

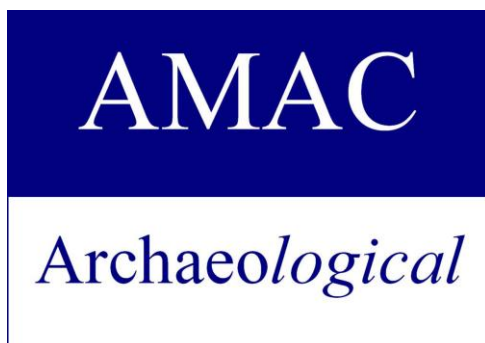
# ABORIGINAL HERITAGE SERVICES

## PART 1 - PRELIMINARY INDIGENOUS HERITAGE IMPACT

### Report for *Cammeray Public School*



<b>Project Name</b>	Cammeray Public School Upgrade		
<b>Report Title</b>	Preliminary Indigenous Heritage Assessment and Impact Report		
<b>File Name</b>	Aboriginal Due Diligence-Cammeray Public School - AMAC-Aegis Pty Ltd-DDWO05118-23		
<b>School Name:</b>	Cammeray Public School	<b>Company Name:</b>	AMAC-AEGIS PTY LTD
<b>School Address:</b>	68 Palmer Street, Cammeray, NSW 2062	<b>Report Date:</b>	09/11/2023
<b>School Region:</b>	North Sydney, NSW	<b>Contract Number:</b>	DDWO05118-23



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Archaeological Management & Consulting Group  
**Prepared for**



**Education**  
School Infrastructure  
**November 2023**

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**Cover Image****Aerial of study area.**

Study area outlined in red. Six Maps. LRS Online (accessed 04/08/2023).

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## EXECUTIVE SUMMARY

### Background

Archaeological Management and Consulting Group (AMAC Group) were commissioned by School Infrastructure NSW (SINSW) in August 2023 to prepare a Preliminary Indigenous Heritage Assessment Impact for the Cammeray Public School as part of a Feasibility Due Diligence Study for a potential upgrade development, at Lots 1, 2, 4, 5, 35, 11, and 66 forming the following street address 68 Palmer Street Cammeray NSW, 2062.

### Aboriginal Consultation

As this is a desktop study and no Aboriginal Heritage Impact Permit (AHIP) is being applied for, this report does not require consultation to be undertaken as per the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010c). SINSW have advised that no stakeholder engagement will be required as part of the Due Diligence reporting process. Should SINSW give permission to engage stakeholders, AMAC Group will provide a copy of this report to the Metropolitan Local Aboriginal Land Council for review and comment. All comments will be included in the final version of this document.

### Results

There were no confirmed Aboriginal archaeological site records located within the study area on the Aboriginal Heritage Information Management System (AHIMS) however there are eight registered sites within 1000m of the study area. The site is also located within 200m of waters which indicates that sub-surface Aboriginal objects and/or deposits are likely in undisturbed areas.

### Recommendations

- Overall, the study site has been assessed as holding some archaeological potential within areas marked as having moderate disturbance (Figure 4.10). Future development works within areas of moderate disturbance will require an Aboriginal Cultural Heritage Assessment Report (ACHAR).

Key	Disturbance Assessment	Future Action Required if development proposed in this zone:
	Moderate	Preparation of an ACHAR if below ground excavation is to occur in that location. Includes any works within biodiversity zone included in shading in Figure 4.10. ACHAR to be prepared during development application stage (DA or SSD pathway) and completed prior to construction phase of project.
	High	Preparation of an Unexpected Finds Protocol (UFP) by archaeologist. No ACHAR is required. UFP to be prepared prior to commencement of excavation work on site. UFP does not require submission with any future development application.

- Based on the current masterplan option supplied by SINSW and reproduced as Figure 4.35, new buildings are proposed towards the west site boundary near Miller Street, within an area assessed as highly disturbed. An ACHAR is not required for these works should the masterplan proceed with development in that location. An Unexpected Finds Protocol (UFP) is to be prepared prior to construction phase.

## CONTACT DETAILS

The contact details for the archaeologist, NSW Police, Heritage NSW, and the Local Aboriginal Land Council are as follows:

Organisation	Contact	Contact Details
NSW Environment Line		131 555
NSW North Sydney Police Area Command		PAC Office: 273 Pacific Hwy, Crows Nest, NSW 2065 Phone: (02) 9956 3199
Archaeological Management & Consulting Group	Mr. Benjamin Streat or Mr. Martin Carney	122c-d Percival Road Stanmore NSW 2048 Ph:(02) 9568 6093 Fax:(02) 9568 6093 Mob: 0405 455 869 Mob: 0411 727 395 <a href="mailto:benjaminstreat@archaeological.com.au">benjaminstreat@archaeological.com.au</a>
Heritage NSW Department of Planning & Environment	Archaeologist – Head Office	Level 6 Valentine Avenue Parramatta, NSW 2150 Ph: (02) 9873 8500 <a href="mailto:heritagemailbox@environment.nsw.gov.au">heritagemailbox@environment.nsw.gov.au</a>
Metropolitan Local Aboriginal Land Council (MLALC)	Cultural Heritage Officer	36-38 George Street, Redfern NSW 2016 Ph: (02)8394 9666 Fax: (02) 8394 9733 <a href="mailto:metrolalc@metrolalc.org.au">metrolalc@metrolalc.org.au</a>

# 1.0 INTRODUCTION

## 1.1 BACKGROUND

Archaeological Management and Consulting Group (AMAC Group) was commissioned by School Infrastructure NSW (SINSW) in August 2023 to prepare a Preliminary Indigenous Heritage Assessment Impact for the Cammeray Public School as part of a Feasibility Due Diligence Study for a potential upgrade development.

## 1.2 STUDY AREA

The study site is that piece of land described as Lots 1, 2, 4, 5, 35, 11, and 66 forming the following street address 68 Palmer Street Cammeray, NSW 2062 in the Parish of Willoughby County of Cumberland (Figure 1.1 and Figure 1.2).

Lot	Deposited Plan
1	123406
1	316130
1	316706
1 & 2	174370
4, 5, 35	758790
11	837836
66	1049613

## 1.3 SCOPE

The aims of this assessment are to evaluate the Aboriginal archaeological potential of the study area and the likelihood of any intact soil profiles within the study area that have the potential to contain Aboriginal archaeological deposits and/or objects; to develop mitigative strategies under the appropriate legislation; and to devise an appropriate strategy for the management of Aboriginal archaeological and cultural heritage values of the area.

### 1.3.1 Proposed Activity and Impacts

As this assessment is part of an initial Feasibility Due Diligence Study for a potential school upgrade, detailed architectural plans are not available but concept plans showing proposed general impact zones have been provided. As a result, our assessment of the potential impacts to Aboriginal cultural heritage and subsequent recommendations have been prepared using information supplied by SINSW at the time of report publication. The sites specific proposed activity and impacts will be discussed in detail in Section 4.6.

### 1.3.2 Limitations

Specific assumptions and limitations identified by AMAC Group as being relevant are set out as follows. This report considers Aboriginal Cultural Heritage only, it does not assess European historical archaeology or built heritage. From a desktop research perspective, school sites that lack local Aboriginal archaeological assessments will be limited by the resource information available for the site's archaeological context.



Aboriginal consultation is outside of the scope of the current study. It should be noted that certain cultural heritage information can only be gathered through extensive consultation with all relevant Aboriginal community members and as such issues, items, objects and matters of Aboriginal cultural significance may not be included in the current assessment.

#### **1.4 ABORIGINAL CONSULTATION & PARTICIPATION SUMMARY**

As this is a desktop study and no Aboriginal Heritage Impact Permit (AHIP) is being applied for, this report does not require consultation to be undertaken as per the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010c).

SINSW have advised that no stakeholder engagement will be required as part of the Due Diligence reporting process. Should SINSW give permission to engage stakeholders, AMAC Group will provide a copy of this report to the Metropolitan Local Aboriginal Land Council for review and comment. All comments will be included in the final version of this document.

#### **1.5 AUTHOR IDENTIFICATION**

The analysis of the archaeological background and the reporting were undertaken by Prue Newton (B. Arts, Hons, MMarArchaeol) and reviewed by Mr. Benjamin Streat (BA, Grad Dip Arch Her, Grad Dip App Sc), Director of Indigenous Heritage in association with senior archaeologist Mr. Steven J. Vasilakis (B. Arts. Hons.). QGIS graphics and mapping were undertaken by Emma Williams (B. Arts).

#### **1.6 ACKNOWLEDGEMENTS**

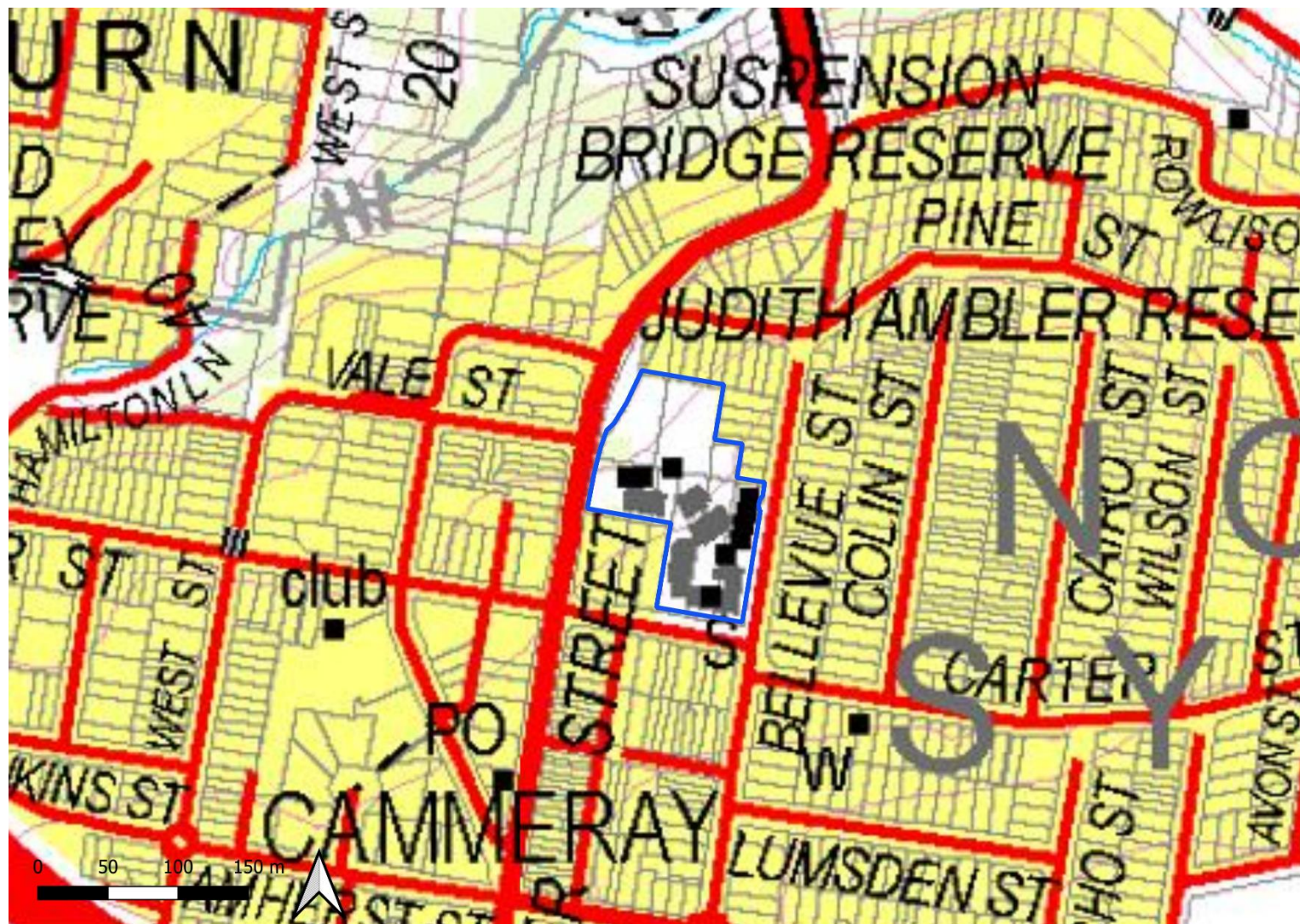
The author would like to thank the following for advice and/or input into this assessment:

- School Infrastructure NSW.



**Figure 1.1** Aerial of study area outlined in red.  
Study area outlined in red. QGIS using Six Maps. LRS Online (accessed 04/08/2023).





**Figure 1.2** Topographic map with site location.  
Study area indicated by blue outline. Six Maps. LRS Online (accessed 04/08/2023).



## 2.0 LEGISLATIVE CONTEXT AND STATUTORY CONTROLS

This section of the report provides a brief outline of the relevant legislation and statutory instruments that protect Aboriginal archaeological and cultural heritage sites within the state of New South Wales. Some of the legislation and statutory instruments operate at a federal or local level and as such are applicable to Aboriginal archaeological and cultural heritage sites in New South Wales. This material is not legal advice and is based purely on the author's understanding of the legislation and statutory instruments. This document seeks to meet the requirements of the legislation and statutory instruments set out within this section of the report.

### 2.1 COMMONWEALTH HERITAGE LEGISLATION AND LISTS

One piece of legislation and two statutory lists are maintained and were consulted as part of this report: *the Environmental Protection and Biodiversity Conservation Act 1999*, the National Heritage List and the Commonwealth Heritage List.

#### 2.1.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act 1999) offers provisions to protect matters of national environmental significance. This act establishes the National Heritage List and the Commonwealth Heritage List which can include natural, Indigenous and historic places of value to the nation. This Act helps ensure that the natural, Aboriginal and historic heritage values of places under Commonwealth ownership or control are identified, protected and managed.

#### 2.1.2 National Heritage List

The National Heritage List is a list which contains places, items and areas of outstanding heritage value to Australia; this can include places, items and areas overseas as well as items of Aboriginal significance and origin. These places are protected under the Australian Government's *EPBC Act 1999*.

#### 2.1.3 Commonwealth Heritage List

The Commonwealth Heritage List can include natural, Indigenous and historic places of value to the nation. Items on this list are under Commonwealth ownership or control and as such are identified, protected and managed by the Federal Government.

#### 2.1.4 The Native Title Act 1993

The *Native Title Act 1993* (NTA 1993) provides the legislative framework to:

- Recognise and protect native title;
- establish ways in which future dealings affecting native title may proceed, and to set standards for those dealings, including providing certain procedural rights for registered native title claimants and native title holders in relation to acts which affect native title;
- establish a mechanism for determining claims to native title;

- provide for, or permit, the validation of past acts invalidated because of the existence of native title.

The National Native Title Tribunal has a number of functions under the *NTA 1993* including maintaining the Register of Native Title Claims, the National Native Title Register and the Register of Indigenous Land Use Agreements and mediating native title claims (*NPW Act 1974* and *DECCW 2010b*).

## 2.2 NEW SOUTH WALES STATE HERITAGE LEGISLATION AND LISTS

The state (NSW) based legislation that is of relevance to this assessment comes in the form of the acts which are outlined below.

### 2.2.1 National Parks and Wildlife Act 1974

The NSW *National Parks and Wildlife Act 1974* (as amended) (*NPW Act 1974*) defines Aboriginal objects and provides protection to any and all material remains which may be evidence of the Aboriginal occupation of lands continued within the state of New South Wales. The relevant sections of the Act are Sections 84, 86, 87 and 90.

An Aboriginal object, formerly known as a relic is defined as:

any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains" (NSW Government, 1974).

It is an offence to harm or desecrate an Aboriginal object or places under Part 6, Section 86 of the *NPW Act 1974*:

Part 6, Division 1, Section 86: Harming or desecrating Aboriginal objects and Aboriginal places:

- (1) A person must not harm or desecrate an object that the person knows is an Aboriginal object.

Maximum penalty:

- (a) in the case of an individual—2,500 penalty units or imprisonment for 1 year, or both, or (in circumstances of aggravation) 5,000 penalty units or imprisonment for 2 years, or both, or
- (b) in the case of a corporation—10,000 penalty units.

- (2) A person must not harm an Aboriginal object.

Maximum penalty:

- (a) in the case of an individual—500 penalty units or (in circumstances of aggravation) 1,000 penalty units, or
- (b) in the case of a corporation—2,000 penalty units.

- (3) For the purposes of this section, **circumstances of aggravation** are:

- (a) that the offence was committed in the course of carrying out a commercial activity, or
- (b) that the offence was the second or subsequent occasion on which the offender was convicted of an offence under this section.

This subsection does not apply unless the circumstances of aggravation were identified in the court attendance notice or summons for the offence.

- (4) A person must not harm or desecrate an Aboriginal place.

Maximum penalty:

- (a) in the case of an individual—5,000 penalty units or imprisonment for 2 years, or both, or
  - (b) in the case of a corporation—10,000 penalty units.
- (5) The offences under subsections (2) and (4) are offences of strict liability and the defence of honest and reasonable mistake of fact applies.
- (6) Subsections (1) and (2) do not apply with respect to an Aboriginal object that is dealt with in accordance with section 85A.
- (7) A single prosecution for an offence under subsection (1) or (2) may relate to a single Aboriginal object or a group of Aboriginal objects.
- (8) If, in proceedings for an offence under subsection (1), the court is satisfied that, at the time the accused harmed the Aboriginal object concerned, the accused did not know that the object was an Aboriginal object, the court may find an offence proved under subsection (2).

### 2.2.2 Environmental Planning & Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act 1979) states that environmental impacts of proposed developments must be considered in land use planning procedures. Four parts of this act relate to Aboriginal cultural heritage.

- Part 3, Divisions 3, 4 and 4A refer to Regional Environmental Plans (REP) and Local Environmental Plans (LEP) which are environmental planning instruments and call for the assessment of Aboriginal heritage among other requirements.
- Part 4 determines what developments require consent and what developments do not require consent. Section 4.15 calls for the evaluation of:
 

The likely impacts of that development, including environmental impacts on both the natural and built environments and the social and economic impacts in the locality.

This part of the legislation also addresses State Significant Developments as mentioned in Division 4.7 with Section 4.38 outlining the consent for State Significant Development in relation to the environmental planning instruments.

- Part 5 of this Act requires that impacts on a locality which may have an impact on the aesthetic, anthropological, architectural, cultural, historic, scientific, recreational or scenic value are considered as part of the development application process.

### 2.2.3 The Aboriginal Land Rights Act 1983

The NSW *Aboriginal Land Rights Act 1983* (ALR Act 1983), administered by the NSW Department of Aboriginal Affairs, established the NSW Aboriginal Land Council (NSWALC) and Local Aboriginal Land Councils (LALCs). The *ALR Act 1983* requires these bodies to:

- Take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law;
- promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.



These requirements recognise and acknowledge the statutory role and responsibilities of New South Wales Aboriginal Land Council and Local Aboriginal Land Councils.

The *ALR Act 1983* also establishes the Office of the Registrar whose functions include but are not limited to, maintaining the Register of Aboriginal Land Claims and the Register of Aboriginal Owners.

Under the *ALR Act 1983* the Office of the Registrar is to give priority to the entry in the Register of the names of Aboriginal persons who have a cultural association with:

- Lands listed in Schedule 14 to the *NPW Act 1974*;
- lands to which section 36A of the *ALR Act 1983* applies (*NPW Act 1974* and *DECCW 2010b*).

#### **2.2.4 NSW Heritage Act 1977 (as amended)**

The *NSW Heritage Act 1977* affords automatic statutory protection to relics that form archaeological deposits or part thereof. *The Act* defines relics as:

- Relic means any deposit, artefact, object or material evidence that:
- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
  - (b) is of State or local heritage significance

Sections 139 to 145 of the *Act* prevent the excavation or disturbance of land for the purpose of discovering, exposing or moving a relic, except by a qualified archaeologist to whom an excavation permit has been issued by the Heritage Council of NSW.

#### **2.2.5 New South Wales State Heritage Register and Inventory**

The State Heritage Register is a list of places and objects of particular importance to the people of NSW. The register lists a diverse range of over 1,500 items, in both private and public ownership. Places can be nominated by any person to be considered to be listed on the Heritage register. To be placed an item must be significant for the whole of NSW. The State Heritage Inventory lists items that are listed in local council's local environmental plan (LEP) or in a regional environmental plan (REP) and are of local significance.

#### **2.2.6 Declared Aboriginal Places**

The *NPW Act 1974* protects areas of land that have recognised values of significance to Aboriginal people. These areas may or may not contain Aboriginal objects (i.e., any physical evidence of Aboriginal occupation or use). Places can be nominated by any person to be considered for Aboriginal Place gazettal. Once nominated, a recommendation can be made to Heritage NSW for consideration by the Minister. The Minister declares an area to be an 'Aboriginal place' if the Minister believes that the place is or was of special significance to Aboriginal culture. An area can have spiritual, natural resource usage, historical, social, educational or other type of significance.

Under section 86 of the *NPW Act 1974* it is an offence to harm or desecrate a declared Aboriginal place. Harm includes destroying, defacing or damaging an Aboriginal place. The potential impacts of the development on an Aboriginal place

must be assessed if the development will be in the vicinity of an Aboriginal place a place (DECCW 2010b).

## **2.3 LOCAL PLANNING INSTRUMENTS**

### **2.3.1 North Sydney Local Environmental Plan (2013)**

The North Sydney Local Environment Plan was endorsed in 2013. Heritage Conservation is discussed in Part 5 Section 5.10 and highlights objectives to conserve archaeological sites, Aboriginal objects and places of heritage significance (Part 5 section 5.10(1)).

Development consent is required when proposed works may disturb or excavate archaeological sites, Aboriginal objects or Aboriginal places of heritage significance (Part 5 section 5.10(2)(a-f)). Conservation incentives through development mitigation and preservation of significant sites is detailed in Part 5 section 10(10). Specific consent requirements surrounding proposed development to Aboriginal places of heritage significance is stated in Part 5 section 5.10(8):

#### **(8) Aboriginal places of heritage significance**

The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:

- (a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and
- (b) notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent.

The study site being Cammeray Public School is listed as a locally significant Heritage Item I0019 and is within the Cammeray Heritage Conservation Area (CA01). It should also be noted that Cammeray Public School is also listed under the NSW Government S170 Heritage and Conservation Register as Heritage Item ID 5065645 for built heritage and Heritage Item Id 5065654 for heritage type complex/ group. These listing however do not relate to Aboriginal heritage.

### **2.3.2 North Sydney Development Control Plan (2013)**

The North Sydney Development Control Plan was completed in 2013 and outlines the objectives relating to Aboriginal archaeology. Aboriginal Archaeology is discussed in Part B – Section 13 and the following is an extract of the Aboriginal heritage as discussed in this section:

#### **13.2 Aboriginal Heritage**

There are a number of known Aboriginal places of heritage significance located within the North Sydney Local Government Area. The location of these known places are not readily available to the general public.

There is also potential for the existence of Aboriginal places of significance and Aboriginal objects on sites that are not currently known about. Such places generally occur:

- Along the harbour foreshores and creek lines and streams.
- On sites containing sandstone outcropping (including flat surfaces above cliffs and scarps, rock shelters on slopes below ridges cliffs and scarps and beneath or part of fallen boulders)

Sites will be more common where properties adjoin bushland and where sandstone cliffs contain overhangs and less common where the land has been heavily modified. Commercial areas where land disturbance has been most intensive will have the lowest frequency of sites.

### Objectives

- O1 Acknowledge the importance of Aboriginal heritage as part of North Sydney's heritage resources.
- O2 Protect Aboriginal objects and Aboriginal places of heritage significance by minimising the likelihood of disturbance from development.
- O3 Minimise potential for interference with archaeological objects as a result of development by encouraging relics to be preserved in-situ.

### Provisions

- P1 Obtain relevant approvals from the Aboriginal Heritage Office prior to commencing work where a site contains, or has potential for Aboriginal objects.
- P2 Building and landscaping works, including paths and driveways are not to disturb any Aboriginal objects.
- P3 Minimise disturbance and exposure of areas along the foreshore, including excavations for swimming pools, jetties and boat sheds.
- P4 Site structures away from the foreshore where possible.
- P5 Minimise disturbance to rock outcrops and overhangs.

## 2.4 DUE DILIGENCE CODE OF PRACTICE FOR THE PROTECTION OF ABORIGINAL OBJECTS IN NEW SOUTH WALES

This assessment conforms to the parameters set out in the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010b).

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales states that if:

- A desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely, then further archaeological investigation and impact assessment is necessary.

## 2.5 CODE OF PRACTICE FOR ARCHAEOLOGICAL INVESTIGATION OF ABORIGINAL OBJECTS IN NSW

Any further work resulting from recommendations should be carried out conforming to the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010a).

## 2.6 GUIDELINES

This report has been carried out in consultation with the following documents which advocate best practice in New South Wales:

- Aboriginal Archaeological Survey, Guidelines for Archaeological Survey Reporting (NSW NPWS 1998).
- Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1998).
- Australia ICOMOS 'Burra' Charter for the conservation of culturally significant places (Australia ICOMOS 1999).
- Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010c).
- Protecting Local Heritage Places: A Guide for Communities (Australian Heritage Commission 1999).

## 3.0 ENVIRONMENTAL CONTEXT

To adequately understand and assess the potential Aboriginal archaeological resources that may be present within the study area it is vital to understand the environment in which the Aboriginal inhabitants of the study area carried out their activities. The environment that Aboriginal inhabitants lived in is a dominant factor in shaping their activity and therefore the archaeological evidence created by this activity. Not only will the resources available to the Aboriginal population have an influence on the evidence created but the survival of said evidence will also be influenced by the environment.

### 3.1 TOPOGRAPHY

Cammeray Public School is located within the suburb of Cammeray and is part of the Lower North Shore region of Northern Sydney. The study site represents a built-up area and modified landscape. The topography of the study site has a steep slope downward towards the northwest and has a substantial amount of outcropping of sandstone rock.

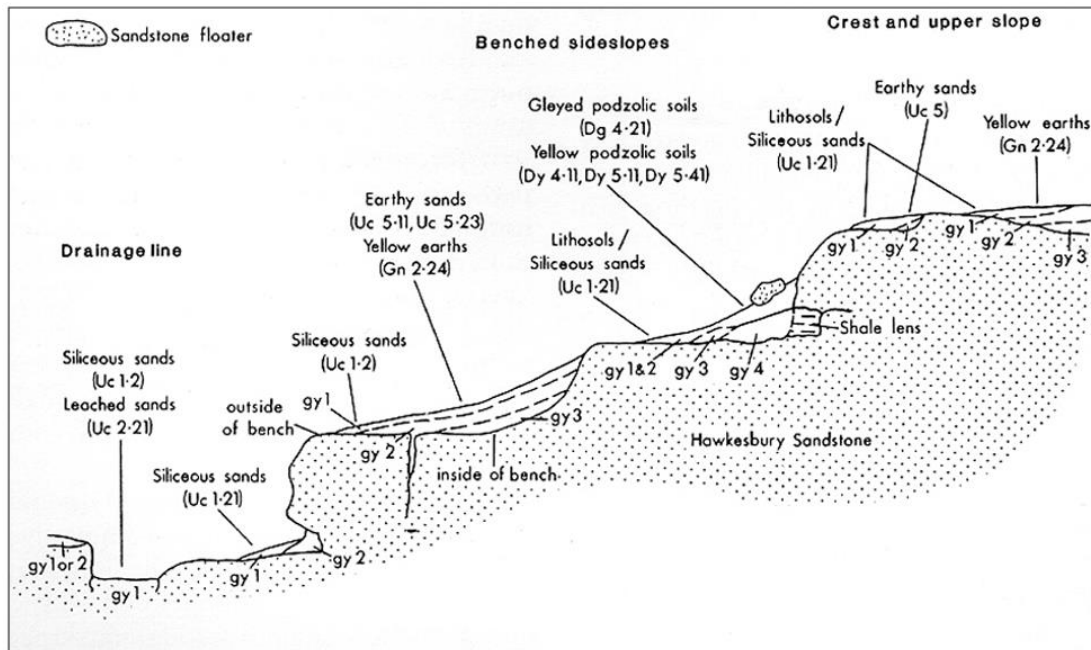
The study area is located over a merged topographic zone: the GyMEA/ Lambert soil landscape. This landscape covers undulating to rolling low hills with local relief 20–80 m and slopes of 10–25%. Sideslopes with narrow to wide outcropping sandstone rock benches (10–100 m), often forming broken scarps of <5 m.

### 3.2 GEOLOGY AND SOILS

The geology consists of Hawkesbury Sandstone, which is a medium to coarse-grained quartz sandstone with minor shale and laminate lenses, DME (unpub.) and Herbert (1993). The dominant soil materials for GyMEA are shown below however the Lambert soil materials have not yet been published.

Dominant Soil Material	Soil Horizon	Description
gy1	A1 Horizon	Loose, coarse sandy loam. This is loamy sand to sandy loam with loose, apedal single grained structure and porous sandy fabric. It generally occurs as topsoil (A1 horizon).
gy2	B Horizon	Earthy, yellowish-brown clayey sand. This is commonly yellowish-brown clayey sand with apedal massive structure and porous earthy fabric. It commonly occurs as subsoil over sandstone bedrock (B horizon). Where it is exposed at the surface it forms hardsetting topsoil.
gy3	B or C Horizon	Earthy to weakly pedal, yellowish-brown sandy clay loam. This is commonly a yellowish-brown sandy clay loam to sandy clay with an apedal massive structure and an earthy porous fabric. It usually occurs as subsoil (B or C horizon) on coarse sandstone.
gy4	B and C Horizon	Moderately to strongly pedal, yellowish-brown clay. This is commonly a yellowish-brown sandy clay or light clay with a moderately to strongly pedal structure and either a smooth or rough-faced ped fabric. This material occurs as subsoil on shale bedrock (B and C horizons).





