DUE DILIGENCE ABORIGINAL ARCHAEOLOGICAL ASSESSMENT

Lot 3001 DP 1115866
Next Sense (formerly the Royal Institute for Deaf and Blind Children)
361-365 North Rocks Road
North Rocks NSW
(Parramatta LGA)

AMAC Archaeological

Benjamin Streat, Yolanda Pavincich & Sarah Hannan

Archaeo*logical* Management and Consulting Group
& Streat Archaeological Services Pty Ltd

for
EG Funds Management Pty Ltd

April 2024

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Cover Image
Study Area outlined in red.
Six Maps, LPI Online (accessed 15/04/2024).

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Background

Archaeological Management and Consulting Group (AMAC Group) was commissioned by EG in August 2018, to prepare a Due Diligence Aboriginal Archaeological Assessment for the proposed redevelopment at Lot 3001 DP 1115866, street address 361- 365 North Rocks Road, North Rocks NSW.

The Planning Proposal was initially submitted to the City of Parramatta Council in June 2021, however, has since been subject to a rezoning review process (ref RR2022/31). On 21 March 2024, a *Record of Decision to Submit Planning Proposal to Gateway Determination* was issued by the Sydney Central Planning Panel. This decision recommends the proposal proceeds to Gateway Determination, subject to conditions, which included some recommended design modifications.

Project Overview

The Planning Proposal seeks to create North Rocks Village (see Figure 7.1), a Housing Diversity Precinct as expressed in Council's Local Strategic Planning Statement (LSPS). It will deliver a genuine mix of housing opportunities within a garden village setting that is respectful of existing neighbourhood character, in addition to new open space including an oval and village square. It also includes a community 'hub' comprising a library and multi-purpose community facility. The Planning Proposal will facilitate:

- Approximately 795 new residential dwellings (including apartments, townhouses, and detached dwellings)
- Approximately 130 independent living units and aged care (seniors housing)
- Approximately 4,400m^2 new community facilities
- Approximately 2,800m^2 retail/commercial floor space
- Associated landscaping, road network, public open space improvements, and increased tree canopy cover

The Planning Proposal has now been amended to adopt the panel recommendations. Key design amendments can be summarised as follows:

- Minor adjustments to building heights, including a range of 2-6 storeys across the site,
- Minor amendments to building layouts, and
- A masterplan which may facilitate an approximate 1.1:1 Floor Space Ratio.

The whole of the study area will be impacted as part of any proposed development on the site of which any intact soils will be impacted on including any Aboriginal archaeological and cultural material that may or may not be present.

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).

Fieldwork

The field inspection was undertaken on the 24th August 2018 by archaeological Benjamin Streat of AMAC/ SAS.

The study area consisted predominately of cleared dry grassed grounds. Clusters of gums and native trees and shrubs were visible along the boundary of the school grounds as well as pockets within the centre and along paved walkways and access ways. All trees were inspected however, were not deemed mature age.

A number of buildings currently stand on the property and are mainly red bricked. There is also interactive play equipment and playgrounds located around the property which are also found to impact the ground surface. The study area is located along a ridge, small areas of exposed soil were inspected.

Although visibility was high, exposure was found to be low. However, of the soil observed, natural soils were identified, indicating that there is a possibility for *intact* soils to be present.

Recommendations

A background analysis of the environment and archaeological context revealed that the study area has moderate/high surface disturbances however, less disturbed areas were observed and may contain intact Aboriginal objects and/or deposits of conservation value.

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.

Natural soils were identified during the site inspection to suggest *intact* soils may be present.

The proposed activity is not:

- located within a sand dune system, or;
- located within 200m below or above a cliff face, or;
- within 20m of or in a cave, rock shelter, or a cave mouth.

The study area is:

- located on a ridge top, ridge line or headland, or;
- located within 200m of waters.

Based on the locale of water and major water tributaries, such as Lake Parramatta and Darling Mills Creek, 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.

In accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010b), it is recommended that further archaeological and cultural assessment is necessary in the form of an ACHAR, as the proposed development zone is located within 200m of waters and upon a ridgeline. Dependent on the design and location of development activities within the study site, archaeological test excavation may be required in accordance with Code

of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010a).

These recommendations should be carried out in conjunction with any application at DA Stage. These do not necessarily need to be carried out with regards to rezoning;

- Full Aboriginal community consultation should take place in accordance with Part 6; National Parks and Wildlife Act, *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010);
- Further assessment is required in the form of a full Aboriginal Cultural Heritage Assessment in accordance Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010c).
- Subsequent to this report and in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010b), a program of systematic, sub surface archaeological test excavation should be undertaken to establish the nature and extent of any archaeological objects and/or deposits that are/may be present.

CONTACT DETAILS

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

Organisation	Contact	Contact Details
NSW Environment Line		131 555
NSW Parramatta Police Area Command		PAC Office: 95 Marsden Street Parramatta NSW 2150 Ph: (02) 9633 0799 Fax: (02 9633 0795
Archaeological Management and 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 benjaminstreat@archaeological.com.au
Heritage NSW Department of Planning & Environment	Archaeologist – Head Office	Level 6 Valentine Avenue Parramatta, NSW 2150 Ph: (02) 9873 8500 heritagemailbox@environment.nsw.gov.au
Metropolitan Local Aboriginal Land Council (MLALC)	Cultural Heritage Officer	PO Box 1103 Strawberry Hills NSW 2012 Ph: (02) 8394 9666 metrolalc@metrolalc.org.au

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1.0 INTRODUCTION

1.1 BACKGROUND

This Due Diligence Aboriginal Archaeological Assessment Report has been prepared by Archaeological Management and Consulting Group (AMAC) on behalf of the proponent being EG Funds Management Pty Ltd (EG) to support a Planning Proposal PP-2021-3409 for rezoning at Lot 3001 DP 1115866, street address 361- 365 North Rocks Road, North Rocks NSW.

