predictive model are environmental and topographic variables such as soils, distance from landscape features, slope, landform elements, and cultural resources."

A predictive model of Aboriginal object location is constructed to identify areas of high archaeological sensitivity (i.e., locations where there is a high probability of an archaeological site occurring), so it can be used as a basis for the planning and management of Aboriginal sites. Predictive modelling involves reviewing existing literature to determine basic patterns of site distribution. These patterns are then modified according to the specific environment of the study area to form a predictive model of site location. A sampling strategy is employed to test the predictive model and the results of the survey used to confirm, refute or modify aspects of the model.

The use of land systems and environmental factors in predictive modelling is based upon the assumption that they provide distinctive sets of constraints, which influenced Aboriginal land use patterns. Following from this is the expectation that land use patterns may differ between each zone, because of differing environmental constraints and that this may result in the physical manifestation of different spatial distributions and forms of archaeological remains.

The predictive model is based on information from the following sources:

- Identification of land systems and landform units
- Previous archaeological surveys conducted within the region
- Distribution of recorded sites and known site density
- Traditional Aboriginal landuse patterns
- Known importance of any part of the study area to the local Aboriginal community

The types, contents and distribution of sites within the study area can be predicted using such modelling.



The following raw materials have been identified in the region (in order of frequency) silcrete, shell indurated mudstone, silicified tuff, chert, quartz and other materials. Artefacts types identified in order of frequency are flakes, cores and tools.

An analysis of the density of distribution, site type and landscape context show that any archaeological evidence will tend to be middens, scarred trees, stone artefacts associated with a watercourse or midden and occasional ceremonial Objects such as grinding grooves will be dependent on a sandstone outcrop associated with a water course. It is not likely that burials or ceremonial areas will be found given the ethnographic and historical record shows them to be elsewhere. Ceremonial areas, like churches and war memorials today, tended to serve a wider area.

Where there is a potential for sub-surface deposit with artefacts (such as flaked stone) it is identified as a PAD. Sub-surface deposits are important as they have the potential to contain intact in-situ archaeological material. In some cases, they may contain material that can be placed in chronological sequence. PADs are significant because they may contain new scientific and cultural information and have the potential to further our understanding of past Aboriginal occupation of the region. Generally, PADs in the area are associated with middens.

The recorded archaeological data suggests that there is a correlation between watercourses and the presence of Aboriginal sites. There is higher potential for sites to be identified within 200m of a water course, than further away. Sites are likely to occur within flat, open depression, simple slope and crest formations.

### **Prediction of Site Type, Location and Density**

Based on the foregoing information (Section 4) the likely site types to be found within the study area depending on the level of disturbance are:

#### *Isolated stone artefacts*

These can be located anywhere in the landscape and represent the remnant of a dispersed artefact scatter (open campsite), the simple loss or random discard of artefacts or anthropogenic and natural processes.

#### *Stone artefact scatters (open campsites)*

This type of site can range from as few as two stone artefacts to an extensive scatter containing a variety of tools and flaking debris, sometimes with associated materials such as bone, shell, ochre, charcoal and hearth stones. An artefact scatter does not necessarily mark a place where actual camping was carried out but may instead be the product of specialised and/or short-term activities involving some level of stoneworking or whilst in transit from one occupation area to another. Artefact scatters may occur as surface concentrations or indicate subsurface stratified deposits.

#### *Scarred Trees*

Given the cleared nature of the land scarred or modified trees are considered unlikely.

### *Location*

Artefacts in the wider area have been found on well-drained low-gradient footslope immediately adjacent to a swamp. Low crests or rises for instance, would have a high level of potential sensitivity. The potential location of artefacts within the study area is likely to be, if present, on a rise or bund overlooking the Lake or in the subsurface within 20m of the river in deposition areas. The study area is unlikely to contain subsurface artefacts.

### *Density*

Based on adjacent recorded average data, density of artefacts within the study area, will be low and generally in the order of less than 3 artefacts per hectare. However, where a concentrated occupation site occurred numerous artefacts possibly into the thousands can be revealed (Davies 2006). The study area does not contain attributes that suggest the likelihood of revealing artefacts.

## **4.9 Landscape Significance Assessment**

It is important to stress that the significance of a cultural landscape is not dependent on archaeological evidence being significant in itself but the interrelatedness of the individual objects to the cultural landscape as a whole. Through understanding the cultural landscape in an holistic manner, one may be able to appreciate the associations that may exist between Aboriginal objects and other features within the landscape.