**Figure 3.1** Schematic cross-section of GyMEA soil landscape illustrating the occurrence and relationship of the dominant soil materials.

### 3.3 VEGETATION

#### *GyMEA*

The original dry sclerophyll woodland and open-forest have been extensively cleared. Low, dry sclerophyll open-woodland dominates ridges and upper slopes. Common species include red bloodwood *Eucalyptus gummifera*, yellow bloodwood *E. eximia*, scribbly gum *E. haemastoma*, brown stringybark *E. capitellata* and old man banksia *Banksia serrata*. On the more sheltered slopes, black ash *E. sieberi*, Sydney peppermint *E. piperita* and smooth-barked apple *Angophora costata* are common tree species. The dry sclerophyll understorey consists of shrubs from the families Epacridaceae, Myrtaceae, Fabaceae and Proteaceae.

#### *Lambert*

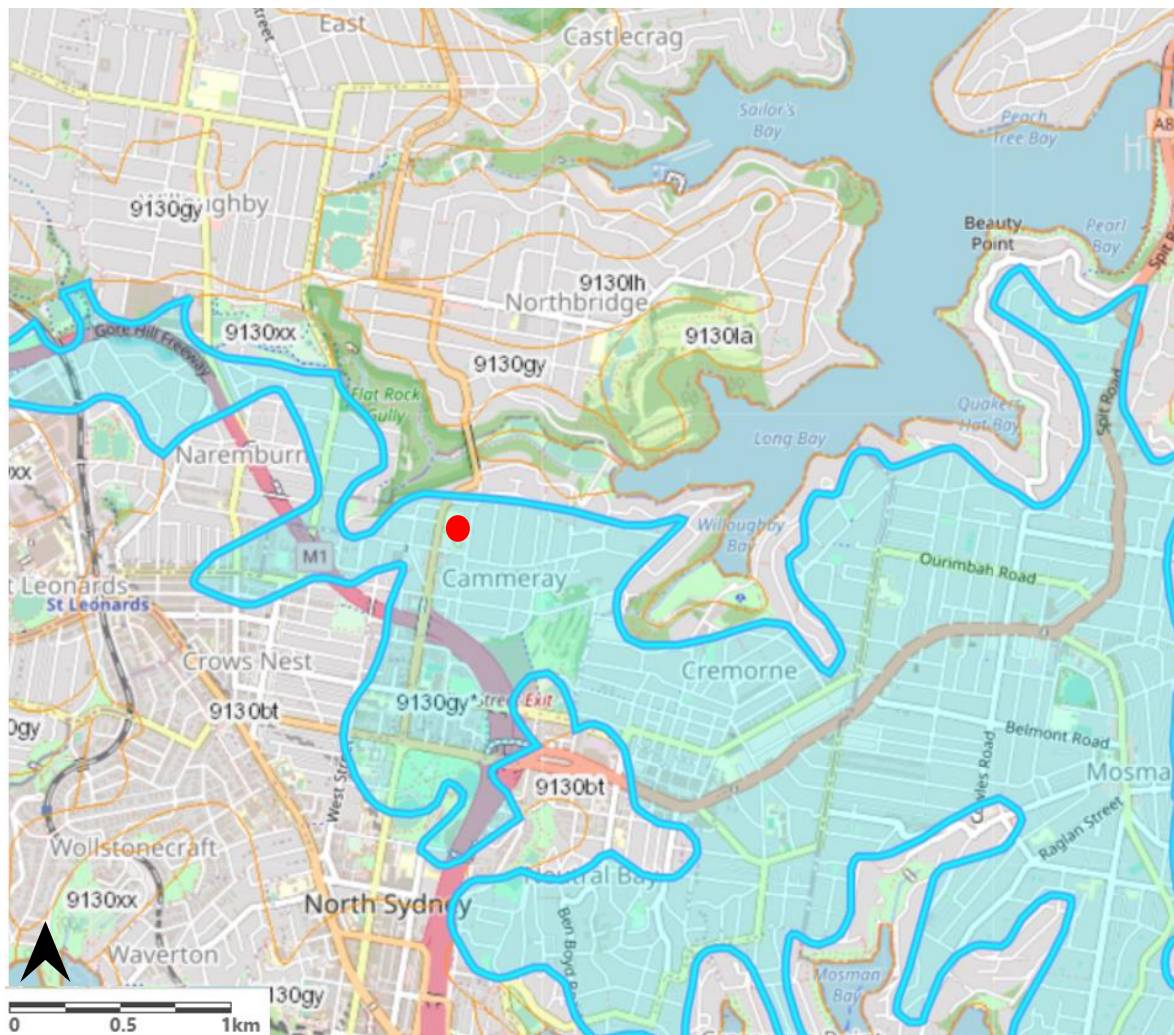
Mostly uncleared open-heathlands, closed-heathlands and scrublands, with patches of low eucalypt woodland. *Banksia ericifolia* (heath banksia) and *Hakea teretifolia* (dagger hakea) are locally dominant in areas subject to seepage or prolonged saturation. Associated shrubs include various *Grevillea* spp. (spider flowers), *Kunzea* spp. (billy buttons), *Dillwynia* spp. (eggs and bacon), *Leptospermum* spp. (tea-trees) and *Epacris* spp. (native heath). In the west near Simpsons Pass, *Angophora hispida* (dwarf apple) occurs. Low eucalypt open-woodland with *Eucalyptus haemastoma* (scribbly gum), *E. punctata* (grey gum) and *Corymbia gummifera* (red bloodwood). *Angophora costata* (smooth-barked apple) and *Allocasuarina distyla* (shrub she-oak) are found at sites with deeper soils and unimpeded soil drainage.

### 3.4 WATERCOURSES

The study area lies to the north of Sydney Harbour, approximately 2.16km. This body of water contains major tributaries. In the past it would have channelled Aboriginal activity as a major resource of food and water. The closest creek within the area consists of Flat Rock Creek (north approx. 200m) and Willoughby Creek

(southeast approx. 470m). During the site inspection (see Section 4.5) a natural water source that has been diverted into a stormwater drain was observed within the natural sandstone rock in the north portion of the site. The study site also lies 680m west of Long Bay.

These creek lines are known to have channelled Aboriginal activity to this area as an important resource within the landscape. Several lakes, drainage channels, reservoirs, and man-made ponds are located within the wider surrounding landscape as a result of European occupation and past land use.

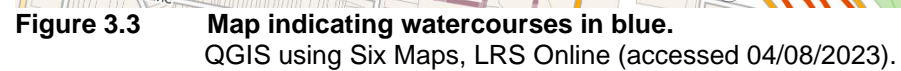


**Figure 3.2**

**Study area on soil map.**

Study area indicated by red marker. Gynea/ Lambert soil profile highlighted in blue. NSW Government Sharing and Enabling Environmental Data in NSW (SEED), accessed 04/08/2023.





## 4.0 DUE DILIGENCE ASSESSMENT

This desktop assessment conforms to the parameters set out in the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010b).

This section builds upon the evidence provided from the environmental context collating archaeological predictive modelling with what is already known about the archaeological context and nearby registered sites. This includes a search of the Aboriginal Heritage Information Management System as well as other statutory lists and an analysis of the current site conditions to determine whether objects and deposits of Aboriginal Cultural Heritage significance are likely to exist within the study area.

### 4.1 ARCHAEOLOGICAL CONTEXT

It is generally accepted that Aboriginal occupation of Australia dates back at least 40,000 years (Attenbrow 2002; Kohen et al 1984) and to as long as 60,000 years (Mulvaney and Kamminga 1999). The majority of reliably dated archaeological sites within the region are less than 5,000 years old which places them in the mid to late Holocene period. A combination of reasons has been suggested for this collection of relatively recent dates; There is an argument that an increase in population and 'intensification' of much of the continent took place around this time, leading to a significant increase in evidence being deposited than was deposited as a result of the sparser prior occupation period. In addition, it is also true that the acidic soils which are predominate around the region do not allow for longer-term survival of sites (Hiscock 2008).

It is estimated that around 250 distinct languages were in use throughout the Australian continent at the time of contact. The exact number cannot be known for certain, however 250 is a conservative estimate. These languages fell within two language groups: the *Pama-Nyungan* and *Non Pama-Nyungan* languages. Knowledge of the different language groups in a given area is variable. Early European recordings noted the names of particular Aboriginal individuals and groups but were not always clear about which named groups represented a language rather than some other social grouping (Hardy and Streat 2008).

Within these large language groups resource access and ownership was centred on extended family groups or 'clans' which appear to have had ownership of land (Attenbrow 2002). As it was unlikely to be acceptable to find sexual partners within the family grouping and for other reasons such as resource sharing, a number of clans would often travel together in a larger group.

These groups are referred to as *bands*. Whether the clan or the band was the most important group politically to an individual is likely to have varied from place to place. Group borders were generally physical characteristics of the landscape inhabited, such as waterways or the limits of a particular resource. Groups also shared spiritual affiliations, often a common dreaming ancestor, history, knowledge, and dialect (Hardy 2008).

A wide variety of activities comprised the lifestyle of the Aboriginal groups across the region. Some behaviours leave traces which can be retrieved by archaeological study of material remains. Many of these can only be reconstructed by oral history, observations of European explorers and ethnologists, and other forms of past



recording such as photography or art. Some of the details of the complexity and sophistication of the past lifestyles of Aboriginal people in the area have been lost, but many can be reconstructed using the sources available.

#### **4.1.1 Sydney Basin**

Different landscape units not only influence the preservation of sites but can determine where certain site types will be located. Across the whole of the Sydney Basin, the most common Aboriginal archaeological site type is occupation evidence within Rock Shelters. However, the most common Aboriginal archaeological site type in the Cumberland Lowlands is Open Artefact Scatters or Open Campsites, which are locations where two or more pieces of stone show evidence of human modification. These sites can sometimes be very large, with up to thousands of artefacts and include other habitation remains such as animal bone, shell, or fireplaces [known as hearths] (Attenbrow 2002 p. 75–76). Many hundreds of artefact sites have been recorded within the Cumberland Lowlands. This is despite the fact that at least 50% of the Cumberland Lowlands has already been developed to such an extent that any archaeological evidence which may have once been present has been destroyed.

#### **4.1.2 Relevant Aboriginal Cultural Heritage Consultant Reports**

The Heritage NSW library of Aboriginal cultural heritage consultant report was searched for reports carried out for sites within 1000m of the study area. This list is by no means exhaustive and is merely a representative sample of archaeological activity within the vicinity of the study area.

This search found the following nearby Aboriginal cultural heritage consultant report/s:

- Bobbie Oakley (1984) An archaeological survey of Northbridge Golf Links.
- A.K. Morris (1986) An archaeological survey of North Port Jackson.
- Val Attenbrow (1991) Port Jackson archaeological project stage 2: Preliminary report on excavations undertaken in August/September under NPWS permit dated 30/7/1990.
- Helen Brayshaw (2003) Land between Macpherson Street and Warriewood Road Warriewood Aboriginal Heritage Assessment.

These studies cover works carried out at nearby suburbs including Northbridge, Port Jackson, and Warriewood. Attenbrow (1991) conducted a Preliminary report on excavations undertaken in August/September for the Metropolitan Aboriginal Land Council. The aim of the excavation was to obtain evidence of Aboriginal occupation and use of resources in the estuarine reaches of Middle Harbour. The site had been previously referred to as Tunks Park, Northbridge however Attenbrow renamed it Cammeray Shelter. The site is a large rock shelter in the cliff line on the upper slope near Tunks Park. It contains a shell midden at least 80cm deep and relatively undisturbed and there are a number of faded rock art drawings on the walls (45-6-633). Attenbrow (1991) suggests that the site has high potential for a deep and shell-rich midden and would be suitable for further explorative excavation to investigate the rich Aboriginal sites in this estuarine zone of the Middle Harbour sub-catchments.

Oakley's (1984) archaeological survey of Northbridge Golf Link included a number of sites. The first site (45-6-644) is in the centre of the first hole fairway of Northbridge Golf Club and close to the clubhouse. The site contains rock engravings consisting of eight human mudoes in an E-W. line that have been covered by soil.

The study was restricted to survey and did not include further excavation. Another site surveyed by Oakley (1984) was a shelter with archaeological deposit with art and engravings. The shelter (45-6-1120) is located at the base of the hill slope on the foreshore of Middle Harbour, Port Jackson in Long Bay just above the high tide level. The site has been assessed as being in poor condition, however, contains an undisturbed archaeological deposit with a max depth of 35cm. Oakley (1984) recommended that the site could be protected by restricting access by the public.

While a survey has been done on this site, no other known archaeological work has been done. The shelter site (45-6-1121) is situated on a sandstone ledge under an overhang approximately 1.5m above high tide level in Middle Harbour. The shelter contains an archaeological deposit approximately 15cm deep. The site is exposed and walked on by people using the foreshore to avoid the high tide. While Oakley (1984) did not recommend that the site should be fenced off in the survey as it would be difficult to do so, he later recorded on the site card that if visitation increased due to the development, it would be advised that protective measures should be undertaken.

Morris (1986) undertook an archaeological investigation for an assignment for an Associate Diploma in Park Management. The site (45-6-1700) investigated is situated at the junction of Flat Rock Creek and a stream flowing from Brook Street, Naremburn. The site contains two rocks at the base of a small waterfall that have rock engravings and axe grinding grooves. The site is downstream of a major city stormwater drain and thus subject to pollutants, sediment, and silt. No other known archaeological work has been done on this site.

The practical ramifications of the results of the abovementioned archaeological assessments and excavations indicates that higher order streams are located in the landscape units represented in the study area, chiefly Flat Rock Creek and estuarine zones of the Middle Harbour. The presence of a known reliable raw material source (outcrops of sandstone rock) on the study site and within nearby landscape units, would suggest that the sites may be of significance in number and size and a high percentage of the shelters containing shell middens and deposits.

## **4.2 AHIMS SEARCH RESULTS**

The Archaeological Heritage Information Management System Database (AHIMS) is an online database maintained by Heritage NSW Offices. This database comprises information regarding all the previously recorded Aboriginal archaeological sites registered with Heritage NSW. Further to the site card information that is present about each recorded site, the assessments and excavation reports that are associated with the location of many of these sites are present in the library of reports.

The location of these sites must be viewed as purely indicative as errors in recording due to the disparate nature of the recording process, the varying level of experience of those locating the sites and the errors that can occur when transferring data. If possible, sites that appear to be located near a study area should be relocated.

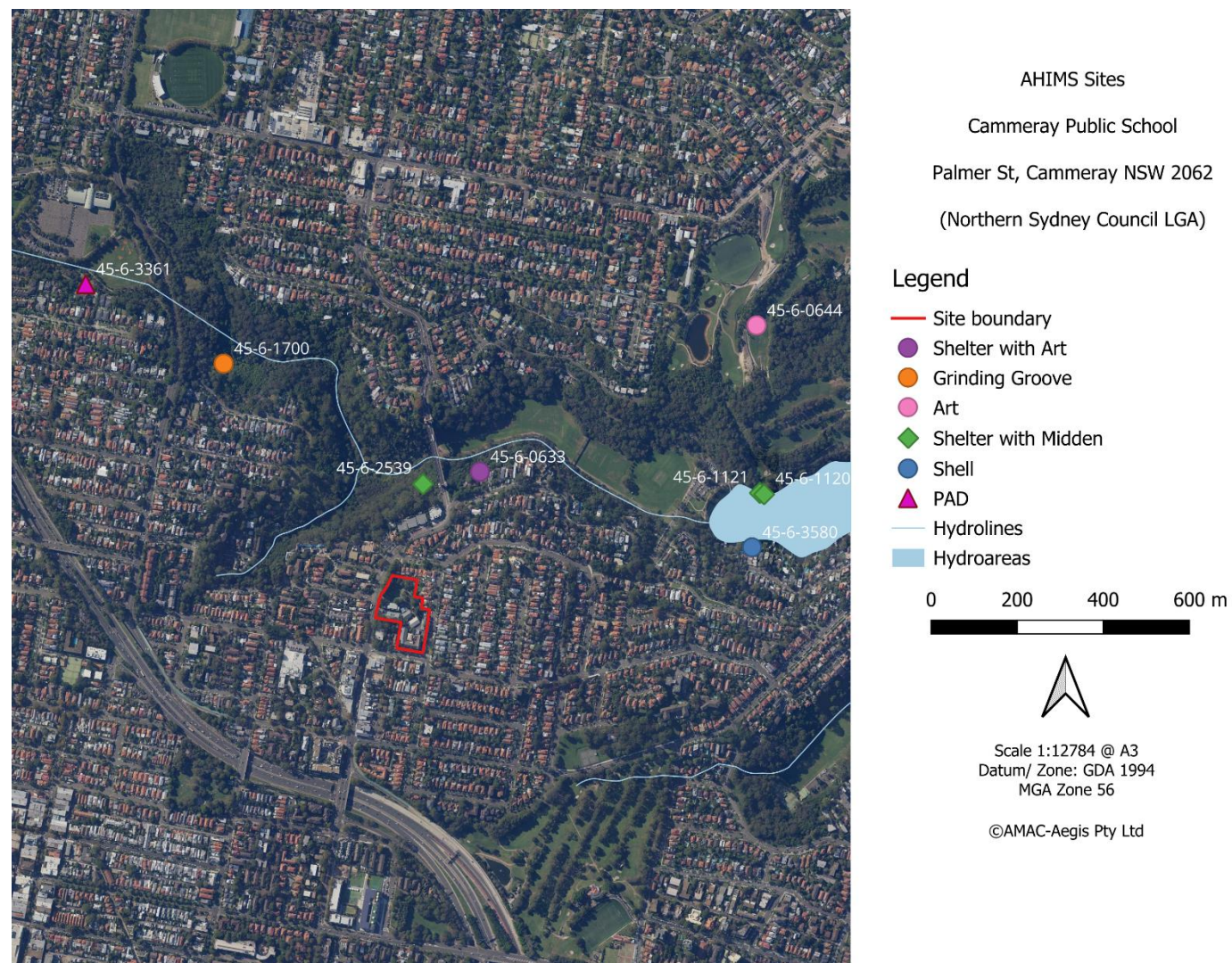
An AHIMS extensive 1km search was conducted on 18/07/2023 (ID-801336). This search resulted in 8 registered sites. The site card for each site within 1000m in all directions from the centre of the study area was inspected (where available) and an assessment made of the likelihood of any of the sites being impacted by the proposed development.

Of these, all are located substantially north of the study site with the majority (approximately 63%) consisting of shell artefact within a shelter with midden. The closest site is 196m north of the study site and contains a shelter with midden (ID 45-6-2539) It is unlikely that any of these registered sites would extend into the study area (Figure 4.1).

The following table is comprised of the results listed from the extensive search.

**Table 4-1 AHIMS Search Results.**

Site ID	Site name	Site status	Site features and Type
45-6-0644	Northbridge Golf Links	Valid	Art (Pigment or Engraved): - Rock Engraving
45-6-3361	Flat Rock Creek Pad	Valid	Potential Archaeological Deposit (PAD): 1
45-6-1121	Long Bay Cave; Northbridge Golf Links	Valid	Shell: - Artefact: - Shelter with Midden
45-6-2539	Suspension Bridge Rockshelter (west)	Valid	Shell: - Artefact: - Shelter with Midden
45-6-1700	Munro Park A.G.G.	Valid	Grinding Groove: - Axe Grinding Groove
45-6-0633	Mosman; Flat Rock Creek; Tunks Park 1	Valid	Shell: - Artefact: - Art (Pigment or Engraved): - Shelter with Art, Shelter with Midden
45-6-1120	Northbridge Golf Links	Valid	Shell: - Artefact: - Shelter with Midden
45-6-3580	Cowdroy Midden 1 (NSC-085)	Valid	Shell: 100



**Figure 4.1 AHIMS Search Results**  
Six Maps. QGIS using LRS Online (accessed 04/08/2023).

### 4.2.1 Other Search Results

Searches were undertaken on the relevant databases outlined in Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010a).

Further to this the following sources were examined:

- The National Heritage List.
- The Commonwealth Heritage List.
- The NSW State Heritage Inventory.
- The National Native Title Register.
- Prevailing local and regional environmental plans, and
- Environmental background material for the study area.

Results for other statutory databases searched are given below:

Heritage Listings/ Register/ Other	Result
National Heritage List	Not Listed
Commonwealth Heritage List	Not Listed
NSW State Heritage Register	Not Listed
National Native Title Register	Not Listed
North Sydney Local Environmental Plan 2010	Not Listed

## 4.3 ARCHAEOLOGICAL PREDICTIVE MODEL

While the AHIMS search provides data regarding previously discovered and registered sites, archaeological predictive modelling is used to identify the potential for unrecorded or subsurface Aboriginal cultural deposits or materials. The presence or absence of subsurface Aboriginal cultural deposits or materials is rarely accurately reflected on the surface, (McDonald 1993).

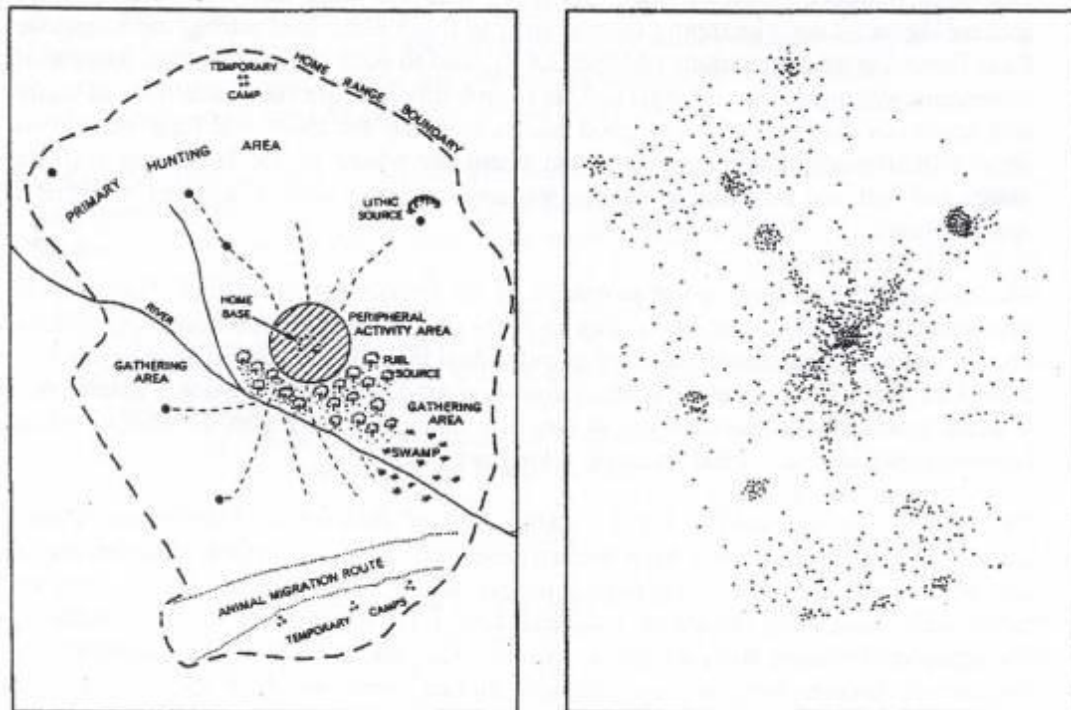
Predictive modelling is an adaptive process which relies on a framework formulated by a number of factors, including but not limited to the use of local land systems, the environmental context, archaeological work and any distinctive sets of constraints that would influence land use patterns. This is based on the concept that different landscape zones may offer different constraints, which is then reflected in the spatial distributions and forms of archaeological evidence within the region (Hall and Lomax 1996).

Early settlement models focused on seasonal mobility, with the exploitation of remote resources being sought once local ones become less abundant. These principles were adopted by Foley (1981) who developed a site distribution model for forager settlement patterns. This model identifies two distinctive types of hunter-gatherer settlements; 'residential base camps' and 'activities areas.' Residential base camps are predominately found located in close proximity to a reliable source of permanent water and shelter. From this point the surrounding landscape is explored, and local resources gathered. This is reflected in the archaeological record, with high density artefact scatters being associated with camp bases, while low density and isolated artefacts are related to the travelling routes and activity areas (Foley 1981).

However, more recently, investigation into understanding the impacts of various episodes of occupation on the archaeological record has been explored, of which



single or repeated events are being identified. This is often a complex process to establish, specifically within predictive models as land use and disturbance can often result in post depositional processes and the superimposition of archaeological materials by repeated episodes of occupation.



**Figure 4.2** Examples of forager settlement patterns.  
Foley (1981).

The principals behind this model have been incorporated into other predictive models such as that of McBryde (1976). McBryde's model is centred on the utilisation of food resources as a contributor to settlement patterns, specifically with reference to the predictability and reliability of food resources for Aboriginal people within the immediate coastal fringe and/or hinterland zone, with migratory behaviour being a possibility. Resources such as certain species of animals, particularly; small marsupials and reptiles, plant resources and nesting seabirds may have been exploited or only available on a seasonal or intermittent basis. As such, archaeological sites which represent these activities whilst not being representative of permanent occupation may be representative of brief, possibly repeated occupation.

Jo McDonald and Peter Mitchell have since contributed to this debate, with reference to Aboriginal archaeological sites and proximity to water using their Stream order model (1993). This model utilises Strahler's hierarchy of tributaries. This model correlates with the concept of proximity to permanent water and site locations and their relationship with topographical units. They identify that artefact densities are greatest on terraces and lower slopes within 100m of water.

Intermittent streams also have an impact on the archaeological record. It was discovered that artefacts were most likely within 50–100m of higher (4<sup>th</sup>) order streams, within 50m (2<sup>nd</sup>) order streams and that artefact distributions around (1<sup>st</sup>) order streams were not significantly affected by distance from the watercourse. Landscapes associated with higher order streams were found to have higher artefact densities and more continuous distribution than lower order streams.

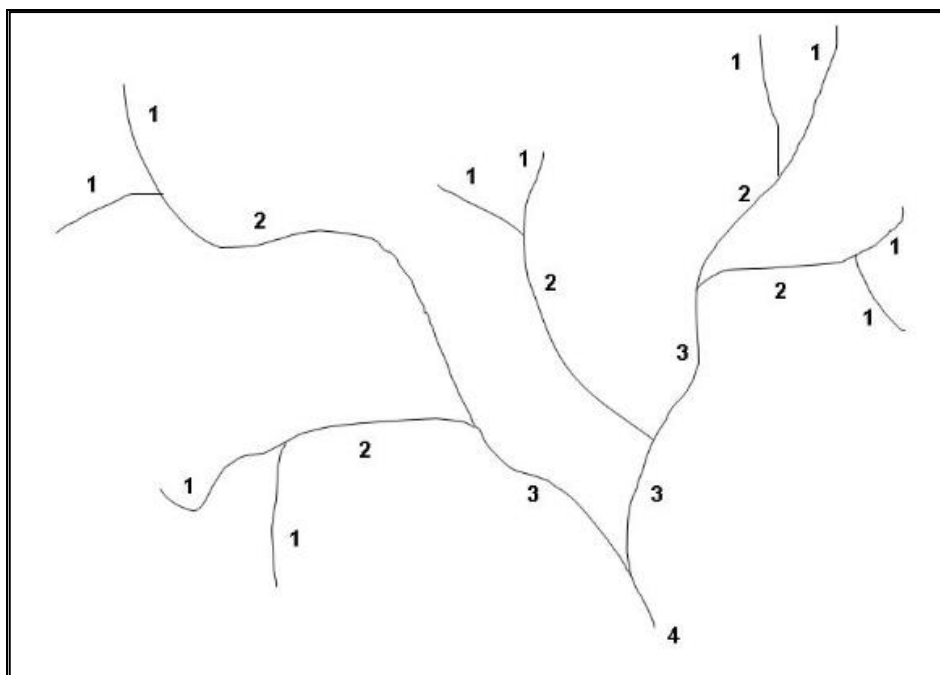


Figure 4.3 Strahler's hierarchy of tributaries.  
Strahler (1957).

Table 4-2 Relationship between landscape unit and site distribution for region

Landscape Unit /Site types	Site Distribution and activity
1 <sup>st</sup> order stream	Archaeological evidence will be sparse and reflect little more than a background scatter.
Middle reaches of 2 <sup>nd</sup> Order Stream	Archaeological evidence will be sparse but focus activity (one off camp locations, single episodes and knapping floor).
Upper reaches of 2 <sup>nd</sup> order stream	Archaeological evidence will have a relatively sparse distribution and density. These sites contain evidence of localised one-off behaviour.
Lower reaches of 3 <sup>rd</sup> order stream	Archaeological evidence for frequent occupation. This will include repeated occupation by small groups, knapping floors (used and unused material) and evidence of concentrated activities.
Major creek lines 4 <sup>th</sup> order streams	Archaeological evidence for more permanent or repeated occupation. Sites will be complex and may be stratified with a high distribution and density.
Creek junctions	This landscape may provide foci for site activity, the size of the confluence in terms of stream rankings could be expected to influence the size of the site, with the expectation of there being higher artefact distribution and density.
Ridge top locations between drainage lines	Ridge Tops will usually contain limited archaeological evidence, although isolated knapping floors or other forms of one-off occupation may be in evidence in such a location.
Raw Materials near water sources	The most common raw materials are silcrete and chert in sites closer to coastal headlands, though some indurated mudstone/silicified tuff and quartz artefacts may also be found.
Grinding Grooves	Grinding Grooves may be found in the sandstone or shale/sandstone transition areas.
Scarred trees	May occur in stands of remnant vegetation.
Ceremonial Sites	Consultation with relevant Aboriginal Stakeholder groups, individuals and review of ethnographic sources often reveal the presence of ceremonial or social sites.