The Planning Proposal was initially submitted to the City of Parramatta Council in June 2021, however, has since been subject to a rezoning review process (ref RR2022/31). On 21 March 2024, a Record of Decision to Submit Planning Proposal to Gateway Determination was issued by the Sydney Central Planning Panel. This decision recommends the proposal proceeds to Gateway Determination, subject to conditions, which included some recommended design modifications.

1.2 STUDY AREA

The study site is that piece of land described as Lot 3001 of the Land and Property Information, Deposited Plan 1115866, forming the following street address 361-365 North Rocks Road, North Rocks suburb in the Parish of Field of Mars, County of Cumberland (Figure 1.1 – Figure 1.2).

Lot	Deposited Plan
3001	1115866

1.3 SCOPE

The aims of this assessment are to assess the Aboriginal archaeological potential of the study area and to measure the impact of the proposed activity on any intact soil profiles with the potential to contain Aboriginal archaeological deposits and/or objects, as well as to develop mitigative strategies under the appropriate legislation in order to devise an appropriate strategy for the management of Aboriginal archaeological and cultural heritage values of the area.

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).

1.5 AUTHOR IDENTIFICATION

The analysis of the archaeological background and reporting were undertaken by Mr. Benjamin Streat (BA, Grad Dip Arch Her, Grad Dip App Sc), Director of Indigenous Heritage in association with archaeologists Ms. Yolanda Pavincich (B. Arch., Grad Dip Cul Her.) and Ms. Sarah Hannan (B. Arts. B. Sc.), under the guidance of Mr. Martin Carney archaeologist and Managing Director of AMAC Group.

1.6 ACKNOWLEDGEMENTS

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

- D. Workman from EG;

Figure 1.1 **Aerial of study site.**
Study area in red. Six Maps, LPI Online (accessed 15/04/2024).

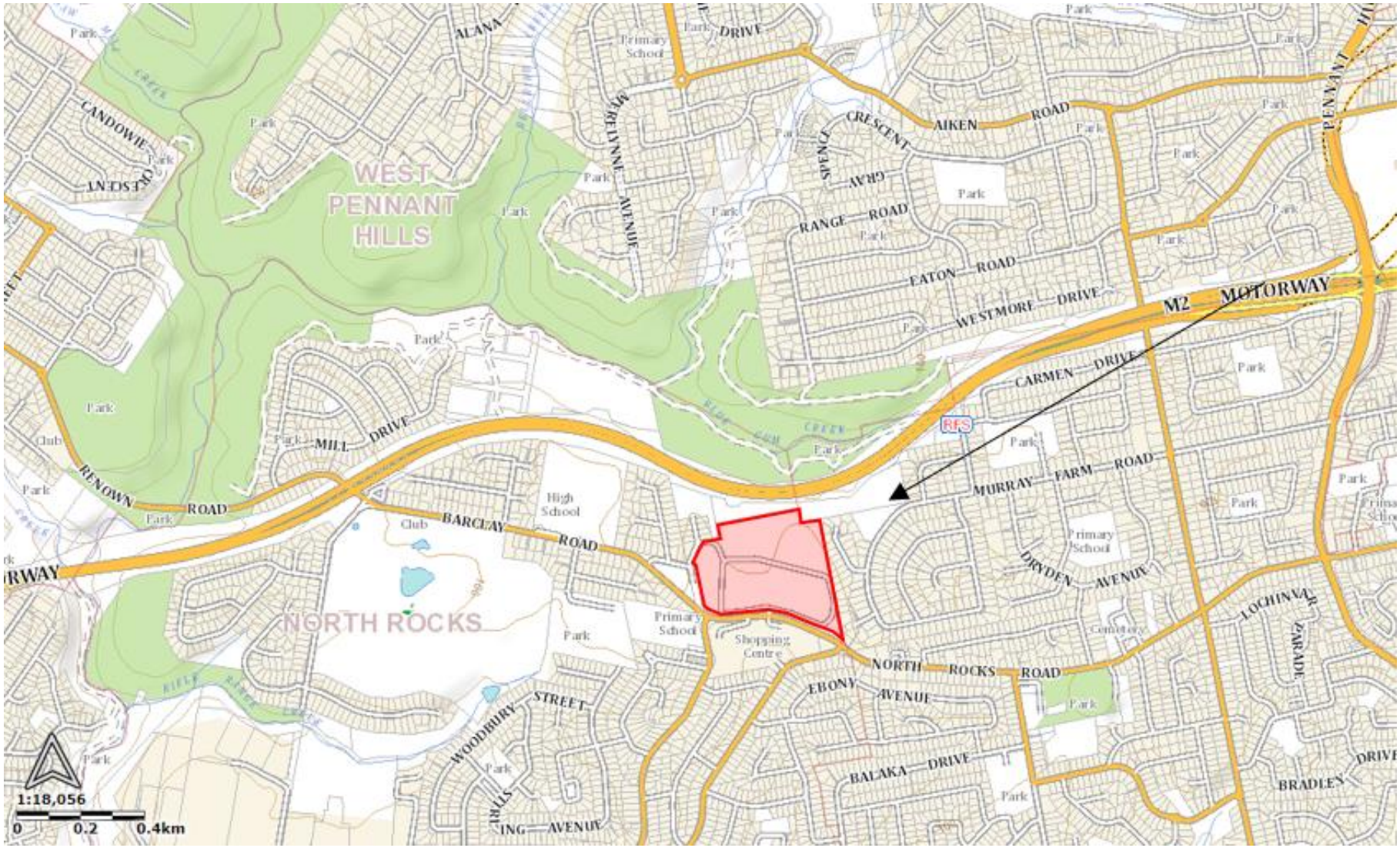

Figure 1.2 **Topographic map with site location.**
Study area outlined in red. Six Maps, LPI Online (accessed 15/04/2024).