Using the criteria outlined earlier the significance of the study area in an Aboriginal cultural heritage context can be assessed as follows:

- *Social value*

Much of the oral tradition and knowledge has been lost to the Aboriginal communities today. However, as research and surveys discover and reveal greater understanding of the past, communities are rediscovering and appreciating what has gone before. At the present time, there does not appear to be spiritual, traditional, historical or contemporary associations and attachments which the place or area has for the present-day Aboriginal community. Similarly, there does not appear to be associations with tragic or warmly remembered experiences, periods or events.

- *Historic value*

At this time, there does not appear to be an association of the study area with a person, event, phase or activity of importance to the history of the Aboriginal community.

- *Scientific value*

Technically, there is **NO** scientific value to the study area as the land is disturbed and visibility nil.

- *Aesthetic value*

The sensory, scenic, and creative milieu of various parts of the landscape does not evoke feelings of a sense of place and its past use, or any special or unusual use.

### **Comment**

Aboriginal Heritage is centred on the fringes of Lake Macquarie itself and the ocean, and transport and resource areas in between. The study area is part of an occasional transient use

of the wider landscape. Whilst all landscapes are of significance to Aboriginal people there are no known areas of archaeological significance within the study area.

#### **4.10 Aboriginal Occupation Assessment**

Roberts, 2009 formulated 7 key principles to determine probable Aboriginal land use of a particular area.

Using those principles, it is possible to place the study area into Aboriginal occupation context and use.

1. Proximity to water

*There is no permanent water on site. Jewells swamp would be the closet location of likely freshwater.*

2. Food resource

*The study area does not appear to contain any unusual favourable, seasonal or special food resources. However, Jewells swamp would have been a not too distant resource.*

3. Geological features

*There are no unusual, unique or prominent geological attributes within or adjacent to the study area.*

4. Ease of access

*The study area is easily accessible on foot for all age groups*

5. Connectivity

*The study area is linked to significant landscape features of other areas by a Songtrail from Jewells Swamp to the coast.*

6. Safety

*The study area is not extremely dangerous or close to dangerous or unhealthy landscapes. However, floodplain footslopes were not favoured camping areas because of insects and wind driven dampness. There does not appear to be natural protection from harsh and extreme weather. There is no particular view.*

7. Archaeological evidence

*Only 9 Objects identified within 1km of the study area. This is perhaps due to both the lack of surveys in the immediate area and an indication of less intensive use of the Area outside of the lake foreshore and the ocean. The information from AHIMS cannot be relied upon to reach any definitive conclusion regarding archaeological potential of the study area.*

#### **Comment**

The information from the above 7 principles indicates:

The study area was not intensively occupied by the Aboriginal community. Food and other practical resources were available at Jewells Swamp and there were no access constraints. However, there are no indications that any of the study area was intensively or extensively used on a permanent basis. The low density of archaeological evidence suggests occasional use. The landscape and archaeological evidence not too distant from the study area indicate more favourable areas for permanent, occasional and more intensive camping. There does not appear to be any landscape attributes that would suggest more than occasional use.

## 5.0 Recommendations (Steps 5 and 6)

After reviewing the landscape attributes of the study area, Aboriginal occupation patterns and the likelihood observing Aboriginal objects, and more importantly accepting the views of the Aboriginal people of the area, it is reasonably concluded that proposal can proceed without the need for further assessment post gateway, subject to the following recommendations:

1. That the consent authority advises the proponent that any consent for construction does not give approval to harm an Aboriginal object. Under the NPW Act 1974, it is the responsibility of all persons to ensure that harm does not occur to an Aboriginal object. If human skeletal remains are found during the activity, work must stop immediately, the area secured to prevent unauthorised access and the NSW Police and OEH contacted. The NPW Act requires that, if a person finds an Aboriginal object on land and the object is not already recorded on AHIMS, they are legally bound under s.89A of the NPW Act to notify OEH as soon as possible of the object's location. This requirement applies to all people and to all situations.
2. A Cultural Education Program should be developed by the proponent for the induction of personnel involved in the construction activities in the project area. The proponent has a duty of care to ensure each worker is aware of individual responsibilities under the Act. The Local Aboriginal Land Council may be able to assist in delivery of such induction.
3. Management protocols should be developed that detail the measures to be taken in the event that Aboriginal objects of significance or a nature not anticipated, such as burials or ceremonial items are discovered during the course of works on the development site. Appendix B has suggested flowcharts.

## 6.0 Certification

This preliminary Aboriginal heritage assessment was prepared in accordance with the brief given by JW Planning to assess of the impact of the proposed rezoning on Aboriginal heritage and was undertaken to consider and assess Aboriginal cultural heritage values.

