



# South Kiama Planning Proposal: Aboriginal Cultural Heritage Assessment

FINAL REPORT

Prepared for Unicomb Development Services Pty Ltd on behalf of White  
Constructions Pty Ltd

18 December 2020

## Biosis offices

### NEW SOUTH WALES

#### Albury

Phone: (02) 6069 9200  
Email: [albury@biosis.com.au](mailto:albury@biosis.com.au)

#### Newcastle

Phone: (02) 4911 4040  
Email: [newcastle@biosis.com.au](mailto:newcastle@biosis.com.au)

#### Sydney

Phone: (02) 9101 8700  
Email: [sydney@biosis.com.au](mailto:sydney@biosis.com.au)

#### Western Sydney

Phone: (02) 9101 8700  
Email: [sydney@biosis.com.au](mailto:sydney@biosis.com.au)

#### Wollongong

Phone: (02) 4201 1090  
Email: [wollongong@biosis.com.au](mailto:wollongong@biosis.com.au)

### VICTORIA

#### Ballarat

Phone: (03) 5304 4250  
Email: [ballarat@biosis.com.au](mailto:ballarat@biosis.com.au)

#### Melbourne

Phone: (03) 8686 4800  
Email: [melbourne@biosis.com.au](mailto:melbourne@biosis.com.au)

#### Wangaratta

Phone: (03) 5718 6900  
Email: [wangaratta@biosis.com.au](mailto:wangaratta@biosis.com.au)

## Document information

<b>Report to:</b>	Unicomb Development Services Pty Ltd on behalf of White Constructions Pty Ltd
<b>Prepared by:</b>	Anthea Vella Maggie Butcher Matthew Tetlaw
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- Mathew Smith – assistance in the field
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- Lauren Harley - mapping

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## Glossary

<b>ACHA</b>	Aboriginal Cultural Heritage Assessment
<b>ADDA</b>	Aboriginal Due Diligence Assessment
<b>AHIMS</b>	Aboriginal Heritage Information Management System
<b>AHIP</b>	Aboriginal Heritage Impact Permit
<b>AR</b>	Archaeological report
<b>Biosis</b>	Biosis Pty Ltd
<b>CHMP</b>	Cultural Heritage Management Plan
<b>Consultation requirements</b>	<i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> (DECCW 2010a)
<b>DA</b>	Determining Authority
<b>DECCW</b>	Department of Environment, Climate Change and Water (now Heritage NSW)
<b>DP</b>	Deposited Plan
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>GPS</b>	Global Positioning System
<b>GSV</b>	Ground Surface Visibility
<b>Heritage Act</b>	<i>Heritage Act 1977</i>
<b>Heritage NSW</b>	Department of Premier and Cabinet (DPC)
<b>ICOMOS</b>	International Council on Monuments and Sites
<b>LALC</b>	Local Aboriginal Land Council
<b>LEP</b>	Local Environmental Plan
<b>LGA</b>	Local Government Area
<b>MGA</b>	Map Grid of Australia
<b>NNTT</b>	National Native Title Tribunal
<b>NPW Act</b>	<i>National Parks and Wildlife Act 1974</i>
<b>NPWS</b>	National Parks and Wildlife Service
<b>NSW</b>	New South Wales
<b>NTSCORP</b>	Native Title Services Corporation
<b>PAD</b>	Potential Archaeological Deposit
<b>RAPs</b>	Registered Aboriginal Parties
<b>Study area</b>	Defined as Lot 1 DP707300, Lot 5 DP740252 Lot 101 DP1077617, Lot 102 DP 1077617 and Lot 8 DP 258605
<b>the Code</b>	<i>Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW</i> (DECCW 2010)

## Summary

Biosis Pty Ltd (Biosis) was commissioned by Unicomb Development Services Pty Ltd on behalf of White Constructions Pty Ltd to undertake an Aboriginal Cultural Heritage Assessment (ACHA) of a planning proposal for an announced re-zoning in South Kiama NSW (the study area). The study area includes Lot 1 Deposited Plan (DP) 707300, Lot 5 DP 740252 Lot 101 DP 1077617, Lot 102 DP 1077617 and Lot 8 DP 258605 is approximately 2 kilometres south of Kiama, and approximately 37 kilometres south of the Wollongong central business district.

Kiama Municipal Council is the Determining Authority and will assess the development application (DA) and all supporting documents, including the ACHA and attached Archaeological Report (AR). This will aid in the determination of the re-zoning and establish the constraints the proposed subdivision may have. A Master Plan has been developed of this subdivision, however it may be subject to change.

### Consultation

The Aboriginal community was consulted regarding the heritage management of the project throughout its lifespan. Consultation has been undertaken as per the process outlined in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a) (consultation requirements). The appropriate government bodies were notified and advertisements placed in the Illawarra Mercury newspapers (17 July 2020), which resulted in the following Aboriginal organisations registering their interest (Table 1):

**Table 1 List of registered Aboriginal parties and group contact**

No.	Organisation	Contact person
1	Guunamaa Dreamin Sites and Surveying	Richard Campbell
2	Gumaraa	Jodie Edwards
3	Warra Bingi Nunda Gurri	Nathanial Kennedy
4	Barraby Cultural Services	Lee Field
5	Yurrandaali Cultural Services	Bo Field
6	Individual	Leanne Tungai
7	Yerramurra	Blaan Davies
8	Individual	James Davis
9	Individual	Clive Freeman
10	Woronora Plateau Gundungara Elders Council	Kayla Williamson
11	Murra Bidgee Mullangari	Ryan and Darleen Johnson
12	Individual	Gary Caines
13	South Coast People (Via NTSCorp)	Gwenda Jarrett
14	Tungai Tonghi	Troy Tungai
15	Three Ducks Dreaming Surveying and Consulting	Leonard Wright
16	Illawarra Local Aboriginal Land Council	Paul Knight

A search conducted by the Office of the Registrar, *Aboriginal Land Rights Act 1983* listed no Aboriginal Owners with land within the study area. A search conducted by the National Native Title Tribunal (NNTT) listed one undetermined Registered Native Title Claim, Unregistered Claimant Applications or Registered Indigenous Land Use Agreements within the study area.

Upon registration, the Aboriginal parties were invited to provide their knowledge on the study area and on the proposal provided in methodology. No responses were given which described the cultural significance of the Kiama area at this stage. Responses from the Registered Aboriginal Parties (RAPs) are included in Appendix 3.

Site officers (Tracey [16] and James Davis [8]) from elected RAPs who participated in the field investigations provided comment on the study area with regard to the proposal. The study area was said to be beneficial to Aboriginal people, especially on the crest and slope landforms beside Munna Munnora Creek.

The outcome of the consultation process was that the RAPs considered the study area to have a moderate level of cultural significance, although that significance was not clearly defined and specific examples were not provided. The results of the consultation process are included in this document.

The recommendations that resulted from the consultation process are provided below.

## Results

The ACHA assessment undertook background research for the proposed study area. Key considerations arising from the background research include:

- A search of the Aboriginal Heritage Information Management System (AHIMS) register identified no previously recorded Aboriginal heritage sites within the study area.
- A review of previous archaeological studies within the vicinity of the study area have identified that Aboriginal artefact sites and potential archaeological deposits (PADs) are the most common site types in the region, and silcrete is the dominant raw material type.

There are 104 Aboriginal cultural heritage sites registered with the Aboriginal Heritage Information Management System (AHIMS) in a 16 kilometre vicinity of the study area. No AHIMS sites have been recorded within the study area.

Biosis undertook a field investigation and sub-surface test excavations which identified four Aboriginal heritage sites within the study area (Table 2). These sites were low density artefact scatters within identified areas of PAD from the field survey, and from two areas considered to have low archaeological potential. As the current Master Plan may be subject to change, it is unknown at this stage what harm the proposed development will have on these sites. Table 2 outlines the site details should the current Master Plan be implemented.

**Table 2 Site details**

Site name	Site type	Significance	Type of harm before mitigated	Consequence of unmitigated harm	Consequence of mitigated harm	Site specific recommendations
<b>South Kiama-01 (AHIMS #52-5-</b>	Sub-surface artefact deposit	Low	Direct	Total loss of value	TBC	Should be avoided. If unavoidable an AHIP should be applied for prior to construction; a Cultural



Site name	Site type	Significance	Type of harm before mitigated	Consequence of unmitigated harm	Consequence of mitigated harm	Site specific recommendations
0970)						Heritage Management Plan (CHMP) and stop works provision should be implemented during construction.
South Kiama-02 (AHIMS #52-5-0971)	Sub-surface artefact deposit	Low	Direct	Total loss of value	TBC	Should be avoided. If unavoidable an AHIP should be applied for prior to construction; a CHMP and stop works provision should be implemented during construction.
South Kiama-03 (AHIMS #52-5-0972)	Sub-surface artefact deposit	Low	None	None	TBC	Should be avoided. If unavoidable an AHIP should be applied for prior to construction; a CHMP and stop works provision should be implemented during construction.
South Kiama-04 (AHIMS #52-5-0973)	Sub-surface artefact deposit	Low	Direct	Total loss of value	TBC	Should be avoided. If unavoidable an AHIP should be applied for prior to construction; a CHMP and stop works provision should be implemented during construction.

## Management recommendations

Prior to any development impacts occurring within the study area, the following is recommended:

### Recommendation 1: Continued consultation with the registered Aboriginal parties

It is recommended that White Constructions Pty Ltd continue to inform the RAPs about the management of Aboriginal cultural heritage sites within the study area throughout the life of the project. This recommendation is in keeping with the consultation requirements.

### **Recommendation 2: Avoidance of Aboriginal sites and sensitive landforms**

Four Aboriginal sites were identified within the study area, South Kiama-01, South Kiama-02, South Kiama-03 and South Kiama-04. The lower slope and floodplain/flat landforms within the study area were also identified as having potential to contain very low density artefact scatters or isolated artefacts. Any potential works should avoid and/or minimise impacts to these sites, however in the instance they cannot be avoided, Recommendations 3 to 7 should be implemented.

### **Recommendation 3: Application for an Aboriginal Heritage Impact Permit (AHIP)**

If the Master Plan and subsequent development cannot avoid impacts to South Kiama-01, South Kiama-02, South Kiama-03 and South Kiama-04, and the lower slope and floodplain/flat landforms, it is recommended that the proponent apply to Heritage NSW, Department of Premier and Cabinet (DPC) (Heritage NSW) for an area wide Aboriginal Heritage Impact Permit (AHIP) to impact these sites, which are currently protected under the *National Parks and Wildlife Act 1974* (NPW Act). **The AHIP should be for a term of 10 years.** The sub-surface test excavations have confirmed the tested sites are of low scientific significance.

### **Recommendation 4: Curation of collected artefacts**

A total of 16 artefacts were excavated during the test excavation program. A long term management strategy of Aboriginal heritage items should be developed in consultation with RAPs and in accordance with Requirement 26 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010) (the Code). This may involve the reburial of artefacts within the study area at a location which will not be impacted on by the future development works. In the event an appropriate reburial location cannot be found, a care and control agreement should be determined in consultation with the RAPs to ensure all parties are satisfied as to the long term care of the Aboriginal artefacts.

### **Recommendation 5: Cultural Heritage Management Plan**

A Cultural Heritage Management Plan (CHMP) should also be prepared outlining requirements for management of existing sites and unexpected finds, site inductions and reporting processes during bulk earthworks and construction phases of development to ensure no Aboriginal sites are impacted during later stages of the project.

### **Recommendation 6: Stop work provision for any potential heritage sites identified during construction**

All Aboriginal places and objects are protected under the NPW Act. This protection extends to Aboriginal objects and places that have not been identified but might be unearthed during construction.

Historical archaeological sites are protected under the relic's provisions (s139 – 146) of the *Heritage Act 1977* (Heritage Act). Should any historical archaeological sites be identified during any phase of the proposed development, all works must cease in the vicinity of the find and the project archaeologist and White Constructions notified. Should the archaeological nature of the find be confirmed, Heritage NSW will require notification.

### **Recommendation 7: Stop work provision for any potential discovery of human remains**

If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately. The remains must be left in place and protected from harm or damage. The following contingency plan describes the immediate actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the study area must follow these steps:

1. Discovery: If suspected human remains are discovered all activity in the vicinity must stop to ensure minimal damage is caused to the remains; and the remains must be left in place, and protected from harm or damage.
2. Notification: Once suspected human skeletal remains have been found, the Coroner's Office and the NSW Police must be notified immediately. Following this, and if the human remains are likely to be Aboriginal in origin, the find will be reported to the Aboriginal parties and Heritage NSW. If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the heritage division of NSW will be notified of the find under S146 of the Heritage Act.

# 1 Introduction

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## 1.1 Project background

Biosis has been commissioned by Unicom Development Services Pty Ltd on behalf of White Constructions Pty Ltd to undertake an ACHA to support a Planning Proposal for a proposed re-zoning and subdivision of Lot 1 Deposited Plan (DP) 707300, Lot 5 DP 740252, part Lot 101 DP 1077617 part Lot 102 DP 1077617, Lot 8 DP 258605, part Lot 102 DP 1077617 and Lot 8 DP 258605, South Kiama, New South Wales (NSW) (Figure 1).