Umwelt (2004), has identified similar environmental – archaeological relationships which contribute to the mapping and modelling of archaeological sites, such as:

- The pattern of watercourses and other landscape features such as ridge lines affected the ease with which people could move through the landscape.
- Certain landscape features such as crests or gently sloping, well-drained landforms influenced the location of camping places or vantage points that provided outlooks across the countryside.
- The morphology of different watercourses affected the persistence of water in dry periods and the diversity of aquatic resources and so influenced where, and for how long, people could camp or procure food.
- The distribution of rock outcrops affected the availability of raw materials for flakes and ground stone tools.
- The association of alluvial, colluvial and stable landforms affects the potential that sites will survive.
- European land-use practices affect the potential for site survival and/or the capacity for sites to retain enough information for us to interpret the types of activities that took place at a specific location.

All models state that the primary requirement of all repeated, concentrated, or permanent occupation is reliable access to fresh water. Brief and possibly repeated occupation may be represented in areas that have unreliable access to ephemeral water sources, however these areas will not possess a high archaeological potential (Goodwin 1999).

#### 4.3.1 Identifying Landscape Features

Based on predictive modelling, the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010b: 11-12) describes the likelihood for Aboriginal objects and sites based on predictive modelling:

Aboriginal objects are often associated with particular landscape features as a result of Aboriginal people's use of those features in their everyday lives and for traditional cultural activities. Examples of such landscape features are rock shelters, sand dunes, waterways, waterholes, and wetlands. Therefore, it is essential to determine whether the site contains landscape features that indicate the likely existence of Aboriginal objects.

Consequently, if your proposed activity is:

- within 200m of waters, or
- located within a sand dune system, or
- located on a ridge top, ridge line or headland, or
- located within 200m below or above a cliff face, or
- within 20m of or in a cave, rock shelter, or a cave mouth.

Based on these categories, 'Waters' are defined as

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

‘Sand dune system’ is defined as

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

#### 4.3.2 Archaeological Predictive Model for the Study Area

Analysis of the environmental context provided in Section 3.0, has found that the study site is located approximately 200m from the Flat Rock Creek watercourse and thus can be identified as having potential for subsurface Aboriginal cultural deposits or materials.

It is important to acknowledge that the information provided in Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010b, p.11-12) is, as with all predictive modelling, indicative. Aboriginal activity cannot be said to have ceased at a hard 200m from waters nor 20m from a cave or rock shelter and these parameters must be viewed as a guide. It must also be taken into account that the course of waterways changes over time and even ephemeral watercourses mark potential features that may have once influenced Aboriginal settlement patterns.

In addition to this, McDonald’s modelling only states that artefact density reduces as the distance from permanent water increases; it also states that the nature of the watercourse may influence artefact density, which may be reflected in the archaeological record.

As such if the study area lies within the 200m zone from waters it may be concluded that the entire study area may have once lay with 200m of waters. In addition to this the artefact density will only decrease at or about 200m from waters but not cease entirely.

The following section gives an indication of the likelihood of certain site types being located within the study area.

**Table 4-3 Potential site types associated with the study area.**

Site Type	Study Site	Likelihood
<b>Open Artefact Scatters</b>	A higher and lower order water course is located within the vicinity of the study area.	Likely within undisturbed parts of the study area.
<b>Isolated Artefacts</b>	A higher and lower order water course is located within the vicinity of the study area.	Likely within undisturbed parts of the study area.
<b>Grinding Grooves</b>	Boulders of sandstone or outcrops do occur in the landscape units represented in the study area.	Possible they will be present within the study area.
<b>Stone Resource Sites</b>	Rock outcrops of suitable flaking material are almost absent from the soil landscapes represented within the study area.	Unlikely
<b>Scarred Trees</b>	No trees of sufficient age/scarring/modified are known to be present within the study area.	Unlikely
<b>Sandstone Shelters</b>	Site inspection did not indicate any sandstone overhangs on the study area.	Unlikely

<b>Burials</b>	There is an unknown potential for burials within the study site.	Unlikely
<b>Ceremonial Sites</b>	Consultation with relevant Aboriginal parties and individuals is not taking place, however, it is possible that such information may become available in the future should consultation take place	Possible that Ceremonial/Social sites will be present within the study area

#### 4.4 DISTURBANCE FACTORS

This section of the report provides an assessment of land use, the level of disturbance and the likely archaeological potential of the study area. The archaeological potential is based on the level of previous disturbance as well as the previously discussed predictive model for the region.

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010b); defines disturbed lands as:

Land is disturbed if it has been the subject of a human activity that has changed the land's surface, these being changes that remain clear and observable. Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure and construction of earthworks)

This definition is based on the types of disturbance as classified in The Australian Soil and Land Survey Field Handbook (CSIRO 2010). The following is a scale formulated by CSIRO (2010) of the levels of disturbances and their classification.

Minor Disturbance		Moderate Disturbance		Major Disturbance	
<b>0</b>	No effective disturbance; natural	<b>3</b>	Extensive clearing (e.g.: poisoning and ringbarking)	<b>6</b>	Cultivation: grain fed
<b>1</b>	No effective disturbance other than grazing by hoofed animals	<b>4</b>	Complete clearing: pasture native or improved, but never cultivated	<b>7</b>	Cultivation; irrigated, past or present
<b>2</b>	Limited clearing (e.g.: selected logging)	<b>5</b>	Complete clearing: pasture native or improved, cultivated at some stage	<b>8</b>	Highly disturbed (quarrying, road works, mining, landfill, urban)

N.B The above scale is used in determining the level of disturbance of the study area and its impact on the potential archaeology which may be present. It is important to note that the following assessments describe the *archaeological* potential of the study area. It is acknowledged if the study area has little or no archaeological potential the study area may still have cultural significance to the Aboriginal community.



#### 4.4.1 Disturbance Summary

Background research indicates that past European land use has led to extensive land clearing for agricultural, residential, and urban development in the early 20th century. The Cammeray Public School was constructed in c.1915. The earliest aerial photograph dates to 1943 where it is evident that development of the study area and surrounds had been well established and continued to expand throughout the 20<sup>th</sup> century (Figure 4.4 - Figure 4.9).

Deep excavations have been undertaken on the site with the standing buildings with associated services, pathways, and outbuildings. The study area has significant disturbance due to the excavation, grading, and levelling required for the installation of building piers, pathways, enclosed surfaces, court surfaces and associated services. In the north portion of the study site however, there are areas that have had moderate disturbance including grassed play areas, vegetable garden on sandstone and soil, a natural water source that has been diverted into a stormwater drain, and a substantial number of garden beds and a fenced off biodiversity area. Exposed natural soil profile was observed and consisted of brown sandy loam (natural A1 horizon) and substantial amount of outcropping of natural sandstone rock.

In light of this, and in the context of the information provided about the land use of the site, its proximity to Flat Rock Creek (north approx. 200m) and a water source on the study site observed during the site inspection, the likelihood for the presence of subsurface Aboriginal Cultural Heritage Material, has been predicted as the following:

*South portion of the site:*

**Moderate-High disturbance to sections of the landscape:** Based on this assessment and predictive modelling, sub-surface Aboriginal objects with potential conservation value have a low probability of being present within the study area.

*Areas within the north portion of the site:*

**Moderate disturbance to sections of the landscape:** Based on this assessment and predictive modelling, sub-surface Aboriginal objects with potential conservation value have a moderate probability of being present within the study area, especially in areas that have had minimal disturbance.



**Figure 4.4** 1943 aerial photograph showing study site outlined in red.  
NSW Historical Imagery (accessed 11/08/2023).



**Figure 4.5** 1955 aerial photograph showing study site outlined in red. NSW Historical Imagery (accessed 11/08/2023).



**Figure 4.6** 1971 aerial photograph showing study site outlined in red.  
NSW Historical Imagery (accessed 11/08/2023).





**Figure 4.7** 1986 aerial photograph showing study site outlined in red. NSW Historical Imagery (accessed 11/08/2023).

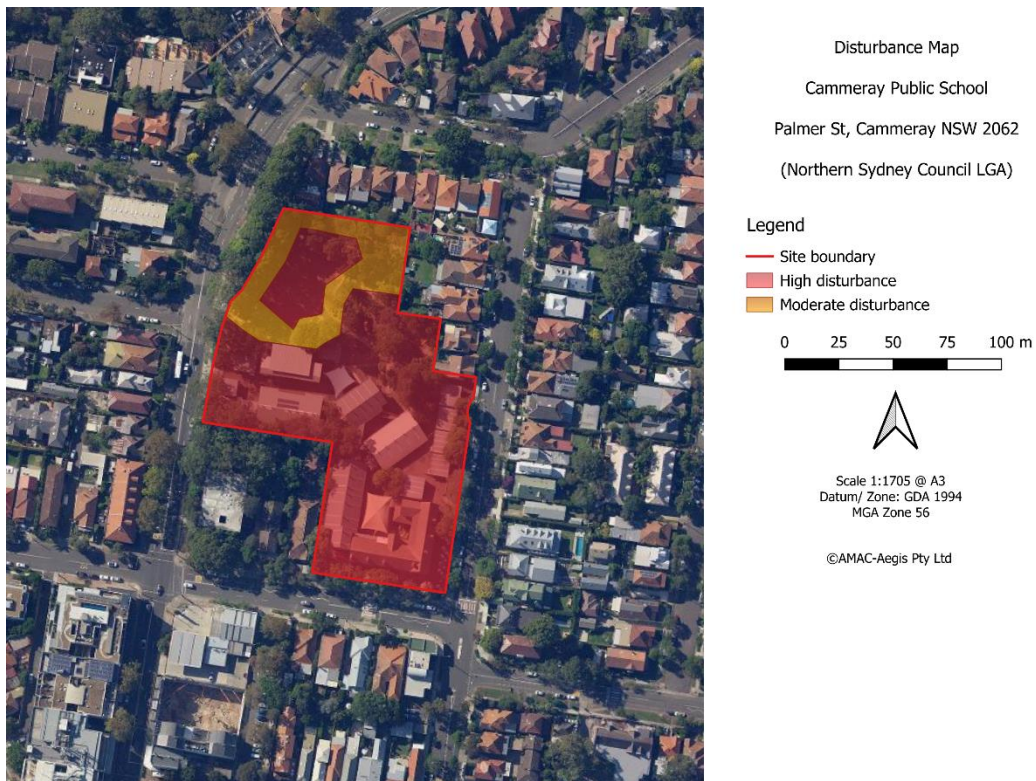


**Figure 4.8** 1994 aerial photograph showing study site outlined in red.  
NSW Historical Imagery (accessed 11/08/2023).





**Figure 4.9** 2004 aerial photograph showing study site outlined in red.  
NSW Historical Imagery (accessed 11/08/2023).



**Figure 4.10** Disturbance map of study site.  
 Red indicates high disturbance – orange moderate disturbance.  
 QGIS using Six Maps, LRS Online (accessed 14/08/2023).

## 4.5 SITE INSPECTION

A site inspection was conducted on the 18<sup>th</sup> of August 2023 by Prue Newton of AMAC Group. The natural topography of the study site slopes steeply down to the northwest and contained different areas of exposure and visibility of soil profiles. For this reason, the study site has been divided and inspected in three zones: The upper slope, lower slope, and biodiversity area.

### 4.5.1 Survey Methods

The study site was inspected on foot. Where practical the whole of the study area was inspected, however there were a number of limiting factors such as existing classrooms, turf and hard surfaces and other school infrastructure. Any areas of exposed soil or areas of erosion were inspected in detail.

All visible landscape units were inspected as well as photographed where informative details as to land use and disturbance could be ascertained. Information was also collected regarding land surface and vegetation conditions as encountered during the survey.

The following broadly outlines the methods adopted:

- Field inspections will be carried out on foot.
- Highly disturbed areas indicated on plans will be inspected to verify the level of disturbance and depending on level of disturbance will be included or excluded from the additional survey.
- Undisturbed areas will be inspected in as much detail as the remaining surface coverage and environment will allow and the results will be recorded.
- Areas of exposed ground such as tracks or eroded surfaces which allow good surface visibility will form the focus of the field inspections.

### 4.5.2 Inspection Results

Cammeray Public School is located close to the central business district (CBD) of Sydney and contains 25 permanent teaching spaces and six demountable buildings. The site is bounded by Palmer Street on the south, Bellevue Street on the east, Miller Street on the west and residential housing fronting Pine Street to the north.

The natural topography of the study site slopes steeply down to the northwest and as discussed in Section 4.5 the site was divided into three zones: The upper slope, lower slope, and biodiversity area. The upper slope was located in the south portion of the site and has low visibility (5%) due to containing majority of the education buildings, concrete surfaces and accessways (Figure 4.11 and Figure 4.17). The lower slope was located in the north portion of the site and has moderate visibility (60%) as it used the natural sandstone outcrops for benching and terracing play areas with areas of grass and Astro turf, vegetable garden on sandstone and soil, a natural water source that has been diverted into a stormwater drain, and a substantial number of garden beds with trees and vegetation (Figure 4.18 and Figure 4.31). The biodiversity area was fenced off and is on the boundary of Miller Street in the north portion and had low visibility (5%) as it contained trees and vegetation that appear to be unmodified and a natural soil landscape with minimal exposure (Figure 4.32 and Figure 4.33).

All visible landscape units were inspected as well as photographed where informative details as to land use and disturbance could be ascertained. Information

was also collected regarding land surface and vegetation conditions as encountered during the survey.

The tables below detail the data for all three zones of the study area. In the lower slope and biodiversity area the surface was exposed revealing the presence of a partial original soil profile which consisted of a brown sandy loam (natural A1 horizon) and a substantial amount of outcropping of natural sandstone rock. Exposure was limited in the upper slope by school structures, accessways and surfaces.

**Table 4-4 Site Inspection Coverage**

Unit	Landform	Area (sq. m)	Visibility (%)	Exposure (%)	Effective Coverage (sq. m)	Effective Coverage (%)
1	Upper slope	8786	5%	5%	1757.2	20%
Unit	Landform	Area (sq. m)	Visibility (%)	Exposure (%)	Effective Coverage (sq. m)	Effective Coverage (%)
1	Lower slope	4211	60%	60%	3789.9	90%
Unit	Landform	Area (sq. m)	Visibility (%)	Exposure (%)	Effective Coverage (sq. m)	Effective Coverage (%)
1	Biodiversity Area	491	5%	5%	0	0%





**Figure 4.11 School play area with enclosed surfaces, view to north.**  
Located on the upper slope.  
AMAC Group, IMG 5852 (18/08/2023).

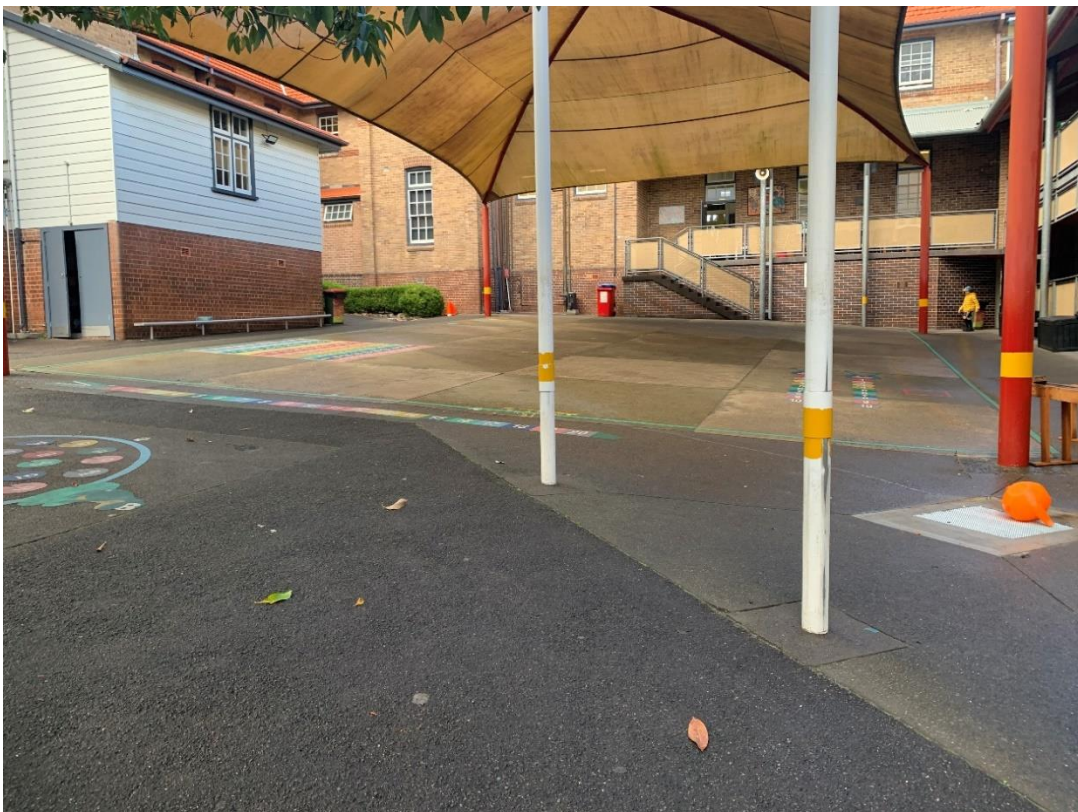


**Figure 4.12 School play area with enclosed surfaces and garden beds, view to northeast.**  
Located on the upper slope.  
AMAC Group, IMG 5855 (18/08/2023).





**Figure 4.13** Seated area along Bellevue Street with trees, view to northeast.  
Located on the upper slope.  
AMAC Group, IMG 5859 (18/08/2023).



**Figure 4.14** School buildings and play area with enclosed surfaces.  
Located on the upper slope.  
AMAC Group, IMG 5899 (18/08/2023).





**Figure 4.15** Terraced garden bed on the upper slope.  
AMAC Group, IMG 5893 (18/08/2023).



**Figure 4.16** Stairs and Astro turf showing steep topography, view to north.  
Located on the upper slope.  
AMAC Group, IMG 5861 (18/08/2023).





**Figure 4.17 Ramps, Astro turf and garden beds, view to southeast.**  
Located on the upper slope.  
AMAC Group, IMG 5862 (18/08/2023).



**Figure 4.18 Play area showing enclosed surfaces and natural sandstone rock, view to southeast.**  
Located on the lower slope.  
AMAC Group, IMG 5863 (18/08/2023).





**Figure 4.19** Stairs and enclosed surfaces showing sloping topography, view to east.

Located on the lower slope.

AMAC Group, IMG 5865 (18/08/2023).



**Figure 4.20** Play area showing enclosed surfaces on the lower slope.

AMAC Group, IMG 5866 (18/08/2023).





**Figure 4.21** Play area with soil landscape and natural outcropping of sandstone rock, view to east.

Located on the lower slope.

AMAC Group, IMG 5867 (18/08/2023).



**Figure 4.22** Section of outcropping of natural sandstone rock, view to south.

Located on the lower slope.

AMAC Group, IMG 5868 (18/08/2023).





**Figure 4.23** Landscaped vegetable garden, view to northeast.  
Located on the lower slope.  
AMAC Group, IMG 5871 (18/08/2023).



**Figure 4.24** Vegetable planter boxes on natural sandstone bedrock, view to northeast.  
AMAC Group, IMG 5872 (18/08/2023).





**Figure 4.25** Water source and natural sandstone rock, view to northeast.  
Located on the lower slope.  
AMAC Group, IMG 5990 (18/08/2023).



**Figure 4.26** Water source diverted to stormwater drain.  
Located on the lower slope.  
AMAC Group, IMG 5903 (18/08/2023).





**Figure 4.27** Exposure of natural soil consisting of brown sandy loam (natural A1 horizon).  
Located on the lower slope.  
AMAC Group, IMG 5873 (18/08/2023).



**Figure 4.28** Greenhouse and planter boxes on soil landscape, view to southeast.  
Located on the lower slope.  
AMAC Group, IMG 5876 (18/08/2023).





**Figure 4.29** View of sport court and vegetable garden, view to north.  
Located on the lower slope.  
AMAC Group, IMG 5870 (18/08/2023).



**Figure 4.30** Landscaped area, view to east.  
AMAC Group, IMG 5880 (18/08/2023).





**Figure 4.31** Area of exposed soil and enclosed surfaces, view to northeast.  
AMAC Group, IMG 5880 (18/08/2023).



**Figure 4.32** Fenced biodiversity area, view to northeast.  
AMAC Group, IMG 5885 (18/08/2023).





**Figure 4.33** Biodiversity area showing dense vegetation and trees, view to east.  
AMAC Group, IMG 5882 (18/08/2023).

## 4.6 UPGRADES MASTERPLAN

The current plan for upgrades is at masterplan phase only, therefore specific subsurface impacts or proposed development plans are undetermined at this stage. SINSW have identified the need for upgrades at Cammeray Public School, primarily related to meeting the current demand and overutilisation at the school and overcome the current reliance on demountables to accommodate student demand. Upgrades may include the replacement of demountables with permanent classrooms which will require both demolition and construction as part of these works. Per the current indicative plan, construction works are proposed to replace an existing sports courts and demountable with new classroom spaces. Per Figure 4.35, this work would occur along the Miller Street site boundary.

### *Previous Borehole Testing*

Geotechnical borehole testing was undertaken on part of the study site in 2001.<sup>1</sup> This work was associated with construction works for current Block C and Block D, located on the southern half of the site (Figure 4.34), within areas assessed as having high disturbance (Figure 4.10). Review of the 2001 report show that boreholes 1 and 2 form the two northernmost boreholes, situated within the footprint of Block D. Both boreholes were recorded as containing fill (brown-grey, loose sand with silt and trace gravel) to a depth of 50-60cm and overlying weathered sandstone.<sup>2</sup> No evidence of the natural soil profile was identified among the boreholes.

In the north portion of the site where natural soils were identified during inspection (Section 4.5), assessed as moderately disturbed (Figure 4.10), a considerable portion of that is presently designated as a biodiversity zone and is unlikely to be impacted on in future development.

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<sup>1</sup> NSW Department of Public Works and Services (2001).

<sup>2</sup> NSW Department of Public Works and Services (2001), Appendix B.



**Figure 4.34** Existing Site Plan – Cammeray Public School, showing general 2001 borehole testing locations circled in orange. Plans supplied by SINSW (August 2023).

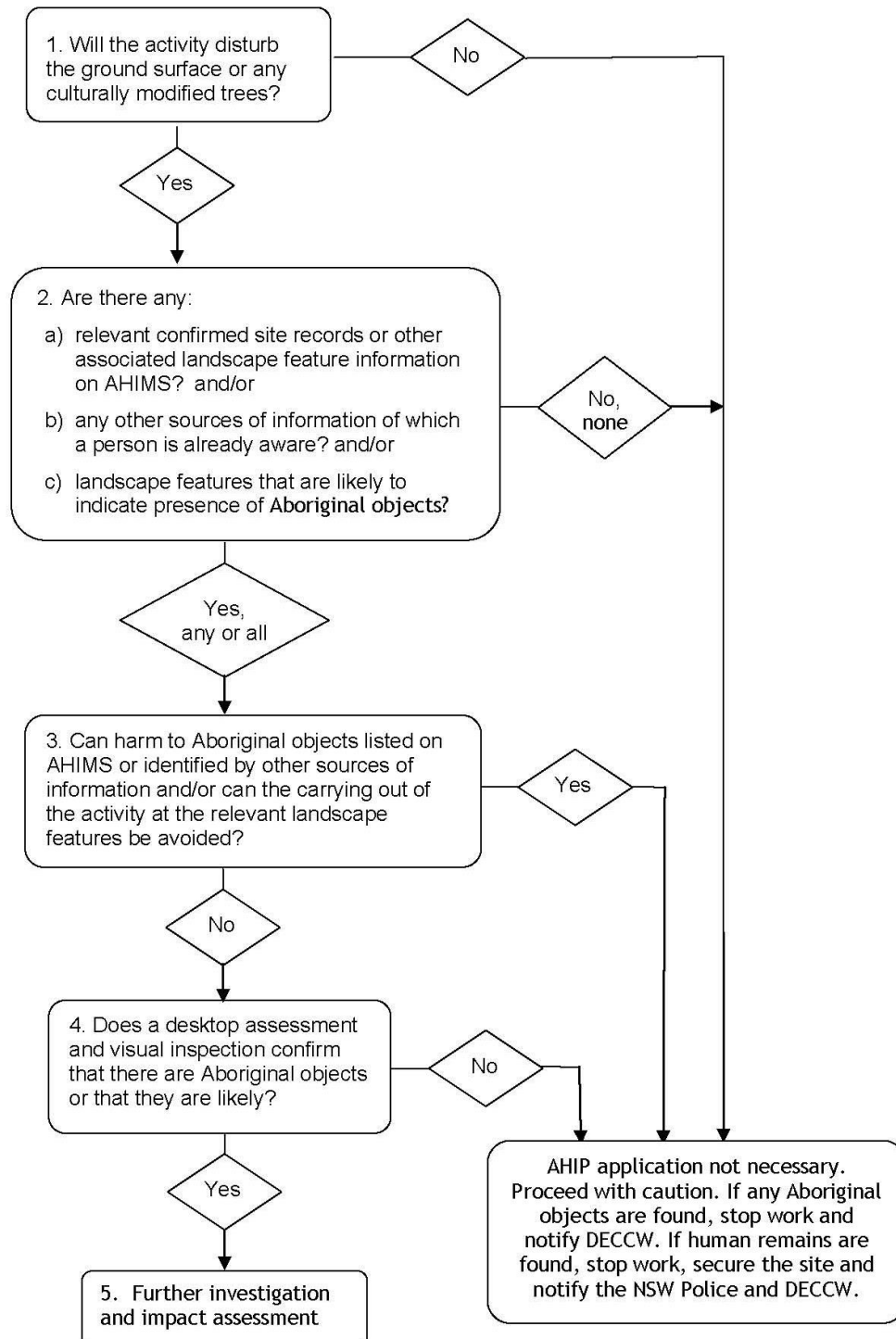




**Figure 4.35** Indicative plan – Cammeray Public School, showing proposed construction of additional classrooms near Miller Street boundary (red arrow). Plans supplied by SINSW, August 2023.

## 4.6 DUE DILIGENCE PROCESS

This assessment has been conducted in accordance with the Due Diligence Code of Practice for Protection of Aboriginal Objects in NSW (DECCW 2010b). A copy of the Due Diligence flow chart is indicated below (Figure 4.36).



**Figure 4.36 Generic Due Diligence Process.**  
DECCW (2010b, p. 10).



#### 4.6.1 Due Diligence Results

The results of the Due Diligence process are indicated below demonstrating the due diligence steps completed:

**Step One: Will the activity disturb the ground surface or any culturally modified trees?**

Yes - should School Infrastructure NSW upgrade portions of Cammeray Public School, this activity will disturb the ground surface. No culturally modified trees are currently known on the site.

**Step Two: Are there any:**

**a) relevant confirmed site records or other associated landscape feature information on AHIMS? and/or**

Yes - there are eight sites registered on AHIMS and within 1000m of the study area.

**b) any other sources of information of which a person is already aware? and/or**

No - School Infrastructure NSW advised that no stakeholder engagement will be required as part of the Due Diligence reporting process.

**c) landscape features that are likely to indicate presence of Aboriginal objects.**

Yes –the study area is located within 200m of a higher and lower order stream, Flat Rock Creek, resulting in increased potential for Aboriginal objects to be present in surrounding undeveloped areas.

**Step Three: Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?**

Yes – if SINSW development Cammeray Public School within zones deemed to have had high disturbance (Figure 4.10) harm is not expected to occur.

**Step Four: Does a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely?**

Yes - the desktop assessment indicates that Aboriginal objects potentially remain in situ in areas deemed to have only been moderately disturbed (Figure 4.10).

**Step Five: Further investigation and impact assessment.**

Yes - further assessment is recommended if the proposed development will impact on areas of the site deemed to have only been moderately disturbed (Figure 4.10).

## 5.0 MANAGEMENT AND MITIGATION

The management recommendations presented in the following section of the report take into account the following:

- Legislation outlined in this report which protects Aboriginal cultural and archaeological objects and places in New South Wales.
- Research and assessment carried out by the author/s of this report.
- Results of previous archaeological assessment and excavation in the vicinity of the study area.
- The possible impact of future development on any Aboriginal archaeological material that may be present.
- The requirements of the consent authority.

### 5.1 CONCLUSIONS

A background analysis of the environmental and archaeological context revealed that Cammeray Public School, in the south portion of the site, has high surface disturbances to the site and thus, a low potential for Aboriginal artefacts and/or deposits of archaeological and cultural significance to be present. Parts of the north portion of the site has areas assessed as moderately disturbed and therefore, moderate potential for Aboriginal artefacts and/or deposits of archaeological and cultural significance to be present.

The surrounding landscape features present do indicate that sub-surface Aboriginal objects and/or deposits are likely in undisturbed areas and are likely to be considered of low-moderate Aboriginal archaeological significance.

The proposed activity is not:

- located within a sand dune system, or
- located within 200m below or above a cliff face, or
- located on a ridge top, ridge line or headland, or
- within 20m of or in a cave, rock shelter, or a cave mouth.