To the best of our knowledge the report accurately reflects the site survey, findings and results. Whilst every care has been taken in compiling this report to determine the impact the proposal may have on Aboriginal Heritage and to demonstrate a due diligence process, MCAS can neither, warrant or guarantee that due diligence has been met. It is the responsibility of the individual or proponent to ensure that they have undertaken due diligence.

**Signed**

  
(Archaeologist)

10/11/2020



## 7.0 References

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## **(Maps)**

### **Memory map**

Topographical Map NSW 25k East. Copyright © 2009 Memory Map Inc.

## **Aboriginal Australia**

Source: *Aboriginal Australia* by David R. Horton. Names and regions as used by D. Horton in his book "The Encyclopaedia of Aboriginal Australia" published in 1994 by Aboriginal Studies Press for the Australian Institute of Aboriginal and Torres Strait Islander Studies.

## 8.0 Glossary

### Aboriginal Site

#### I. Occupation Sites

Evidence of human occupation, which includes food remains, stone tools, baked clay, fire-blackened and fire-cracked stones and charcoal, is found in a range of sites known collectively as occupation sites

- *Shell middens.* These sites are found on the coastline and along the edges of rivers and lakes. It is a deposit composed of the remains of edible shellfish and also usually contains fish and animal bones, stone tools and campfire charcoal.
- *Rock shelters with archaeological deposit.* In rock outcrops such as sandstone and granite, overhangs sometimes form creating useable shelters. Sediment from fires, roof fall, discarded stone tools and food remains form a deposit protected within the shelter and this deposit can be excavated by archaeologists to study patterns of Aboriginal life.
- *Open campsites.* These sites are mostly surface and associated subsurface scatters of stone artefacts, sometimes with fireplaces. They exist throughout the landscape and are the most common site type in rural areas, while found in all environmental locations larger and denser sites tend to be found on riverbanks and lower slopes racing watercourses, as well as ridgelines and other areas that offers movement routes. The study of open sites can assist in understanding patterns of Aboriginal land use.
- *Base camp.* This is the name applied to the major or main area of habitation. They tended to be close to a permanent water source and food source. Generally, well sheltered. These camps would be rotated for hygiene reasons. They are different to smaller open campsites, which were mainly camps on transport routes or overnight areas on hunting forays.

#### 2. Aboriginal Reserves and Missions

These places are very important to Aboriginal people today. Although Aboriginal people were often moved to reserves by force and were restricted by harsh regulations, the reserves became home to many people, where they and their families were born, lived and died. Historic cemeteries at many reserves are still cared for by the local Aboriginal community.

#### 3. Rock Paintings

Aboriginal paintings are found on the ceilings and walls of rockshelters, which occur wherever suitable rock surfaces and outcrops, exist. Figures include humans, kangaroos, emus, echidnas, grid patterns, animal tracks, boomerangs, axes, hand stencils and other motifs. Paintings are made with white, red, yellow and black pigments. The motifs may be drawn, painted or stencilled, and charcoal drawings are common as well.

#### 4. Rock Engravings

These occur usually where there is a suitable exposure of fairly flat, soft rock or in rock overhangs. The outlines of motifs were made by hitting the rock surface with a sharp stone to make small holes or pits. Sometimes the pits were jointed to form a groove, by rubbing with a stone. People, animal shapes and tracks are common as well as non-figurative designs such as circles.

## 5. Grinding Grooves

Grooves are located on flat rock exposures close to a stream or rock hole. They vary in size but are generally long (about 30-40cm in length) and elliptical in shape. Stone axes were ground into the softer stone allowing a working edge to be created or sharpened- Deeper grooves may have been used to work spears or other thin implements.

## 6. Quarries

Quarry sites occur wherever there are outcrops of siliceous or igneous rock. Stone material was used in creating stone tools, which in turn were used to work wood and provide people with tools to assist in hunting and gathering activities. Siliceous rock is easily flaked and made useful cutting and scraping tools whereas igneous rock was preferred for edge-ground tools, particularly axes.

## 7. Ceremonial grounds

These sites were used for initiation ceremonies, marriages, tribal meetings and other important functions and are of great significance to Aboriginal people. Bora rings, which are one or more raised earth rings, were used for male initiations.

## 8. Stone arrangements

These range from simple stone mounds to complex circles and pathways. Arrangements are found throughout inland New South Wales as well as the coast, where fish traps were sometimes constructed.

## 9. Carved and scarred trees

Tree bark was used for constructing canoes, shelters, coolamons and shields. Distinctive scars are left from bark removal and can usually be differentiated from natural scars. Carved trees are more distinctive, exhibiting patterns etched into the wood of the tree. They can occur throughout the state although clearing and forestry practices have greatly reduced numbers.