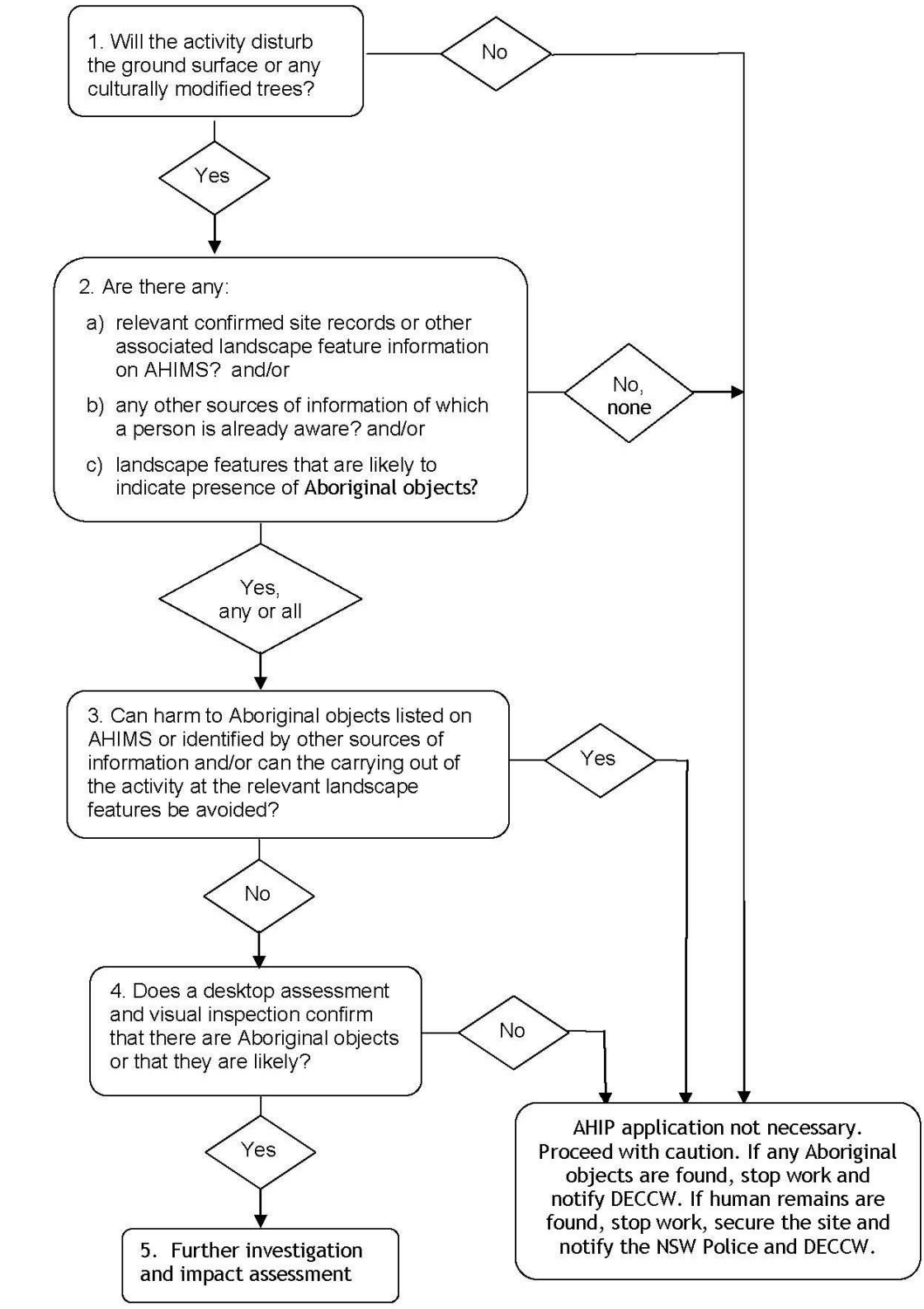

Figure 1.3 **Generic Due Diligence Process**
DECCW, (2010).

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 City of Parramatta Local Environmental Plan 2023

The City of Parramatta Local Environment Plan was endorsed in 2023. 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.

2.3.2 City of Parramatta Development Control Plan 2023

The City of Parramatta Development Control Plan was endorsed in 2023. Aboriginal Cultural Heritage is discussed in Part 7 section 7.8. This identifies areas of high and low sensitivity for Aboriginal objects and places of heritage significance. The study area notably falls within an area of high sensitivity (Figure 2.1).

Objective

> Ensure that appropriate consideration is given to the impact of development on known or potential Aboriginal archaeological sites or sites of cultural or historical significance to Aboriginal people in the City.
>
> Minimise the likelihood of disturbance to protect Aboriginal sites and archaeological relics.

Controls

> Before lodging a Development Application for development that may have an impact on known or potential Aboriginal sites, NSW Office of Environment and Heritage Aboriginal Heritage Information Management System and Council's information on known Aboriginal sites and potential heritage sensitivity should be consulted. Refer to Figure 7.8.1 below for the Aboriginal Sensitivity map.
>
> For properties identified with Low Aboriginal Heritage Sensitivity no Aboriginal Heritage Assessment is required.
>
> For properties identified with High Aboriginal Heritage Sensitivity, a Due Diligence assessment and/or an Aboriginal Heritage Assessment is required, in accordance with the NSW OEH Office of Environment and Heritage guidelines and particularly where a development site:

• Is within 200 metres of the centreline of a creek.

• Has not been previously developed and contain undisturbed original landform.

• Is within 50 metres of a known Aboriginal site.

• Is of historical heritage with archaeological potential and is within the area of the Parramatta Sand Body.

In general, an Aboriginal Heritage Assessment will not be required if the land has been previously substantially developed, excavated to bedrock, and retains no undisturbed original landform.

For properties within 50 metres of a known Aboriginal site the Office of Environment & Heritage's Aboriginal Heritage Information Management System should be consulted to determine whether the Aboriginal site is located on the property. If the known Aboriginal site is located on, or extends into the property, the development may become Integrated Development.

2.4 SUMMARY OF STATUTORY LISTINGS

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
The Parramatta Local Environmental Plan 2023	Not Listed
The Parramatta Development Control Plan Aboriginal Sensitivity Map 2023	Yes, Listed.