The study area is:

- located within 200m of waters.

Based on the locale of water and major tributaries such as Flat Rock Creek (north approx. 200m), water source (on the study site) observed during the site inspection (Section 4.5) and Willoughby Creek (southeast approx. 470m), it is likely that Aboriginal movement and land use would be channelled to this location and therefore the site may hold information regarding cultural activities of the area. Natural sandstone rock outcrops were found throughout the site demonstrating the natural profile and topography of the site.

There were no confirmed Aboriginal archaeological site records located within the study area on the Aboriginal Heritage Information Management System (AHIMS) or

from other sources of information of which the author of this report is aware of. As a result, an Aboriginal Heritage Impact Permit (AHIP) is not required at this stage.

## 5.2 RECOMMENDATIONS

- Overall, the study site has been assessed as holding some archaeological potential within areas marked as having moderate disturbance (Figure 4.10). Future development works within areas of moderate disturbance will require an Aboriginal Cultural Heritage Assessment Report (ACHAR).

Key	Disturbance Assessment	Future Action Required if development proposed in this zone:
	Moderate	Preparation of an ACHAR if below ground excavation is to occur in that location. Includes any works within biodiversity zone included in shading in Figure 4.10. ACHAR to be prepared during development application stage (DA or SSD pathway) and completed prior to construction phase of project.
	High	Preparation of an Unexpected Finds Protocol (UFP) by archaeologist. No ACHAR is required. UFP to be prepared prior to commencement of excavation work on site. UFP does not require submission with any future development application.

- Based on the current masterplan option supplied by SINSW and reproduced as Figure 4.35, new buildings are proposed towards the west site boundary near Miller Street, within an area assessed as highly disturbed. An ACHAR is not required for these works should the masterplan proceed with development in that location. An Unexpected Finds Protocol (UFP) is to be prepared prior to construction phase.
- SINSW have advised that no stakeholder engagement will be required as part of the Due Diligence reporting process. Should SINSW give permission to engage stakeholders, AMAC Group will provide a copy of this report to the Metropolitan Local Aboriginal Land Council for review and comment. All comments will be included in an updated final version of this document.

## GLOSSARY AND ABBREVIATIONS

Term	Definition
Aboriginal Object	A term now used (formerly 'relic') within the NSW <i>National Parks and Wildlife Act, 1974</i> to refer to "...any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction and includes Aboriginal remains."
ACH	Aboriginal Cultural Heritage
ACHAR	Aboriginal Cultural Heritage Assessment Report
AHIP	Aboriginal Heritage Impact Permit, issued under Part 6 of the <i>National Parks and Wildlife Act 1974</i> , where harm to an Aboriginal object or Aboriginal place cannot be avoided.
Alluvial	Describes material deposited by, or in transit in flowing water.
AMAC Group	Archaeological Management and Consulting Group.
Artefact	Any object, usually portable, that has been made or shaped by human hand.
Assemblage	A collection of artefacts found in close proximity with one another often excavated together.
Axe grinding Grooves	Areas on a stone surface where other items such as stone tools, wood or bones have been sharpened.
Basalt	A dark coloured, basic volcanic rock.
Bioturbation	Reworking of sediments through the action of ground dwelling life forms. This can also include soil cracking and root activity.
Broken Flake	A flake fragment which displays only part of the diagnostic features of a complete flake.
BP	Before present (AD1950).
Burial	Sites containing the physical remains of deceased Aboriginal people.
Ceremonial Sites	Places or objects of ceremonial, religious or ritual significance to Aboriginal people.
DCP	Development Control Plan.
DoPE	Department of Planning and Environment
DP	Deposited Plan.
Erosion	Process where particles are detached from rock or soil and transported away principally via water, wind and ice.
Flake	A piece of stone, detached by striking a core with another stone.
Flaking/Knapping	The process of making stone tools by detaching flakes from a piece of stone.
Friable	Easily crumbled or cultivated.
Hard setting	Soil which is compact and hard. It appears to have a pedal structure when dried out.
Heritage Division	Formerly known as the Heritage Branch now Heritage NSW
HNSW	Heritage NSW
Holocene	The period of time since the last retreat of the polar icecaps, commencing approximately 10,000 – 110,000
Intensification	Increased social and economic complexity.
Landscape Unit	An area of land where topography and soils have distinct characteristics, are recognisable, describable by concise statements and capable of being represented on a map.
Laminite	A thinly bedded, fine grained sedimentary rock.
LEP	Local Environment Plan.
LGA	Local Government Area.

Term	Definition
Lithics	A term used to describe stone and stone artefacts.
Loam	A medium textured soil of approximate composition of 10- 25% clay, 25-50% silt and 2% sand.
Loose	A soil which is not cohesive.
Matrix	Finer grained fraction, typically a cementing agent within soil or rock in which larger particles are embedded.
Midden	Aboriginal occupation site consisting chiefly of shells, which can also include bone, stone artefacts and other debris.
NPW Act	National Parks and Wildlife Act 1974
OEH	NSW Office of Environment and Heritage (formerly known as the DECCW)
Open Campsite	A surface accumulation of stone artefacts and/ or other artefacts exposed on the ground surface.
Potential Archaeological Deposit (PAD)	An area where no surface archaeological remains are visible but where it has been assessed that there is some potential for sub-surface archaeological remains to be present.
Ped	An individual, natural soil aggregate.
Pedal	Describes a soil in which some or all of the soil material occurs in the form of peds in a moist state.
Plastic	Describes soil material which is in a condition which allows it to undergo permanent deformation without appreciable volume change or elastic rebound and without rupture.
Pleistocene	The epoch of geological time starting 1.8 million years ago.
RAP	Registered Aboriginal Parties
Rock Painting	Encompassing drawing, paintings or stencils that have been placed on a rock surface usually within a rock shelter.
Rock Engraving	Pictures which have been carved, pecked or abraded into a rock surface, usually sandstone and predominantly open, flat surfaces.
Sandstone	A detrital sedimentary rock with predominantly sand sized particles.
Scarred/ Carved Tree	A tree from which bark has been deliberately removed.
Sclerophyll	Denoting the presence of hard stiff leaves, typically used to classify forest and indicative of drier conditions.
Sedimentation	Deposition of sediment typically by water.
Silcrete	A sedimentary rock comprising of quartz grains in a matrix of fine grained – amorphous silica.
Silt	Fine soil particles in size ranges of 0.02 – 0.002mm.
Slope	A landform element inclined from the horizontal at an angle measured in degrees or as a percentage.
SHI	State Heritage Inventory
SHR	State Heritage Register
Subsoil	Subsurface material comprising the B and C horizons of soils with distinct profiles.
Stone Resource Site	A geological feature in the landscape from which raw material for the manufacture of stone tools was obtained.
Texture	The coarseness or fineness of a soil as measured by the behaviour of a moist ball of soil when pressed between the thumb and forefinger.
Topsoil	A part of the soil profile, typically the A1 Horizon, containing material, which is usually darker, more fertile and better structured than the underlying layers.
Weathering	The physical and chemical disintegration, alteration and decomposition of rocks and minerals at or near the earth's surface by atmospheric and biological agents.



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# APPENDICES

## APPENDIX ONE – AHIMS SITE SEARCH RESULTS



### AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : Cammeray PS

Client Service ID : 801256

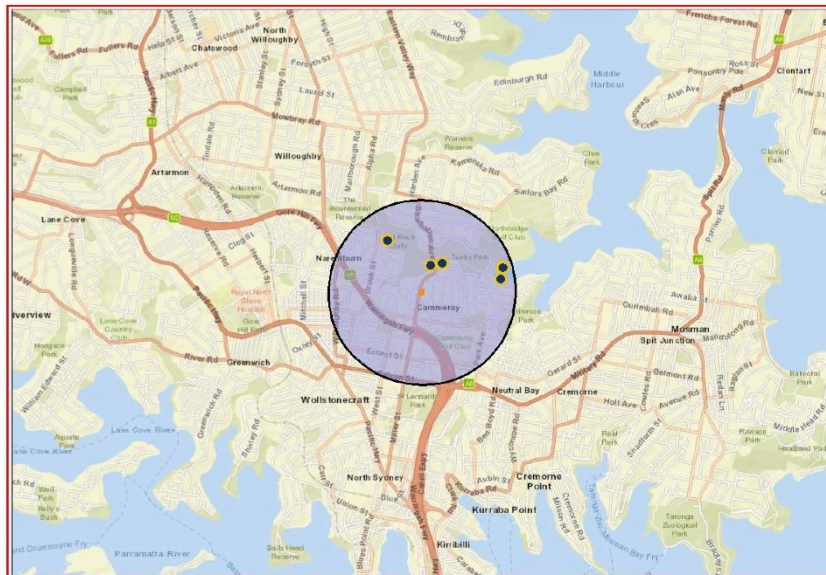
Date: 18 July 2023

AMAC Group P/L  
122c Percival Rd  
Stanmore New South Wales 2048  
Attention: Martin Carney  
Email: amac@archaeological.com.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 1, DP:DP123406, Section : - with a Buffer of 1000 meters, conducted by Martin Carney on 18 July 2023.**

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

<b>6</b>	<b>Aboriginal sites are recorded in or near the above location.</b>
<b>0</b>	<b>Aboriginal places have been declared in or near the above location. *</b>



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

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

**Important information about your AHIMS search**

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



## AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : Cammeray PS3

Client Service ID : 801283

AMAC Group P/L

Date: 18 July 2023

122c Percival Rd

Stanmore New South Wales 2048

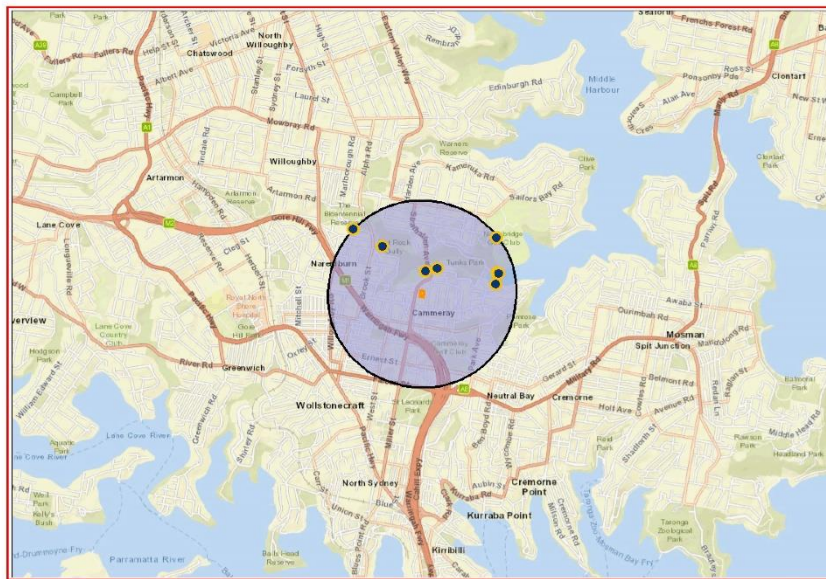
Attention: Martin Carney

Email: amac@archaeological.com.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 1, DP:DP316130, Section : - with a Buffer of 1000 meters, conducted by Martin Carney on 18 July 2023.**

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

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

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

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

**Important information about your AHIMS search**

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





Your Ref/PO Number : Cammeray PS8  
Client Service ID : 801318

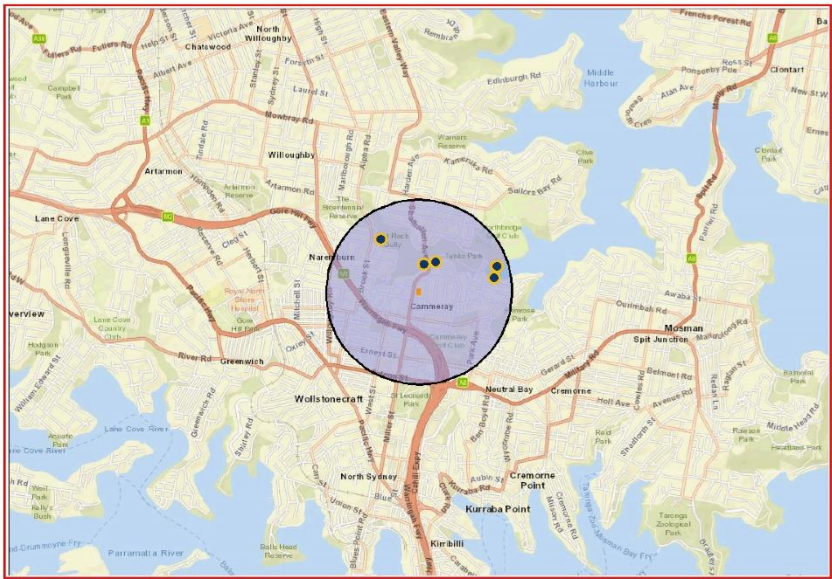
AMAC Group P/L  
122c Percival Rd  
Stanmore New South Wales 2048  
Attention: Martin Carney  
Email: amac@archaeological.com.au

Date: 18 July 2023

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 1, DP:DP174370, Section : - with a Buffer of 1000 meters, conducted by Martin Carney on 18 July 2023.**

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

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

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

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

**Important information about your AHIMS search**

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



Your Ref/PO Number : Cammeray PS6  
Client Service ID : 801306

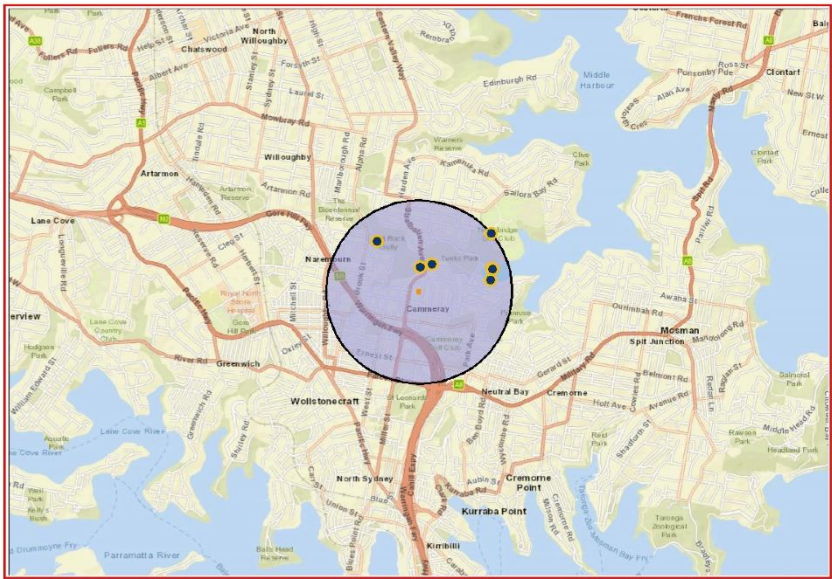
AMAC Group P/L  
122c Percival Rd  
Stanmore New South Wales 2048  
Attention: Martin Carney  
Email: amac@archaeological.com.au

Date: 18 July 2023

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 1, DP:DP316706, Section : - with a Buffer of 1000 meters, conducted by Martin Carney on 18 July 2023.**

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

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



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

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

**Important information about your AHIMS search**

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



## AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : Cammeray PS7

Client Service ID : 801310

AMAC Group P/L

Date: 18 July 2023

122c Percival Rd

Stanmore New South Wales 2048

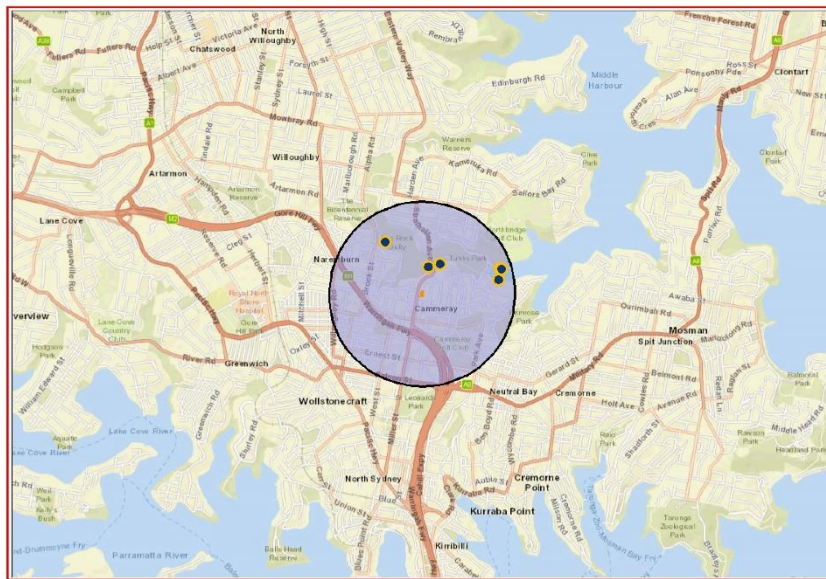
Attention: Martin Carney

Email: amac@archaeological.com.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 2, DP:DP174370, Section : - with a Buffer of 1000 meters, conducted by Martin Carney on 18 July 2023.**

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

<b>6</b>	<b>Aboriginal sites are recorded in or near the above location.</b>
<b>0</b>	<b>Aboriginal places have been declared in or near the above location. *</b>

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

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

**Important information about your AHIMS search**

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





## AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : Cammeray PS4

Client Service ID : 801293

AMAC Group P/L

122c Percival Rd

Stanmore New South Wales 2048

Attention: Martin Carney

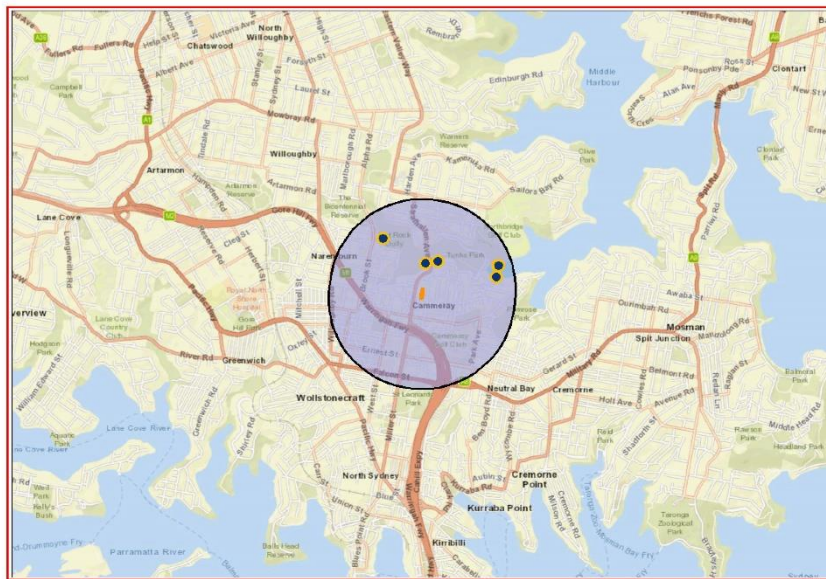
Email: amac@archaeological.com.au

Dear Sir or Madam:

Date: 18 July 2023

**AHIMS Web Service search for the following area at Lot : 4, DP:DP758790, Section : 35 with a Buffer of 1000 meters, conducted by Martin Carney on 18 July 2023.**

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

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

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

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

**Important information about your AHIMS search**

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



# **AHIMS Web Services (AWS)** Search Result

Your Ref/PO Number : Cammeray PS5

Client Service ID : 801298

AMAC Group P/L

Date: 18 July 2023

122c Percival Rd

Stanmore New South Wales 2048

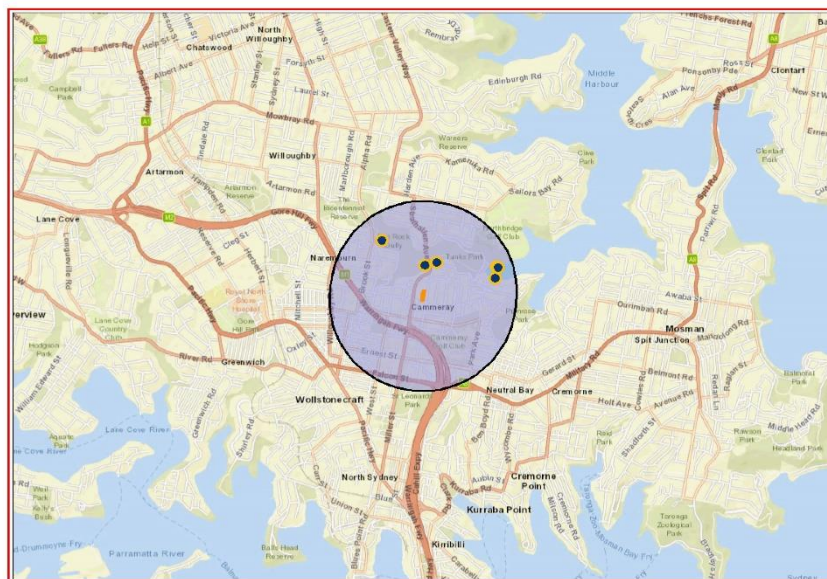
Attention: Martin Carney

Email: amac@archaeological.com.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 5, DP:DP758790, Section : 35 with a Buffer of 1000 meters, conducted by Martin Carney on 18 July 2023.**

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

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



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

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

**Important information about your AHIMS search**

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



Your Ref/PO Number : Cammeray PS2  
Client Service ID : 801279

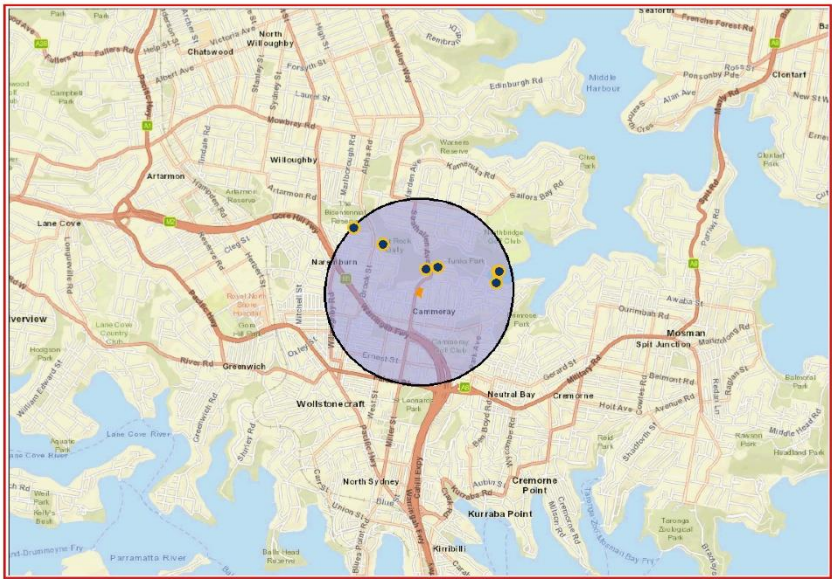
AMAC Group P/L  
122c Percival Rd  
Stanmore New South Wales 2048  
Attention: Martin Carney  
Email: amac@archaeological.com.au

Date: 18 July 2023

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 11, DP:DP837836, Section : - with a Buffer of 1000 meters, conducted by Martin Carney on 18 July 2023.**

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

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

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

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

**Important information about your AHIMS search**

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- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
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## AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : Cammeray PS9

Client Service ID : 801327

AMAC Group P/L

122c Percival Rd

Stanmore New South Wales 2048

Attention: Martin Carney

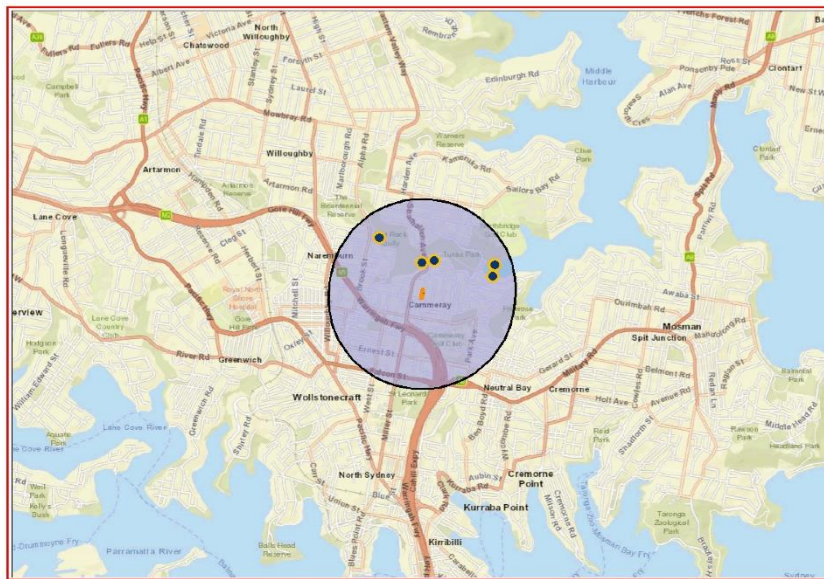
Email: amac@archaeological.com.au

Dear Sir or Madam:

Date: 18 July 2023

**AHIMS Web Service search for the following area at Lot : 66, DP:DP1049613, Section : - with a Buffer of 1000 meters, conducted by Martin Carney on 18 July 2023.**

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

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

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

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

**Important information about your AHIMS search**

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

### Extensive search - Site list report

Your Ref/PO Number : Cammeray PS3

Client Service ID : 801336

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
45-6-0644	Northbridge Golf Links;	AGD	56	335187	6256810	Open site	Valid	Art (Pigment or Engraved) : -	Rock Engraving	
	<b>Contact</b>							<b>Permits</b>		
45-6-3361	FLAT ROCK CREEK PAD	GDA	56	333732	6257069	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<b>Contact</b>							<b>Permits</b>		
45-6-1121	Long Bay Cave;Northbridge Golf Links;	GDA	56	335307	6256613	Closed site	Valid	Shell : -, Artefact : -	Shelter with Midden	597
	<b>Contact</b>							<b>Permits</b>		
45-6-2539	Suspension Bridge Rockshelter (west)	GDA	56	334524	6256620	Closed site	Valid	Shell : -, Artefact : -	Shelter with Midden	
	<b>Contact</b>							<b>Permits</b>		
45-6-1700	Munro Park A.G.G.;	AGD	56	333950	6256700	Open site	Valid	Grinding Groove : -	Axe Grinding Groove	1293
	<b>Contact</b>							<b>Permits</b>		
45-6-0633	Mosman;Flat Rock Creek;Tunks Park 1;	AGD	56	334550	6256460	Closed site	Valid	Shell : -, Artefact : -, Art (Pigment or Engraved) : -	Shelter with Art,Shelter with Midden	2047,98676
	<b>Contact</b>							<b>Permits</b>		
45-6-1120	Northbridge Golf Links;..	GDA	56	335317	6256610	Closed site	Valid	Shell : -, Artefact : -	Shelter with Midden	597
	<b>Contact</b>							<b>Permits</b>		
45-6-3580	Cowdroy Midden 1 (NSC-085)	GDA	56	335291	6256487	Open site	Valid	Shell : 100		
	<b>Contact</b>							<b>Permits</b>		

#### \*\* Site Status

**Valid** - The site has been recorded and accepted onto the system as valid

**Destroyed** - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

**Partially Destroyed** - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

**Not a site** - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 18/07/2023 for Martin Carney for the following area at Lot : 1, DP:DP316130, Section : null with a Buffer of 1000 meters.. Number of Aboriginal sites and Aboriginal objects found is 8

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Page 1 of 1



## SITE CARDS

## Site Card 45-6-0644


(N) (III) 9130 SI/56-5 SYDNEY 45-6-644

NORTHBRIDGE, MOSMAN/MIDDLE HARBOUR PARK Locality ROCK ENGRAVINGS

Military map/other reference Sydney 1:250.000.SI/56-5 Sydney 1:63.360. Site 1.  
C.4222.8223 C.223.223 Group VI, c.  
(c. 223223)

Pastoral or other property, park

Description of site Located on the first fairway of the Northbridge Golf Club, and near to the clubhouse.  
Now under soil - covered by " " .  
In centre of first hole fairway.

Direction site faces Width  45-6-0644

Dimensions of decorated areas

Estimated number of figures

Nearest water supply

Techniques abraded grooves conjoined puncture pecked

Styles abraded grooves outline outline with design linear  
pecked linear pecked intaglio combined pecked and linear

Subjects Group consists of 8 human mundoes in an E.W. line.  
toes in a N-S line.

Superimpositions

+

<u>Associated with</u>	rock paintings	carved trees	stone arrangements
	axe grooves	quarry	burials
	campsite	other relics	

Natural defacementAnimal defacementHuman defacementPhoto record byWhere depositedScale chart byWhere depositedHistory

From Aust.Mus.Index.

Recorded by F.O. McCarthy 30th September 1941

Aboriginal meaning and namePublished reference

Mankind 111,2,56,P1 L.October 1941.