A range of diagnostic criteria has been developed to assist in the identification of Aboriginal scarred trees. The following criteria are based on archaeological work conducted by Simmons (1977) and Beesley (1989) It should be noted that these criteria have never been quantitatively tested or quantified using non-relative criteria such as absolute dating or an analysis of pre-occluded scar morphologies. This is because radiocarbon dating or dendrochronology is mostly inconclusive, and the removal of regrowth exposes trees to further damage.

1. **The scar does not normally run to ground level:** (scars resulting from fire, fungal attack or lightning nearly always reach ground level). However, ground termination does not necessarily discount an Aboriginal Origin (some ethno-historic examples of canoe scars reach the ground).
1. (A). **If a scar extends to the ground, the sides of the original scar must be relatively parallel:** (natural scars tend to be triangular in shape):
2. **The scar is either approximately parallel sided or concave, and symmetrical:** (few natural scars are likely to have these properties except fire scars which may be symmetrical but are wider at the base than their apex. Surveyors marks are typically triangular and often adzed).
3. **The scar should be reasonably regular in outline and regrowth:** scars of natural origin tend to have irregular outlines and may have uneven regrowth:
4. **The ends of the scar should be shaped, either squared off, or pointed** (often as a result of regrowth): (a 'keyhole' profile with a 'tail' is suggestive of branch loss).
5. **A scar which contains adze or axe marks** on the original scar surface is likely to be the result of human scarring. Their morphology and distribution may lend support to an interpretation of an Aboriginal origin: (marks produced after the scarring event may need to be discounted):



6. **The tree must date to the time of Aboriginal bark exploitation within its region:** (an age of *at least* 100 years is prerequisite)
7. **The tree must be endemic to the region:** (and thus exclude historic plantings).

Field based identification of Aboriginal scars is based on surface evidence only and will not necessarily provide a definitive classification. In many cases the possibility of a natural origin cannot be ruled out, despite the presence or several diagnostic criteria or the balance or interpretation leaning toward an Aboriginal origin. For this reason, interpretations of an Aboriginal origin are qualified by the recorder's degree of certainty. The following categories are used

**Definite Aboriginal scar** - This is a scar that conforms to all of the criteria and/or has in addition a feature or characteristic that provides definitive identification, such as diagnostic axe or adze marks or an historical identification. All conceivable natural causes of the scar can be reliably discounted.

**Aboriginal origin is most likely** - This is a scar that conforms to all of the criteria and where a natural origin is considered unlikely and improbable.

**Probable Aboriginal scar** - this is a scar that conforms to all of the criteria and where an Aboriginal origin is considered to be the most likely. Despite this, a natural origin cannot be ruled out.

**Possible Aboriginal scar** - This is a scar which conforms to all or most of the criteria and where an Aboriginal origin cannot be reliably considered as more likely than alternative natural causes. The characteristics of this scar will also be consistent with a natural cause.

## 10. Burials

Aborigines feel equally as respectful about prehistoric burials as modern cemeteries. As Aborigines have lived in Australia for over 30 000 years burials are seen as part of a continuing culture and tradition as well as offering valuable archaeological information. The dead were sometimes cremated, sometimes placed in trees or rock ledges and sometimes buried. Burials exist throughout New South Wales and can be accidentally uncovered in construction work or become exposed through erosion. It is important that if a skeleton is found it be reported to the police, to a representative of the National Parks and Wildlife Service and to the relevant Aboriginal community group.

## II. Natural sacred sites

Many features of the landscape, such as mountains, rocks, waterholes etc., are regarded as sacred sites by Aborigines. They are places associated with Dreamtime ancestors and usually can only be identified by Aboriginal people. They retain a high significance to Aborigines.

### Fire- stick Farming

The process of burning to aid in hunting. Animals could be speared or clubbed as they fled to escape the flames. Other uses of fire were for long term hunting strategies. After firing, the bush would regenerate attracting animals on which the hunters would prey. (Flood, p250)

**Flake** fragment of stone that was used as a tool for weapons, scrapers etc.

## Geographical

**AHD (Australian Height Datum)** Australian standard measurement from the mean high sea level.

**Swamp.** An almost level, closed, or almost closed depression with a seasonal or permanent water table at or above the surface, commonly aggraded by overbank stream flow (Speight 1990: 33).

## Legal

**Activity** means a project, development, activity or work (i.e., this term is used in its ordinary way, and does not just refer to an activity as defined by Part 5 EP&A Act)

**Disturbed land** or land already disturbed by previous activity Land that has been previously subjected to any activity that has resulted in clear and observable changes to the land's surface. Examples include soil that has been ploughed; urban development that has occurred; existing rural infrastructure such as dams and fences; existing roads, trails and walking tracks; and other existing infrastructure such as pipelines, transmission lines and stormwater drainage.