Biosis was originally engaged in 2017 to complete an Aboriginal Due Diligence Assessment (ADDA) for Lot 1 DP707300, Lot 5 DP740252, Lot 101 DP1077617 and part Lot 102 DP1077617. In 2020, Biosis was engaged to update the ADDA to include part Lot 102 DP 1077617 and Lot 8 DP 258605. The ADDA concluded that there are three areas of high archaeological potential to contain Aboriginal objects within sub-surface deposits, and as such recommended that an ACHA be prepared to support an AHIP application prior to any physical impacts occurring in these three areas.

This report details the investigation, consultation and assessment of Aboriginal cultural heritage undertaken for the study area. The AR in Appendix 6 details the findings of the archaeological investigations conducted as part of the ACHA. As required under Section 2.3 of the Code, the AR provides evidence about the material traces of Aboriginal land use to support the conclusions and management recommendations in the ACHA.

## 1.2 Study area

The study area includes Lot 1 DP707300, Lot 5 DP740252 Lot 101 DP1077617, Lot 102 DP 1077617 and Lot 8 DP 258605 (Figure 1). It is bounded by residential properties to the west. The study area also lies west of and abuts the Kiama Bypass. It is bounded to the north by Saddleback Mountain Road, to the south by Weir Street except for part of Lot 102 DP1077617 and Lot 8 DP 258605 which is south of Weir Street, and to the west by a dry stone wall. The study area is approximately two kilometres south of Kiama, and approximately 37 kilometres south of the Wollongong central business district.

The study area is within the:

- Kiama Local Government Area (LGA).
- Parish of Kiama.
- County of Camden (Figure 2).

## 1.3 Proposed development

White Constructions is preparing a planning proposal to rezone the study area from RU2 rural landscape to R2 low density residential (Figure 3). This assessment has been completed to guide a planning proposal to amend the *Kiama Local Environmental Plan 2011* (Kiama LEP) under Section 5 of the *Environmental Planning and Assessment Act 1979* NSW (EP&A Act).

## 1.4 Planning approvals

The proposed development will be assessed against Section 3.33 (formerly Section 55) of the EP&A Act. Other relevant legislation and planning instruments that will inform this assessment include:

- NPW Act.
- NSW *National Parks and Wildlife Amendment Act 2010*.
- Kiama LEP 2011.
- Kiama Development Control Plan 2012.

## 1.5 Restricted and confidential information

Appendix 1 in the AR contains AHIMS information which is confidential and not to be made public. This is clearly marked on the title page for the attachment.

## 1.6 Aboriginal cultural heritage

### 1.6.1 General description

According to Allen and O'Connell (2003), Aboriginal people have inhabited the Australian continent for the last 50,000 years. New evidence out of the Northern Territory has pushed this date back with the Malakanunja II rock shelter dated at around 65,000 years BP (before present) (Clarkson et al. 2017).

In NSW, according to Bowler et al. (2003), Aboriginal people have occupied the land for over 42,000 years. However, preliminary evidence presented by Biosis (2016) from a sub-surface testing program in south-western NSW suggests Aboriginal people may have occupied the semi-arid zone of the region for 50,000 years.

Without being part of the Aboriginal culture and the productions of this culture, it is not possible for non-Aboriginal people to fully understand the meaning of site, objects and places to Aboriginal people – only to move closer towards understanding this meaning with the help of the Aboriginal community. Similarly, definitions of Aboriginal culture and cultural heritage without this involvement constitute outsider interpretations.

With this preface Aboriginal cultural heritage broadly refers to things that relate to Aboriginal culture and hold cultural meaning and significance to Aboriginal people (DECCW 2010a, p.3). There is an understanding in Aboriginal culture that everything is interconnected. In essence Aboriginal cultural heritage can be viewed as potentially encompassing any part of the physical and/or mental landscape, that is, 'Country' (DECCW 2010a, p.iii).

Aboriginal people's interpretation of cultural value is based on their 'traditions, observance, lore, customs, beliefs and history' (DECCW 2010a, p.3). The things associated with Aboriginal cultural heritage are continually and actively being defined by Aboriginal people (DECCW 2010a, p.3). These things can be associated with traditional, historical or contemporary Aboriginal culture (DECCW 2010a, p.3).

### 1.6.2 Tangible Aboriginal cultural heritage

Three categories of tangible Aboriginal cultural heritage may be defined:

- Things that have been observably modified by Aboriginal people.
- Things that may have been modified by Aboriginal people but no discernible traces of that activity remain.
- Things never physically modified by Aboriginal people (but associated with Dreamtime Ancestors who shaped those things).

### 1.6.3 Intangible Aboriginal cultural heritage

Examples of intangible Aboriginal cultural heritage would include memories of stories and 'ways of doing', which would include language and ceremonies (DECCW 2010a, p.3).

### 1.6.4 Statutory

Currently Aboriginal cultural heritage, as statutorily defined by the NPW Act, consists of objects and places which are protected under Part 6 of the Act.

Aboriginal objects are defined as:

*any deposit, object or material evidence...relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains*

Aboriginal places are defined as a place that is or was of special Aboriginal cultural significance. Places are declared under section 84 of the NPW Act.

### 1.6.5 Values

Aboriginal cultural heritage is valued by Aboriginal people as it is used to define their identity as both individuals and as part of a group (DECCW 2010a, p.iii). More specifically it is used:

- To provide a:
  - 'Connection and sense of belonging to Country' (DECCW 2010a, p.iii).
  - Link between the present and the past (DECCW 2010a, p.iii).
- As a learning tool to teach Aboriginal culture to younger Aboriginal generations and the general public (DECCW 2010a, p.3).
- As further evidence of Aboriginal occupation prior to European settlement for people who do not understand the magnitude to which Aboriginal people occupied the continent (DECCW 2010a, p.3).



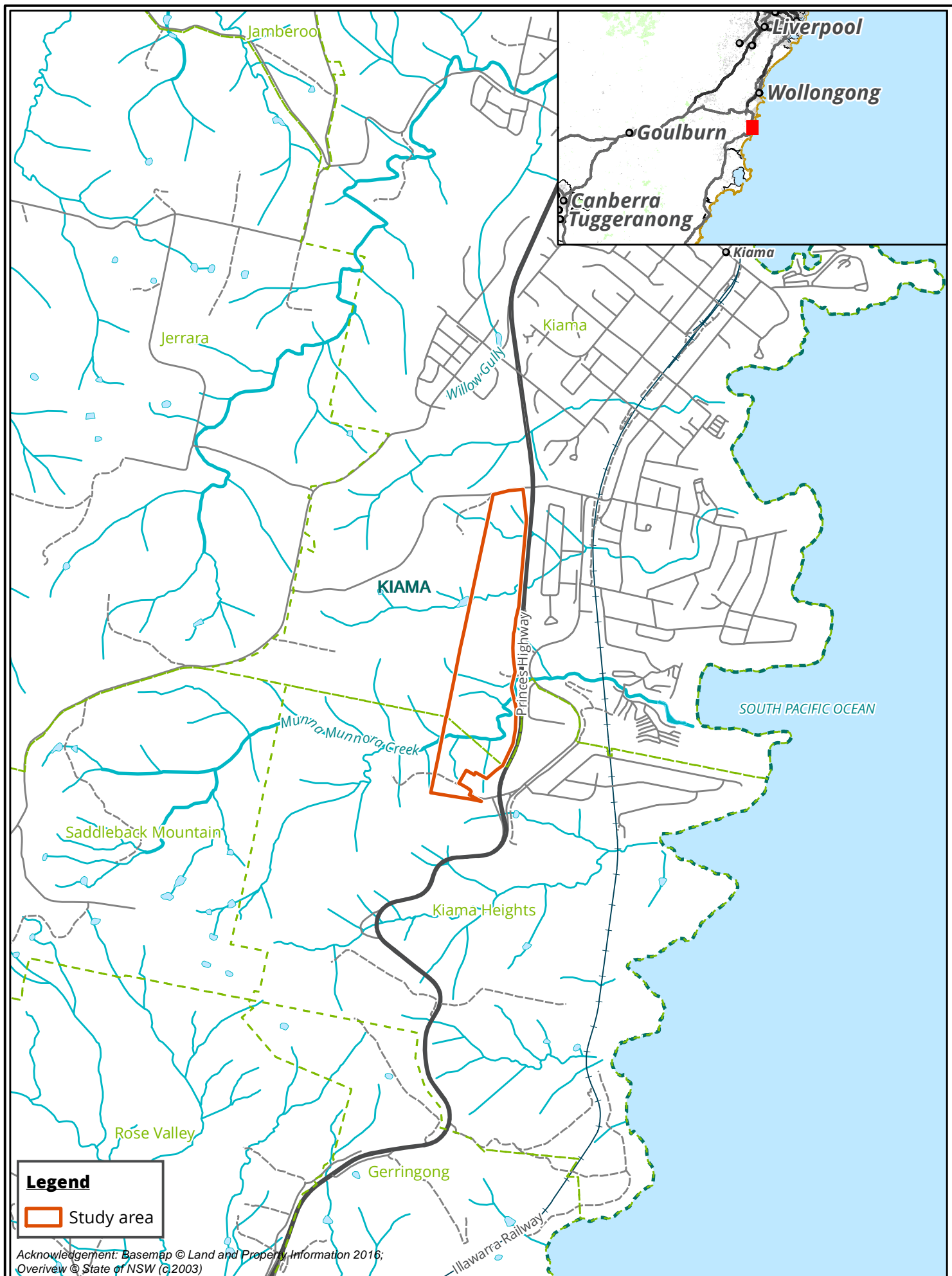


Figure 1 Location of the study area

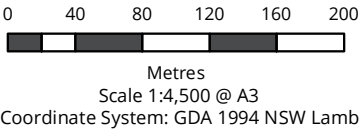




Figure 2 Study area detail

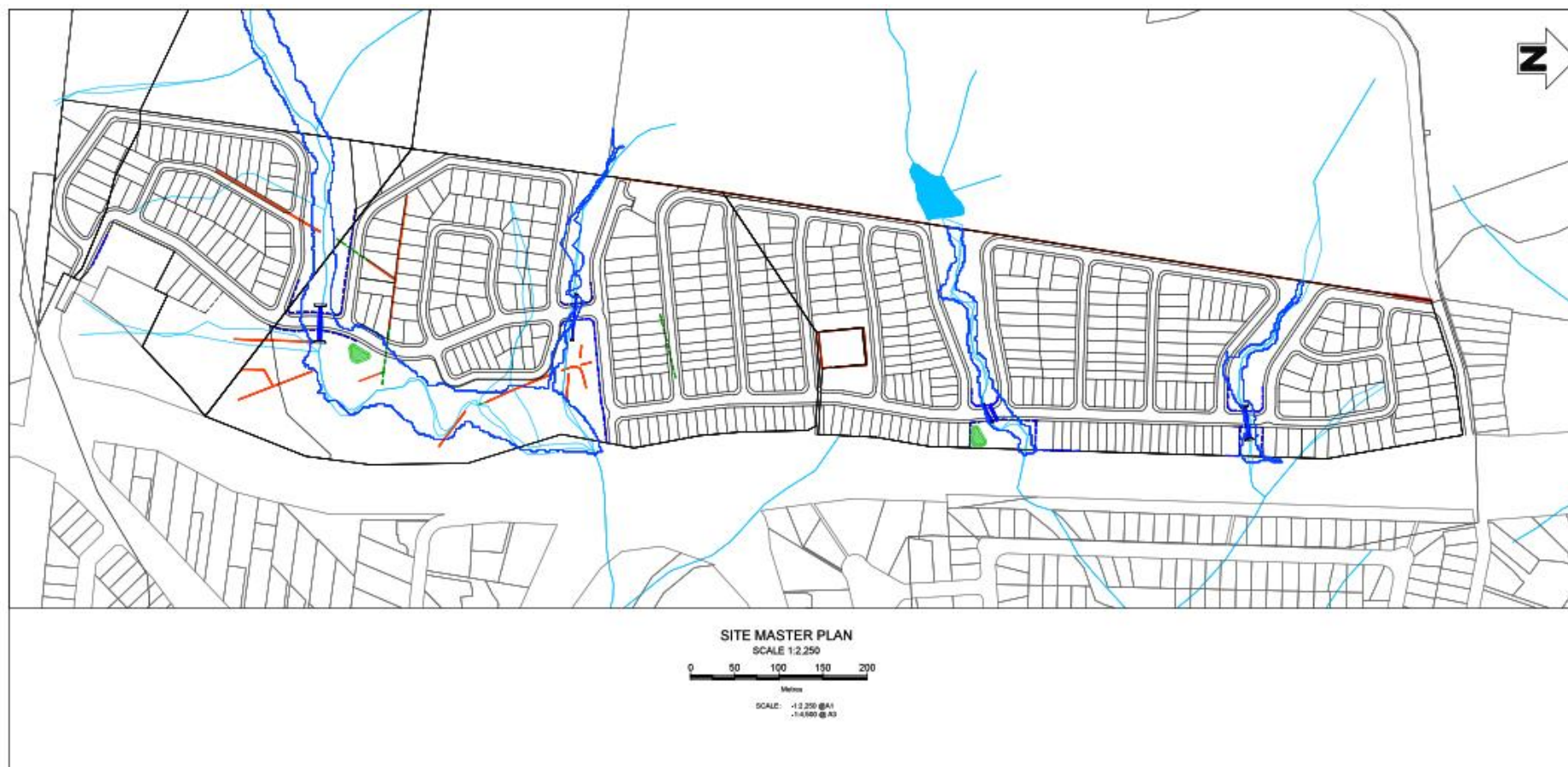


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**Figure 3 Current site Master Plan**



## 2 Study area context

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This section discusses the study area in regards to its landscape, environmental and Aboriginal cultural heritage context. This section should be read in conjunction with the AR attached in Appendix 6. The background research has been undertaken in accordance with the Code.