RemarksAn Archaeological Survey of the Northbridge  
Golf Links - B Oakley, Mar 1984

Site Card 45-6-0633

[ ] New recording

[✓] Additional Info



# National Parks and Wildlife Service

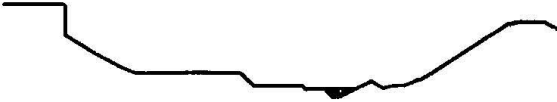
Box 1967, Hurstville NSW 2220. Tel: (02) 585 6444  
Standard Site Recording Form Revised 5/88



45-6-0633

1:250,000 map sheet: <u>SYDNEY</u>		NPWS Code <u>14.5</u>
AMG Grid reference Full reference - please include leading digits	<div style="display: flex; justify-content: space-around;"> <div>250K 334550 mE</div> <div>250K 6256460 mN</div> </div>	<b>HEAD OFFICE USE ONLY:</b> NPWS Site no: <u>45-6-0633</u> Site types: <u>ROCK SHELTER WITH MIDDEN &amp; ART</u> Accessed by: <u>[Signature]</u> Date: <u>10 MAR 1990</u> Data entered by: _____ Date: _____ Owner/Manager: <u>NORTH SYDNEY MUNICIPAL COUNCIL</u> Address: <u>200 MILLER ST NORTH SYDNEY</u>
Scale of map used for grid reference Please use largest scale available	<input checked="" type="checkbox"/> 25K, 50K (preferred) <input type="checkbox"/> 100K <input type="checkbox"/> 250K	
(125K) 50K, 100K map name: <u>Parramatta River 9130-3-N</u>		
Site name: <u>TUNKS PARK 1</u> Locality/property name: <u>CAMMERAY</u> NPWS District: <u>SYDNEY</u> Region: <u>CENTRAL</u>		
Reason for investigation: <u>ARCHAEOLOGICAL SURVEY OF METROPOLITAN SYDNEY</u>		
Portion no: Parish: <u>WILLOUGHBY</u>		<u>COUNTY OF CUMBERLAND</u>
<u>SKETCH OF ART AND LOCATION MAP ATTACHED</u>		Photos taken? <u>NO</u> How many attached? _____
How to get to the site (refer to permanent features, give best approach to site eg. from above, below, along cliff. (Draw diagram on separate sheet.) <u>SITUATED BELOW THE BOULEVARDE CAMMERAY WITHIN THE BUSHLAND AREA OF TUNKS PARK EAST OF THE SUSPENSION BRIDGE and on the south side. SEE LOCATION MAP</u>		
Other sites in locality? <u>YES</u> Are sites in NPWS Register? <u>NO</u>		Site Types include: <u>SHELL MIDDENS</u>
Have artefacts been removed from site? <u>YES</u> By whom? <u>UNKNOWN</u>		When? <u>UNKNOWN</u> Deposited where? <u>UNKNOWN</u> <u>A LARGE HOLE HAS BEEN DUG IN EAST END AND CONTENTS REMOVED.</u>
Is site important to local Aborigines? <u>UNKNOWN</u> Give contact(s) name(s) + address(es) _____		
Contacted for this recording? <u>NO</u> (Attach additional information separately) If not, why not? _____		
Verbal/written reference sources (including full title of accompanying report):		<u>Personal Investigation</u> NPWS Report Catalogue # <u>C-2047</u>
Checklist: surface visibility, damage/disturbance/ threat to site	Condition of site: <u>GOOD - EXCELLENT EXCAVATION POTENTIAL</u>	
Recommendations for management & protection (attach separate sheet if necessary): _____		
Site recorded by: <u>MICHAEL GUIDER</u> Address/Institution: <u>ROYAL EXCHANGE P.O. BOX R32 SYDNEY</u>		Date: <u>1st July 1990</u>



SITE POSITION & ENVIRONMENT		OFFICE USE ONLY: NPWS site no:
1. Land form a. beach/hill slope/ridge top, etc:		b. site aspect: c. slope:
d. mark on diagram provided or on your own sketch the position of the site:		e. Describe briefly:
		
f. Local rock type: <b>SANDSTONE</b>		g. Land use/effect:
2. Distance from drinking water: <b>small waterfall</b>		Source: <b>at site</b>
3. Resource Zone associated with site (estuarine, riverine, forest etc):		
4. Vegetation:		
5. Edible plants noted:		
6. Faunal resources (include shellfish):		
7. Other exploitable resources (river pebbles, ochre, etc):		
Site type: <b>Rock Shelter with ART + SHELL MIDDEN</b>	<b>DESCRIPTION OF SITE &amp; CONTENTS.</b> Note state of preservation of site & contents. Do NOT dig, disturb, damage site or contents.	
<b>CHECKLIST TO HELP</b> length, width, depth, height of site, shelter, deposit, structure, element eg. tree scar, grooves in rock. <b>DEPOSIT:</b> colour, texture, estimated depth, stratigraphy, contents-shell, bone, stone, charcoal, density & distribution of these, stone types, artefact types. <b>ART</b> area of surface decorated, motifs, colours, wet, dry pigment, technique of engraving, no. of figures, sizes, patination. <b>BURIALS:</b> number & condition of bone, position, age, sex, associated artefacts. <b>TREES:</b> number, alive, dead, likely age, scar shape, position, size, patterns, axe marks, regrowth <b>QUARRIES</b> rock type, debris, recognisable artefacts, percentage quarried. <b>OTHER SITES</b> EG. structures (fish traps, stone arrangements, bora rings, mia mias), mythological sites, rock holes, engraved groove channels, contact sites (missions massacres cemeteries) as appropriate	<b>Rock Shelter facing North Very large a home base site. About 60ft above present level of Tunks Park which has been reclaimed from Long Bay. Floor gray sandy soil and shell midden</b> <b>Length 120ft Height 12ft Depth 34ft</b> Due to a large hole having been dug into east end of shelter it is possible to give an accurate depth of deposit which is 2ft. The shells seen are as follows:- Hercules Club whelk - <i>Pyrazus ebeninus</i> Sydney Cockle - <i>Anadara trapezia</i> Rock Oyster - <i>Saccostrea commercialis</i> Chama - <i>Chama fibula</i> Hairy Mussel - <i>Trichomya hirsuta</i> Barnacle sp. - Unidentified as yet <b>STONE FLAKES</b> are present on surface and there are several red ochre drawings on the wall in the eastern end. Two of these figures are Boomerangs which are very clear the other figures are indeterminate as yet. Attach sketches etc. eg. plan & section of shelter, show relation between site contents, indicate north, show scale. Attach annotated photos (stereo where useful) showing scale, particularly for art sites.	

**CAMMERAY**  
**NPWS Site No 45-6-633**

**FIELDWORK AIMS**

The aim of the excavations at Cammeray was to obtain evidence of Aboriginal occupation and use of resources in the estuarine reaches of Middle Harbour (Figure 1). Middle Harbour is a major water way on the northern side of Port Jackson and its catchment forms the largest of the eight sub-catchments.

The large size and configuration of the shelter, and exposure of almost 50 cm depth of midden in a pit at one end of the shelter, suggested that the site had the potential to contain a relatively deep and shell-rich midden. For these reasons it appeared the most suitable site to excavate in the estuarine zone of the Middle Harbour sub-catchment.

**THE SITE AND ITS LOCATION**

*Site name*

In my earlier reports and applications this site (45-6-0633) has been called Tunks Park, Northbridge. Since my excavations I have referred to it as Cammeray Shelter for two reasons: firstly, the southern side of Tunks Parks is in Cammeray and not Northbridge, and secondly (and more importantly) the site is not in Tunks Park. Just before my excavations were due to begin, I learnt that the site was not in Tunks Park, but within residential land - in fact in the rear of three residential gardens. The houses and a large part of their gardens are above the cliffline in which the rockshelter occurs. The ridgeside below the cliffline is bushland and, as there is no boundary fence between the park and the gardens, I had assumed the cliffline was the boundary between the park and the residential land.

According to a letter in the North Shore Times of 31 August 1960, the shelter was also called *Goat Cave* at one time 'owing

Val Atkinson

→ also date 5840 ISO  
(see 1995 report).

to [it] being the haunt of many of these animals which had run wild in the bush'.

#### *Site description*

The rockshelter is extremely large and roomy and faces west-north-west (Figures 7 and 8). Its maximum floor dimensions are 56 m x 11 m, with a ceiling height of 5 m, though the main central floor area is about 35 m x 11 m. It is one of the largest rockshelters with midden that has been recorded in the Port Jackson catchment. Several seepage points occur along the back wall and in the ceiling, but the present floor is relatively flat and dry over most of its area. During the fieldwork, however, it was discovered that the floor level has not always been as it is now. A sandstone retaining wall running across part of the front of the shelter appears as if it was built to raise the height of the deposits at the front of the shelter thereby enlarging the area of level floor.

At present some water comes over the eastern part of the overhang from the gardens above. However, Peter Whittaker (one of the land owners) advised that originally the natural drainage line came over the centre of the overhang. When the houses were built, the natural drainage line was rechannelled into a stormwater drain which runs down on the western side of the houses.

There are several areas on the walls where very faded drawings occur. Some of the figures are indeterminate, but two are clearly boomerangs, another is a series of 'tally marks', and in another area appears to have a group of people with upraised arms. All these drawings are in red ochre. The boomerangs and 'people' are infilled figures.

#### *Site location and environment*

Cammeray Shelter has formed in a ca.15 m high sandstone cliffline at the top of a relatively steep ridgeside overlooking Tunks Park. The flat ground in Tunks Park is reclaimed land which is principally used for playing fields. A small tidal tributary of Middle Harbour (Flat Rock Creek)



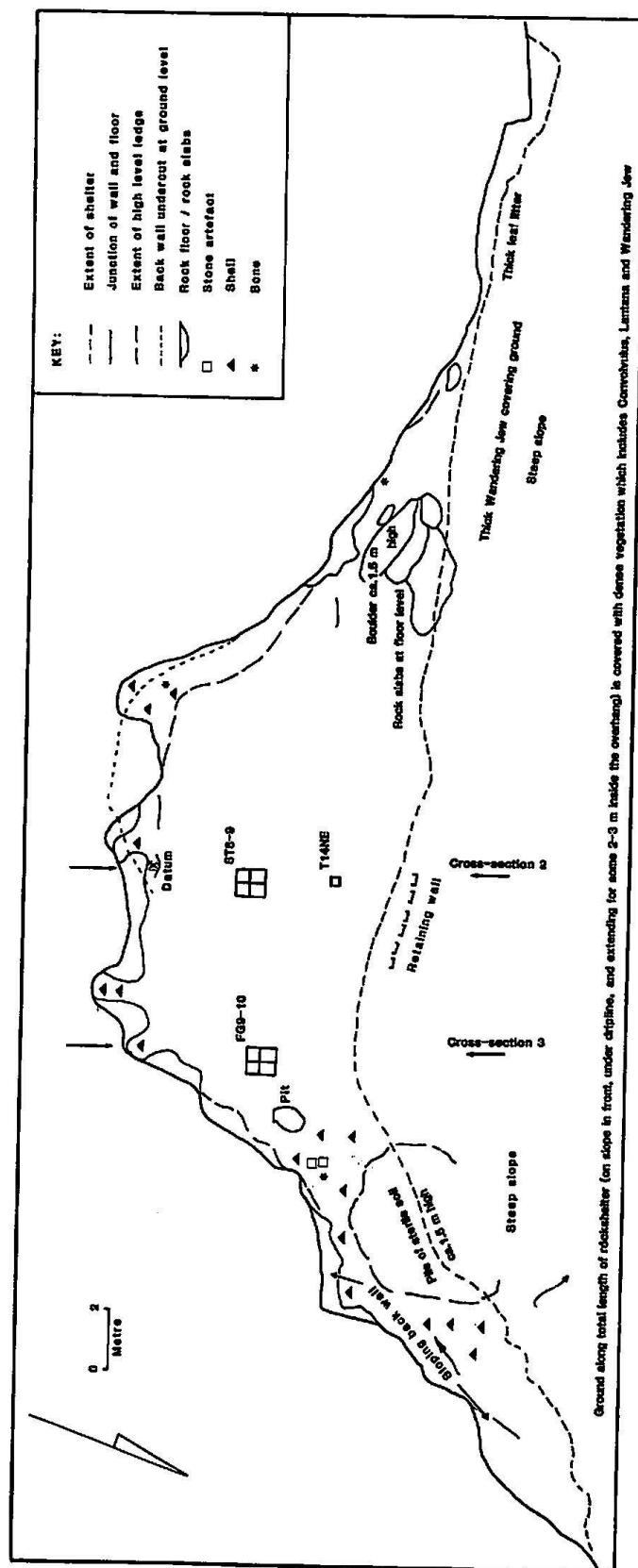
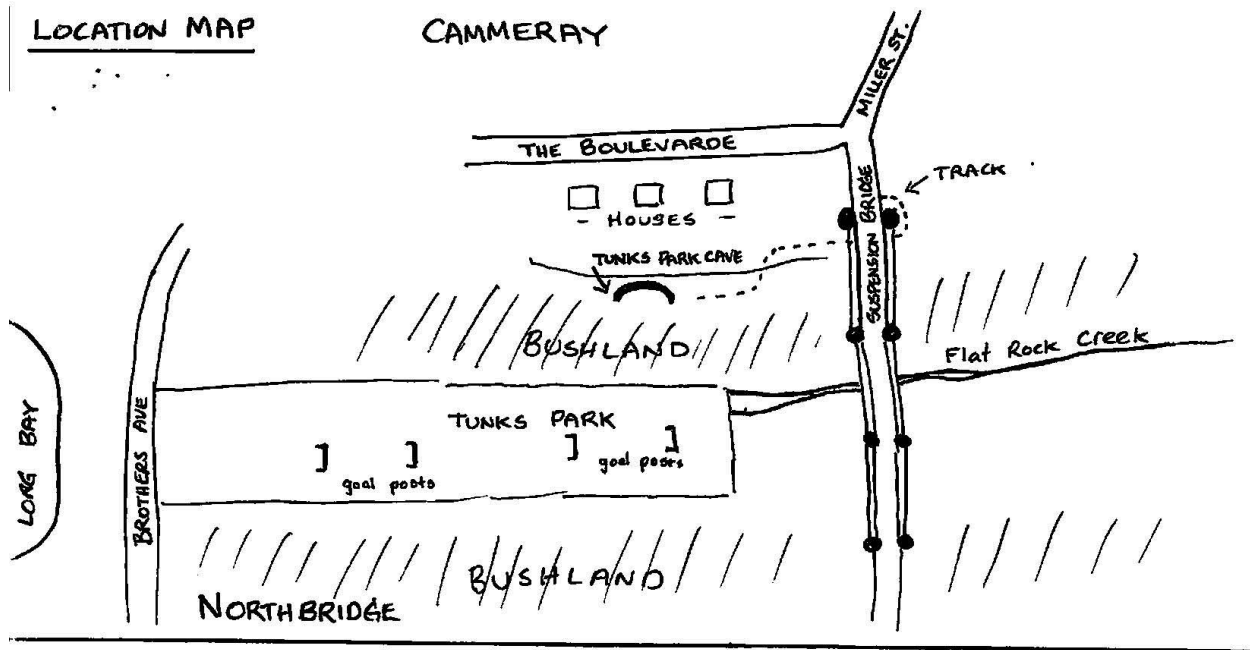
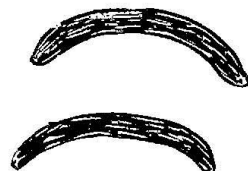


Figure 7 Cammeray Shelter: Floor plan showing areas excavated



ABORIGINAL ART - IN TUNKS PARK CAVE - CAMMERAY

9 Figures in Red Ochres all in eastern end of cave on wall



2 RED OCHRE  
BOOMERANGS  
INFILLED

[ ] New recording

[X] Additional Info




# National Parks and Wildlife Service

Box 1967, Hurstville NSW 2220. Tel: (02) 585 6444  
Standard Site Recording Form Revised 5/88

1:250,000 map sheet: <u>Sydney</u> NPWS Code <u>1415</u>		HEAD OFFICE USE ONLY:	
AMG Grid reference <u>33450</u> mE <u>6256460</u> mN		NPWS Site no: <u>45-6-633</u>	
Full reference - please include leading digits		Site types: <u>Rockshelter with midden and art</u>	
Scale of map used for grid reference <input checked="" type="checkbox"/> 25K, 50K (preferred) <input type="checkbox"/> 100K <input type="checkbox"/> 250K		Accessioned by: <u>BK</u> Date: <u>27 FEB 83</u>	
Please use largest scale available		Data entered by: <u>h</u> Date: <u>1</u>	
1:25K, 50K, 100K map name: <u>Pymatta River</u>		Owner/Manager: <u>North Sydney Council</u>	
Site name: <u>Junks Park</u> Locality/property name: <u>Junks Park</u>		Address:	
NPWS District: <u>Sydney</u> Region: <u>Central</u>			
Reason for investigation <u>Port Jackson Archaeology Project.</u>			
Portion no:		Photos taken?	
Parish:		How many attached?	
How to get to the site (refer to permanent features, give best approach to site eg. from above, below, along cliff. (Draw diagram on separate sheet.) <u>See attached sheets.</u>			
Other sites in locality?		Site Types include:	
Are sites in NPWS Register?			
Have artefacts been removed from site?		When?	
By whom?		Deposited where?	
Is site important to local Aborigines?			
Give contact(s) name(s) + address(es)			
Contacted for this recording? <u>Metropolitan L.A.H.C.</u>			
(Attach additional information separately) If not, why not?			
Verbal/written reference sources (including full title of accompanying report).		NPWS Report Catalogue #	
<u>1990</u> <u>Attenbrow (forthcoming) Report on PJAP Stage I fieldwork.</u>		<u>C-2047</u>	
Checklist: surface visibility, damage/disturbance/ threat to site	Condition of site: <u>See attached.</u>		
Recommendations for management & protection (attach separate sheet if necessary):			
Site recorded by: <u>V. Attenbrow</u> Date: <u>27.10.1989</u>			
Address/institution: <u>Australian Museum</u>			
<u>P.O. Box 4.285 South Sydney 2000</u>			



SITE POSITION & ENVIRONMENT		OFFICE USE ONLY: NPWS site no: 45-6-633
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>1. Land form a. beach/hill slope/ridge top, etc:</p> <p>d. mark on diagram provided or on your own sketch the position of the site:</p> </div> <div style="width: 35%;"> <p>b. site aspect:</p> <p>c. slope:</p> <p>e. Describe briefly:</p> </div> </div>		
		
<div style="display: flex; justify-content: space-between;"> <p>f. Local rock type:</p> <p>g. Land use/effect:</p> </div>		
<p>2. Distance from drinking water: Source:</p>		
<p>3. Resource Zone associated with site (estuarine, riverine, forest etc):</p>		
<p>4. Vegetation:</p>		
<p>5. Edible plants noted:</p>		
<p>6. Faunal resources (include shellfish)</p>		
<p>7. Other exploitable resources (river pebbles, ochre, etc).</p>		
<p>Site type:</p> <p><b>Rockshelter with midden</b></p> <p><b>CHECKLIST TO HELP</b> length, width, depth, height of site, shelter, deposit, structure, element eg. tree scar, grooves in rock.</p> <p><b>DEPOSIT:</b> colour, texture, estimated depth, stratigraphy, contents-shell, bone, stone, charcoal, density &amp; distribution of these, stone types, artefact types.</p> <p><b>ART</b> area of surface decorated, motifs, colours, wet, dry pigment, technique of engraving, no. of figures, sizes, patination.</p> <p><b>BURIALS:</b> number &amp; condition of bone, position, age, sex, associated artefacts.</p> <p><b>TREES:</b> number, alive, dead, likely age, scar shape, position, size, patterns, axe marks, regrowth.</p> <p><b>QUARRIES</b> rock type, debris, recognisable artefacts, percentage quarried.</p> <p><b>OTHER SITES EG.</b> structures (fish traps, stone arrangements, bora rings, mia mias), mythological sites, rock holes, engraved groove channels, contact sites (missions massacres cemeteries) as appropriate</p>	<p><b>DESCRIPTION OF SITE &amp; CONTENTS.</b> Note state of preservation of site &amp; contents. Do NOT dig, disturb, damage site or contents.</p> <p><b>Hugh rockshelter in cliffline at top of steep slope. Shellmidden at least 80 cm deep, relatively undisturbed.</b></p> <p><b>For further details see attached sheets.</b></p> <p>Attach sketches etc, eg. plan &amp; section of shelter, show relation between site contents, indicate north, show scale.</p> <p>Attach annotated photos (stereo where useful) showing scale, particularly for art sites.</p>	



## Site Card 45-6-1120

REGISTER COPY


*Seahy*

1. Map Name ..... *SPRNEY* ..... 5. Site No. .... *45-6-1120* ....

2. Scale ..... *1:250,000* ..... 6. Site type ..... *SHELTER (MIDDLE)* .....

3. Grid ref ..... *4232:8225* ..... 223:219 .....

4. Site name(s) ..... *MOSMAN* ..... 7. Classification .....

8. Air photo ref .....  .....

9. Cadastral ..... *45-6-1120* .....

10. Land Status ..... 11. ....

12. Directions for site relocation


---

13. Owner ..... 14. Tenant/Manager .....  
 Address ..... Address .....  
 .....  
 Attitude ..... Attitude .....

---

15. Site Description  
*L = 125' ; D = 3-7' ; H = 3-6' ; Aspect = SSW. Floor = DOG OUT SHELL, SAND, ROCK*  
*NO ART.*

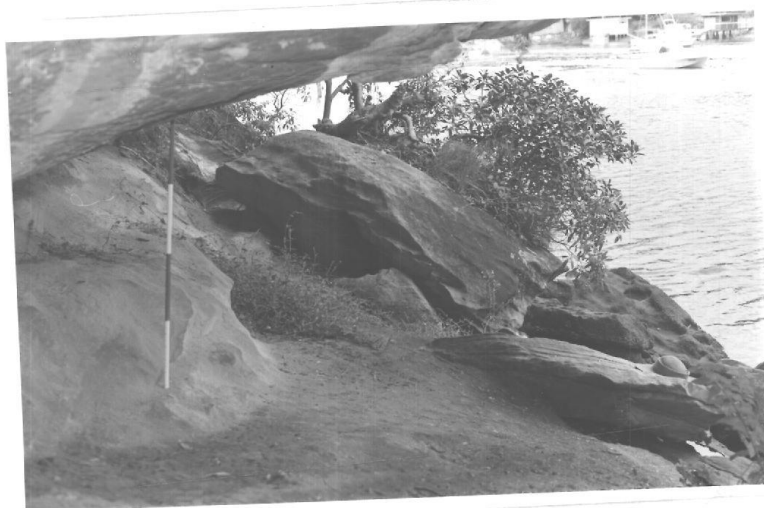
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16. Reasons for investigation .....  
 17. Condition .....  
 .....  
 18. Interpretation .....  
 19. Visitation .....  
 20. Recommendations ..... 



1. Environmental description of site locality

2. Relation to o



3. Details of artifact collections

4. Is plan or diagram of site attached? Yes/No

5. Are annotated photographs attached? Yes/No How many?

6. Other additions

7. Importance of site to Aborigines

8. Source of this information

9. Oral sources of information

10. Written references

FILE A1447.

1. Recorded by R. TAPLIN-


Filed by P. Kelly


Address

Date

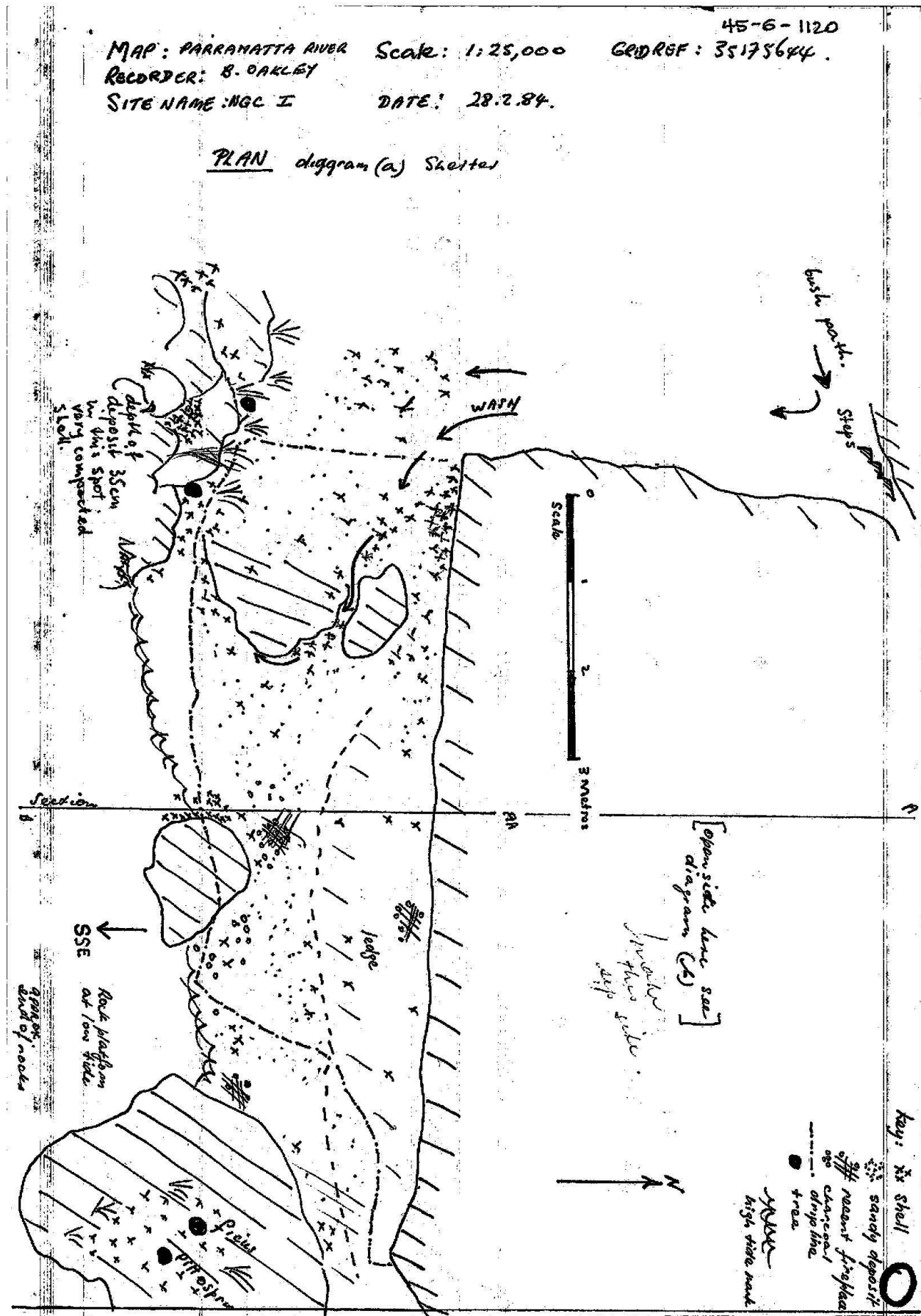
Date 5/11/79.