**Due diligence** Taking reasonable and practicable steps to avoid harm and protect Aboriginal objects.

**harm** an object or place includes any act or omission that:

- (a) destroys, defaces or damages the object or place, or
- (b) in relation to an object—moves the object from the land on which it had been situated, or
- (c) is specified by the regulations, or
- (d) causes or permits the object or place to be harmed in a manner referred to in paragraph (a), (b) or (c),

but does not include any act or omission that:

- (e) desecrates the object or place, or
- (f) is trivial or negligible, or
- (g) is excluded from this definition by the regulations.

**Sand Dune** Refers to sand ridges and sand hills formed by the wind, usually found in desert regions, near a lake or in coastal areas. In areas of Western NSW, windblown dunes can occur along the eastern edges of ephemeral lakes (called lunettes dunes). They can also occur along the banks of rivers.

**Waters** means the whole or any part of any river, stream, lake, lagoon, swamp, wetlands, natural watercourse, tidal waters (including the sea). Note: the boundary or tidal waters is defined as the high-water mark. <sup>2</sup>

## 9.0 Appendix

- (A) AHIMS Results
- (B) Consultation Log
- (C) Unexpected Finds Management Protocols

## APPENDIX A



Susan Roberts

Date: 01 November 2020

6783 Pacific Highway 6783 Pacific Highway  
Tea Gardens New South Wales 2324

Attention: Susan Roberts

Email: sue@tallpines.net.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 100, DP:DP717604 with a Buffer of 1000 meters, conducted by Susan Roberts on 01 November 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

9	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

**If your search shows Aboriginal sites or places what should you do?**

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(http://www.nsw.gov.au/gazette\)](http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