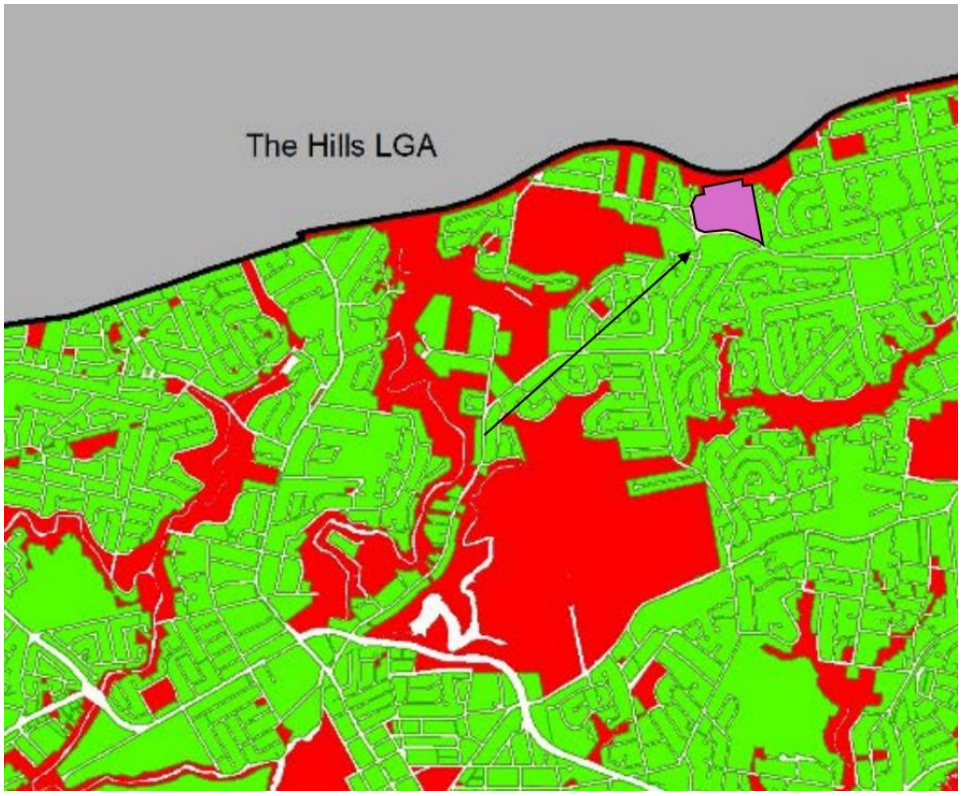

Figure 2.1 **Parramatta City Council Aboriginal Sensitivity Map.**
Study area highlighted in purple.

2.5 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.

2.6 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).

2.7 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 resource 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

The study area is located within the Parramatta River topographic zone. The site lies on the Hornsby Plateau on Hawkesbury Sandstone and consists of undulating to rolling low hills (slopes 5-20%). The topography of the area is low rolling and steep hills with local relief of between 50 – 120m. Moderately inclined slopes of between 15% are the dominant landform elements with convex narrow ridges and hillcrests with narrow concave drainage lines. This topographic zone is associated with the Glenorie (gn) soil landscape as well as the Gymea (gy) soil landscape.

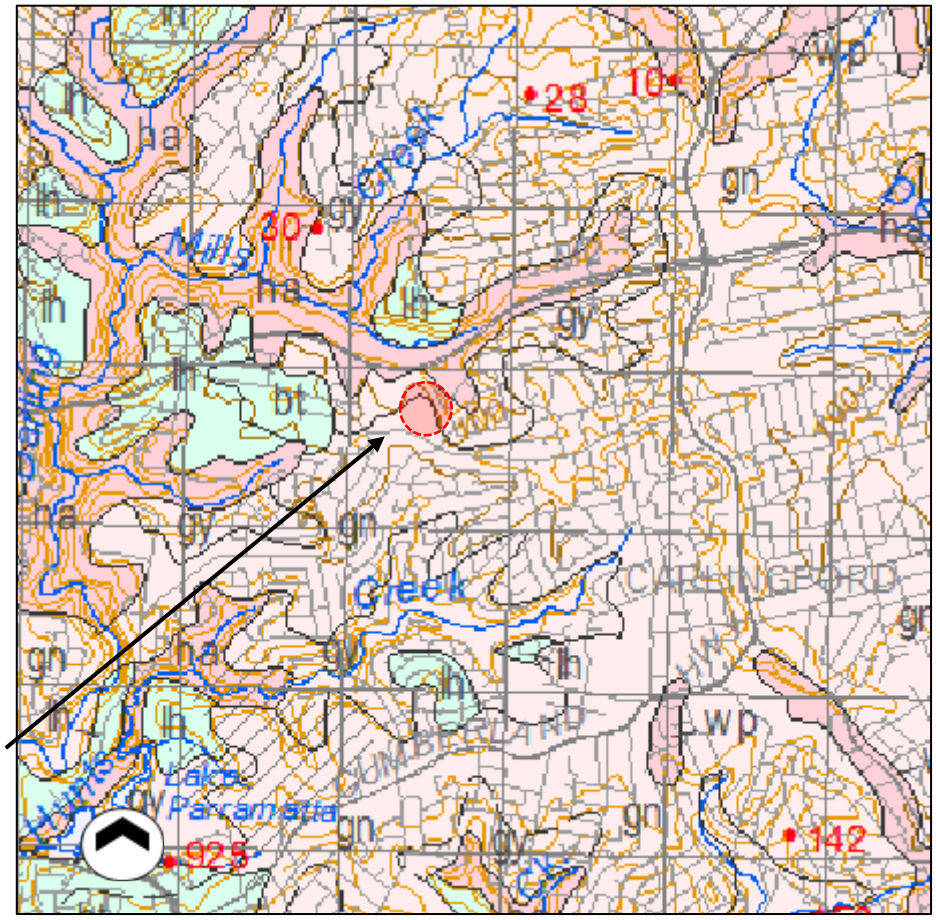

Figure 3.1 **Study area on soil map.**
Study area in red. Soil Landscapes of the Penrith 1:100 000 Sheet Report (Hazelton *et al*).