45-6-1120

 <b>National Parks and Wildlife Service</b> BOX N189, GROSVENOR STREET POST OFFICE, SYDNEY NSW 2000. TEL (02) 237 6500 <b>Standard Site Recording Form</b>				
MAP NAME: <b>Parramatta</b>  <b>River</b> <b>Sydney</b> <b>Sydney</b>	EDITION: <b>First</b>	SCALE: <b>1:25,000</b>  <b>1:250 K</b>  <b>1:63,360</b>	REFERENCE: <b>35175644</b>  <b>4232 8225</b>  <b>223 219</b>	HEAD OFFICE USE ONLY: NWPS site no: <b>45-6-1120</b> Site types: <b>Shelter</b> File nos: <b>with midden</b> Date <b>16/3/84</b> Filed by: <b>[Signature]</b>
Site name: <b>NORTHBRIDGE GOLF LINKS - 1.</b>		Locality/property name: <b>Northbridge Golf Links</b>		Owner/Manager: <b>Northbridge Golf Links</b>
Local post office: <b>Northbridge</b>		Region:		Address: <b>Sailors Bay Road, Northbridge, N. S. W.</b>
NPWS District:				
Reason for investigation (give R.O. instruction no. where applicable): <b>Archaeological Survey for proposed development -- proposed development = upgrading of existing walking trails and the possible development of a jetty, picnic area and the upgrading of a rock pool.</b>				
Portion no:	Other land category:	Plan/sketch/section of site attached? Yes/No. Yes		
Parish:	County:	How many? <b>one each</b>		
Air photo refs. (for stereo pair)		Photos taken? Yes/No <b>yes</b>		
		How many attached?		
How to get to the site (refer to permanent features, give best approach to site eg. from above, below, along cliff. (Draw diagram on separate sheet.) <b>see map attached</b>				
<b>Open middens</b>				
Other sites in locality? Yes/No <b>Yes</b>		Site Types include: <b>shelters with arch. dep., art; engravings:</b>		
Are sites in NPWS Register? Yes/No <b>Yes</b>		Unregistered sites — plans for future recording? Yes/No <b>Yes</b>		
Have artefacts been removed from site? <b>Yes/No</b> <b>don't know</b>		When? <b>don't know</b>		
By whom?		Deposited where?		
Is site important to local Aborigines? <b>Yes/No</b> <b>don't know</b>		<b>don't know - Steve McCarthy is preparing</b>		
Give contact(s) name(s) + address(es)		<b>a statement of Aboriginal Interest (Northshore Land Council</b>		
Contacted for this recording? Yes/No <b>Yes</b>		(Attach additional information separately) If not, why not?		
Verbal/written reference sources (including full title of accompanying report).				
<b>An Archaeological Survey of the Northbridge Golf Links by Bobbie Oakley 1984.</b>				
Checklist: surface visibility, 95% damage/disturbance/ threat to site	Condition of site: <b>Poor - the deposit has been damaged by slope wash, rain, wind and wave action, and also by casual visitors and persons retrieving golf balls -- a rough bush track goes through the site.</b>			
Recommendations for management & protection (attach separate sheet if necessary): <b>The site could be protected by blocking access - this could be done by planting shrubs and removing all traces of the rough bush track by landscaping the general area. The site is not threatened by the proposed development directly but could be by the increased use of the area after devel.</b>				
Site recorded by: <b>Bobbie Oakley</b>		Date: <b>28.2.84</b>		
Address/institution: <b>27/4 Ithaca Road, Elizabeth Bay.</b>				

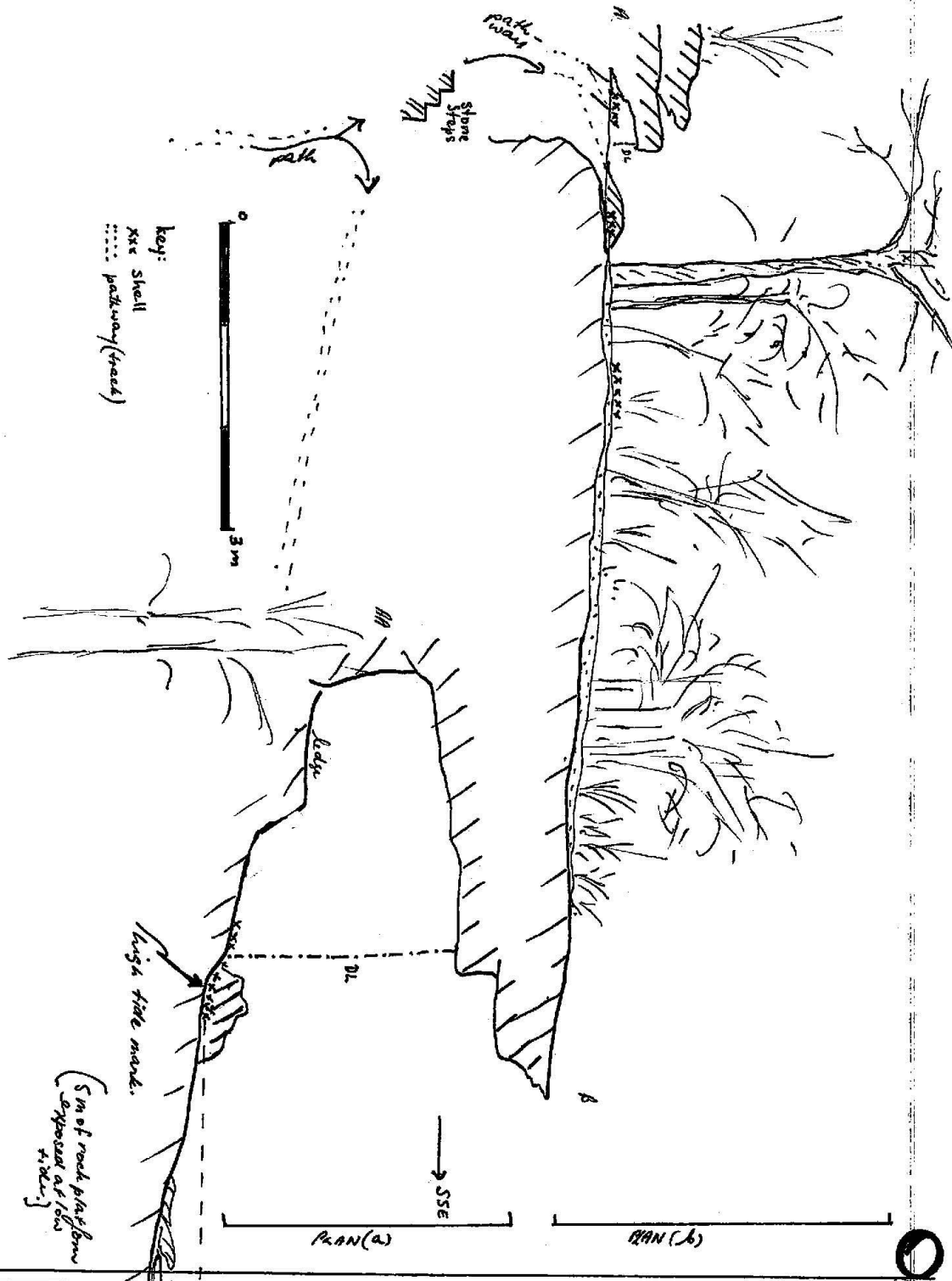
SITE POSITION & ENVIRONMENT		OFFICE USE ONLY: NPWS site no: 45-6-1120
1. Land form a. beach/hill slope/ridge top, etc: base of hill slope		b. site aspect: S. S. E. c. slope: 80
d. mark on diagram provided or on your own sketch the position of the site:		e. Describe briefly: site is a shelter at the base of a hill slope on the foreshore of Middle Harbour, Port Jackson
		
f. Local rock type: Hawkesbury Sandstone	g. Land use/effect: Recreation -- bush walking, fishing picnics	
2. Distance from drinking water: 100 metres 120 metres	Source: seepage in cliff face rock pools in water course	
3. Resource Zone associated with site (estuarine, riverine, forest etc): Estuarine		
4. Vegetation: Mixed sclerophyll Ficus, Pittosporum, Angophora, Acacia, Casuarina Melaleuca Eucalyptus and introduced species		
5. Edible plants noted: Xanthorrhoea, Acacia, Pittosporum, Ficus, bracken fern		
6. Faunal resources (include shellfish): Crassostrea commercialis, Anadara trapezia, Mytilus planulatus Anomia descripta, Trichomya hirsutus, Pyrazus ebeninus		
7. Other exploitable resources (river pebbles, ochre, etc): None limpets and false limpet, fish, crabs, possum		
Site type: Shelter with midden	DESCRIPTION OF SITE & CONTENTS.	
	Note state of preservation of site & contents. Do NOT dig, disturb, damage site or contents.	
	The site is in poor condition, (as noted above) however there is undisturbed archaeological deposit with a max. depth of 35cm.	
	The shelter is situated on Long Bay Just above the high tide level. The shelter is long and open and exposed to the elements and wave action. The shelter is formed by a large boulder resting on a sandstone ledge. The ceiling is black in some places.	
	Dimensions: Length: 9 metres Width: 2.75 metres Height: 2.5 metres	
	Contents:	
	Deposit: grey medium sand with the arch. deposit max depth 35cm on a sloping rock floor. The arch. deposit also extends several metres either side of the actual shelter. -- this could be reworked material from the midden)	
	Shell: Crassostrea commercialis 60%; Trichomya hirsuta 30%; Anadara trapezia 15%; Bittium, Bembicium, and unidentified 5%	
	Charcoal: pieces eroding from archaeological deposit and also recent charcoal from picnic fireplaces	
	Bone: one piece of fish bone eroding from arch. Deposit also recent fish bone (cats noted eating fish in shelters)	
	Stone: none	
	Art: none	
CHECKLIST TO HELP: length, width, depth, height of site, shelter, deposit, structure, element eg. tree scar, grooves in rock. DEPOSIT: colour, texture, estimated depth, stratigraphy, contents-shell, bone, stone, charcoal, density & distribution of these, stone types, artefact types. ART: area of surface decorated, motifs, colours, wet, dry pigment, technique of engraving, no. of figures, sizes, patination. BURIALS: number & condition of bone, position, age, sex, associated artefacts. TREES: number, alive, dead, likely age, scar shape, position, size, patterns, axe marks, regrowth QUARRIES: rock type, debris, recognisable artefacts, percentage quarried. OTHER SITES EG. structures (fish traps, stone arrangements, bora rings, mia mias), mythological sites, rock holes, engraved groove channels, contact sites (missions massacres cemeteries) as appropriate	Attach sketches etc, eg. plan & section of shelter, show relation between site contents, indicate north, show scale. Attach annotated photos (stereo where useful) showing scale, particularly for art sites.	







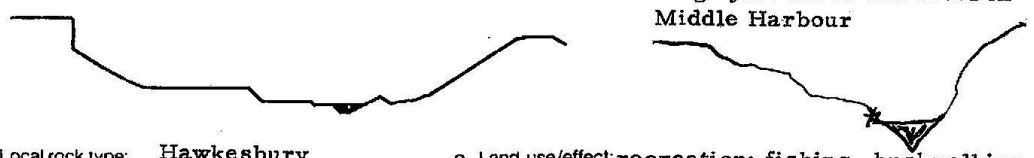
Map: PARRAMATTA RIVER  
 Scale: 1:25,000  
 Site Name: N.G.C I  
 Grid Ref: 35175644  
 Section:

45-6-1120  
 Recorder: B. OAKLEY  
 Date: 28.2.84.



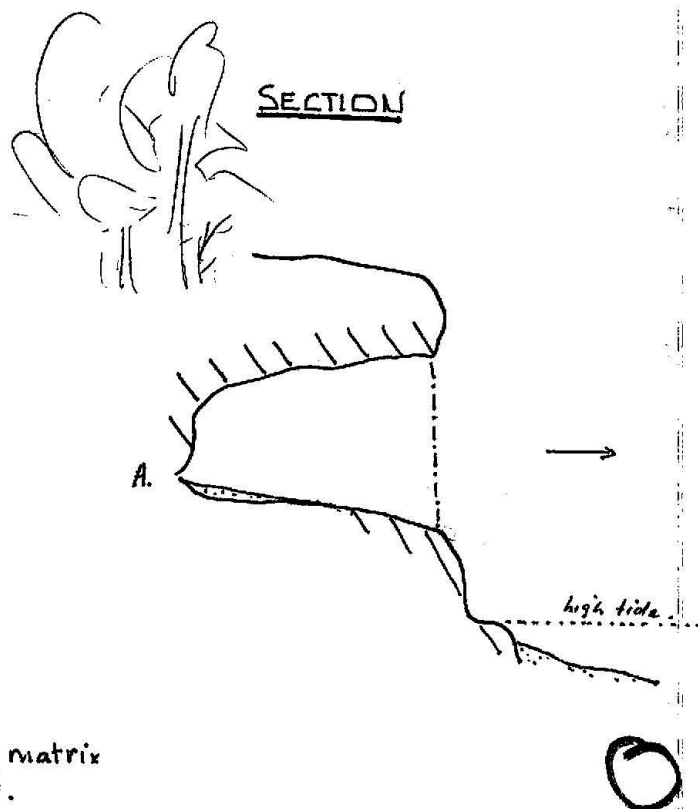
## Site Card 45-6-1121

 <b>National Parks and Wildlife Service</b> BOX N189, GROSVENOR STREET POST OFFICE, SYDNEY, NSW 2000. TEL (02) 237 6500 Standard Site Recording Form				 <b>45-6-1121</b>	
<b>MAP NAME</b> PARRAMATTA RIVER <i>Sydney</i> <i>Sydney</i>	<b>EDITION</b> FIRST	<b>SCALE</b> 1:25,000 1:250 K 1:63,360	<b>REFERENCE</b> ?5 3520645 4232 8225 223 219	<b>HEAD OFFICE USE ONLY:</b> NWPS site no: <i>45-6-1121</i> Site types: <i>Shelter</i> File nos: <i>with midden</i> Date <i>16/8/84</i> Filed by: <i>[Signature]</i>	
Site name: <i>N. G. L. 3.</i> Locality/property name: <i>Northbridge Golf Links 3.</i> Northbridge Golf Links 3. North bridge Golf Links Local post office: <i>Northbridge</i> NPWS District: <i>Central</i>		Owner/Manager: <i>Northbridge Golf Club</i> leased from: <i>Willoughby Council</i> Address: <i>Sailors Bay Road, Northbridge, N. S. W.</i>			
Reason for investigation (give R.O. instruction no. where applicable): <i>Archaeological Survey for proposed development -- upgrading of existing walking trails and proposed development of a jetty, picnic area and the upgrading of a rock pool by the Willoughby Mun. Council.</i>					
Portion no: Parish:		Other land category: County:		Plan/sketch/section of site attached? Yes/No <input checked="" type="checkbox"/> YES How many? <i>One each</i>	
Air photo refs. (for stereo pair)				Photos taken? Yes/No <input checked="" type="checkbox"/> YES How many attached? <i>Two</i>	
How to get to the site (refer to permanent features, give best approach to site eg. from above, below, along cliff). (Draw diagram on separate sheet.) <p style="text-align: center;"><i>see attached map</i></p>					
Other sites in locality? Yes/No <input checked="" type="checkbox"/> YES Are sites in NPWS Register? Yes/No <input checked="" type="checkbox"/> Yes Have artefacts been removed from site? Yes/No/don't know. When? <i>Don't know</i> By whom? <i>Deposited where?</i>					
Site Types include: <i>Open middens, Shelters with Arch. deposit</i> Unregistered sites — plans for future recording? Yes/No <input checked="" type="checkbox"/> Yes					
Is site important to local Aborigines? <i>Don't know</i> Give contact(s) name(s) + address(es) <i>Steve McCarthy, c/- N. P. W. S. or Northshore land council.</i> Contacted for this recording? Yes/No <input checked="" type="checkbox"/> Yes - <i>Steve is preparing a Statement of Aboriginal Interest</i> (Attach additional information separately) If not, why not?					
Verbal/written reference sources (including full title of accompanying report). <i>An Archaeological Survey of the Northbridge Golf Links -- by B. Oakley, 1984</i>					
Checklist: surface visibility, 50% damage/disturbance/ threat to site		Condition of site: <i>Poor- the archaeological deposit has in places been disturbed by slope wash, rain and possibly wave action. It is also being disturbed by casual visitors to the foreshore and has evidence of a recent fireplace</i>			
Recommendations for management & protection (attach separate sheet if necessary): <i>The site is on a ledge just above high water level and persons using the foreshore at high tide possibly walk through the site to avoid getting wet. It would be difficult to prevent this without fencing off the site -- however this was not recommended in the survey report - if visitation increased due to development, then it may be necessary to take protective measure</i>					
Site recorded by: <i>B. Oakley</i> Address/institution: <i>27/ Ithaca Road, Elizabeth Bay. 2011.</i>		Date: <i>28.2.84.</i>			

SITE POSITION & ENVIRONMENT		OFFICE USE ONLY: NPWS site no: 45-6-1121
<p>1. Land form a. beach/hill/slope/ridge top, etc: base of hill slope</p> <p>b. site aspect: S. S. E. c. slope:</p> <p>d. mark on diagram provided or on your own sketch the position of the site:</p> <p>e. Describe briefly: site on a sandstone ledge just above sea level in Middle Harbour</p>  <p>f. Local rock type: Hawkesbury Sandstone</p> <p>g. Land use/effect: recreation: fishing, bushwalking, golf, picnics.</p>		
<p>2. Distance from drinking water: at site 100 metres Source: seepage small watercourse and rock pools.</p>		
<p>3. Resource Zone associated with site (estuarine, riverine, forest etc): estuarine</p>		
<p>4. Vegetation: Mixed sclerophyll -- Pittosporum, Epacris, Casuarina, geebung, Eucalyptus and introduced species-lantana</p>		
<p>5. Edible plants noted: there is Xanthorrhoea in the general area (also endemic mushrooms)</p>		
<p>6. Faunal resources (include shellfish): fish, crabs, possum, Crassostrea commercialis, Anadara Mytilus planulatus, Anomia descripta, Trichomya hirsutus, Pyrazus, limpets.</p>		
<p>7. Other exploitable resources (river pebbles, ochre, etc):</p>		
<p>Site type:</p> <p><b>Shelter with midden</b></p> <p>CHECKLIST TO HELP: length, width, depth, height of site, shelter, deposit, structure, element eg. tree scar, grooves in rock. DEPOSIT: colour, texture, estimated depth, stratigraphy, contents-shell, bone, stone, charcoal, density &amp; distribution of these, stone types, artefact types. ART. area of surface decorated, motifs, colours, wet, dry pigment, technique of engraving, no. of figures, sizes, patination. BURIALS: number &amp; condition of bone, position, age, sex, associated artefacts. TREES: number, alive, dead, likely age, scar shape, position, size, patterns, axe marks, regrowth QUARRIES: rock type, debris, recognisable artefacts, percentage quarried. OTHER SITES EG. structures (fish traps, stone arrangements, bora rings, mia mias), mythological sites, rock holes, engraved groove channels, contact sites (missions massacres cemeteries) as appropriate</p>	<p><b>DESCRIPTION OF SITE &amp; CONTENTS.</b> Note state of preservation of site &amp; contents. Do NOT dig, disturb, damage site or contents.</p> <p>The shelter is situated 1.5 metres above high tide level. The arch. dep is in the shelter on a sandstone ledge under an overhang. The shelter is exposed to weather from the south and not at all protected by rocks and vegetation. In front of the shelter there is a narrow rock platform which is exposed only at low tide.</p> <p>Dimensions: Length: 9metres; Width: 2.0 metres; Height: 2 metres</p> <p>Contents:</p> <p>Deposit: medium sand -- grey brown, and yellow coarse sand. Max. depth of deposit is approx. 15 cm (at the back wall) the rock floor of the shelter is visible at the front of the site and it was clear that little depth of arch. deposit overlies the bedrock.</p> <p>Shell: Crassostrea commercialis 65%; Trichomya hirsuta 20% Anadara trapezia, 9%; Bittium, Bernbicium and others 6%.</p> <p>Charcoal: eroding out of arch. deposit and some recent on surface</p> <p>Stone: none</p> <p>Bone: none</p> <p>Art. none</p> <p>Attach sketches etc, eg. plan &amp; section of shelter, show relation between site contents, indicate north, show scale. Attach annotated photos (stereo where useful) showing scale, particularly for art sites.</p>	



SITE NAME: N64(3)



key:

xxx shell  
 /// rock  
 --- dripline  
 #/# recent fireplace  
 ogo charcoal eroding out of matrix  
 x.x sandy floor + leaf litter.

## REGISTER COPY

*Gydney*

1. Map Name ..... *SYDNEY* ..... *ROCKEY BAY* ..... 5. Site No. .... *45-6-1121* .....  
 2. Scale ..... *1:250,000* ..... *1:63,360* ..... 6. Site type .... *(MIDDEN)* .....  
 3. Grid ref ..... *4232 8225* ..... *223219* ..... *SHELTER* .....  
 4. Site name(s) ..... *MOSMAN!* ..... *LONG BAY CAVE* ..... 7. Classification .....  
 8. Air photo ref .....  
 9. Cadastral .....  
 10. Land Status ..... 11. ....  
 12. Directions for site relocation

13. Owner ..... 14. Tenant/Manager .....  
 Address ..... Address .....  
 .....  
 Attitude ..... Attitude .....

## 15. Site Description

*LONG BAY CAVE: L = 30; D = 2-13; H = 3-18; ASPECT = S. FLOOR = DISTURBED SHELL  
 NO ART*

16. Reasons for investigation .....  
 17. Condition .....  
 .....  
 18. Interpretation .....  
 19. Visitation .....  
 20. Recommendations .....  
 .....

21. Environmental description of site locality

22. Relation to other sites in locality

23. Details of artifact collections

24. Is plan or diagram of site attached? Yes/No

25. Are annotated photographs attached? Yes/No How many?

26. Other additions

27. Importance of site to Aborigines

28. Source of this information

29. Oral sources of information

30. Written references

FILE A1447.

31. Recorded by R. TAPLIN.

Filed by M. Kelly.

Address

Date

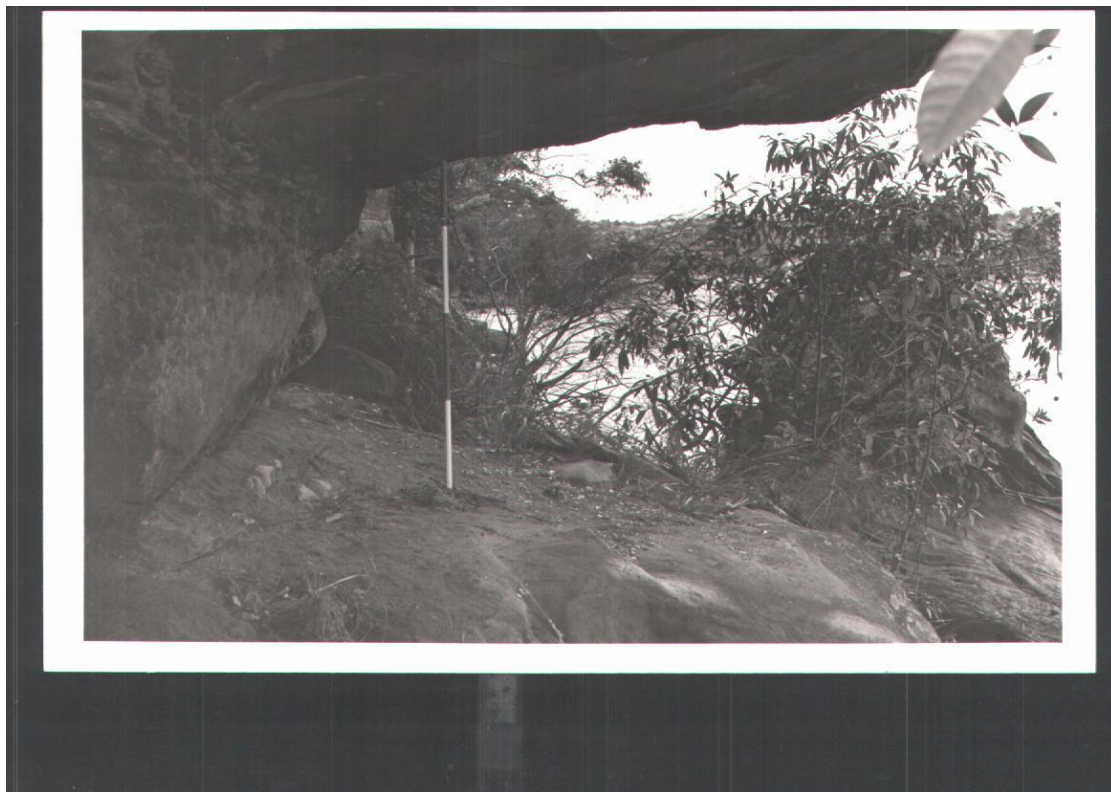
Date

5/11/79.

45-6-144







## Site Card 45-6-1700

NOT A SITE



## National Parks and Wildlife Service


BOX N189, GROSVENOR STREET POST OFFICE, SYDNEY, NSW 2000. TEL (02) 237 6500

Standard Site Recording Form



45-6-1700

MAP NAME	EDITION	SCALE	REFERENCE	HEAD OFFICE USE ONLY:
PARRAMATTA RIVER 1978		1:25,000.	<sup>3/</sup> 3395.5670	NWPS site no: 45-6-1700
SYDNEY	1950 (1st)	1:250,000	4232.8220	Site types: File nos: Axe-Grinding Date 18-1-88 Grooves, Filed by: K. Emanuel
Site name: Munro Park Axe Grinding Grooves		Locality/property name: Munro Park		Owner/Manager: Willoughby Council
Local post office: Naremburn		Address:		
NPWS District: Sydney		Region: Central		
Reason for investigation (give R.O. instruction no. where applicable):				
Associated Diploma in Park Management, assignment in archaeological Investigations.				
Portion no:	Other land category: Council Reserve	Plan/sketch/section of site attached? Yes/No.		
Parish: Willoughby	County: Cumberland	How many?		
Air photo refs. (for stereo pair)		Photos taken? Yes/No Yes		
		How many attached? two		
How to get to the site (refer to permanent features, give best approach to site eg. from above, below, along cliff. (Draw diagram on separate sheet.) The site is at the junction of two streams, the major being Flat Rock Creek, the other a stream flowing from Brook Street, Naremburn. Approach from Car Park in Brothers Avenues, Long Bay (Middle Harbour). Walk up Flat Rock Creek from playing fields, under Cammeray Bridge to waterfall where two rocks with axe grinding grooves are located.				
Other sites in locality? Yes/No. yes		Site Types include: Cave paintings, Rock engravings, shelters		
Are sites in NPWS Register? Yes/No. yes		Unregistered sites — plans for future recording? Yes/No. yes		
Have artefacts been removed from site? Yes/No/don't know. When? Not known		By whom? Deposited where?		
Is site important to local Aborigines? Yes/No/don't know. Inspected by mr D. Tompkins on 12/6/86 who		Give contact(s) name(s) + address(es) considered that the grooves were not made by aboriginals		
Contacted for this recording? Yes/No.		(Attach additional information separately) If not, why not?		
Verbal/written reference sources (including full title of accompanying report). C-1293				
none				
Checklist: surface visibility, damage/disturbance/ threat to site	Condition of site: The site in Flat Rock Creek is 200m downstream of a major city stormwater drain -silt, sediment and pollutants affect the site.			
Recommendations for management & protection (attach separate sheet if necessary):				
Site recorded by: Alan K. Morris		Date: 16/5/86		
Address/institution: 32 Cliff Street				
Watsons Bay NSW 2030				

SITE POSITION & ENVIRONMENT		OFFICE USE ONLY: NPWS site no:
1. Land form a. beach/hill slope/ridge top, etc: <u>stream bed</u> d. mark on diagram provided or on your own sketch the position of the site: 		b. site aspect: <u>stream flows west-east.</u> e. Describe briefly: <u>rocks at base of small waterfall on Flat Rock Creek have a number of rock engravings/axe grinding grooves.</u>
f. Local rock type: <u>Hawkesbury Sandstone</u>		g. Land use/effect: <u>Public Recreation Reserve.</u>
2. Distance from drinking water: <u>in stream bed</u>		Source: <u>Flat Rock Creek</u>
3. Resource Zone associated with site (estuarine, riverine, forest etc):		<u>permanent stream</u>
4. Vegetation: <u>wet sclerophyll forests -tall eucalypts and dense understorey of Pittosporum &amp; watergum, now dominated by privets.</u>		
5. Edible plants noted: <u>Lilli Pilli Acmena smithii</u>		
6. Faunal resources (include shellfish): <u>Possums, fish (mullet in upper reaches of stream)</u>		
7. Other exploitable resources (river pebbles, ochre, etc): <u>not known</u>		
Site type:  <b>AXE-GRINDING GROOVES</b>  CHECKLIST TO HELP: length, width, depth, height of site, shelter, deposit, structure, element eg. tree scar, grooves in rock. DEPOSIT: colour, texture, estimated depth, stratigraphy, contents-shell, bone, stone, charcoal, density & distribution of these, stone types, artefact types. ART: area of surface decorated, motifs, colours, wet, dry pigment, technique of engraving, no. of figures, sizes, patination. BURIALS: number & condition of bone, position, age, sex, associated artefacts. TREES: number, alive, dead, likely age, scar shape, position, size, patterns, axe marks, regrowth. QUARRIES: rock type, debris, recognisable artefacts, percentage quarried. OTHER SITES EG. structures (fish traps, stone arrangements, bora rings, mia mas), mythological sites, rock holes, engraved groove channels, contact sites (missions massacres, cemeteries) as appropriate	<b>DESCRIPTION OF SITE &amp; CONTENTS.</b> Note state of preservation of site & contents. Do NOT dig, disturb, damage site or contents.  Two rocks in the stream at the waterfall appear to have axe-grinding grooves, although there are many other suitable rocks present without grooves. The rock with the most grooves, has two parallel grooves of 35cm x 6 cm, smaller grooves of 12cm x 5 cm eight altogether, surround the longer pair. The other rock is 20m away with a strange set of markings as per photograph.  Flat Rock Creek can only run free to a distance upstream of 200m and downstream for 500m for elsewhere it is located within a large box culvert and flows under playing fields.  These two rocks are two of many at the waterfall (c 3m high) located at the junction of Flat Rock Creek and the stream that flows from Brook Street, Naremburn. The location is on the border of Hallstrom Reserve and Munro Park, just within Willoughby Municipal Council area rather than North Sydney Council.	
Attach sketches etc, eg. plan & section of shelter, show relation between site contents, indicate north, show scale. Attach annotated photos (stereo where useful) showing scale, particularly for art sites.		