### 2.1 Topography and hydrology

The study area lies in the Wollongong Coastal Plain physiographic region. The Coastal Plain is situated between the ocean and the Illawarra Escarpment. The Coastal Plain is characterised as a mosaic of foothills, ridges, spurs, hillocks and floodplains. Slopes in this region vary from very gently inclined to steep with the occasional low cliff. The Coastal Plain is dissected by easterly flowing streams at intervals that become more frequent further north (Fuller 1982, p.18). A number of small, non-perennial streams cross the study area, as well as the perennial Munna Munnora Creek and four of its tributaries in the southern portion of the study area.

The geology of the study area consists of the Blowhole Latite Member, a late Permian aged, mid grey latite deriving from a basaltic lava flow of the Gerringong Volcanics (Hazelton 1992). The Blowhole Latite Member in turn overlies the volcanoclastic sandstone of the Kiama Sandstone Member (Hazelton 1992). Also contained within the study area is the Broughton Formation geological unit consisting of sandstone, interbedded siltstone, pebble conglomerate, shelly fossils and varying levels of bioturbation. The study area is also positioned atop the Bombo Latite Member, a volcanic formation, and alluvial fan deposits associated with Munna Munnora Creek in the centre of the study area and an unnamed tributary in the north. This deposit consists of quartz-lithic sand, silt, gravel and clay.

### 2.2 Soil landscapes

Soil landscapes have distinct morphological and topological characteristics that result in specific archaeological potential. Because they are defined by a combination of soils, topography, vegetation and weathering conditions, soil landscapes are essentially terrain units that provide a useful way to summarise archaeological potential and exposure. The study area is contained within two soil landscapes; the Kiama Soil Landscape covers majority of the study area, while the Wattamolla Road Soil Landscape is present within the far southern portion of the study area.

The Kiama Soil Landscape is an erosional soil landscape, characterised by rolling low hills with a relief of between 40 and 60 metres. Crests within this landscape are typically broad with long, moderately inclined convex slopes and gently inclined concave footslopes. Extensively scattered rock outcrops are present on upper slopes, and when coastal the landscape features steep coastal headlands with narrow rock platforms and occasional blowholes. The soils in the Kiama landscape are characterised by deep (>150 centimetres) Krasnozems on crests and upper slopes, with up to 50 centimetres of friable clay loam overlying weak and heavy clays (Hazelton 1992).

The Wattamolla Road Soil Landscape is also an erosional soil landscape, characterised by long, gently to moderately inclined sideslopes and undulating to rolling hills, with local relief greater than 200 metres. Broad flat benches and crests recur throughout the landscape, with slope gradients typically between 5 and 15%. Drainage lines are found to be incised with rock outcrop and scattered boulders, terracettes and slumping present on steeper slopes. Soils are moderately deep throughout the landscape, extending to a depth of

approximately 50-100 centimetres, with upper slopes and benches containing red podzolic soils and mid and lower slopes containing yellow podzolic soils (Hazelton 1992).

Since erosional soils are generally subject to movement, they typically result in poor preservation of the archaeological record, with sub-surface archaeological deposits unable to remain in situ.

## 2.3 Climate and rainfall

Climate data collected from the Kiama Bowling Club weather station (station number 068038), located approximately two kilometres north-east of the study area, recorded an average annual mean rainfall of 1248.2 millimetres. The highest average temperature recorded during summer months was 25.2 degrees Celsius and the lowest was 16.3 degrees Celsius. The highest average temperature recorded during winter months was 17.7 degrees Celsius and the lowest was 8.5 degrees Celsius (BOM 2020).

## 2.4 Landscape resources

The Coastal Plain of the Illawarra region provides a number of resources used by Aboriginal inhabitants. The geology of the region provides an abundant supply of raw materials. Many would have been available locally and also from trading with other groups (Donlon & Sefton 1988, pp. 23). Igneous material would have come from the south of the study area in areas like Gerringong (Donlon & Sefton 1988, pp. 55) due to its volcanic nature. Some of the other fine grain siliceous material may have come from the Cumberland Plain, to the north of the study area, including silcrete cobbles (McDonald 1992). Elsewhere on the Plain, the potential raw materials for stone artefact making include silicified wood, tuff, mudstone, quartz, quartzite and basalt. River gravels and cobbles containing silcrete, chert, and other fine grained volcanic rocks were also used (Attenbrow 2010). While previous archaeological work within the region has not identified any specific stone sources, the presence of the volcanic Dapto Latite Member in the region may have provided a suitable source of raw material, providing lithic material for stone axes. Resources would have been accessible in the outcrops of siltstone, shale and tuffaceous sandstones of the Berry Siltstone formation.

The wider Illawarra region has undergone extensive clearing, but continues to support stands of closed forest. Traditional stories tell of the arrival of the Dharawal people at the mouth of Lake Illawarra, bringing with them the Cabbage Tree Palm *Livistona australis*, hence their namesake (Wesson 2009, pp. 5). Prior to clearing the coastal plain supported grassy woodland, swamps, grasslands and swamps. This region also supported rainforests on the escarpment (Wesson 2009). The abundance of water and vegetation within the study area would have supported an array of floral and faunal species, many of which would have been utilised according to seasonal availability. Aboriginal inhabitants of the region would have had access to a wide range of avian, terrestrial and aquatic fauna and repeated firing of the vegetation would have opened up the foliage allowing ease of access through and between different resource zones.

The Wattamolla soil landscape has also been cleared although scatters of tall open-forest remain. Common species to this landscape include Rough-Barked Apple *Angophora floribunda*, Cabbage Gum *Eucalyptus amplifolia* Brown Barrel *E. fastigata*, Mountain Grey Gum *E. cyellocarpa*, Forest Red Gum *E. tereticornis*, isolated Scribbly Gum *E. racemosa* and Bangalay *E. botryoides*

Plant resources were used in a variety of ways. Fibres were twisted into string, which was used for many purposes, including the weaving of nets, baskets and fishing lines. String was also used for personal adornment. Bark was used in the provision of shelter; a large sheet of bark being propped against a stick to form a gunyah (Attenbrow 2010).

As well as being important food sources, animal products were also used for tool making and fashioning a myriad of utilitarian and ceremonial items. For example, tail sinews are known to have been used to make

fastening cord, while 'bone points', which would have functioned as awls or piercers, are often part of the archaeological record. Animals such as Brush-tailed Possums were highly prized for their fur, with possum skin cloaks worn fastened over one shoulder and under the other. Kangaroo teeth were incorporated into decorative items, such as head bands (Attenbrow 2010).

## **2.5 European land use history**

The study area has been subject to disturbances as a result of pastoral practices (clearing, cattle grazing) over the past 150 years. In addition to this, there have been a large number of dry stone walls constructed within the study area, and a historic cemetery (approximate location Photo 1) is present in the central portion of the site. Furthermore, there is scattered residential development in the southern portion of the study area.

The northern portion of the study area is located within a 500 acre grant initially issued to Andrew Byrne in 1825, which enclosed Burroul and Tanners Hill. Over the next two years, the property was acquired by James Wright in 1826, and then by Reverend Thomas Kendall in 1827. The Kiama parish map from 1897 shows this grant extending from the western boundary of the current study area to the coastline at Kaleula and Marsden Heads (Photo 1). The Kendalls were one of the most notable pioneer families in the Kiama region following their immigration, intermarrying with many other prominent families of the area. Kendall settled in Australia in 1825, where he took up a large land grant near Ulladulla prior to his acquisition of Wright's property (Binney et al. 2005, 23–28; Binney 1990).

The southern portion of the study area is located within a 1,000 acre grant issued to William Montague Manning in 1839 called Bonaira. This land was originally a promise grant to James Farmer in 1825 who did not take up the land (Lindsay 1994, pp. 34). In addition to Bonaira, Manning had acquired 1,200 acres in Mulgoa and 50 town allotments at Kiama (Rutledge 2020).

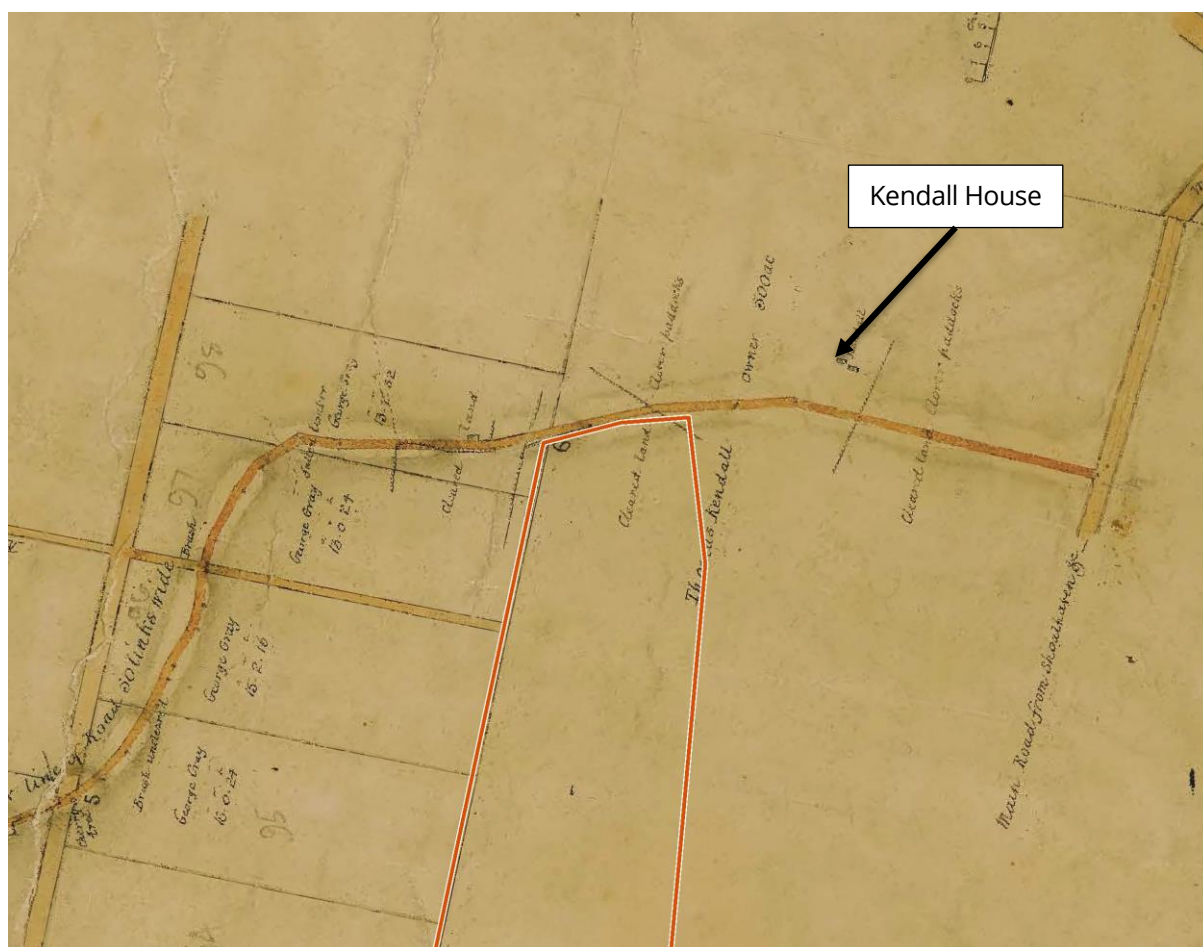




**Photo 1** An extract from the 1897 Kiama Parish map showing the extent of Burrool and Tanners Hill, with the approximate study area highlighted in red. The approximate location of the cemetery is marked with a green arrow (Source: NSW Department of Lands)

The colonial government encouraged settlers to clear and cultivate land, and from the 1840s to 1860s provided incentives to grantees by providing them with 30 acre (12 hectares) lots of uncleared land, rent free, under a five to seven year lease, under the condition that it be cleared and developed (Latona Masterman & Associates 1987, 13). By the 1860s the use of the scheme had declined, at which point much of the region had undergone extensive clearing. The *Burrool Estate* was cleared and fenced in the summer of 1831 in preparation for planting corn, but the land was later used for dairying ('A South Coast Pioneer. T. S. Kendall, of "Barrool"', 1927). To the north of the study area, the town of Kiama was subdivided and lots sold beginning in 1840 (Bayley 1976, 27). This includes Bonaira, which was divided into smaller farms in 1844 (Young 1973). Thomas Surfleet formally took ownership of the *Burrool Estate* in 1843 ('A South Coast Pioneer. T. S. Kendall, of "Barrool"', 1927).

An 1857 survey map for Saddleback Mountain Road, which marks the northern perimeter of the study area, names Thomas Kendall as the owner of all 500 acres; the land surrounding the road is recorded as cleared clover paddocks, implying the land continued to be used for dairying at this date (Photo 2).