3.2 GEOLOGY AND SOILS

The study site extends over two soil landscape zone both the Glenorie (gn) soil landscape and the Gymea (gy) soil landscape. The descriptions of each individual landscapes are outlined in this section.

3.2.1 Glenorie Soil Landscape (gn)

The geology of the study area is found to consist partly of the Wianamatta Group Ashfield Shale and Bringelly Shale formations. Ashfield Shale is comprised of laminite and dark grey shale while Bringelly Shale consists of shale calcareous claystone, laminite fine to medium grained lithic-quartz sandstone.

The following is a typical soil profile of the mid slopes of the Glenorie (gn) soil landscape;

Table 3.1 Description of dominant soil material in Glenorie Soil Landscape.

Dominant Soil Material	Soil Horizon	Description
gn1	A1 Horizon	Dark brown loam, friable silt loam or silty clay loam with moderate to strong pedal structure and a porous rough-faced ped fabric. Moderately acidic, shale fragments occur, charcoal is present. Roots are common.
gn2	A2 Horizon	Brown clay loam, hard setting (when exposed as surface) clay loam to fine sandy clay loam with pedal massive or weakly pedal structure and an earthy porous or rough-faced ped fabric. Strongly acidic, shale fragments occur, charcoal is present. Roots are present.
gn3	B1 Horizon	Reddish brown clay, medium clay with a strongly pedal structure and a smooth-faced, dense ped fabric. Strongly acidic, shale fragments common, charcoal is absent. Roots are rare.
gn4	B2 Horizon	Grey clay, plastic medium to heavy clay with a strongly pedal structure and a smooth-faced, dense ped fabric. Strongly acidic, shale and gavel fragments common, charcoal is absent. Roots are rare.
gn5	B Variation	Brownish grey silty clay, plastic silty clay with a pedal massive structure and is often saturated. Strongly acidic, shale fragments common, charcoal is absent. Roots are absent.

Table 3.2 Expected Glenorie soil profile depth based on landform.

Crest

- up to 15 cm of friable dark brown loam **(gn1)** overlaying
- 10-30 cm of hardsetting brown clay loam **(gn2)** overlaying
- 30–100 cm of reddish-brown clay **(gn3)**

Occasionally **gn1** is absent.

*N.B The soil depth is commonly <150 cm. In places **gn1** is absent. The boundaries between the soil horizons is usually clear.*

Upper Slopes and Mid Slopes

- Up to 10 cm of dark brown loam **(gn1)** overlaying
- 5-30 cm of hardsetting clay loam **(gn2)** overlaying
- >100 cm of reddish-brown clay **(gn3)** usually overlaying
- Up to 150 cm of grey mottled clay **(gn4)**

*N.B The soil depth is commonly 50->100 cm. In places **gn1** is absent. The boundaries between the soil horizons is usually clear.*

Lower Slopes

- 10-60 cm dark brown **(gn1)** overlies
- >100 cm of reddish-brown clay **(gn3)** which overlies
- 20-100 cm of **(gn4)**

N.B The total soil profile consists of > 150cm. The boundaries between the soil horizons are clear.

Poor Drainage

- Up to 100 cm of brownish-grey silty clay **(gn5)** overlaying
- >100 cm of grey mottled clay **(gn4)** overlaying

*N.B Many drainage lines contain up to 100 cm of recently transported topsoil **gn1** overlying **gn4** and occasionally **gn3**.*

In some forested areas soils may be gradational. These soils are typically covered with up to 20cm of forest litter.

*Occasionally ironstone concretionary nodules associated with laterite occur above and within **gn4** at depth.*

3.2.2 Gymea Soil Landscape (gy)

The geology of the study area partly consists of Hawkesbury Sandstone – a quartz sandstone with minor shale and laminate lenses. These are the dominant geological formations of the Sydney Basin.

The soil profile is shallow to moderately deep (30-100m) consisting of yellow earths and earthy sands as well as siliceous sands along drainage lines. The soil ranges between strongly acidic pH levels to slightly. This is common within sands. The soil materials are found to have low erodibilities due to effective drainage as well as being held together by high organic matter. Therefore,

surface movement is found to be stable amongst the sandy soils, while being slightly reactive with depth.

Table 3.3 Description of dominant soil material in Gymea Soil Landscape.

Dominant Soil Material	Soil Horizon	Description
gy1	A1 Horizon	Loose, coarse sandy loam ranging from a brownish -black – when organic matter is present to a dull yellow – orange, often becoming lighter with depth. It generally contains small sandstone and ironstone fragments, as well as charcoal and roots.
gy2	B Horizon	Earthy, yellowish – brown clayey sand. This often overlays a sandstone bedrock. When exposed the soil can become hardsetting. The soil becomes a light sandy clay loam with depth along with orange mottles occurring. Less charcoal and root inclusions are present, however weathered sandstone and ironstone fragments remain present.
gy3	B/C Horizon	Earthy, yellowish – brown sandy clay loam to sandy clay. The soil increases to a sandy clay with depth along with orange mottles occurring with depth. Weathered sandstone fragments remain common however roots and charcoal fragments are rare.

Table 3.4 Expected Gymea soil profile depth based on landform.