**Important information about your AHIMS search**

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



Susan Roberts

Date: 01 November 2020

6783 Pacific Highway 6783 Pacific Highway  
Tea Gardens New South Wales 2324

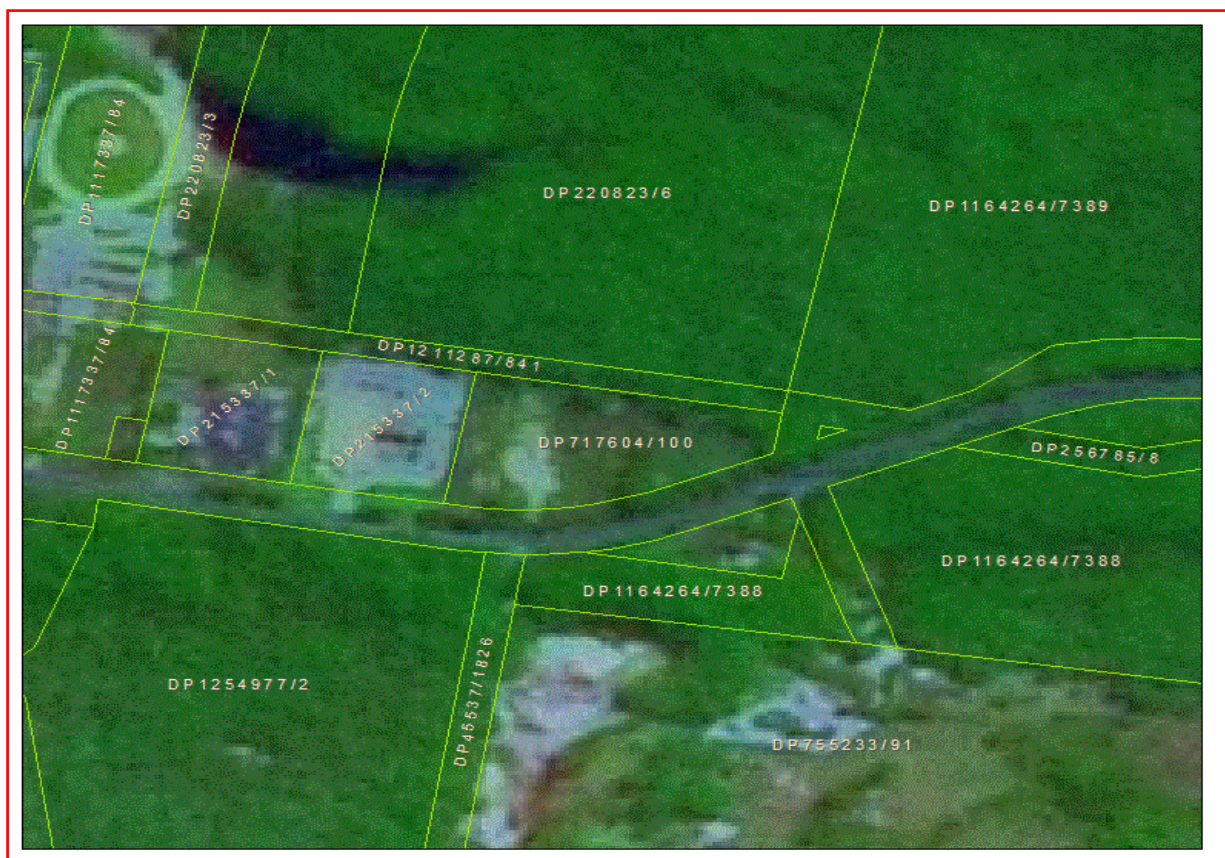
Attention: Susan Roberts

Email: sue@tallpines.net.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 100, DP:DP717604 with a Buffer of 200 meters, conducted by Susan Roberts on 01 November 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

1	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

**If your search shows Aboriginal sites or places what should you do?**

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(http://www.nsw.gov.au/gazette\)](http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

**Important information about your AHIMS search**

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



Susan Roberts

Date: 01 November 2020

6783 Pacific Highway 6783 Pacific Highway  
Tea Gardens New South Wales 2324

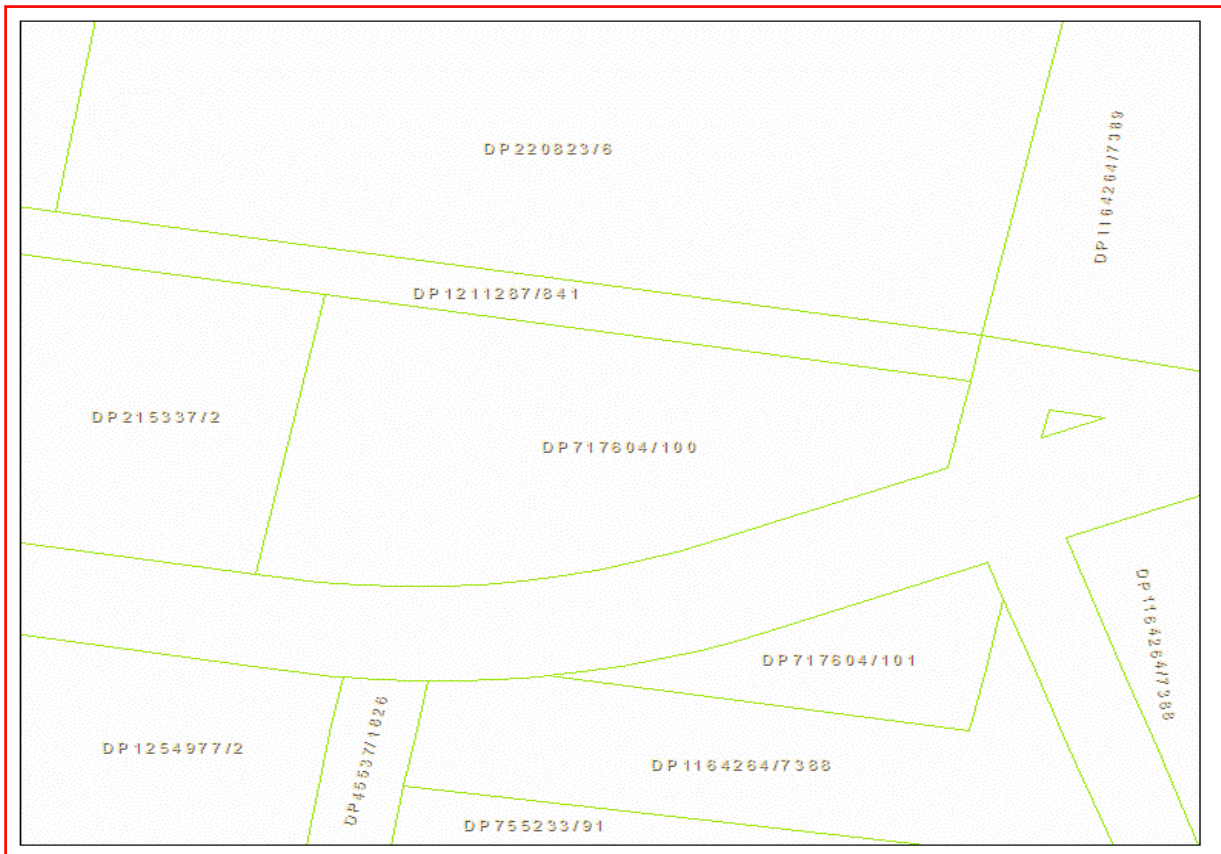
Attention: Susan Roberts

Email: sue@tallpines.net.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 100, DP:DP717604 with a Buffer of 50 meters, conducted by Susan Roberts on 01 November 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