**Photo 2** Extract from an 1857 plan of Saddleback Mountain Road, with approximate location of the study area shown in red (Source: NSW Department of Lands, reference 22-1603)

The Kendall family remain closely associated with the study area, with Kendalls Cemetery located at its centre, which the Kiama Heritage Inventory notes was established as a non-denominational family burial ground. No grave or memorial is known for Reverend Thomas Kendall, who drowned in 1832, but his wife Jane (nee Quickfall) is buried within Kendalls Cemetery; she is the only member of the first generation of the Kendall family to be interred in the family cemetery (Binney 1990). The earliest date of death recorded on the memorial features within the cemetery is 1853, commemorating the death of Caroline Elizabeth Perry (Australian Cemeteries Index n.d.). This suggests that the cemetery was likely established around this time, and continued to be used into the 1940s.

The northern portion of the study area, *Burroul Estate*, remained largely in the hands of the Kendall family until 1920, with descendants of the Kendall family still controlling portions of the estate beyond this date ('A South Coast Pioneer. T. S. Kendall, of "Barroul"', 1927). The southern portion of the study area, Bonaira was purchased by David Weir in 1909. The study area has retained its primarily agricultural use since this initial clearing. Both properties remained with the Weir and Kendall families before passing into the control of the Kiama Dairy and Pastoral Co. Pty Ltd. in 1979 and farmers Alexander and Dianne Rendel in 1987 under primary application. Several easements for services were also made throughout the course of the 20th century (NSW Department of Lands Vol.1395 Fol.204, Vol.13951 Fol. 205, Vol.13951 Fol.206, Vol.13951 Fol. 207. Primary Application 54228, Primary Application 61263). Regarding the development of the study area, aerial imagery from 1949 (Figure 4) and 1970 (Figure 5) show the continued agricultural use of the study area,

with paddock boundaries consistent with the location of mapped stone walls within the study area. No structures are present within the study area on these aerials.





**Legend**


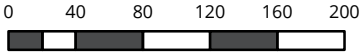
 Study area

Figure 4 1949 aerial photograph of Kiama with the study area shown (Source: NSW LPI, 2017)

 **biosis**  
Biosis Pty Ltd

Matter: 33490  
Date: 05 November 2020,  
Checked by: AV, Drawn by: LH, Last edited by: lharley  
Location: P:\33400s\33490\Mapping\  
33490\_F7\_1949Aerial



Scale 1:4,500 @ A3  
Coordinate System: GDA 1994 NSW Lambert







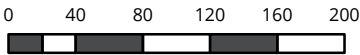
**Legend**

Study area



Figure 5 1970 aerial photograph of Kiama with the study area shown (Source: NSW LPI, 2017)

Acknowledgements: Imagery (c) Nearmap 2017  
Topography (c) NSW Land and Planning Information 2012  
Matter: 31559  
Date: 05 November 2020,  
Checked by: JC, Drawn by: LW, Last edited by: Iharley  
Location:P:\33400s\33490\Mapping\  
33490\_F8\_1970Aerial



Scale 1:4,500 @ A3  
Coordinate System: GDA 1994 NSW Lambert





## 3 Aboriginal cultural heritage context

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### 3.1 Ethnohistory

It is generally accepted that Aboriginal peoples have inhabited Australia for the last 50,000 years (Allen & O'Connell 2003). Despite a proliferation of known Indigenous sites there is considerable ongoing debate about the nature, territory and range of pre-contact Indigenous language groups in the Illawarra region. These debates have arisen largely due to the lack of ethnographic and linguistic information recorded at the time of European contact. By the time colonial diarists, missionaries and proto-anthropologists began making detailed records of Indigenous people in the late 19th Century; pre-European Indigenous groups had been broken up and reconfigured by European settlement activity. The following information relating to Indigenous people on the Illawarra is based on such early detailed records.

The Illawarra region is the traditional land of the Wodi Wodi, a group of people who spoke a variant of the Dharawal language (Wesson 2005). The area of this group extended from Botany Bay down the coast to around Nowra. To the north of the Wodi Wodi, the Darug are identified, to the west are the Gundanguura, and in the south the Thoorga are identified (Tindale 1974).

The areas inhabited by each of the groups are considered to be indicative only and would have changed through time and possibly also depending on circumstances (i.e. availability and distribution of resources).

Traditional stories tell of the arrival of the Wodi Wodi to Lake Illawarra, bringing with them the Dharawal or Cabbage Tree Palm from which their language is named (Wesson 2005). Analysis of middens in the region has provided dates of occupation dating back 6000 to 7000 years on the coast and at Lake Illawarra, and it is accepted that Aboriginal occupation of the south coast dates to around 20,000 years ago (AMBS 2008, p.33).

Interactions between the first recorded contact between Aboriginal and European peoples occurred in 1770, when Captain Cook sailed down the east coast of Australia in the Endeavour and observed cook fires and Aboriginal people carrying canoes along the coast (Organ 1990, p.2). The next recorded contact occurred in 1796, when Flinders and Bass travelled along the coast in the *Tom Thumb* (Organ 1990, p.8). Organ (1993, p.49) also notes an expedition from Jervis Bay by George William Evans, in which the expedition met several groups of Aboriginal people on the way through the Wollongong area in 1812.

### 3.2 Aboriginal heritage located in the study area

The archaeological assessment of the study area identified the following Aboriginal sites in the study area:

- South Kiama-01 (AHIMS #52-5-0970).
- South Kiama-02 (AHIMS #52-5-0971).
- South Kiama-03 (AHIMS #52-5-0972).
- South Kiama-04 (AHIMS #52-5-0973).

The AR attached in Appendix 6 provides details for Aboriginal sites identified during the archaeological assessment and shown on Figure 6. A brief description of each site is provided below.

#### South Kiama-01 (AHIMS #52-5-0970)

South Kiama-01 is located on a mid to lower slope which is dissected by a drainage channel depression. It is located in the east of the study area. South Kiama-01 is located approximately 125 metres west of the



Princess Highway and 520 metres to the north of Weir Street within Lot 5 DP 740252. Munna Munnora Creek runs adjacent to the site approximately 115 metres to the east. The site covers an area of approximately 120 metres by 50 metres.

South Kiama-01 consists of a low density sub-surface archaeological deposit containing four artefacts, two are chert and one each of silcrete and quartz. Artefact types identified within this site extent include proximal flake fragments, a longitudinal flake fragment and an angular fragment.

Soils within South Kiama-01 varied from soft to moderately compacted reddish brown and yellowish silty loam, sand and clay content that are consistent with the Kiama soil landscape. The soil profile was consistent across the area, with the top of the test pits containing silty loam or clayey sand which had been disturbed by cattle and introduced grass and weeds.

#### **South Kiama-02 (AHIMS #52-5-0971)**

South Kiama-02 is located on a mid to lower slope in the south west of the study area. South Kiama-02 is located approximately 300 metres west of the Princess Highway and 215 metres to the north of Weir Street within Lot 5 DP 740252. Munna Munnora Creek runs directly adjacent to the site to the north. The site covers an area of approximately 40 metres by 15 metres.

South Kiama-02 consists of a low density sub-surface archaeological deposit containing three artefacts, one chert, one silcrete and one mudstone. Artefact types identified within this site extent include a distal flake and angular fragments.

Soils within South Kiama-02 varied from soft silty loam to moderately compacted sandy clay. As the site approaches the creek, soils become darker and siltier. Moving to the west away from the creek soil exhibit a similar stratigraphy to South Kiama-01 and is consistent with the Kiama soil landscape.

#### **South Kiama-03 (AHIMS #52-5-0972)**

South Kiama-03 is located on a flat landform in the south east of the study area. South Kiama-03 is located approximately 120 metres west of the Princess Highway and 350 metres to the north of Weir Street within Lot 5 DP 740252. Munna Munnora Creek runs approximately 25 metres to the east of the site. The site covers an area of approximately 5 metres by 5 metres.

South Kiama-03 consists of a low density sub-surface archaeological deposit containing two artefacts, both which are made of chert. Artefact types identified within this site extent include a complete flake and a distal flake fragment.

Soils within South Kiama-03 consisted of soft reddish brown silty sand, soft dark reddish brown sandy loam and moderately compacted dark reddish brown silty clay before ending at clay. The soil profiles are consistent with South Kiama-01 and the Kiama soil landscape.

#### **South Kiama-04 (AHIMS #52-5-0973)**

South Kiama-04 is located on a mid to lower slope in the centre east of the study area. South Kiama-04 is located approximately 50 metres west of the Princess Highway and 670 metres to the south of Saddleback Mountain Road within Lot 5 DP 707300. A small first order creekline is located approximately 40 metres to the south east. The site covers an area of approximately 5 metres by 5 metres.

South Kiama-04 consists of a low density sub-surface archaeological deposit containing seven artefacts, two quartz, two silcrete, and one each of chert, crystal quartz and mudstone. Artefact types identified within this site extent include complete flakes, angular fragments and a distal flake fragment.

Soils within South Kiama-04 consisted of soft dark brown silty loam and hard very dark grey sandy clay before ending at clay. The soil profiles are consistent with South Kiama-01 and the Kiama soil landscape.

### 3.3 Interpretation of past Aboriginal land use

The coastal plain of the Illawarra region generally provides a number of resources that could have been used by Aboriginal inhabitants. Lithic resources would have been accessible in the outcrops of siltstone, shale, chert, and tuffaceous sandstones that are located further inland. These resources would be used by Aboriginal people for a variety of purposes dependent on the particular task involved, and they would often need to be modified into tools for the desired objective. The proximity to Munna Munnora Creek suggest that Aboriginal people would have had access to water sources, increasing the potential for Aboriginal artefacts to exist in sub-surface deposits. The Kiama soil landscape is an erosional landscape, however the depth of this soil may aid in the preservation of archaeological deposits.

The four sites identified by test excavations represent isolated or low density scatters, and given the low sample size, the artefact analysis was unable to determine any firm patterns in raw material use or typology. The assemblage recovered from the test excavations was dominated by complete flakes (31.25%) and angular fragments (31.25%), which made up a total of 62.5% of the entire assemblage. Distal flake fragments, proximal flake fragments and longitudinally split fragments were also present. An analysis of the artefact assemblage did not identify any evidence of size sorting as a result of post-depositional disturbance. There was no retouching or usewear on any of the artefacts and only two artefacts possessed cortex. The analysis of the cortex on the recorded sub-surface artefacts also indicated that reduction activities were being undertaken a fair distance from the raw material sources. The predominant material in the assemblage was chert at 37.5%, followed by silcrete (25%) and quartz (18.75%). Mudstone and crystal quartz were also present.

A lack of archaeological testing and salvage projects in the area make it difficult to ascertain whether this is a typical assemblage for the local area. Excavations by Mary Dallas Consulting Archaeologists (MDCA) (2007b) of two areas of PAD located 200 metres to the east of the study area revealed two artefacts out of 14 test areas. These areas of PAD were also in close proximity to Munna Munnora Creek within the Kiama soil landscape. Topsoil in the areas excavated by MDCA was between 200 to 400 millimetres thick overlying clay subsoil with latite cobbles. This is the same profile as the Aboriginal sites which are located within the current study area. The two isolated artefacts were considered to represent lost or discarded cultural material not associated with long term occupation or tool production.

MDCA's assessment covered similar landforms, and soil profiles to the current assessment. The results of the current assessment are generally consistent with the results of the MDCA assessment, with low density sub-surface deposits identified within lower slope and flat landforms situated in the Kiama soil landscape.