## Cultural Resources

NSW  
NATIONAL  
PARKS AND  
WILDLIFE  
SERVICE

## DATABASE UPDATE SHEET

- [ ] REGISTER Site register  
[ ] CATALOG Reports catalogue  
[ ] FOTODEX Photographic catalogue

Record ID Field/variable New or revised value(s)

45-6-1700

1 SITENAME Munro Park A.G.G.  
2 SITETYPE 8 = Axe grinding groove  
3 RECTYPE 2 = Standard site record  
4 RECORDER Morris, A.K.  
5 RECDATE 00May1986  
6 DISTRICT 2 = North Metropolitan  
7 DISTRICT 1 = Sydney  
8 ASSOCREP C-1293  
9 STATUS 1 = Present in H.O.  
10 ZONE 56 = AMG Zone 56  
11 AMG\_E 333950  
12 AMG\_N 6256700  
13 MAPSCALE 7 = 1:25/50/100K convrt  
14 LNDSTAT 2 = Council reserve  
15 CONDITN 2 = Disturbed  
16 ARCHWRK 1 = Surface recording  
17 DATEUPD 11Oct1991  
18 <Sub-rec>

Filled in by: S. fields

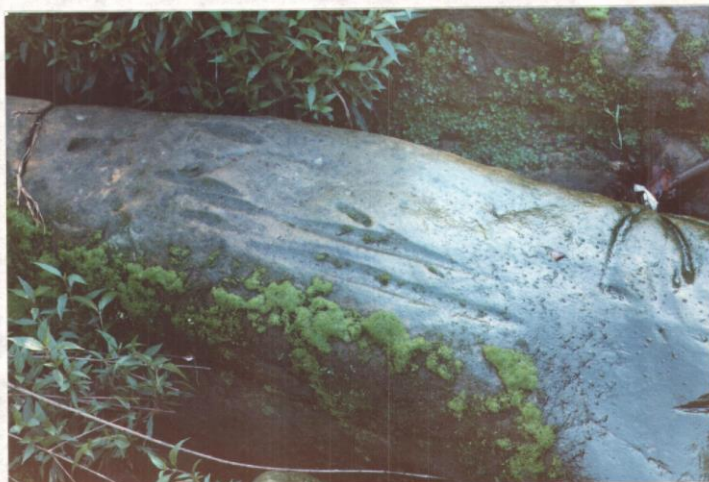
Date: 3-10-91

Entered by: S. fields

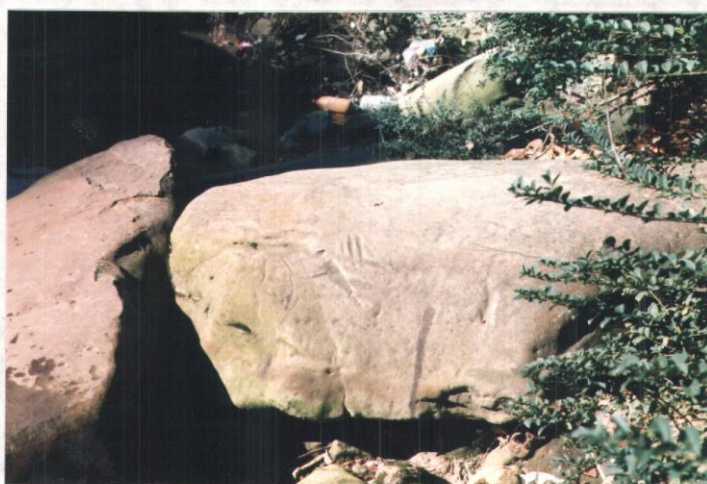
Date: 3-10-91

0





14. MUNRO PARK AXE-GRINDING GROOVES, FLAT ROCK CREEK




15. MUNRO PARK AXE-GRINDING GROOVES, SECOND ROCK



16 MUNRO PARK AXE-GRINDING GROOVES, CLOSE UP OF ABOVE

## Site Card 45-6-2539

[ ] New recording [ ] Additional info



## National Parks and Wildlife Service

Box 1967, Hurstville NSW 2220. Tel: (02) 585 6444  
Standard Site Recording Form Revised 5/88

SERVICES DIVISION

31 MAY 1996

---

1:250,000 map sheet: SYDNEY NPWS Code

250K

AMG Grid reference 334370 mE

Full reference - please include leading digits

250K

6256520 mN

5/8

Scale of map used for grid reference [ ] 25K, 50K [ ] 100K [ ] 250K  
Please use largest scale available. (preferred)

(25K) 50K, 100K map name: PARRAMATTA RIVER

**HEAD OFFICE USE ONLY:**

NPWS Site no: 45-6-2539

Site types:

Accessioned by: [Signature] Date: 11/6/96

Date entered by: [Signature] Date: 11/6/96

Owner/Manager:

Address:

---

Site name: Suspension Bridge Rockshelter (west) Locality/property name:

NPWS District: SYDNEY Region: metropolitan

Reason for investigation: B HAZARD FIRE REDUCTIONS ASSESSMENT

45-6-2539

---

Portion no:

Parish:

Photos taken? YES

How many attached? 2

---

How to get to the site (refer to permanent features, give best approach to site eg. from above, below, along cliff. (Draw diagram on separate sheet.)

Approach reclaimed long bay from Middle Harbour - passed sports fields to Suspension Bridge. Follow southern cliff line about 100 metres from bridge (west from bridge). Shelter is approx 1/2 way up cliff line. (see attached map)

---

Other sites in locality? YES

Are sites in NPWS Register? YES

Have artefacts been removed from site? NO

By whom?

Is site important to local Aborigines? YES

Give contact(s) name(s) + address(es) BILL WALKER  
METROPOLITAN LALC 72 RENLUCK ST  
REDFERN

Contacted for this recording?

(Attach additional information separately) If not, why not? YES, Billy attended site recording

Verbal/written reference sources (including full title of accompanying report)

Site Types include: Rockshelter with deposit - art

When?

Deposited where?

NPWS Report Catalogue #

---

Checklist:

surface visibility.

damage/disturbance/

threat to site

Condition of site: some surface disturbance caused by sporadic modern occupation.  
Some rubbish in shelter, dumping nearby from over cliff edge; shelter walls  
are moist & deflating

---


Recommendations for management & protection (attach separate sheet if necessary):

---

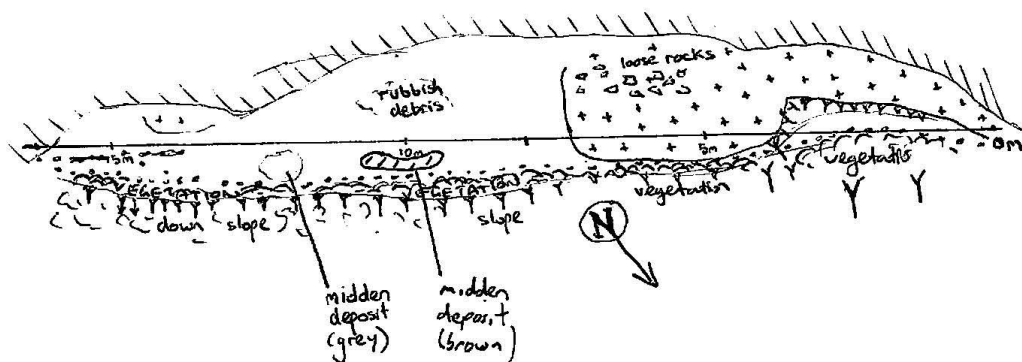
Site recorded by: PHIL HUNT & MICHAEL BENNETT, SYD ZONE




Address/institution: ROD MATHER NATSYD COUNCIL  
BILL WALKER METROP LALC

Date: 14 MAY 1996

SITE POSITION & ENVIRONMENT		OFFICE USE ONLY: NPWS site no:
1. Land form a. beach/hill slope/ridge top, etc: <i>middle cliff line</i> d. mark on diagram provided or on your own sketch the position of the site: 		b. site aspect: <i>NORTH</i> c. slope: <i>0°</i> e. Describe briefly: <i>arrow rockshelter,</i>
f. Local rock type: <i>Sydney sandstone</i> g. Land use/effect:		
2. Distance from drinking water: <i>100m</i> Source:		
3. Resource Zone associated with site (estuarine, riverine, forest etc): <i>riverine/coastal</i>		
4. Vegetation: <i>bracken fern, eucalyptus</i>		
5. Edible plants noted: <i>bracken fern</i>		
6. Faunal resources (include shellfish): <i>ANADAMA, oyster</i>		
7. Other exploitable resources (river pebbles, ochre, etc):		
Site type: <i>rockshelter with midden deposit</i>	<b>DESCRIPTION OF SITE &amp; CONTENTS.</b> Note state of preservation of site & contents. Do NOT dig, disturb, damage site or contents.  <i>SEE ATTACHED SHEET</i>	
<b>CHECKLIST TO HELP:</b> length, width, depth, height of site, shelter, deposit, structure, element eg. tree scar, grooves in rock. <b>DEPOSIT:</b> colour, texture, estimated depth, stratigraphy, contents-shell, bone, stone, charcoal, density & distribution of these, stone types, artefact types. <b>ART:</b> area of surface decorated, motifs, colours, wet, dry pigment, technique of engraving, no. of figures, sizes, patination. <b>BURIALS:</b> number & condition of bone, position, age, sex, associated artefacts. <b>TREES:</b> number, alive, dead, likely age, scar shape, position, size, patterns, axe marks, regrowth. <b>QUARRIES:</b> rock type, debris, recognisable artefacts, percentage quarried. <b>OTHER SITES EG.</b> structures (fish traps, stone arrangements, bora rings, maa maa), mythological sites, rock holes, engraved groove channels, contact sites (missions massacres cemeteries) as appropriate  Attach sketches etc. eg. plan & section of shelter, show relation between site contents, indicate north, show scale. Attach annotated photos (stereo where useful) showing scale, particularly for art sites.		

PLAN VIEW  
OF ROCKSHELTER



-  vegetation edge
-  rock debris
-  sandstone bedrock
- .... dripline

0 ————— 5  
Metres  
(approx)

MAY 1996  
PHIL HUNT

- MIDDEN DEPOSIT : - ANA DARA
- OYSTER
  - LIKELY TO BE LESS THAN 20 CM DEEP
  - MIDDEN DISTURBED ON SURFACE BY FOOT TRAFFIC

0

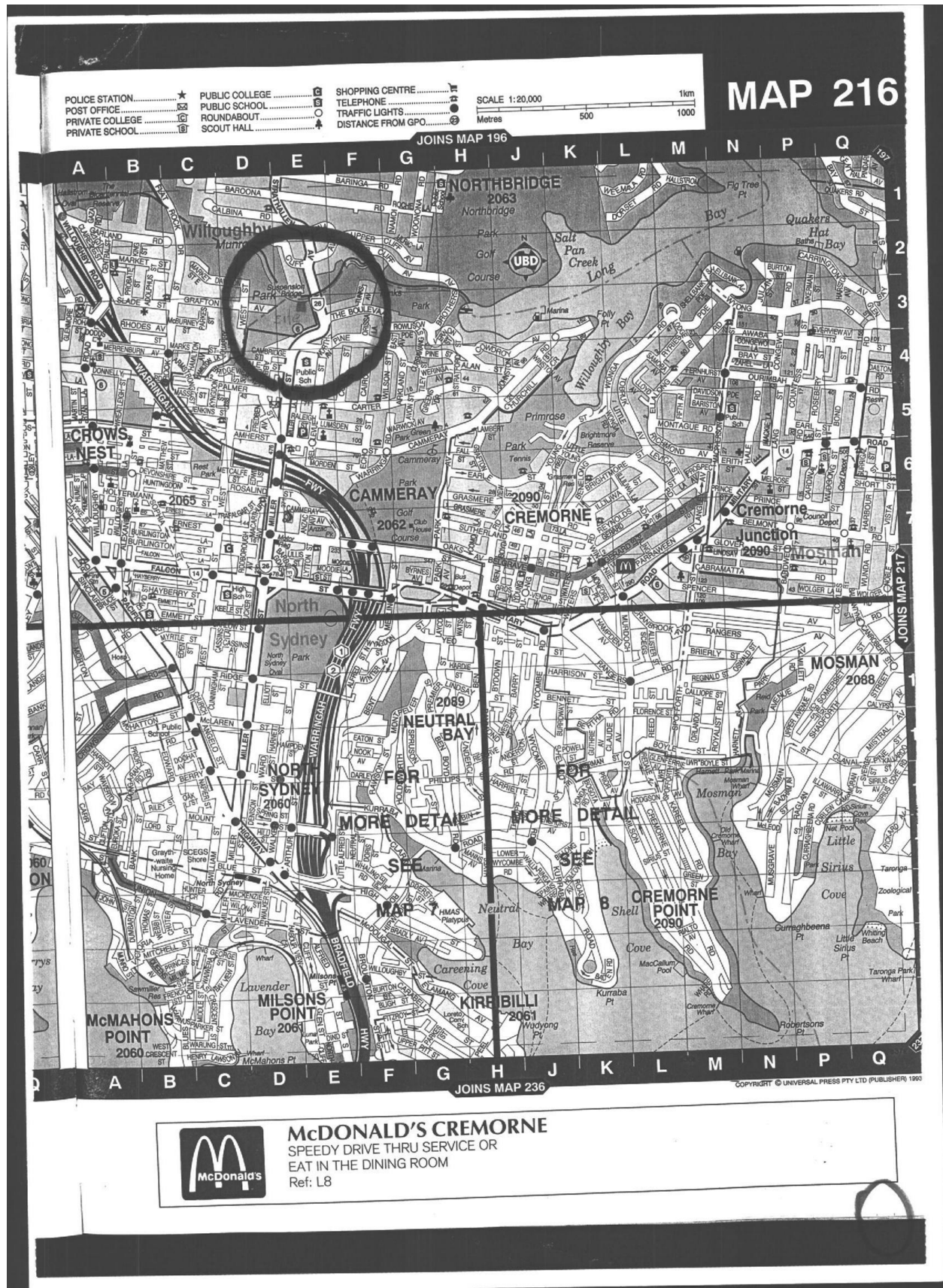




← PHOTO 1 ROCK SHELTER (FACING WEST) MIDDEN VISIBLE IN FOREGROUND ALTHOUGH PARTLY OBSCURED BY SUNLIGHT. DARKER DEPOSIT TO THE LEFT OF CROUCHING SUBJECT

PHOTO 2  
ROCKSHELTER (FACING EAST)  
SUBJECTS RIGHT FOOT POINTS TOWARDS MIDDEN









Aboriginal Heritage Office  
**Aboriginal Site Update**

Date: 11 February 2011

AHO Site # NSC-069

AHIMS Site # 45-6-2539

**UPDATE AHIMS Information in following:**

This site is incorrectly located. It should be

**Location:** (based on 1. **monitor**, 2. original card 1:25,000k reference, 3. Estimate, 4. other...GIS check.)

AMG 66

3	3	4	4	2	0
---	---	---	---	---	---

 mE

GDA 94

3	3	4	5	2	4
---	---	---	---	---	---

 mE

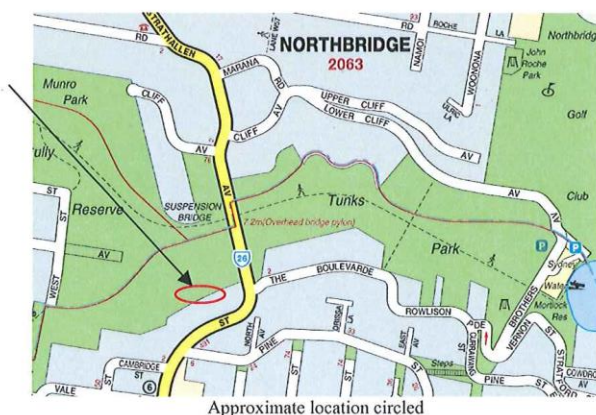
6	2	5	6	4	3	0
---	---	---	---	---	---	---

 mN

6	2	5	6	6	2	0
---	---	---	---	---	---	---

 mN




This location for the site has been revised using GPS/GIS to its correct location. It corrects the error of the original recording NPWS/AHIMS card (the map and description is correct, but the northing was incorrect) It also improves the easting.



Phil Hunt

Aboriginal Heritage Office,  
 Ku-ring-gai, Lane Cove, Manly, North Sydney, Pittwater, Warringah, Willoughby and City of Ryde Councils  
 PO Box 12 North Sydney NSW 2059  
 Ph: 9949 9882

## Site Card 45-6-3361

		<b>Aboriginal Site Recording Form</b> AHIMS Registrar PO Box 1967, Hurstville NSW 2220		 	
<b>Office Use Only</b>					
		<b>Site Number</b> 4 5 - 6 - 3 3 6 1			
Date received		Date entered into system		Date catalogued	
Entered by (I.D.)					
<b>Information Access</b>					
<input type="checkbox"/> Gender/male		<input type="checkbox"/> Gender/female		<input type="checkbox"/> Location restriction	
				<input type="checkbox"/> General restriction	
				<input type="checkbox"/> No access	
<b>For Further Information Contact:</b>					
<input type="checkbox"/> <b>Nominated Trustee</b>					
Title	Surname		First Name		Initials
Organisation					
Address					
Phone number			Fax		
<input type="checkbox"/> <b>Knowledge Holder</b>					
Title	Surname		First Name		Initials
M S	T I M O T H Y		S E L I N A		
Organisation					
Address					
Phone number			Fax		
<b>Aboriginal Heritage Unit or Cultural Heritage Division Contacts</b>					
<b>Geographic Location</b>					
Site Name					
Easting					
Northing		AGD/GDA		GDA	
Mapsheet					
Zone		Location Method			
Other Registration					
<b>Primary Recorder</b>					
Title	Surname		First Name		Initials
M R	C O S T E L L O		A N D R E W		A C
Organisation					
Address					
Phone number			Fax		
Date recorded					



page 2

Open Site

## NPWS Aboriginal Site Recording Form - Site Information

page 3

## General Site Information

## Closed Site

## Shelter/Cave Formation

- ☐ Boulder  
☐ Wind erosion  
☐ Water erosion  
☐ Rock collapse

## Condition of Ceiling

- ☐ Boulder  
☐ Sandstone platform  
☐ Silica gloss  
☐ Tessellated  
☐ Weathered  
☐ Other platform

## Rock Surface Condition

- ☐ Boulder  
☐ Sandstone platform  
☐ Silica gloss  
☐ Tessellated  
☐ Weathered  
☐ Other platform

## Shelter Aspect

- ☐ North  
☐ North East  
☐ East  
☐ South East  
☐ South  
☐ South West  
☐ West  
☐ North West

## Open Site

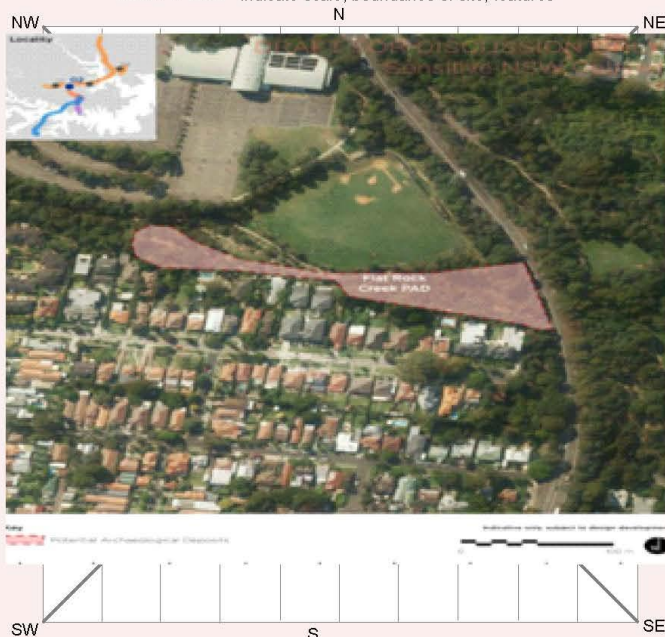
## Site Orientation

- ☐ N-S  
☐ NE-SW  
☒ E-W  
☐ SE-NW  
☐ N/A

## Features

- ☐ 1. Aboriginal Ceremony & Dreaming  
☐ 2. Aboriginal Resource & Gathering  
☐ 3. Art  
☐ 4. Artefact  
☐ 5. Burial  
☐ 6. Ceremonial Ring  
☐ 7. Conflict  
☐ 8. Earth Mound  
☐ 9. Fish Trap  
☐ 10. Grinding Groove  
☐ 11. Habitation Structure  
☐ 12. Hearth  
☐ 13. Non Human Bone & Organic Material  
☐ 14. Ochre quarry  
☒ 15. Potential Archaeological Deposit  
☐ 16. Stone Quarry  
☐ 17. Shell  
☐ 18. Stone Arrangement  
☐ 19. Modified Tree  
☐ 20. Water Hole

## Site Plan Indicate scale, boundaries of site, features



## Site Dimensions

## Closed Site Dimensions (m)

- Internal length  
 Internal width  
 Shelter height  
 Shelter floor area

## Open Site Dimensions (m)

- Total length of visible site  
 Average width of visible site  
 Estimated area of visible site  
 Length of assessed site area

page 4

A site survey was undertaken. This site has low-moderate potential archaeological sensitivity. Further investigation in the form of test excavation is required to determine the cultural and scientific significance of the site. Management recommendations to be determined with further consultation.

[illegible]

Title	Surname										First Name										Initials	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Organisation	<input type="text"/>																					
Address	<input type="text"/>																					
Phone number	<input type="text"/>										Fax	<input type="text"/>										

☐ A4 location map

☐ B/W photographs

☐ Colour photographs

☐ Slides

☐ Aerial photographs

☐ Site plans, drawings

☐ Recording tables

☐ Other

☐ Feature inserts-No.

[illegible]

NPWS FEATURE RECORDING FORM - ARTEFACT				page 1						
Site I.D.	<input type="text"/>	Site Name	<input type="text"/>							
First recorded date	<input type="text"/>	Importance	<input type="text"/>							
No. of instances	<input type="text"/>									
Recorded by	<input type="text"/>									
Stone artefacts only	<input type="text"/>	Yes No								
Artefacts collected	<input type="text"/>	Percentage of Non-stone Artefacts to Percentage of Stone Artefacts								
Permit issued	<input type="text"/>	0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% 90-100%								
<b>Feature Context &amp; Condition</b>										
Scatter No.		<input type="text"/>	Easting	<input type="text"/>						
			Northing	<input type="text"/>						
Density	Dimensions		Yes No							
(Artefact count per square metre)	<input type="text"/>	Length (m) <input type="text"/> Width (m) <input type="text"/> Depth (m) <input type="text"/>	In situ <input type="text"/>							
			Stratified <input type="text"/>							
<table border="0" style="width: 100%;"> <tr> <td style="width: 33%; vertical-align: top;"> <b>Feature Condition</b>  <input type="checkbox"/> Very good  <input type="checkbox"/> Good  <input type="checkbox"/> Poor </td> <td style="width: 33%; vertical-align: top;"> <b>General Condition</b>  <input type="checkbox"/> Weathered  <input type="checkbox"/> Vehicle damage  <input type="checkbox"/> Surface water wash  <input type="checkbox"/> Fire damage  <input type="checkbox"/> Erosion  <input type="checkbox"/> Stock damage  <input type="checkbox"/> Exposed archaeological material </td> <td style="width: 33%; vertical-align: top;"> <b>Recommended Action</b>  <input type="checkbox"/> Boardwalk  <input type="checkbox"/> Fencing  <input type="checkbox"/> Closure to public  <input type="checkbox"/> Continued inspection  <input type="checkbox"/> Fire hazard reduction  <input type="checkbox"/> Expert assessment  <input type="checkbox"/> Meeting with land manager </td> </tr> <tr> <td></td> <td></td> <td> <input type="checkbox"/> Revegetation  <input type="checkbox"/> Signage  <input type="checkbox"/> Soil erosion control  <input type="checkbox"/> Track closure/re-routing  <input type="checkbox"/> Additional recording </td> </tr> </table>					<b>Feature Condition</b> <input type="checkbox"/> Very good <input type="checkbox"/> Good <input type="checkbox"/> Poor	<b>General Condition</b> <input type="checkbox"/> Weathered <input type="checkbox"/> Vehicle damage <input type="checkbox"/> Surface water wash <input type="checkbox"/> Fire damage <input type="checkbox"/> Erosion <input type="checkbox"/> Stock damage <input type="checkbox"/> Exposed archaeological material	<b>Recommended Action</b> <input type="checkbox"/> Boardwalk <input type="checkbox"/> Fencing <input type="checkbox"/> Closure to public <input type="checkbox"/> Continued inspection <input type="checkbox"/> Fire hazard reduction <input type="checkbox"/> Expert assessment <input type="checkbox"/> Meeting with land manager			<input type="checkbox"/> Revegetation <input type="checkbox"/> Signage <input type="checkbox"/> Soil erosion control <input type="checkbox"/> Track closure/re-routing <input type="checkbox"/> Additional recording
<b>Feature Condition</b> <input type="checkbox"/> Very good <input type="checkbox"/> Good <input type="checkbox"/> Poor	<b>General Condition</b> <input type="checkbox"/> Weathered <input type="checkbox"/> Vehicle damage <input type="checkbox"/> Surface water wash <input type="checkbox"/> Fire damage <input type="checkbox"/> Erosion <input type="checkbox"/> Stock damage <input type="checkbox"/> Exposed archaeological material	<b>Recommended Action</b> <input type="checkbox"/> Boardwalk <input type="checkbox"/> Fencing <input type="checkbox"/> Closure to public <input type="checkbox"/> Continued inspection <input type="checkbox"/> Fire hazard reduction <input type="checkbox"/> Expert assessment <input type="checkbox"/> Meeting with land manager								
		<input type="checkbox"/> Revegetation <input type="checkbox"/> Signage <input type="checkbox"/> Soil erosion control <input type="checkbox"/> Track closure/re-routing <input type="checkbox"/> Additional recording								
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <b>Feature Plan</b> (Indicate scale, location of instances) </div> <div style="width: 50%;"> <b>Feature Environment</b> (Complete when feature environment differs to site environment, use attributes from cover card, p. 2) </div> </div> <div style="display: flex;"> <div style="width: 45%;"> </div> <div style="width: 50%; padding-left: 10px;"> <input type="text"/> Land form  <input type="text"/> Land form unit  <input type="text"/> Slope  <input type="text"/> Vegetation  <input type="text"/> Land use  <b>Water</b>  Distance to permanent water source <input type="text"/> metres  Distance to temporary water source <input type="text"/> metres  Name of nearest permanent water source <input type="text"/>  Name of nearest temporary water <input type="text"/> </div> </div>										



**Archaeological Management & Consulting Group**  
**November 2023**

## NPWS FEATURE RECORDING FORM - MODIFIED TREE

page 3

Site I.D.	<input type="text"/>	Site Name	<input type="text"/>	Aboriginal Information	<input type="text"/>
First recorded date	<input type="text"/>	Importance	<input type="text"/>	Recorded?	<input type="text"/>
No. of instances	<input type="text"/>				
Recorded by	<input type="text"/>				

## Feature description

No. of scars

No. of carved panels

## Feature Condition

☐ Very good

☐ Good

☐ Poor

## Condition

☐ Weathered

☐ Ringbarked

☐ Fire damage

☐ Vehicle damage

☐ Insects/termites

☐ Rot

☐ Limb fall

☐ Stock damage

Easting Northing 

## Recommended Action

☐ Fencing

☐ Closure to public

☐ Continued inspection

☐ Expert assessment

☐ Fire hazard reduction

☐ Insect removal

☐ Meeting with land manager

☐ Rubbish removal

☐ Signage

☐ Tree health assessment

☐ Track closure/re-routing

☐ Additional recording

## Feature environment

(Complete when feature environment differs to site environment, use attributes from cover card, page 2)

Land form

Land form unit

Slope

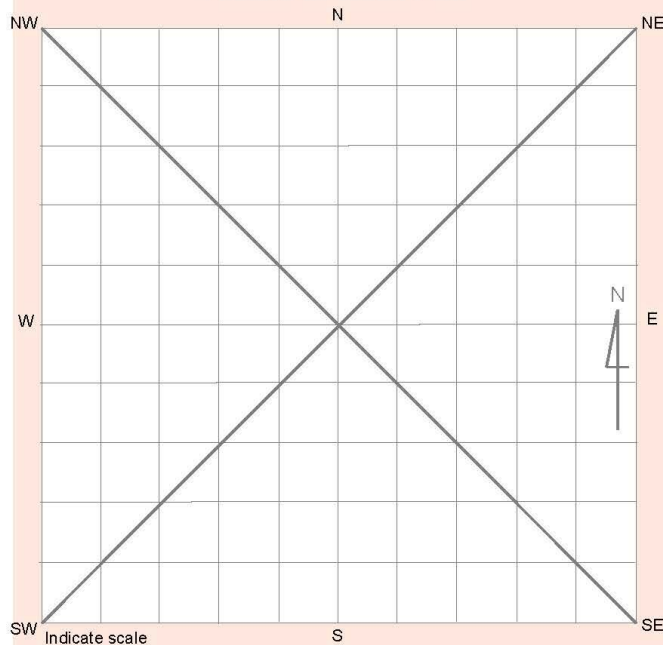
Vegetation

Land use

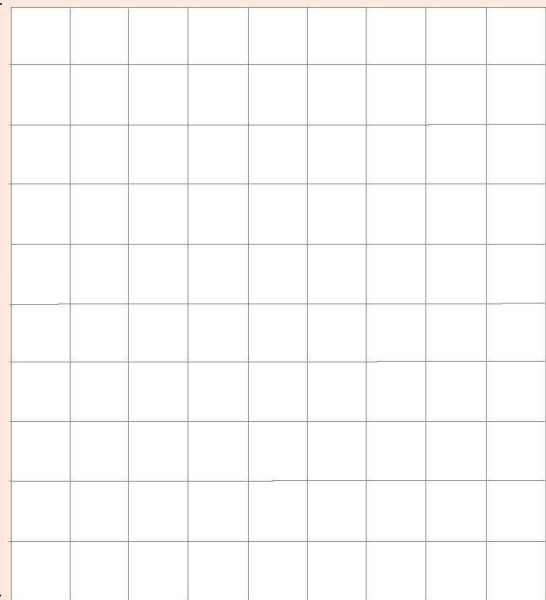
## Water

Distance to permanent water source  metresDistance to temporary water source  metresName of nearest permanent water source Name of nearest temporary water 

## Feature Location Plan



## Scar/Carved Panel Drawing



**Archaeological Management & Consulting Group**  
**November 2023**

## NPWS FEATURE RECORDING FORM - GROOVE

page 1

Site I.D.  Site Name  Importance  Aboriginal Information Recorded?