**If your search shows Aboriginal sites or places what should you do?**

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(http://www.nsw.gov.au/gazette\)](http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

**Important information about your AHIMS search**

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

## APPENDIX B

## Consultation

### Consultation Log

16/5/2022 1pm phoned Awabakal Local Aboriginal Land Council 49654532 left message

25/5/2022 2:11pm phoned Awabakal Local Aboriginal Land Council 49654532 left message

25/5/2022 5:13 pm sent email seeking comment on report.

16/06/2022 No response to email, so follow up phone call 9:57 am. Left Message

16/06/2022 Received call from Teresa Barbanti (0439 223 557) responding to my message. Asked me to send through copy of my original email. Sent copy

20/06/2022 Received email from Teresa advising CEO will be in on 23<sup>rd</sup>. response sent return email

22/06/2022 Phone call from Teresa (0439 223 557) advising CEO will be in next week and will read through report and get back to me if considered necessary.

---

**Len Roberts**

---

**From:** Len Roberts <len@tallpines.net.au>  
**Sent:** Monday, 20 June 2022 9:30 AM  
**To:** 'Business Support'  
**Subject:** RE: Gateshead

Thanks Teresa, much appreciated. Len

---

**From:** Business Support <businesssupport@awabakallalc.com.au>  
**Sent:** Monday, 20 June 2022 9:23 AM  
**To:** Len Roberts <len@tallpines.net.au>  
**Cc:** 'Jason Wasiak' <jason@jwplanning.com.au>  
**Subject:** RE: Gateshead

Hi Len

Our Acting CEO is back on the 23<sup>rd</sup>. Ill forward your email to her.

Kind regards



**Teresa Barbanti**  
**Business Support Officer**  
Awabakal Local Aboriginal Land Council

---

**P** 02 4965 4532 **M** 0439 223 557 **W** [www.awabakallalc.com.au](http://www.awabakallalc.com.au)  
**E** [businesssupport@awabakallalc.com.au](mailto:businesssupport@awabakallalc.com.au)  
**A** PO Box 101 Islington NSW 2287

I acknowledge and pay my respects to the traditional owners and custodians of the land on which I live and work, to their continuing connection to land, water, culture and community and pay respects to Elders past, present and to our future generations.

---

**From:** Len Roberts <[len@tallpines.net.au](mailto:len@tallpines.net.au)>  
**Sent:** Thursday, 16 June 2022 1:34 PM  
**To:** Business Support <[businesssupport@awabakallalc.com.au](mailto:businesssupport@awabakallalc.com.au)>  
**Cc:** 'Jason Wasiak' <[jason@jwplanning.com.au](mailto:jason@jwplanning.com.au)>  
**Subject:** FW: Gateshead

---

**From:** Len Roberts <[len@tallpines.net.au](mailto:len@tallpines.net.au)>  
**Sent:** Thursday, 16 June 2022 12:36 PM  
**To:** 'Businesssupport@awabakal.com.au' <[Businesssupport@awabakal.com.au](mailto:Businesssupport@awabakal.com.au)>  
**Cc:** 'Jason Wasiak' <[jason@jwplanning.com.au](mailto:jason@jwplanning.com.au)>  
**Subject:** FW: Gateshead

Thanks for the call back, greatly appreciated.  
All the best, Len

---

**From:** [len@myallcoast.net.au](mailto:len@myallcoast.net.au) <[len@myallcoast.net.au](mailto:len@myallcoast.net.au)>  
**Sent:** Wednesday, 25 May 2022 5:13 PM



**To:** 'reception@awabakallalc.com.au' <[reception@awabakallalc.com.au](mailto:reception@awabakallalc.com.au)>

**Subject:** Gateshead

Hi my name is Len Roberts, I am an archaeologist who did an assessment of an industrial site at Oakdale Road, Gateshead, during covid.

As it was not possible to make contact then and as I have tried to make contact over the past few weeks but with no success, I have attached the report for your comment. The land is heavily disturbed.

I can be contacted on 0403071922.