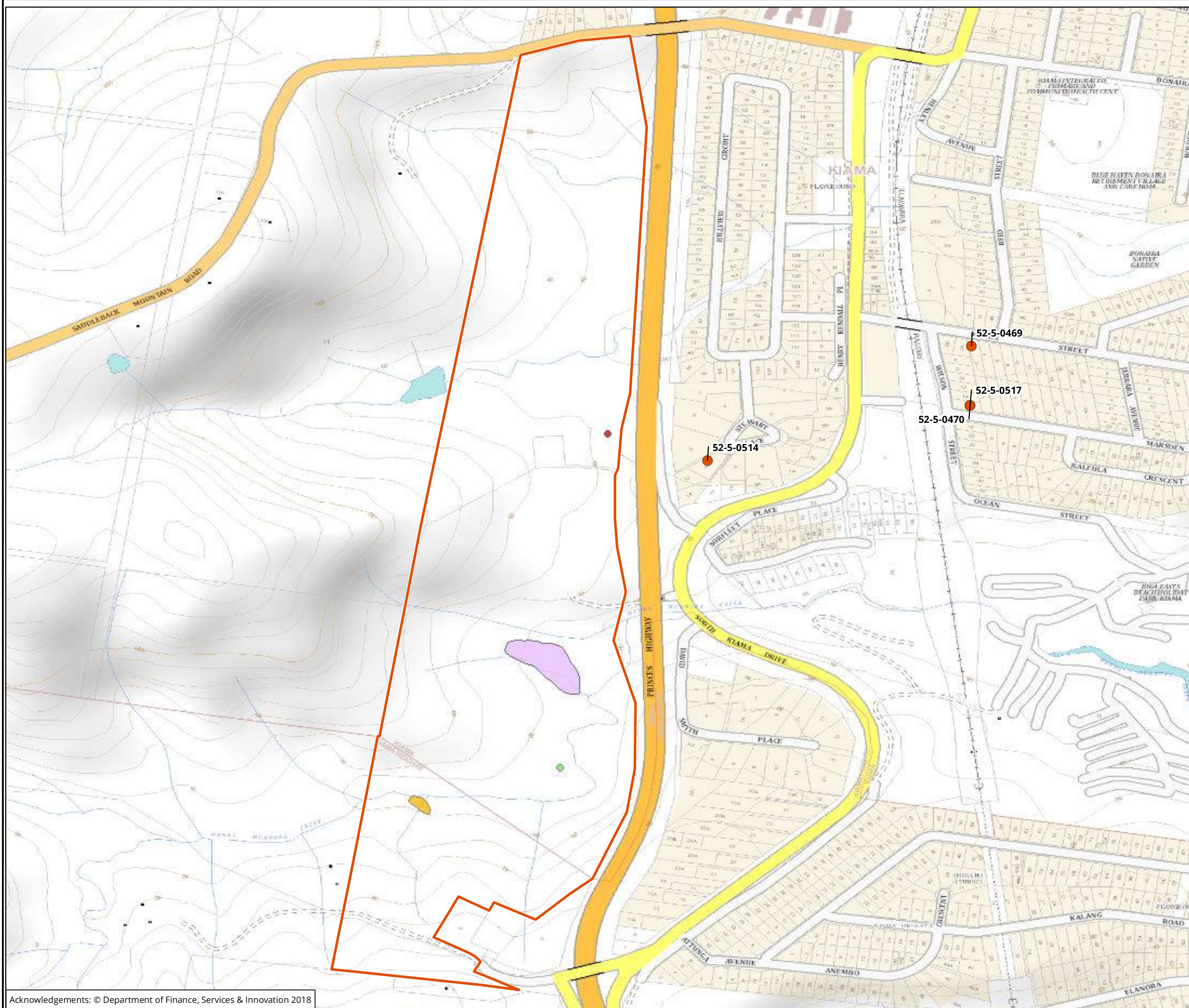
Due to the small size of the assemblage recovered limited information can be obtained from South Kiama-01 to South Kiama-04 that can contribute to our understanding of Aboriginal occupation and land use within the area. The soil profiles indicate that the topsoil has been disturbed or removed by vegetation clearance, slope erosion and pastoral use of the study area; this is supported by the Mary Dallas excavations (2007b) located 200 metres to the east which exhibited the same soil profiles.

The limited amount of artefacts found by both the MDCA (2007b) and current excavations indicate that this area did not contain any long term campsites and was instead used as resource gathering zone or travel route. Munna Munnora Creek leads from the Kiama hills, through the study area down, to East Beach thereby providing a direct path between the coastal resource zone and the resource zone of the undulating hill systems further inland. This conclusion is further supported when comparing excavations undertaken along the coast at Gerroa, Kiama and Dunmore which typically contained a large and varied amount of artefacts

(Navin Officer Heritage Consultants Pty Ltd 2000) (Biosis Pty Ltd 2009) (Heritage Consulting Australia Pty Ltd 2014) demonstrating ongoing long-term, intense occupation of this portion of the coast by Aboriginal people.

The evidence collected as part of this assessment indicates that the study area was utilised primarily for resource gathering or transitory purposes and was not a foci for Aboriginal occupation. Four very low density sub-surface deposits were identified in the lower slope and floodplain/flat landforms in the study area. This assessment has found that there is the potential for very low density artefact scatters or isolated artefacts to be present throughout the lower slope and floodplain/flat landforms across the study area.





#### Legend

- Study area
- AHIMS Records

#### Aboriginal sites

- South Kiama-01
- South Kiama-02
- South Kiama-03
- South Kiama-04

**Figure 6 Aboriginal sites located in the study area and vicinity**

**NOT TO BE MADE PUBLIC**

0 60 120 180 240 300  
Metres

Scale: 1:6,000 @ A3  
Coordinate System: GCS GDA 1994



Ballarat, Brisbane, Canberra, Melbourne,  
Sydney, Wangaratta & Wollongong

Matter:  
Date: 27 October 2020,  
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## 4 Aboriginal community consultation

Consultation with the Aboriginal community has been undertaken in compliance with the consultation requirements as detailed below. A consultation log of all communications with RAPs is provided in Appendix 1.

### 4.1 Stage 1: Notification of project proposal and registration of interest

#### 4.1.1 Identification of relevant Aboriginal stakeholders

In accordance with the consultation guidelines, Biosis notified the following bodies regarding the proposal:

- Kiama Municipal Council.
- Heritage NSW, Department of Premier and Cabinet.
- NSW Native Title Services Corporation Limited (NTSCORP Limited).
- Office of the Registrar, Aboriginal Land Rights Act 1983 of Aboriginal Owners.
- National Native Title Tribunal (NNTT).
- South East Local Land Services.
- Illawarra Local Aboriginal Land Council.

A list of known Aboriginal stakeholders in the Illawarra was provided by Heritage NSW (a copy of this responses is provided in Appendix 2 and include:

- |   |  |
|---|--|
| • Badu  | • Kullila Site Consultants and Koori Site Management |
| • Barraby Cultural Services                                     | • La Pouse Botany Bay Corporation                    |
| • Bellambi Indigenous Corporation Gandangara Traditional Owners | • Minnamunnung                                       |
| • Biamanga  | • Munyunga   |
| • Bilinga   | • Mura Indigenous Corporation                        |
| • Darryl Caines   | • Murramarang  |
| • Gary Caines   | • Murra Bidgee Mullangari                            |
| • Coomaditchie United Aboriginal Corporation                    | • Murrumbul  |
| • Darug Land Observations                                       | • NIAC   |
| • James Davis   | • Nundagurri   |
| • Dharug  | • Pemulwuy   |
| • Duncan Falk Consultancy                                       | • Norma Simms  |
| • Eora Heritage Group   | • South Coast NSW Aboriginal Elders                  |
| • Ken Foster  | • South West Rocks Corporation                       |

- Clive Freeman
- Gadhu Dreaming
- Raymond Garbutt
- Goobah Development Pty Ltd
- Gumaraa
- Gundungurra Tribal Technical Services
- Gunyuu
- Guunamaa Dreamin Sites and Surveying
- Illawarra Aboriginal Corporation
- Illawarra Local Aboriginal Land Council
- Jerringong
- Jerrinja Local Aboriginal Land Council
- Karrial
- Korewal Elouera Jerrungurah Tribal Elders Council
- Three Ducks Dreaming Surveying and Consulting
- Thoorga Nura
- Tungai Tonghi
- Leanne Tungai
- The Wadi Wadi Coomaditchie Aboriginal Corporation
- Walbunja
- Walgalu
- Warra Bingi Nunda Gurri
- Wingikara
- The Wodi Wodi Elders Corporation
- The Wodi Wodi Elders Corporation
- Woronora Plateau Gundungara Elders Council
- Wullung
- Yerramurra
- Illawarra Local Aboriginal Land Council (ILALC)

A search conducted by the Office of the Registrar, *Aboriginal Land Rights Act 1983* (NSW) listed no Aboriginal Owners with land within the study area. A search conducted by the NNTT listed one undetermined Registered Native Title Claims, Unregistered Claimant Applications or Registered Indigenous Land Use Agreements within the study area.

#### 4.1.2 Public notice

In accordance with the consultation guidelines, a public notification was placed in the following newspapers:

- *Illawarra Mercury* (17 July 2020).

The advertisement invited Aboriginal people who hold cultural knowledge to register their interest in a process of community consultation to provide assistance in determining the significance of Aboriginal object(s) and/or places in the vicinity of the study area. A copy of the public notice is provided in Appendix 2.

#### 4.1.3 Registration of Aboriginal parties

Aboriginal groups identified in Section 4.1.1 were sent a letter inviting them to register their interest in a process of community consultation to provide assistance in determining the significance of Aboriginal object(s) and/or places in the vicinity of the study area. In response to the letters and public notice, a total of 14 groups registered their interest in the project. Responses to registration from Aboriginal parties are provided in Appendix 3. A full list of Aboriginal parties who registered for consultation is provided below:



**Table 3 List of registered Aboriginal parties**

No.	Organisation	Contact person
1	Guunamaa Dreamin Sites and Surveying	Richard Campbell
2	Gumaraa	Jodie Edwards
3	Warra Bingi Nunda Gurri	Nathanial Kennedy
4	Barraby Cultural Services	Lee Field
5	Yurrandaali Cultural Services	Bo Field
6	Individual	Leanne Tungai
7	Yerramurra	Blaan Davies
8	Individual	James Davis
9	Individual	Clive Freeman
10	Woronora Plateau Gundungara Elders Council	Kayla Williamson
11	Murra Bidgee Mullangari	Ryan and Darleen Johnson
12	Individual	Gary Caines
13	South Coast People (Via NTSCorp)	Gwenda Jarrett
14	Tungai Tonghi	Troy Tungai
15	Three Ducks Dreaming Surveying and Consulting	Leonard Wright
16	Illawarra Local Aboriginal Land Council	Paul Knight

## 4.2 Stage 2: Presentation of information about the proposed project

On 4 August 2020, Biosis provided RAPs with details about the proposed development works (project information pack). A copy of the project information pack is provided in Appendix 3.

## 4.3 Stage 3: Gathering information about cultural significance

### 4.3.1 Archaeological assessment methodology information pack

On 4 August 2020, Biosis provided each RAP with a copy of the project methodology pack outlining the proposed ACHA process and methodology for this project. RAPs were given 28 days to review and prepare feedback on the proposed methodology. A copy of the project methodology pack is provided in Appendix 3.

No comments from RAPs were received at this stage of consultation.

### 4.3.2 Information gathered during fieldwork

Tracey Herry of the ILALC [16] and James Davis [8] both commented on the potential of Aboriginal people to have lived within the study area, citing the abundance of sloping and crest landforms as well as the many water sources present. At the request of the RAPs two additional areas were tested during excavations.

#### **4.4 Stage 4: Review of draft ACHA report**

On 11 November 2020, Biosis provided each RAP with a copy of the draft ACHA and AR report for their review. RAPs were given 28 days to review and prepare feedback for the provided reports. Two responses were received from the initial consultation to RAPs. Troy Tungai of Tungai Tongi responded on 11 November 2020 providing thanks for the email and to be included in upcoming works of the project. Leanne Tungai responded on 12 November 2020 providing thanks for the information provided.

A plain English project summary, which summarised the ACHA/AR and provided questions to think about when responding was sent to Clive Freeman on 27 November 2020 at his request. No response was received.

A reminder of consultation closure was sent to RAPs on 9 December 2020 by Biosis. A response was received by Richard Campbell or Guunamaa Dreaming Sites and Surveying on 9 December 2020 requesting that artefacts found during the project are placed in a safe keeping place nearby where they were found. Troy Tungai of Tungai Tongi responded on 9 December 2020 providing thanks for the email and to be included in upcoming works of the project. Leanne Tungai responded on 12 December 2020 providing thanks for the information.

A copy of the Stage 4 consultation is provided in Appendix 5.

## 5 Aboriginal cultural significance assessment

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The two main values addressed when assessing the significance of Aboriginal sites are cultural values to the Aboriginal community and archaeological (scientific) values. This report will assess the cultural values of Aboriginal sites in the study area. Details of the scientific significance assessment of Aboriginal sites in the study area are provided in Appendix 6.

### 5.1 Introduction to the assessment process

Heritage assessment criteria in NSW fall broadly within the significance values outlined in the Australia International Council on Monuments and Sites (ICOMOS) *Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance* (Australia ICOMOS 2013) (the Burra Charter). This approach to heritage has been adopted by cultural heritage managers and government agencies as the set of guidelines for best practice heritage management in Australia. These values are provided as background and include:

- **Historical significance** (evolution and association) refers to historic values and encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this section. A place may have historic value because it has influenced, or has been influenced by, a historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives *in situ*, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.
- **Aesthetic significance** (Scenic/architectural qualities, creative accomplishment) refers to the sensory, scenic, architectural and creative aspects of the place. It is often closely linked with social values and may include consideration of form, scale, colour, texture, and material of the fabric or landscape, and the smell and sounds associated with the place and its use.
- **Social significance** (contemporary community esteem) refers to the spiritual, traditional, historical or contemporary associations and attachment that the place or area has for the present-day community. Places of social significance have associations with contemporary community identity. These places can have associations with tragic or warmly remembered experiences, periods or events. Communities can experience a sense of loss should a place of social significance be damaged or destroyed. These aspects of heritage significance can only be determined through consultative processes with local communities.
- **Scientific significance** (Archaeological, industrial, educational, research potential and scientific significance values) refers to the importance of a landscape, area, place or object because of its archaeological and/or other technical aspects. Assessment of scientific value is often based on the likely research potential of the area, place or object and will consider the importance of the data involved, its rarity, quality or representativeness, and the degree to which it may contribute further substantial information.

The cultural and archaeological significance of Aboriginal and historic sites and places is assessed on the basis of the significance values outlined above. As well as the Burra Charter significance values guidelines, various government agencies have developed formal criteria and guidelines that have application when assessing the significance of heritage places within NSW. Of primary interest are guidelines prepared by the Australian

Government, Heritage NSW and the Heritage Branch, and the NSW Department of Planning, Industry and Environment. The relevant sections of these guidelines are presented below.

These guidelines state that an area may contain evidence and associations which demonstrate one or any combination of the Burra Charter significance values outlined above in reference to Aboriginal heritage. Reference to each of the values should be made when evaluating archaeological and cultural significance for Aboriginal sites and places.