Crest
➢ >30cm of loose sandy quartz loam (gy1) overlying, ➢ <30cm of yellowish- brown clayey sand (gy2) overlaying (sometimes), ➢ >30cm of yellow earthy sandy clay loam (gy3) overlaying, ➢ Sandstone bedrock. *N.B The total soil profile consists of <50 cm. The boundaries between the soil horizons is gradual.* *gy2 and gy3 can often be hardsetting deposits where exposure and erosion has occurred.*
Side Slopes
➢ 20cm of loose sandy quartz loam (gy1) overlying, ➢ Bedrock (Outside of benches and areas close to sandstone outcrops) Alternatively, sideslopes located within the inside of benches can consist of the following; ➢ 30cm of loose sandy quartz loam (gy1) overlying, ➢ 10-30cm of yellowish- brown clayey sand (gy2) overlaying, ➢ 30cm of yellow earthy sandy clay loam (gy3)

N.B The total soil profile consists of 30-70 cm. The boundaries between the soil horizons are gradual.

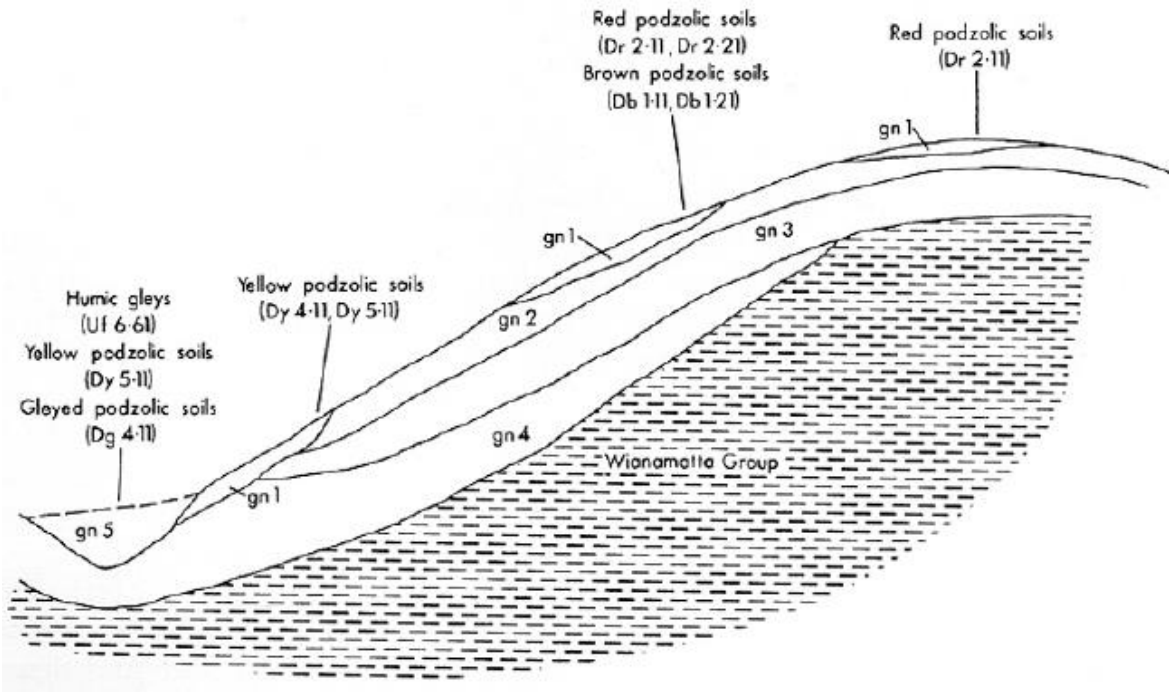

Figure 3.2 **Cross Section of Glenorie soil landscape illustrating relationships between landscape features and dominant soil materials.**
Soil Landscapes of the Penrith 1:100 000 sheet report (Bannerman and PA Hazelton 1990).

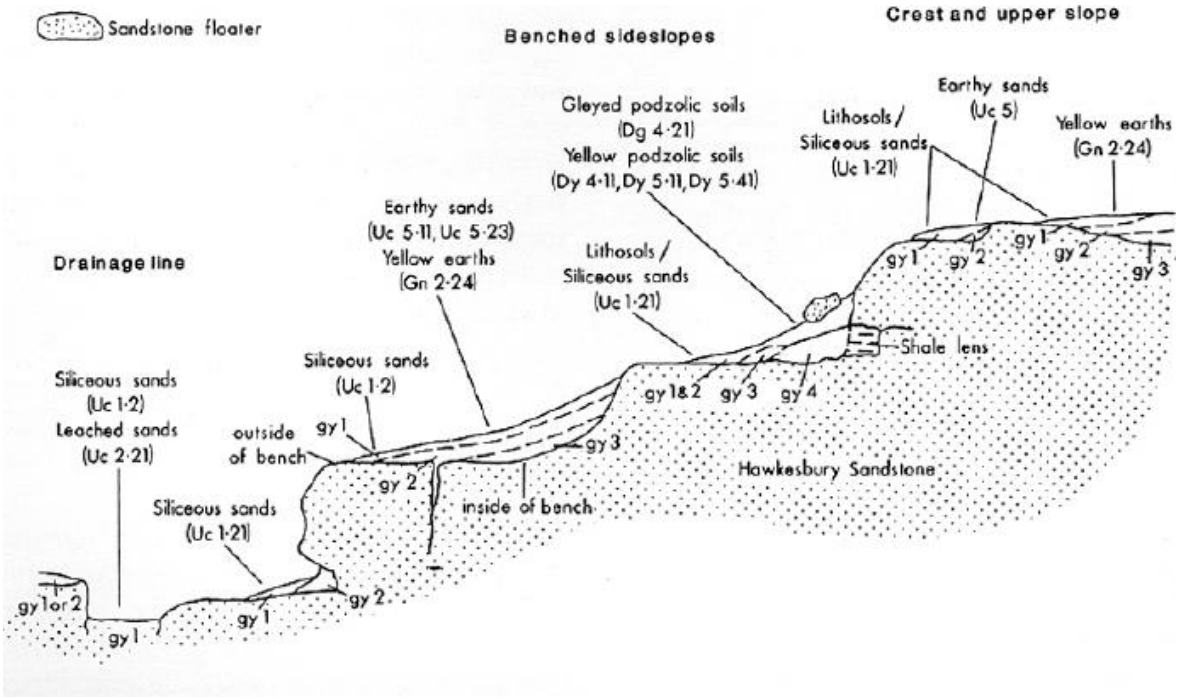

Figure 3.3 **Cross Section of Gymea soil landscape illustrating relationships between landscape features and dominant soil materials.**
Soil Landscapes of the Penrith 1:100 000 sheet report (Bannerman and PA Hazelton 1990).