All the best,  
Len

## APPENDIX C

# SCHEDULE of PROTOCOLS

**Procedures for new sites, relics and human remains**

# FLOWCHART 1 – PROCEDURE FOR UNRECORDED ABORIGINAL OBJECTS

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During the course of construction an Aboriginal Object or possible Aboriginal Object is identified work in the immediate vicinity is stopped and the Aboriginal Heritage Adviser (AHA) notified



The AHA determines whether object is Aboriginal. If not work continues. If it is, the AHA appoints a recorder to cordon off the object



Before the recorder picks up any artefact, the position of each potential artefact to be observed or recorded must be marked with a stake, flag, nail or similar, by the recorder.

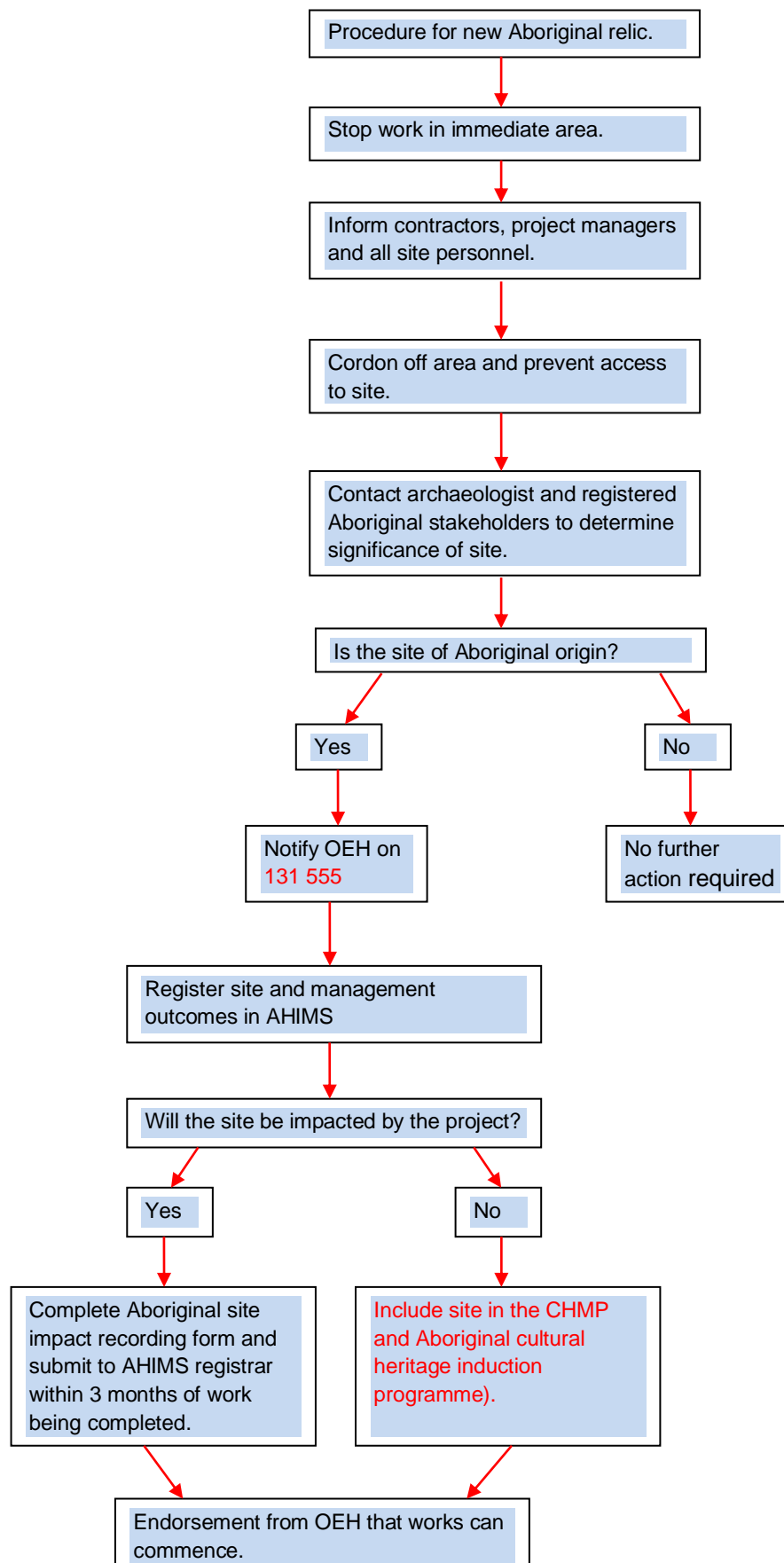


Once their positions are marked, each artefact may then be picked up and recorded (attributes, measurements, photography or drawing) before replacing in the exact same spot.



Notify OEH  
And follow their advice

## FLOWCHART 2 – PROCEDURE FOR ABORIGINAL RELICS





## FLOWCHART 3 – PROCEDURE FOR HUMAN REMAINS

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