In addition to the previously outlined heritage values, the Heritage NSW *Guidelines to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011) also specify the importance of considering cultural landscapes when determining and assessing Aboriginal heritage values. The principle behind a cultural landscape is that 'the significance of individual features is derived from their inter-relatedness within the cultural landscape'. This means that sites or places cannot be 'assessed in isolation' but must be considered as parts of the wider cultural landscape. Hence the site or place will possibly have values derived from its association with other sites and places. By investigating the associations between sites, places, and (for example) natural resources in the cultural landscape the stories behind the features can be told. The context of the cultural landscape can unlock 'better understanding of the cultural meaning and importance' of sites and places.

Although other values may be considered – such as educational or tourism values – the two principal values that are likely to be addressed in consideration of Aboriginal sites and places are the cultural/social significance to Aboriginal people and their archaeological or scientific significance to archaeologists and the Aboriginal community. The determinations of archaeological and cultural significance for sites and places should then be expressed as statements of significance that preface a concise discussion of the contributing factors to Aboriginal cultural heritage significance.

## 5.2 Cultural (social significance) values

Cultural or social significance refers to the spiritual, traditional, historical and/or contemporary associations and values attached to a place or objects by Aboriginal people. Aboriginal cultural heritage is broadly valued by Aboriginal people as it is used to define their identity as both individuals and as part of a group (DECCW 2010a, p.iii). More specifically it provides:

- A 'connection and sense of belonging to Country' (DECCW 2010a, p.iii).
- A link between the present and the past (DECCW 2010a, p.3).
- A learning tool to teach Aboriginal culture to younger Aboriginal generations and the general public (DECCW 2010 p.3).
- Further evidence of Aboriginal occupation prior to European settlement for people who do not understand the magnitude to which Aboriginal people occupied the continent (DECCW 2010a, p.3).

It is acknowledged that Aboriginal people are the primary determiners of the cultural significance of Aboriginal cultural heritage. During consultation the following information was provided by RAPs in regards to the cultural values of the study area.

- This area may have been used as a pathway from Saddleback Mountain down to the beaches. Saddleback Mountain holds significance to the Aboriginal people of the area and there is potentially a freshwater stream and a birthing place located in the mountain range.

### 5.3 Historic values

Historic significance refers to associations a place or object may have with a historically important person, event, phase or activity to the Aboriginal and other communities. The study area is not known to have any historic associations.

### 5.4 Archaeological (scientific significance) values

An archaeological scientific assessment was undertaken for the study area and is presented in detail as part of the attached Archaeological Report (Appendix 6).

### 5.5 Aesthetic values

The study area has been disturbed through vegetation clearance and agricultural practices. However, this disturbance has only affected the top of the topsoil. The landform of gently undulating hills and flats adjacent to the creek lines have not been altered by modern human agency. The landscape of the study area is closely linked with Aboriginal cultural values and provides a context for Aboriginal sites that gives a strong sense of place. The Illawarra Aboriginal community strongly identifies with the landscape of the study area.

### 5.6 Statement of significance

The significance of sites was assessed in accordance with the following criteria:

- Requirements of the Code.
- The Burra Charter.
- *Guide to Investigating and Reporting on Aboriginal Heritage.*

The combined use of these guidelines is widely considered to represent the best practice for assessments of Aboriginal cultural heritage. The identification and assessment of cultural heritage values includes the four values of the Burra Charter: social, historical, scientific and aesthetic values. The resultant statements of significance in Table 5 have been constructed for the study area based on the significance ranking criteria assessed in Table 4.

**Table 4 Significance assessment criteria**

Site name	Criteria	Ranking
<b>South-Kiama-01 (AHIMS #52-5-0970)</b>	Cultural – Consultation with RAPs reflect that the site possesses high cultural significance due to the strong connections members of the community have with the area as the site is representative of their continued occupation of the area where they have resided for generations.	High
	Historical – the site is not connected to any historical event or personage.	Low
	Scientific – the site possesses low archaeological value as there is low potential for further information to be obtained that will contribute to our understanding of Aboriginal occupation of the area..	Low

Site name	Criteria	Ranking
<b>South Kiama-02 (AHIMS #52-5-0971)</b>	Aesthetic – The lower stratigraphy is considered <i>in situ</i> , however the topsoil has been partially removed and the higher levels of stratigraphy has been disturbed via human agents, namely vegetation removal and use of the land for agricultural purposes.	Low
	Cultural – Consultation with RAPs reflect that the site possesses high cultural significance due to the strong connections members of the community have with the area as the site is representative of their continued occupation of the area where they have resided for generations.	High
	Historical – the site is not connected to any historical event or personage.	Low
	Scientific – the site possesses low archaeological value as there is low potential for further information to be obtained that will contribute to our understanding of Aboriginal occupation of the area..	Low
<b>South-Kiama-03 (AHIMS #52-5-0972)</b>	Aesthetic – The lower stratigraphy is considered <i>in situ</i> , however the topsoil has been partially removed and the higher levels of stratigraphy has been disturbed via human agents, namely vegetation removal and use of the land for agricultural purposes.	Low
	Cultural – Consultation with RAPs reflect that the site possesses high cultural significance due to the strong connections members of the community have with the area as the site is representative of their continued occupation of the area where they have resided for generations.	High
	Historical – the site is not connected to any historical event or personage.	Low
	Scientific – the site possesses low archaeological value as there is low potential for further information to be obtained that will contribute to our understanding of Aboriginal occupation of the area..	Low
<b>South-Kiama-04 (AHIMS #52-5-0973)</b>	Aesthetic – The lower stratigraphy is considered <i>in situ</i> , however the topsoil has been partially removed and the higher levels of stratigraphy has been disturbed via human agents, namely vegetation removal and use of the land for agricultural purposes.	Low
	Cultural – Consultation with RAPs reflect that the site possesses high cultural significance due to the strong connections members of the community have with the area as the site is representative of their continued occupation of the area where they have resided for generations.	High
	Historical – the site is not connected to any historical event or personage.	Low
	Scientific – the site possesses low archaeological value as there is	Low

Site name	Criteria	Ranking
	low potential for further information to be obtained that will contribute to our understanding of Aboriginal occupation of the area..	
	Aesthetic – The lower stratigraphy is considered <i>in situ</i> , however the topsoil has been partially removed and the higher levels of stratigraphy has been disturbed via human agents, namely vegetation removal and use of the land for agricultural purposes.	Low

**Table 5** Statements of scientific significance for archaeological sites recorded within the study area.

Site name	Statement of significance
<b>South Kiama-01 (AHIMS #52-5-0970)</b>	South Kiama-01 is a low density sub-surface archaeological deposit located upon a mid to lower slope consisting of four artefacts of predominately chert material. The site extends across an area of 120 metres by 50 metres. The lower stratigraphy is considered <i>in situ</i> , however the topsoil has been partially removed and the higher levels of stratigraphy has been disturbed via human agents, namely vegetation removal and use of the land for agricultural purposes. There have been few excavations in the area on the same type of landform near the coastline in which to compare the frequency of the site, however transitory areas typically contain low density scatters. South Kiama-01 is considered to have low scientific research potential. The significance of this site has been assessed as low.
<b>South Kiama-02 (AHIMS #52-5-0971)</b>	South Kiama-02 is a low density sub-surface archaeological deposit located upon a mid to lower slope consisting of three artefacts of chert, silcrete and mudstone material. The site extends across an area of 40 metres by 15 metres. The lower stratigraphy is considered <i>in situ</i> , however the topsoil has been partially removed and the higher levels of stratigraphy has been disturbed via human agents, namely vegetation removal and use of the land for agricultural purposes. There have been few excavations in the area on the same type of landform near the coastline in which to compare the frequency of the site, however transitory areas typically contain low density scatters. South Kiama-02 is considered to have low scientific research potential. The significance of this site has been assessed as low.
<b>South Kiama-03 (AHIMS #52-5-0972)</b>	South Kiama-03 is a low density sub-surface archaeological deposit located upon a flat landform next to a creekline consisting of two artefacts of chert material. The site extends across an area of 5 metres by 5 metres. The lower stratigraphy is considered <i>in situ</i> , however the topsoil has been partially removed and the higher levels of stratigraphy has been disturbed via human agents, namely vegetation removal and use of the land for agricultural purposes. There have been few excavations in the area on the same type of landform near the coastline in which to compare the frequency of the site, however transitory areas typically contain low density scatters. South Kiama-03 is considered to have low scientific research potential. The significance of this site has been assessed as low.



Site name	Statement of significance
<b>South Kiama-04 (AHIMS #52-5-0973)</b>	<p>South Kiama-04 is a low density sub-surface archaeological deposit located upon a mid to lower slope consisting of seven artefacts of predominately quartz and silcrete material. The site extends across an area of 5 metres by 5 metres. The lower stratigraphy is considered in situ, however the topsoil has been partially removed and the higher levels of stratigraphy has been disturbed via human agents, namely vegetation removal and use of the land for agricultural purposes. There have been few excavations in the area on the same type of landform near the coastline in which to compare the frequency of the site, however transitory areas typically contain low density scatters. South Kiama-04 is considered to have low scientific research potential. The significance of this site has been assessed as low.</p>

## 6 Development limitations and mitigation measures

The works to be undertaken at this stage of the proposal include rezoning which will not physically impact on the study area or the Aboriginal sites.

The draft Master Plan in Figure 7 demonstrates what may be built, should the rezoning be successful. This Master Plan may be subject to change. Below outlines strategies that should be adopted should the residential subdivision go ahead after the rezoning to take into consideration Aboriginal heritage values within the study area.

A summary of the potential impacts of the current Master Plan on known Aboriginal sites within the study area is provided in Table 6.

**Table 6 Summary of potential archaeological impact of current Master Plan**

AHIMS site no.	Site name	Significance	Type of harm	Degree of harm	Consequence of harm
52-5-0970	South Kiama-01	Low	Direct	Total	Total loss of value
52-5-0971	South Kiama-02	Low	Direct	Partial	Partial loss of value
52-5-0972	South Kiama-03	Low	None	None	No loss of value
52-5-0973	South Kiama-04	Low	Direct	Total	Total loss of value



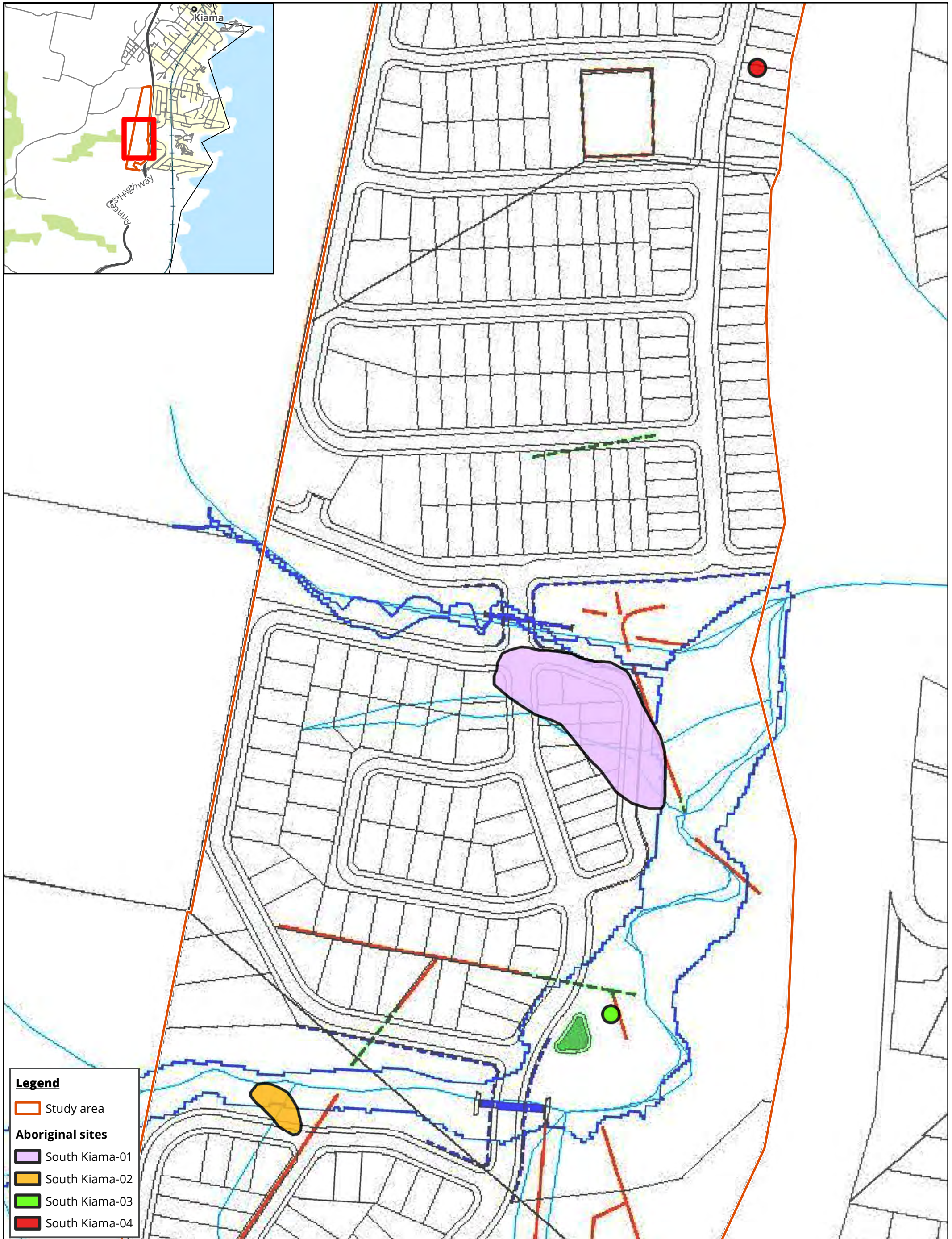


Figure 7 Aboriginal sites and the proposed development



## 6.1 Potential risks to Aboriginal cultural heritage

The current draft Master Plan includes the subdivision of the study area to residential blocks with roads and associated infrastructure. Activities typically associated with this type of development which could impact Aboriginal heritage sites or objects may include:

- Vehicle movement within study area with potential compaction of surface soils.
- Bulk earthworks, which will involve the removal of topsoil and subsoil.
- Sub-surface service installation, which would involve the excavation of soils to install services which would include electrical cables, water pipes etc. among others.
- Building up the ground level for a suitable platform to build on, this may involve the introduction of additional soils to the site and has the potential to compact surface soils.