First recorded date  /  /

No. of instances

Recorded by

## Feature Description

## Type of Grinding Feature

- ☐ Broad
- ☐ Narrow/point
- ☐ Hollow
- ☐ Flat

## Profile Shape

- ☐ 'U' shaped
- ☐ 'V' shaped
- ☐ Flat

## Seed Species Present

Recording date  /  / 

## Groove Function

## Dimensions

## Smallest

Length (mm) Width (mm) Depth (mm) 

## Largest

Length (mm) Width (mm) Depth (mm) Groove count Cluster count 

## Feature Context &amp; Condition

Easting      Northing      Dimensions of Whole Feature  Length (m)  Width (m)

## Feature Condition

- ☐ Very good
- ☐ Good
- ☐ Poor

## General Condition

- ☐ Weathered
- ☐ Vandalised

## General Condition ctd

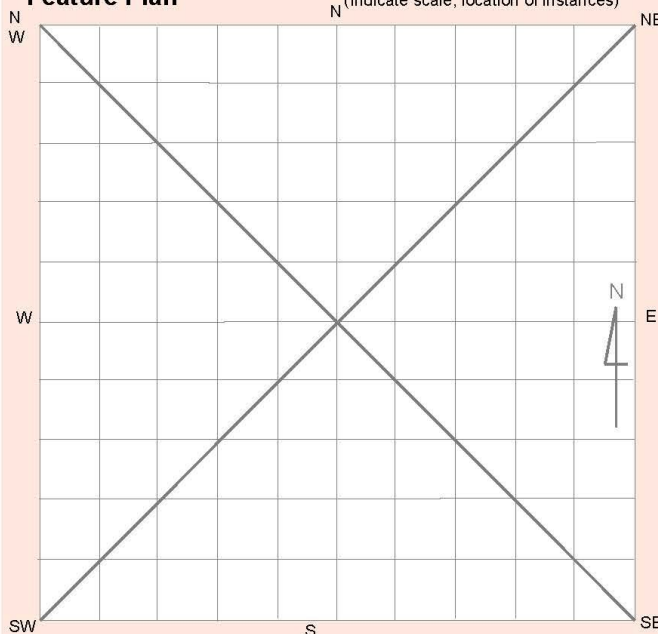
- ☐ Fire damage
- ☐ Surface water wash
- ☐ Graffiti
- ☐ Vehicle damage
- ☐ Erosion
- ☐ Stock damage

## Recommended Action

- ☐ Boardwalk
- ☐ Cage/barrier/fencing
- ☐ Closure to public
- ☐ Continued inspection
- ☐ Expert assessment
- ☐ Graffiti removal
- ☐ Meeting with land manager
- ☐ Revegetation
- ☐ Rubbish removal
- ☐ Signage
- ☐ Erosion control
- ☐ Track closure/re-routing
- ☐ Additional recording

## Feature Plan

(Indicate scale, location of instances)



## Feature Environment

(Complete when feature environment differs to site environment, use attributes from cover card, p. 2)

Land form

Land form unit

Slope

Vegetation

Land use

## Water

Distance to permanent water source  metresDistance to temporary water source  metres

Name of nearest permanent water source

Name of nearest temporary water



**Archaeological Management & Consulting Group**  
November 2023

page 2

Motif			Application Technique	Main Colour	Art Location	Condition
Anthropomorphic	Female	Marine-Other	Abraded	Black	All over shelter surfaces	Faded
Bird	Fish	Other	Drawn	Mauve *	ceiling	Stained
Bird Track	Foot	Pattern	Other	N/A	Floor	Mineralisation Evident
Canoe	Hand	Quadruped	Painted	Orange *	Mostly near largest sheltered space	V brant Colours
Circle	Jellyfish	Reptile	Pecked	Other	Mostly on out of the way surfaces	Unweathered
Contact material culture	Kangaroo	Rifle	Pigment & Engraved	Red *	Other	Weathered
Duck	Line	Shield	Stencilled	White *	Wall	
Eel	Lizard	Ship	<b>Form</b>	Yellow *		
Emu	Macropod	Snake	Fill			
Emu track	Macropod Track	Spear	Line			
European figure	Male	Wallaby	Line+ Fill			
			Other			
			Pattern			

[illegible]

## NPWS FEATURE RECORDING FORM - SHELL

page 1

Site I.D.	<input type="text"/>	Site Name	<input type="text"/>
First recorded date	<input type="text"/> / <input type="text"/> / <input type="text"/>	Importance	<input type="text"/>
No. of instances	<input type="text"/>	Aboriginal Information Recorded?	<input type="text"/>
Recorded by	<input type="text"/>		

**Feature Context & Condition**Easting       Northing      **Dimensions of Whole Feature**Length (m)  Width (m)  Depth (m) **Shell Distribution**

- ☐ Surface scatter  Distance to high water mark (m)
- ☐ Stratified deposit
- ☐ Mounded

**Feature Condition**

- ☐ Very good
- ☐ Good
- ☐ Poor

**General Condition**

- ☐ Weathered
- ☐ Vandalised
- ☐ Surface water wash
- ☐ Mineralisation
- ☐ Graffiti

**General Condition ctd**

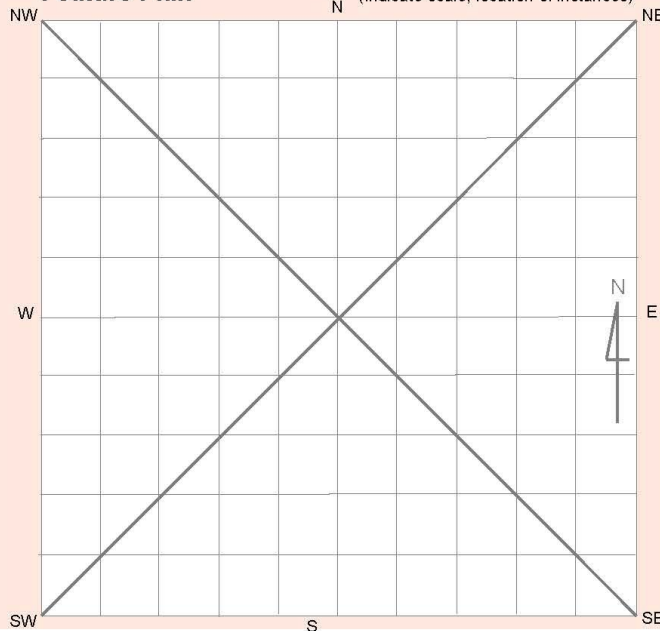
- ☐ Fire damage
- ☐ Vehicle damage
- ☐ Insects/termites
- ☐ Erosion
- ☐ Stock damage
- ☐ Unstable structure
- ☐ Exposed bone material
- ☐ Exposed archaeological material

**Recommended Action**

- ☐ Boardwalk
- ☐ Cage/barrier/fencing
- ☐ Closure to public
- ☐ Continued inspection
- ☐ Expert assessment
- ☐ Fire hazard removal
- ☐ Graffiti removal
- ☐ Meeting with land manager
- ☐ Insect/bird nest removal
- ☐ Revegetation
- ☐ Rubbish removal
- ☐ Signage
- ☐ Erosion control
- ☐ Track closure/re-routing
- ☐ Additional recording

**Feature Plan**

(Indicate scale, location of instances)

**Feature Environment**(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

- Land form
- Land form unit
- Slope
- Vegetation
- Land use

**Water**

Distance to permanent water source  metres

Distance to temporary water source  metres

Name of nearest permanent water source




Name of nearest temporary water

page 2

[illegible]



## Site Card 45-6-3580

		<b>Aboriginal Site Recording Form</b> AHIMS Registrar PO Box 1967, Hurstville NSW 2220		 	
<b>Office Use Only</b>					
		<b>Site Number</b>			
Date received		Date entered into system		Date catalogued	
Entered by (I.D.)					
<b>Information Access</b>					
<input type="checkbox"/> Gender/male		<input type="checkbox"/> Gender/female		<input type="checkbox"/> Location restriction	
				<input type="checkbox"/> General restriction	
				<input type="checkbox"/> No access	
<b>For Further Information Contact:</b>					
<input type="checkbox"/> <b>Nominated Trustee</b>					
Title		Surname		First Name	
Initials					
Organisation					
Address					
Phone number		Fax			
<input type="checkbox"/> <b>Knowledge Holder</b>					
Title		Surname		First Name	
Initials					
Organisation					
Address					
Phone number		Fax			
<b>Aboriginal Heritage Unit or Cultural Heritage Division Contacts</b>					
<b>Geographic Location</b>					
Site Name		C o w d r o y M i d d e n 1 N S C - 0 8 5			
Easting		Northing		AGD/GDA	
3 3 5 2 9 1		6 2 5 6 4 8 7		GDA	
Mapsheet					
Zone		Location Method			
56		Client GIS or CAD System			
Other Registration					
<b>Primary Recorder</b>					
Title		Surname		First Name	
Initials					
Organisation		A b o r i g i n a l H e r i t a g e O f f i c e			
Address		P O B o x 1 2 N o r t h S y d n e y 2 0 5 9			
Phone number		Fax			
2 9 9 7 6 1 6 8 2					
Date recorded		01/06/2018			

## NPWS Aboriginal Site Recording Form - Site Information

page 2

OPEN/CLOSE SITE ☒ Open Site

## Site Context

## Landform

- ☐ Mountainous  
☐ Plain  
☐ Rolling hills  
☒ Steep hills  
☐ Undulating plain

## Slope

5 degrees

## Landform Unit

- ☐ Beach  
☐ Coastal rock platform  
☐ Dune  
☐ Intertidal flat  
☐ Lagoon  
☐ Tidal Creek

- ☐ Tidal Flat  
☐ Cliff  
☐ Crest  
☐ Flat

- ☒ Lower slope  
☐ Mid slope

- ☐ Upper slope  
☐ Plain  
☐ Ridge  
☐ Tor  
☐ Valley flat  
☐ Levy

- ☐ Stream bank  
☐ Stream channel  
☐ Swamp  
☐ Terrace  
☐ Terrace flat

## Vegetation

- ☐ Closed forest  
☐ Grasslands  
☐ Isolated clumps of trees  
☐ Open forest  
☐ Open woodland  
☐ Scrub  
☐ Woodland  
☒ Cleared  
☐ Revegetated  
☐ N/A

## Land use

- ☐ Conservation  
☒ Established urban  
☐ Farming-intensive  
☐ Farming-low intensity  
☐ Forestry  
☐ Industrial  
☐ Mining  
☐ Pastoral/grazing  
☐ Recreation  
☐ Semi-rural  
☐ Service corridor  
☐ Transport corridor  
☐ Urban expansion  
☐ N/A

## Water

Distance to permanent water source 150 metres

Distance to temporary water source metres

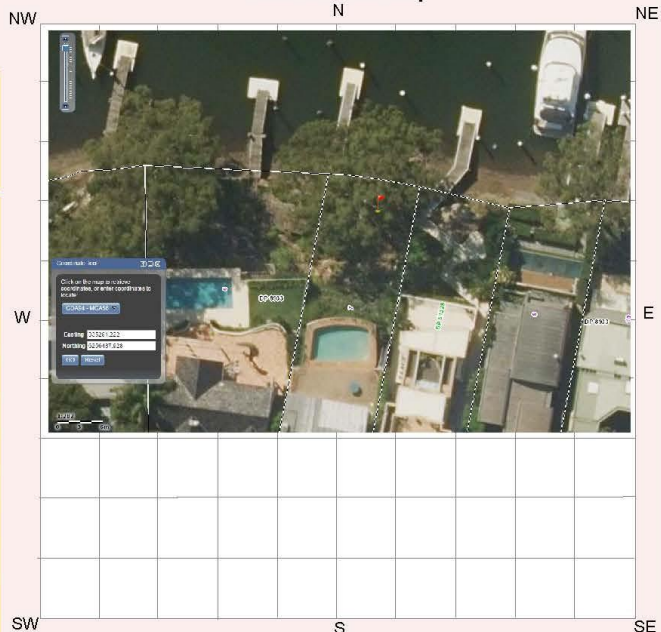
Name of nearest permanent water source Flat Rock

Name of nearest temporary water

## Directions for Relocation

On foreshore of 14 Cowdroy Ave, Cammeray. Midden is exposed on slope above shoreline about 5m from the eastern boundary, about 3m from the foreshore and about 2m above mean high tide. Best approached from residence.

## Site Location Map



## Current Land Tenure

- ☐ Public National Park / other Government Dept.  
☒ Private

## Primary report

I.D. (I.D. Office Use only)

## NPWS Aboriginal Site Recording Form - Site Information

page 3

## General Site Information

## Closed Site

## Shelter/Cave Formation

- ☐ Boulder  
☐ Wind erosion  
☐ Water erosion  
☐ Rock collapse

## Rock Surface Condition

- ☐ Boulder  
☐ Sandstone platform  
☐ Silica gloss  
☐ Tessellated  
☐ Weathered  
☐ Other platform

## Condition of Ceiling

- ☐ Boulder  
☐ Sandstone platform  
☐ Silica gloss  
☐ Tessellated  
☐ Weathered  
☐ Other platform

## Shelter Aspect

- ☐ North  
☐ North East  
☐ East  
☐ South East  
☐ South  
☐ South West  
☐ West  
☐ North West

## Open Site

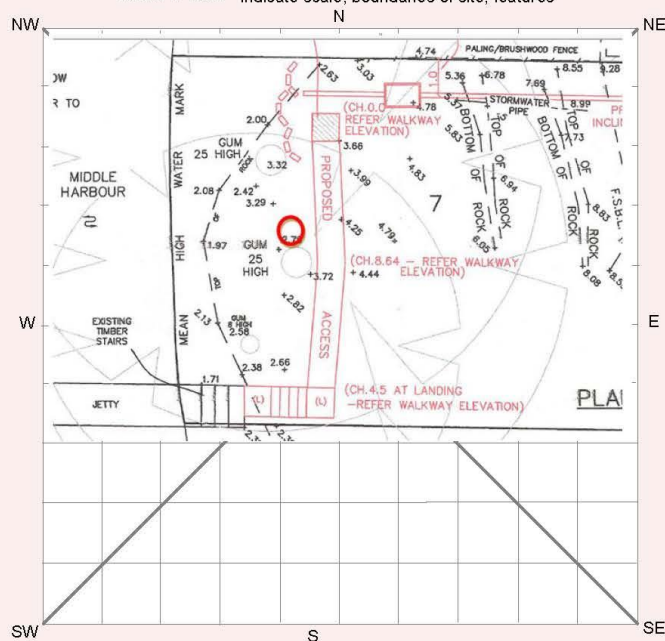
## Site Orientation

- ☒ N-S  
☐ NE-SW  
☐ E-W  
☐ SE-NW  
☐ N/A

## Features

- ☐ 1. Aboriginal Ceremony & Dreaming  
☐ 2. Aboriginal Resource & Gathering  
☐ 3. Art  
☐ 4. Artefact  
☐ 5. Burial  
☐ 6. Ceremonial Ring  
☐ 7. Conflict  
☐ 8. Earth Mound  
☐ 9. Fish Trap  
☐ 10. Grinding Groove  
☐ 11. Habitation Structure  
☐ 12. Hearth  
☐ 13. Non Human Bone & Organic Material  
☐ 14. Ochre quarry  
☐ 15. Potential Archaeological Deposit  
☐ 16. Stone Quarry  
☒ 17. Shell  
☐ 18. Stone Arrangement  
☐ 19. Modified Tree  
☐ 20. Water Hole

## Site Plan Indicate scale, boundaries of site, features



## Site Dimensions

## Closed Site Dimensions (m)

- Internal length  
 Internal width  
 Shelter height  
 Shelter floor area

## Open Site Dimensions (m)

- 1.0 Total length of visible site  
 0.5 Average width of visible site  
 1m Estimated area of visible site  
 1 Length of assessed site area

page 4

[illegible]

refer attached

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Title	Surname	First Name	Initials

[illegible]

See attached site information.





## North Sydney

### ABORIGINAL HERITAGE SITE RE-RECORDING FORM

**SITE: NSC#085**

NPWS SITE NO: 45-6-new  
 SITE NAME: Cowdroy Midden 1  
 SITE TYPE: MIDDEN  
 DATE RECORDED: 1/6/2018

#### Grid Reference (GPS):

AHO, SixMaps GIS. Accuracy = 1 (Good).

AMG 66

3 3 5 mE

6 2 5 6 mN

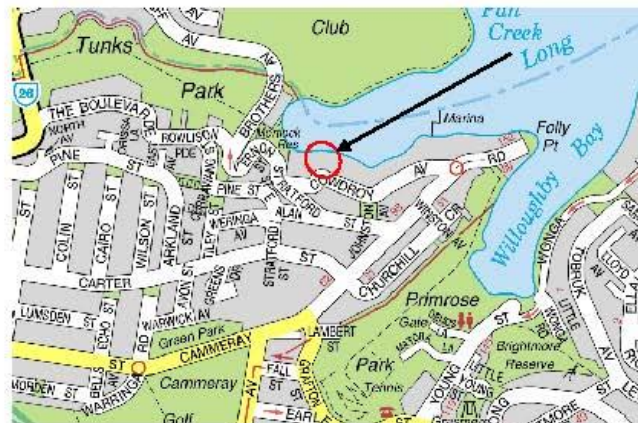
GDA 94

3 3 5 2 9 1 mE

6 2 5 6 4 8 7 mN

#### LOCATION:

On foreshore of 14 Cowdroy Ave, Cammeray. Midden is exposed on slope above shoreline about 5m from the eastern boundary, about 3m from the foreshore and about 2m above mean high tide. Best approached from residence.



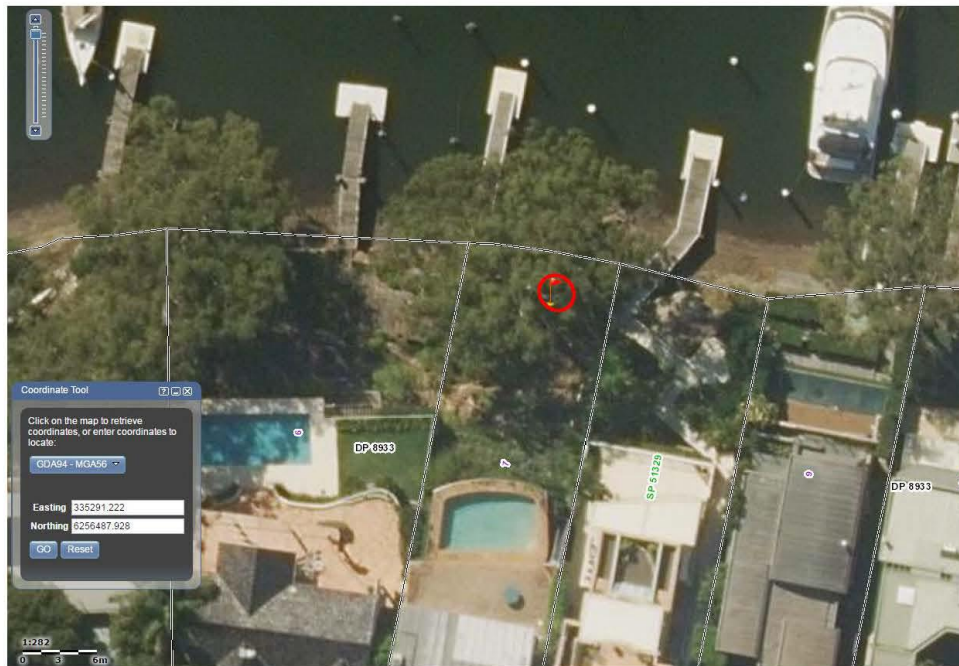
NSC#085 5 Primrose & Tunks (45-6-new)

Aboriginal Heritage Office [www.aboriginalheritage.org](http://www.aboriginalheritage.org)

1

**DESCRIPTION:**

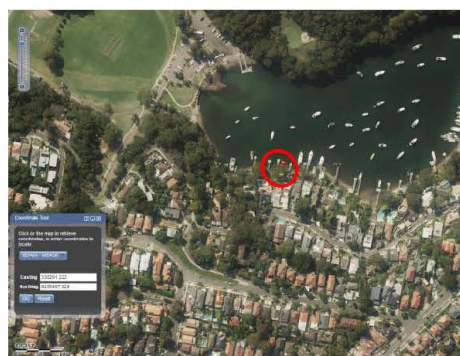
Midden is a small scatter of cockles (*Anadara*) and rock oyster, several shells on the surface visible through vegetation, other shell eroding from a pale brown vertical soil horizon immediately adjacent (East) of large tree. The shells that were observed were clustered in an area less than 50cm x 50cm but grass and weed cover and the large trees obscured ground visibility. There is a midden recorded in Mortlock Reserve about 120m WNW from here. The surface had several cockles between 30-50mm long, oyster fragments >20mm.



Location of midden (SixMaps)



Location of midden, 1943 aerial (SixMaps)



NSC#085 5 Primrose &amp; Tunks (45-6-new)

Aboriginal Heritage Office [www.aboriginalheritage.org](http://www.aboriginalheritage.org)

2

**CONDITION:****Aboriginal Heritage Office****Aboriginal Site Monitor****AHO Site #** **NSC-085** **AHIMS Site #** **45-6-new**

DATE	REASON	OFFICER/VOL	COMMENTS
	Eg track work, reg monitor etc	AHO officer, Council or volunteer	Brief comment, eg no change; new graffiti; etc
1/6/18	DA inspection	Phil Hunt	1 <sup>st</sup> recording of site. Brief inspection only for Council DA referral.
	<p>Identified shell during inspection for proposed inclinor. Owner (92yo) has lived there apparently 75 years, first house in street. The lower slope below swimming pool has some disturbance (steps, stormwater pipes or pool overflow along eastern boundary) but not significant. There is a large boulder right on the foreshore below the shell deposit and several boulders and ground level scarps up the slope towards the house.</p> <p>The level of the shell is a slightly higher elevation on slope and a very small 'jump up' (20-30cm?) than the immediate foreshore. On the eastern boundary there appears to be sunken excavation for stormwater, and the western boundary has the track, which at this level has over 1m<sup>2</sup> of eroded soil for archaeological visibility, but no shell seen.</p> <p>Above the shell cluster there is still 2-3m of slightly sloped land before rising sharply.</p>		



**PHOTOS TAKEN:  
2018**



DSC-6339 foreshore and area of shell (circled), looking south-easterly



DSC-6338 midden area, looking W.





DSC\_6334 area of shell, looking S



DSC\_6335 area of shell, looking SE

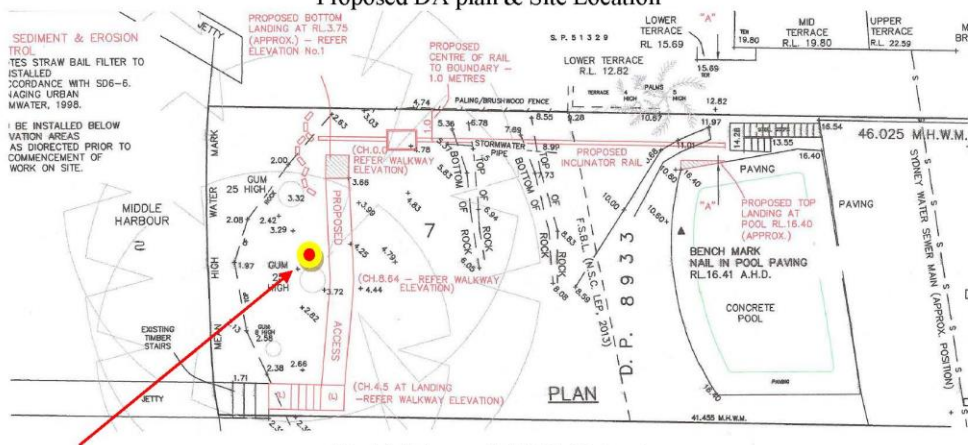


DSC\_6336 shell exposed in eroding vertical face (looking SE)



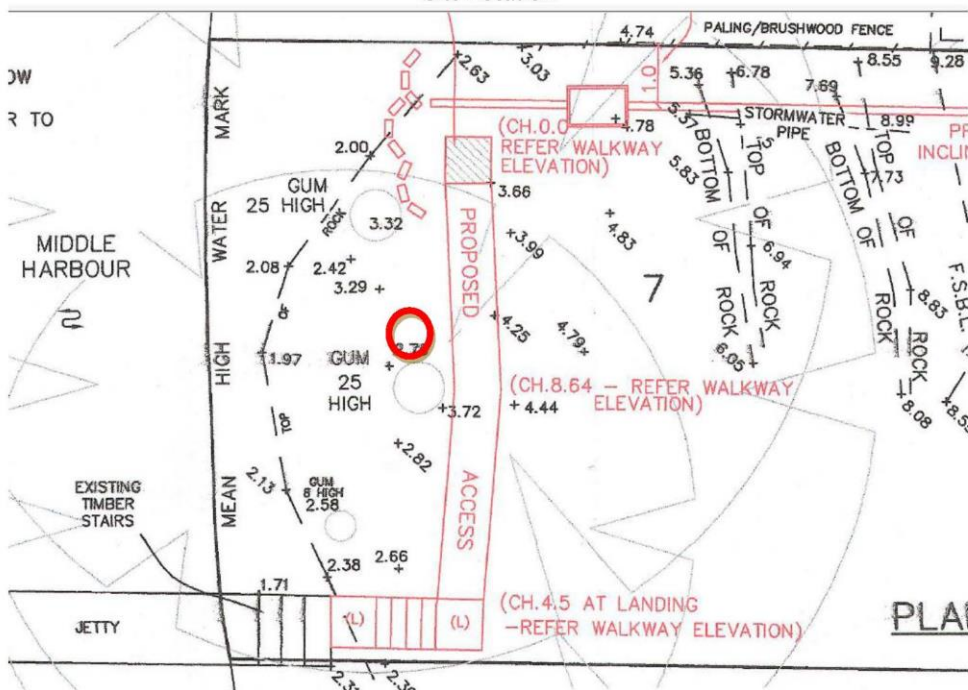
DSC\_6337 shell on terrace surface.

Proposed DA plan & Site Location



(North is left towards Middle Harbour)

Site Location



## APPENDIX TWO – ACHAR TIMEFRAME & FLOW CHART

The following table provides a breakdown of typical ACHAR reporting tasks and timeframes including test excavation under the Code of Conduct. The flowchart provides a visual indication of where additional timeframes occur (Stage 2/3) for sites which require test excavation under an approved Aboriginal Heritage Impact Permit (AHIP).

Week(s)	Flowchart Stage	Task Description
1-4	Stage 1	<p><i>Initiate Consultation:</i></p> <ul style="list-style-type: none"> <li>- Write and distribute letters to all authorities requesting list of potential Registered Aboriginal Parties (RAPs)</li> <li>- Write/send letters for potential interested RAPs (14 Day Response)</li> <li>- Place advertisement for potential interested RAPs (14 Day Response)</li> </ul> <p><i>Commence Reporting – Research Design &amp; Test Excavation Methodology:</i></p> <ul style="list-style-type: none"> <li>- Search and review relevant Aboriginal sites/data held on the Aboriginal Heritage Information Management System (AHIMS)</li> <li>- Collate relevant background information (site cards, nearby site reports, environmental and geographical information)</li> <li>- Compile review of existing environmental, historical, and archaeological information for the study area, identifying and summarising known previously recorded Aboriginal heritage places, areas of cultural significance, and landforms of archaeological interest in immediate surrounds</li> <li>- Determine and map if any Aboriginal objects, places, areas of cultural significance, or of archaeological potential are present (or likely to be present) within the study area, as well as areas of existing surface/subsurface disturbance, through ground-truthing</li> <li>- Assess, identify, and recommend measures to mitigate heritage constraints, potential impacts, and risks to the project.</li> </ul>
5-8	Stage 2/3	<p><i>Consultation:</i></p> <ul style="list-style-type: none"> <li>- Distribute draft report to RAPs for mandatory 28-day review period (statutory requirement)</li> <li>- Site inspection and meeting with RAPs to discuss cultural significance of the project area</li> <li>- Follow up calls/emails with RAPs to obtain report comments/approvals</li> <li>- If an Aboriginal Heritage Impact Permit (AHIP) is required, an additional statutory 28-day RAP review period will be required as well as 60-days to process AHIP application (see flow chart below).</li> </ul>
9-10	Test Excavation (if required)	<p><i>Proceed with Test Excavation (if required for site):</i></p> <ul style="list-style-type: none"> <li>- Archaeological Test Excavation: 2-5 days (notional)</li> <li>- Test Excavation under the Code of Conduct possible within this table framework</li> <li>- Test Excavation under an AHIP - Only after AHIP issued by Heritage NSW</li> </ul>
11-12	Test Excavation Results	<p><i>Reporting:</i></p> <ul style="list-style-type: none"> <li>- Draft Aboriginal Archaeological Technical Report (AATR) with test excavation results (including artefact cataloguing, photography, graphics production).</li> <li>- Update ACHAR/Consultation Log</li> <li>- Internal review of draft reports by senior staff member</li> <li>- Issue 1<sup>st</sup> draft to client for comment and approval</li> </ul> <p><i>Consultation:</i></p> <ul style="list-style-type: none"> <li>- Follow up calls/emails with RAPs to obtain report comments/approvals</li> </ul>
13-16	Stage 4	<p><i>Consultation:</i></p> <ul style="list-style-type: none"> <li>- Distribute draft reports to RAPs for mandatory 28-day review period (statutory requirement)</li> <li>- Follow up calls/emails, site meetings with RAPs to discuss/obtain final approval.</li> </ul>
17-18	Stage 4	<p><i>Final Report:</i></p> <ul style="list-style-type: none"> <li>- Issue 2nd draft to client for comment and approval</li> <li>- Issue Final to client following sign off from Aboriginal Cultural Heritage Director</li> <li>- AHIP application may be required at this stage if Aboriginal objects/deposits discovered during testing under the Code of Conduct (see flow chart below)</li> </ul>