3.3 WATERCOURSES

Surrounding the study area are a number of minor tributaries including Blue Gum Creek (approx. 190m north), Darling Mills Creek junction (approx. 1km northwest), Hunts Creek (approx. 1km south), Rifle Range Creek (approx. 830m southwest). The study area is also situated within approximately 2.5km north of Lake Parramatta. Also located on the site is a manmade pond.

3.4 VEGETATION

The vegetation found in the study area is no longer in a native state and is comprised of a variety of introduced and noxious types of vegetation. This movement away from the natural vegetation is a result of previous land clearing for farming and development. These lands were cleared soon after European settlement due to the relatively high agricultural value of the soils upon which they are situated. However, elements of native vegetation remain intact.

The native vegetation of the area is considered to have comprised of both wet/open sclerophyll forests and woodlands that are associated with the Wianamatta and Bringelly Shale Groups. (Chapman and Murph, 1989)

These vegetative communities principally contain White stringybark *(Eucalyptus eugenioides),* Grey box (*E. hemipholia)*, Forest red gum (*E. teraticornis)*, Sydney blue gum (*E. saligna),* Rough barked apple *(Angophora floribunda)*, Blackbutt (*E.pilularis*), Red bloodwood (*E. gummifera)*, Yellow bloodwood (*E. eximia)*, Scribbly gum (*E. haemastoma)*, Brown stringybark (*E. capitellata)* and Old man banksia (*Banksia serrata)*. Societies of Ironbarks *(E. crebra), (E. sideropholia) and (E. paniculta)* and Turpentine *(Syncarpia laurifolia)* also occur.

On the slopes, the following plant species would have been located; Black ash (*E. sieberi)*, Sydney peppermint (*E. piperita)* and Smooth-barked apple (*Angophora costatai)* are common tree species.

Understorey species included grasses, such as spear grass, shrub species such as Blackthorn, ferns including Bracken and vines such as Sarsparilla, Pittosurum and Coffee bush are common. Families such as Epacridaceae, Myrtaceae, Fabaceae and Proteaceae can also be found. For the most part this indigenous vegetation has been cleared for grazing, urban residential and light industry land use throughout the area (Walker, 1975).

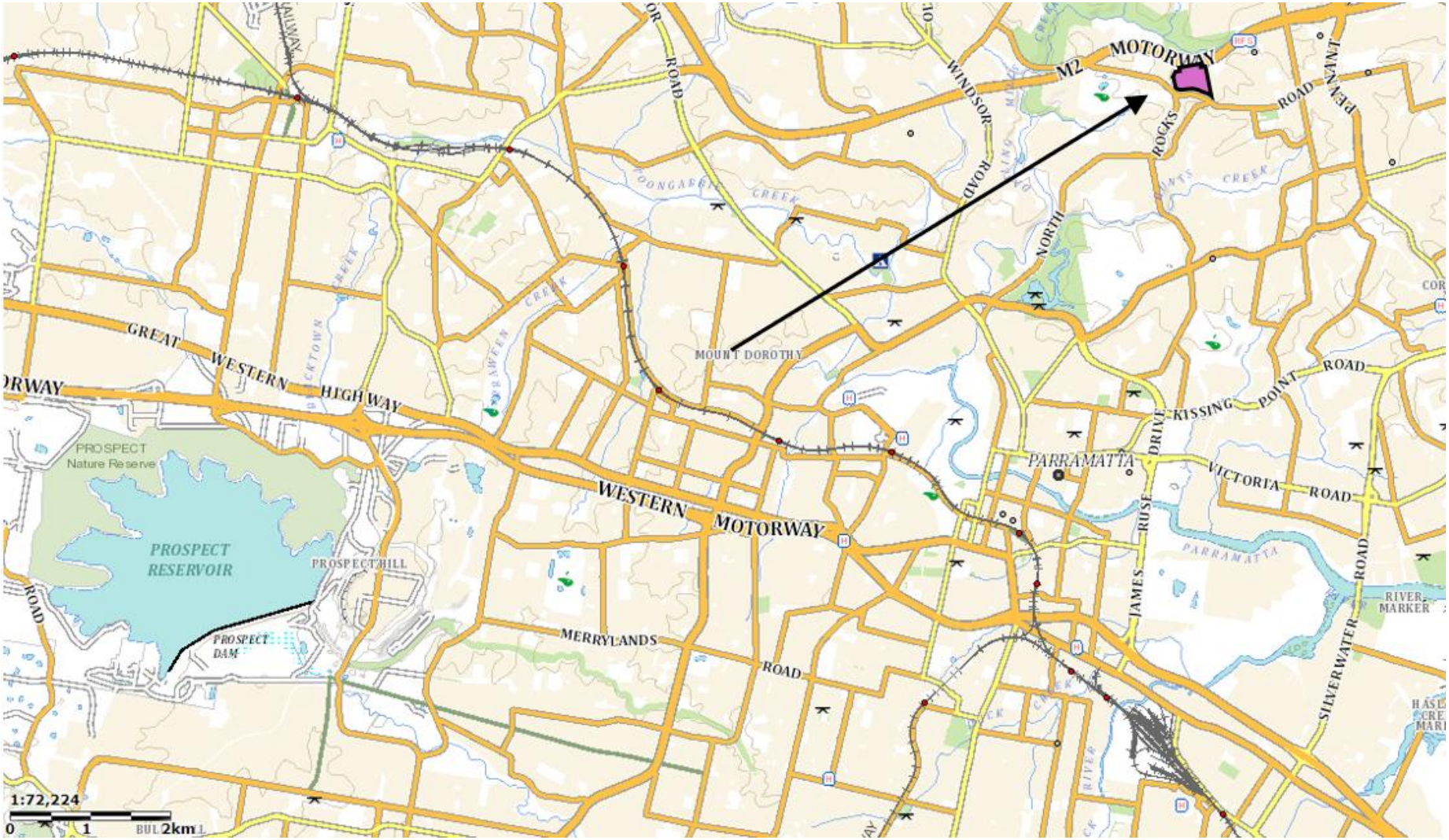

Figure 3.4 **Topography map indicating watercourses in blue.**
Study site indicated in purple, Six Maps, LPI Online (accessed 15/04/2024).