Left unmitigated, these activities have potential to completely remove or disturb archaeological deposits and Aboriginal objects.

## 6.2 Management and mitigation measures

Ideally, heritage management involves conservation of sites through the preservation and conservation of fabric and context within a framework of 'doing as much as necessary, as little as possible' (Marquis-Kyle & Walker 1994, pp. 13). In cases where conservation is not practical, several options for management are available. For sites, management often involves the salvage of features or artefacts, retrieval of information through excavation or collection (especially where impact cannot be avoided) and interpretation.

### Avoidance of identified Aboriginal sites

Avoidance of impacts to archaeological and cultural heritage sites through design of the development is the primary mitigation and management strategy, and should be implemented where practicable.

The Master Plan in its current design will impact Aboriginal sites South Kiama-01, South Kiama-02 and South Kiama-04 and the lower slope and flat landforms. The artefact scatters throughout the testing areas are low density with low scientific significance, and it is expected that this trend would continue throughout the lower slope and flat landforms within the study area.

Where possible, should the Master Plan change, attempts should be made to avoid these areas as this will preserve these sites and any potential artefacts present for future generations in line with intergenerational equity and Environmentally Sustainable Development. Should avoidance not be possible, the mitigation measures below should be implemented.

### Collection of archaeological information

As part of this assessment test excavations and community consultation have been undertaken to determine the archaeological and cultural significance of the study area. Test excavations identified four Aboriginal sites and the information obtained from specialist analysis of these sites has been incorporated into this report to characterise and present information on Aboriginal use of the area. This has allowed for future generations to access and build upon our knowledge of Aboriginal land use and technology in accordance with the principles of Intergenerational Equity.

### **AHIP application and Cultural Heritage Management Plan (CHMP)**

The test excavation results have also indicated that low density surface artefact scatters are likely to be present on the gentle middle and lower hillslopes and alluvial flats associated with the perennial water source Munna Munnora Creek, as it was likely a travel route between the hill and coastal resource zones. It is possible that additional sporadic, isolated or low density artefact sites may be present across these landforms. As a result any development in the study area is likely to result in impacts to Aboriginal heritage, regardless of whether the development avoids South Kiama-01, South Kiama-02, South Kiama-03, and South Kiama-04; although any additional sites are unlikely to further contribute to our understanding of archaeological nature of the area. It is recommended that an AHIP to impact is obtained before works commence to South Kiama-01, South Kiama-02, South Kiama-03, South Kiama-04, and the lower slope and floodplain/flat landforms.

A CHMP should also be prepared outlining requirements for management of existing sites and unexpected finds, site inductions and reporting processes during bulk earthworks and construction phases of development to ensure no Aboriginal sites are impacted during later stages of the project.

## 7 Recommendations

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The recommendations below respond specifically to the wishes of the RAPs. Recommendations regarding the archaeological value of the site, and the subsequent management of Aboriginal cultural heritage is provided in the archaeological report (Appendix 6).

### **Recommendation 1: Continued consultation with the registered Aboriginal parties**

It is recommended that White Constructions Pty Ltd continue to inform the RAPs about the management of Aboriginal cultural heritage sites within the study area throughout the life of the project. This recommendation is in keeping with the consultation requirements.

### **Recommendation 2: Avoidance of Aboriginal sites and sensitive landforms**

Four Aboriginal sites were identified within the study area, South Kiama-01, South Kiama-02, South Kiama-03 and South Kiama-04. The lower slope and floodplain/flat landforms within the study area were also identified as having potential to contain very low density artefact scatters or isolated artefacts. Any potential works should avoid and/or minimise impacts to these sites, however in the instance they cannot be avoided, Recommendations 3 to 7 should be implemented.

### **Recommendation 3: Application for an Aboriginal Heritage Impact Permit (AHIP)**

If the Master Plan and subsequent development cannot avoid impacts to South Kiama-01, South Kiama-02, South Kiama-03 and South Kiama-04, and the lower slope and Floodplain/flat landforms, it is recommended that the proponent apply to Heritage NSW for an area wide AHIP to impact these sites, which are currently protected under the NPW Act. **The AHIP should be for a term of 10 years.** The sub-surface test excavations have confirmed the tested sites are of low scientific significance.

### **Recommendation 4: Curation of collected artefacts**

A total of 16 artefacts were excavated during the test excavation program. A long term management strategy of Aboriginal heritage items should be developed in consultation with RAPs and in accordance with Requirement 26 of the Code. This may involve the reburial of artefacts within the study area at a location which will not be impacted on by the future development works. In the event an appropriate reburial location cannot be found, a care and control agreement should be determined in consultation with the RAPs to ensure all parties as satisfied as to the long term care of the Aboriginal artefacts.

### **Recommendation 5: Cultural Heritage Management Plan**

A CHMP should also be prepared outlining requirements for management of existing sites and unexpected finds, site inductions and reporting processes during bulk earthworks and construction phases of development to ensure no Aboriginal sites are impacted during later stages of the project.

### **Recommendation 6: Stop work provision for any potential heritage sites identified during construction**

All Aboriginal places and objects are protected under the NPW Act. This protection extends to Aboriginal objects and places that have not been identified but might be unearthed during construction.



If construction proceeds without an approved AHIP, work must cease if Aboriginal objects or places are identified. Sydney Water and the project archaeologist must be notified to make an assessment of the find and advise on subsequent management.

Historical archaeological sites are protected under the relic's provisions (s139 – 146) of the Heritage Act. Should any historical archaeological sites be identified during any phase of the proposed development, all works must cease in the vicinity of the find and the project archaeologist and White Constructions notified. Should the archaeological nature of the find be confirmed, the Heritage NSW will require notification.

### **Recommendation 7: Stop work provision for any potential discovery of human remains**

If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately. The remains must be left in place and protected from harm or damage. The following contingency plan describes the immediate actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the study area must follow these steps:

1. Discovery: If suspected human remains are discovered all activity in the vicinity must stop to ensure minimal damage is caused to the remains; and the remains must be left in place, and protected from harm or damage.
2. Notification: Once suspected human skeletal remains have been found, the Coroner's Office and the NSW Police must be notified immediately. Following this, and if the human remains are likely to be Aboriginal in origin, the find will be reported to the Aboriginal parties and Heritage NSW. If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the heritage division of NSW will be notified of the find under S146 of the Heritage Act.

## References

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- 'A South Coast Pioneer. T. S. Kendall, of "Barroul" 1927, *Kiama Independent, and Shoalhaven Advertiser (NSW: 1863 - 1947)*, <<http://nla.gov.au/nla.news-article104784979>>.
- Allen, J & O'Connell, J 2003, 'The long and the short of it: archaeological approaches to determining when humans first colonised Australia and New Guinea', *Australian Archaeology*, vol. 57, pp. 5–19.
- AMBS 2008, *Aboriginal heritage study: Illawarra Escarpment*. Australian Museums Business Services, Report prepared for Wollongong City Council.
- Attenbrow, V 2010, *Sydney's Aboriginal Past. Investigating the Archaeological and Historical Records*, 2nd edn, University of New South Wales Press Ltd, Sydney NSW.
- Australia ICOMOS 2013, *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance*, Australia ICOMOS, Burwood, VIC.
- Australian Cemeteries Index n.d., *Kendalls Cemetery (Barroul Estate private cemetery)*, *Australian Cemeteries Index*, viewed 9 October 2017, <<http://www.austcemindex.com/?cemid=1652&sort=death>>.
- Bayley, WA 1976, *Blue Haven: History of Kiama Municipality, New South Wales*, Kiama Municipal Council, Kiama.
- Binney, J 1990, 'Kendall, Thomas.', *Dictionary of New Zealand Biography. Te Ara - The Encyclopedia of New Zealand*.
- Binney, J & Kendall, T 2005, *The Legacy of Guilt: A Life of Thomas Kendall*, 2nd edn, Bridget William Books, Wellington.
- Biosis Pty Ltd 2016, *Darcoola west water efficiency scheme: Aboriginal cultural heritage assessment report*, Unpublished report to Department of Primary Industries – Water, Authors: Atkinson, A, Smith, S & Cole, J.
- BOM 2020, *Climate statistics for Australian locations*, viewed 16 July 2020, <[http://www.bom.gov.au/climate/averages/tables/cw\\_068038.shtml](http://www.bom.gov.au/climate/averages/tables/cw_068038.shtml)>.
- Bowler, JM et al. 2003, 'New ages for human occupation and climatic change at Lake Mungo, Australia', *Nature*, vol. 421, no. 6925, pp. 837–840.
- Clarkson, C et al. 2017, 'Human occupation of northern Australia by 65,000 years ago', *Nature*, vol. 547, no. 7663, p. 306.
- DECCW 2010a, *Aboriginal Cultural Heritage Consultation Requirements for Proponents*, Department of Environment and Climate Change, Sydney NSW.
- DECCW 2010b, *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*, Department of Environment and Climate Change, Sydney NSW.
- Fuller, L 1982, *Wollongong's Native Trees*, McPherson's Printing Group, National Library of Australia.
- Hazelton, PA 1992, *Soil Landscapes of the Kiama 1:00,000 Sheet*, Department of Conservation and Land Management (incorporating the Soil Conservation Service of NSW), Sydney.

Latona Masterman & Associates 1987, *Kiama Heritage Study. Prepared for Kiama Municipal Council*.

Lindsay, B 1994, *Early Land Settlement in Illawarra*, Illawarra Historical Publications, Wollongong.

OEH 2011, 'Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW', <Office of Environment and Heritage, Department of Premier and Cabinet, Sydney NSW>.

Organ, M 1990, *A Documentary History of the Illawarra and South Coast Aborigines 1770-1850*, Aboriginal Education Unit, Wollongong University, Wollongong.

Organ, M 1993, *Illawarra South Coast Aborigines 1770-1900*, Report to the Australian Institute of Aboriginal and Torres Strait Islander Affairs, Canberra.

Rutledge, M 2020, *Manning, Sir William Montagu (1811-1895)*, *Australian Dictionary of Biography*, <<http://adb.anu.edu.au/biography/manning-sir-william-montagu-4150>>.

Tindale, N 1974, *Aboriginal Tribes of Australia*, University of California Press, Berkeley.

Wesson, S & New South Wales Government Office of Environment and Heritage 2005, *Murni, Dhungang, Jirrar: living in the Illawarra - Aboriginal people and wild resource use*.

Young, I 1973, 'James Armstong ("Bedad")', *Illawarra Historical Society Bulletin*.



## Appendices

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## Appendix 1 Consultation log

### Stage 1 – Notification of project proposal and registration of interest

#### Step 1- Identification of Aboriginal people/parties with an interest in the proposed study area.

Organisation contacted	Date and type of contact	Date and type of response	Response details
Heritage NSW	30/06/2020, email	17/07/2020	Provided list of potential RAPs
National Native Title Tribunal	30/06/2020, email	2/7/2020	No native title information was found in lots 1/DP707300 101/DP1007617 102/DP1007617 5/DP740252 8//D258605
Native Title Services Corporation	30/06/2020, email	-	-
Office of the Registrar Aboriginal Land Rights Act 1983	30/06/2020, email	31/7/2020	There are no registered Aboriginal owners for the project area.
South East Local Land Services	30/06/2020, email	-	-
Illawarra Local Aboriginal Land Council	30/06/2020, email	17/9/2020	Late registration for the project
Kiama Municipal Council	30/06/2020, email	-	-

#### Step 2- Public advertisement

The public notice was published in the Illawarra Mercury on the 17 July 2020. A copy of the advertisement is provided in Appendix 2.

#### Step 3- Registration of interest.

The registration period ran from the 17 July 2020 to 31 July 2020. Leeway was given to Aboriginal parties/groups who provided responses shortly after the close of this period and they have been registered as Aboriginal parties for consultation.

Organisation contacted	Date and type of contact	Date and type of response	Response details
Badu	17/07/2020, email	-	-
Barraby Cultural Services	17/07/2020, email	17/07/2020, email	Would like to register for project
Bellambi Indigenous Corporation Gandangara Traditional Owners	17/07/2020, email	-	-
Biamanga	17/07/2020, email	-	-

Organisation contacted	Date and type of contact	Date and type of response	Response details
<b>Bilinga</b>	17/07/2020, email	-	-
<b>Darryl Caines</b>	17/07/2020, email	-	-
<b>Gary Caines</b>	17/07/2020, email	30/07/2020, phone call	Would like to register for project.
<b>Coomaditchie United Aboriginal Corporation</b>	17/07/2020, email	-	-
<b>Darug Land Observations</b>	17/07/2020, email	-	-
<b>James Davis</b>	17/07/2020, email	18/07/2020, email	Please register me for the project
<b>Dharug</b>	17/07/2020, email	-	-
<b>Duncan Falk Consultancy</b>	17/07/2020, email	-	-
<b>Eora Heritage Group</b>	17/07/2020, email	-	-
<b>Ken Foster</b>	17/07/2020, email	-	-
<b>Clive Freeman</b>	17/07/2020, email	20/07/2020, email	Would like to register for project
<b>Gadhu Dreaming</b>	17/07/2020, email	-	-
<b>Raymond Garbutt</b>	17/07/2020, email	-	-
<b>Goobah Development Pty Ltd</b>	17/07/2020, email	-	-
<b>Gumaraa</b>	17/07/2020, email	17/07/2020, email	Would like to register for the project.
<b>Gundungurra Tribal Technical Services</b>	17/07/2020, email	-	-
<b>Gunyu</b>	17/07/2020, email	-	-
<b>Guunamaa Dreamin Sites and Surveying</b>	17/07/2020, email	17/07/2020, email	Would like to register for this job
<b>Illawarra Aboriginal Corporation</b>	17/07/2020, email	-	-
<b>Illawarra Local Aboriginal Land Council</b>	17/07/2020, email	-	-
<b>Jerringong</b>	17/07/2020, email	-	-
<b>Jerrinja Local Aboriginal Land Council</b>	17/07/2020, email	-	-
<b>Karrial</b>	17/07/2020, email	-	-
<b>Korewal Elouera Jerrungurah Tribal Elders Council</b>	17/07/2020, email	-	-
<b>Kullila Site Consultants</b>	17/07/2020, email	-	-



Organisation contacted	Date and type of contact	Date and type of response	Response details
and Koori Site Management			
La Perouse Botany Bay Corporation	17/07/2020, email	-	-
Minnamunnung	17/07/2020, email	-	-
Munyunga	17/07/2020, email	-	-
Mura Indigenous Corporation	17/07/2020, email	-	-
Murramarang	17/07/2020, email	-	-
Murra Bidgee Mullangari	17/07/2020, email	21/07/2020	Please register our organisation for the above project, we look forward to working with you.
Murrumbul	17/07/2020, email	-	-
NIAC	17/07/2020, email	-	-
Nundagurri	17/07/2020, email	-	-
Pemulwuy	17/07/2020, email	-	-
Norma Simms	17/07/2020, email	-	-
South Coast NSW Aboriginal Elders	17/07/2020, email	-	-
South West Rocks Corporation	17/07/2020, email	-	-
Three Ducks Dreaming Surveying and Consulting	17/07/2020, email	19/07/2020, email	I would like to participate in the upcoming Aboriginal Cultural Heritage Assessment at Weir Street and Saddleback Mountain Road, South Kiama
Thoorga Nura	17/07/2020, email	-	-
Tungai Tonghi	17/07/2020, email	31/07/2020, phone call	Registered for project
Leanne Tungai	17/07/2020, email	17/07/2020, email	Registered for project
The Wadi Wadi Coomaditchie Aboriginal Corporation	17/07/2020, email	-	-
Walbunja	17/07/2020, email	-	-
Walgalu	17/07/2020, email	-	-
Warra Bingi Nunda Gurri	17/07/2020, email	17/07/2020, email	Please register me for the project and include me at every stage.
Wingikara	17/07/2020, email	-	-

Organisation contacted	Date and type of contact	Date and type of response	Response details
The Wodi Wodi Elders Corporation	17/07/2020, email	-	-
The Wodi Wodi Elders Corporation	17/07/2020, email	-	-
Woronora Plateau Gundungara Elders Council	17/07/2020, email	20/07/2020, email	Woronora Plateau Gundungara Elders Council would like to register for consultation for Weir Street, Saddleback Mountain Road, South Kiama.
Wullung	17/07/2020, email	-	-
Yerramurra	17/07/2020, email	17/07/2020, email	Would like to register for the project.
Yurrandaali Cultural Services	17/07/2020, email	18/07/2020, email	Is interested in participating in the project
South Coast peoples (Via NTS corp)	17/07/2020, email	24/07/2020, email	Registered for project

## Stage 2 – Presentation of information about the proposed project

### Step 1- Provision of project information pack

A copy of the information pack is provided in Appendix 3 and a copy of the covering email is provided following.

Identification number	Organisation contacted	Date and type of contact	Date and type of response	Response details
1	Richard Campbell	4/08/2020, email	-	-
2	Gumaraa	4/08/2020, email	-	-
3	Warra Bingi Nunda Gurri	4/08/2020, email	-	-
4	Barraby Cultural Services	4/08/2020, email	7/08/2020, email	Has read and supports methodology.
5	Yurrandaali Cultural services	4/08/2020, email	-	-
6	Leanne Tungai	4/08/2020, email	-	-
7	Yerramurra	4/08/2020, email	9/08/2020, email	Supports methodology.
8	Clive Freeman	4/08/2020, email	-	-
9	Woronora Plateau Gundungara Elders Council	4/08/2020, email	-	-
10	Gary Caines	4/08/2020, email	-	-
11	James Davis	4/08/2020, email	-	-
12	South Coast Peoples	4/08/2020, email	-	-

Identification number	Organisation contacted	Date and type of contact	Date and type of response	Response details
13	Tungai Tongi	4/08/2020, email	5/08/2020, email	Has read methodology and is happy with it.
14	Murra Bidgee Mullangari	4/08/2020, email	5/08/2020, email	Has ready methodology and supports it.
15	Three Ducks Dreaming	4/08/2020, email	-	-
16	Illawarra LALC	4/08/2020, email	-	-

## Stage 3 – Gathering information about cultural significance

### Step 1- Provision of project methodology pack and consultation meeting

A copy of the methodology pack is provided in Appendix 3 and a copy of the covering email is provided following.

Identification number	Organisation contacted	Date and type of contact	Date and type of response	Response details
1	Richard Campbell	4/08/2020, email	-	-
2	Gumaraa	4/08/2020, email	-	-
3	Warra Bingi Nunda Gurri	4/08/2020, email	-	-
4	Barraby Cultural Services	4/08/2020, email	7/08/2020, email	Has read and supports methodology.
5	Yurrandaali Cultural services	4/08/2020, email	-	-
6	Leanne Tungai	4/08/2020, email	-	-
7	Yerramurra	4/08/2020, email	9/08/2020, email	Supports methodology.
8	Clive Freeman	4/08/2020, email	-	-
9	Woronora Plateau Gundungara Elders Council	4/08/2020, email	-	-
10	Gary Caines	4/08/2020, email	-	-
11	James Davis	4/08/2020, email	-	-
12	South Coast Peoples	4/08/2020, email	-	-
13	Tungai Tongi	4/08/2020, email	5/08/2020, email	Has read methodology and is happy with it.
14	Murra Bidgee Mullangari	4/08/2020, email	5/08/2020, email	Has ready methodology and supports it.
15	Three Ducks Dreaming	4/08/2020, email	-	-
16	Illawarra LALC	4/08/2020, email	-	-



## Step 2- Field survey

Identification number	Organisation contacted	Date and type of contact	Date and type of response	Response details
N/A	HeritageNSW	11/09/2020, email	-	-
11	James Davis	11/09/2020, email	-	-
16	Illawarra LALC	11/09/2020, email	-	-
6	Leanne Tungai	11/09/2020, email	-	-

## Stage 4 – Review of draft report

### Step 1- Provision of draft report for review

Identification number	Organisation contacted	Date and type of contact	Date and type of response	Response details
1	Richard Campbell	11/11/2020, Email 9/12/2020, Email	- 9/12/2020, email	- Enquired about artefact reburial.
2	Gumaraa	11/11/2020, Email 9/12/2020, Email	-	-
3	Warra Bingi Nunda Gurri	11/11/2020, Email 9/12/2020, Email	-	-
4	Barraby Cultural Services	11/11/2020, Email 9/12/2020, Email	-	-
5	Yurrandaali Cultural services	11/11/2020, Email 9/12/2020, Email	-	-
6	Leanne Tungai	11/11/2020, Email 9/12/2020, Email	12/11/2020 12/12/2020	Thank you for the information. Thank you for the information.
7	Yerramurra	11/11/2020, Email 9/12/2020, Email	-	-
8	Clive Freeman	11/11/2020,	12/11/2020,	Requested concise and plain

Identification number	Organisation contacted	Date and type of contact	Date and type of response	Response details
		Email 27/11/2020, email 9/12/2020, Email	Phone	English report to review. Biosis provided a condensed letter report for review.
9	Woronora Plateau Gundungara Elders Council	11/11/2020, Email 9/12/2020, Email	-	-
10	Gary Caines	11/11/2020, Email 9/12/2020, Email	-	-
11	James Davis	11/11/2020, Email 9/12/2020, Email	-	-
12	South Coast Peoples	11/11/2020, Email 9/12/2020, Email	-	-
13	Tungai Tongi	11/11/2020, Email 9/12/2020, Email	11/11/2020, email 9/12/2020, email	EOI  EOI
14	Murra Bidgee Mullangari	11/11/2020, Email 9/12/2020, Email	-	-
15	Three Ducks Dreaming	11/11/2020, Email 9/12/2020, Email	-	-
16	Illawarra LALC	11/11/2020, Email 9/12/2020, Email	-	-

## Appendix 2 Stage 1: Notification of project proposal and registration of interest

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## Appendix 3 Stage 2 & 3: Presentation of information about the proposed project & Gathering information about cultural significance

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## Appendix 4 Notice of test excavations

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## Appendix 5 Stage 4: Review of draft cultural heritage assessment report

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Wed 11/11/2020 12:53 PM

Madeleine Lucas

33490 - South Kiama ACHA - Stage 4 Consultation

To: Madeleine Lucas

Bcc: richardcampbell123@outlook.com; oldmanwisdomgumaraa@gmail.com; warrabingi@gmail.com; barrabyculturalservices@gmail.com; yurrandaali\_cs@outlook.com; leannecaroltungai@gmail.com; blaen.davies@my.jcu.edu.au; jydcorp@hotmail.com; dlve.freeman@y7mail.com; Kayla\_87@hotmail.com; murrabidgeemullangani@yahoo.com.au; Garycaines87@gmail.com; gwenda.jarrett2534@gmail.com; troytungai72@outlook.com; tbjwright1977@hotmail.com; ceo@laic.org.au

Good afternoon,

Further your registration for the Weir Street and Saddleback Mountain Road, South Kiama Aboriginal Cultural Heritage Assessment (ACHA), Biosis Pty Ltd is assisting Unicom Development Services Pty Ltd with Aboriginal community consultation to inform the ACHA. Please see the following link for the ACHA and AR reports in accordance with the Aboriginal *Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010) (consultation requirements).

<https://spaces.hightail.com/receive/4YKDvVwpOTb>

Please provide feedback on the ACHA and AR in writing via post or email by **9 November 2020** to:

**Maggie Butcher**  
Biosis Pty Ltd  
14/17-27 Power Avenue  
Alexandria  
[mbutcher@biosis.com.au](mailto:mbutcher@biosis.com.au)

If you have any queries regarding the project or issues accessing the link please don't hesitate to contact me or Maggie Butcher on the details above.

Kind regards

**Madeleine Lucas**  
Research Assistant - Heritage  
M: 0437 705 064  
D: (02) 4911 4043  
E: [mlucas@biosis.com.au](mailto:mlucas@biosis.com.au)





Wed 9/12/2020 10:37 AM

Madeleine Lucas

RE: 33490 - South Kiama ACHA - Stage 4 Consultation

To: Madeleine Lucas

Bcc: richardcambell123@outlook.com; oldmanwisdomumaraa@gmail.com; warrabing@gmail.com; barrabyculturalservices@gmail.com; yurrandaali\_cs@outlook.com; learnecaroltunga@gmail.com; blean.davies@my.jcu.edu.au; jvdcorp@hotmail.com; chve.freeman@y7mail.com; Kayla\_87@hotmail.com; murrabidgeemullangan@yahoo.com.au; Garycaines87@gmail.com; gwenda.jarrett2534@gmail.com; troytunga72@outlook.com; bjwright1977@hotmail.com; ceo@isac.org.au

Good morning,

This is a reminder that Stage 4 consultation for the Weir Street and Saddleback Mountain Road, South Kiama ACHA closes today. Please send through any comments you have regarding the ACHA and AR reports at your soonest convenience. A copy of the reports can be found via the link in the email below.

Please don't hesitate to contact Maggie or I via the contact details below if you have any questions or issues accessing the reports.

Kind regards,

Madeleine

Madeleine Lucas  
Archaeologist

M: 0437 705 064  
D: (02) 4911 4043  
E: [mlucas@biosis.com.au](mailto:mlucas@biosis.com.au)



Leaders in Ecology and Heritage Consulting

**Biosis acknowledges the Aboriginal and Torres Strait Islander people as Traditional Custodians of the country on which we live and work. We pay our respects to the Traditional Custodians and Elders past, present and future, and honour their connection to the land and ongoing contribution to society.**

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## Appendix 6 Archaeological report

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