4.0 BACKGROUND INFORMATION

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 p.20 - 21 & Kohen et al 1983). The result of this extensive and continued occupation which includes the Sydney region has left a vast amount of accumulated depositional evidence and the Cumberland Lowlands is no exception. The oldest date generally considered to be reliable for the earliest occupation around the region comes from excavations at Parramatta which contain objects or features which have been dated to 30,735 ± 407 BP (McDonald et al 2005).

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 great deal more evidence being deposited than was deposited as a result of the sparser prior occupation period. It is also the case that many archaeological sites along the past coastline may have been submerged as the seas rose approximately to their current level around 6,000 years ago. This would have had the effect of covering evidence of previous coastal occupation. In addition, it is also true that the acidic soils which are predominate around the Sydney region do not allow for longer-term survival of sites (Hiscock 2008 p. 106).

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.

4.2 PREVIOUS ARCHAEOLOGICAL STUDIES NEAR THE STUDY AREA

The Heritage NSW library of Aboriginal cultural heritage consultant report was searched for reports carried out for sites within the vicinity of the study area. Presented below are summaries of indigenous archaeological survey assessments, test excavations and salvage excavations in the vicinity of the study area, which have all been carried out. This list is by no means exhaustive and is merely a representative sample of archaeological activity within the vicinity of the study area.

1992 Corkill – Darling Mills State Forest – Survey
Tessa Corkill conducted a survey of the Darling Mills Creek and its tributaries. The survey resulted in 48 rock shelter sites or potential sites, with 5 confirmed Aboriginal archaeological sites with visible art and stone artefacts present. In addition, an isolated artefact was also located outside a rock overhang. Further investigation was recommended. A number of these registered sites are near the vicinity of the study area.

1995 Corkill – Darling Mills State Forest – Test Excavation
Tessa Corkill conducted test excavations of a rock shelter within the Darling Mills State Forest in 1995. The excavations indicated that the rock shelter floor has been heavily disturbed. It was confirmed that the potential archaeological deposit was an Aboriginal archaeological site and therefore remains registered.

Comber Consultants 2015 – Aboriginal Cultural Heritage Assessment Report – Parramatta North Urban Transformation
Comber undertook an assessment as part of the proposed rezoning and planning controls for the urban transformation in North Parramatta, this includes the Cumberland Precinct and Sports and Leisure Precinct. The area was considered to contain medium to high archaeological potential with the study area deemed to have national significance and thus testing was proposed under an AHIP. Further archaeological research and collection of oral histories was recommended (Comber 2015).

GML 2015 – Test Excavation and Salvage Report 143 – 169 Macquarie Street, Parramatta
Salvage excavations conducted by GML yielded a total of 122 Aboriginal stone artefacts. The investigation was broken into 39 sample units. This is considered a small artefact density. The artefacts were predominately silcrete. The Parramatta Pleistocene Sand Terrace was not present (GML 2015).

AMAC 2016 – Test Excavation – *Riverside*, 333 Church Street, Parramatta
The test excavations revealed that the sand sheet was present, but heavily disturbed with 70 Aboriginal objects identified. The highest artefact density on the site was 17/sqm, which is composed of an assemblage of debitage and broken flakes. A comparison of surrounding sites of a similar nature including those containing the Parramatta Pleistocene Sand Terrace, indicates that a moderate artefact density consists of between 26/sqm and 30/sqm (McDonald 2003 and 2005), while a low artefact density consists of between 2.6/sqm and 20.0/sqm (AHMS 2004 and McDonald 2003). Therefore, the finds were determined to be of low density.

The artefact density across the site was 3.08/sqm, with the highest on site being 17/sqm located in trench 14 and the second highest 11/sqm in trench 7. These two trenches are adjacent to each other.

Optically Stimulated Luminescence (OSL) dating put the finds ca. 20,000 years BP. No further archaeological work was recommended (AHMS, 2014).

Comber Consultants 2016 – Test Excavation – Parramatta Park, The Paddocks & The Crescent, Parramatta.
Test excavation was undertaken by Comber which resulted in the retrieval of 462 artefacts. This included evidence of two *in situ* flaking floors which contained 208 of the artefacts. The majority of the artefacts were silcrete. The artefacts associated with the flaking floors appear to have been reduced onsite, only a few showed any evidence of primary flaking occurring at the source.

Test excavations showed the highest artefact density was 87/sqm, which is composed of an assemblage of debitage, flakes and broken flakes. However, the overall artefact density was between 4 and 0.1/sqm. Comparison of surrounding sites of a similar nature including those containing the Parramatta Pleistocene Sand Terrace, indicates that a moderate artefact density consists of between 26/sqm and 30/sqm (McDonald 2003 and 2005), while a low artefact density consists of between 2.6/sqm and 20.0/sqm (AHMS 2004 and McDonald 2003). Therefore, the finds are considered to be of low density with the site showing considerable disturbance. In contrast, there was a high artefact density of 87/sqm present in a single trench which was relatively intact.

There was no evidence of the Parramatta Pleistocene Sand Terrace. Artefacts were located within the A horizon and areas of erosion were thought to have displaced some artefacts (Comber 2016).

GML 2016 – Test Excavation Report- Parramatta Leagues Club
GML conducted test excavations under AHIP-1846. These were undertaken over a five-day period and consisted of a total of 22 testing locations within the study area. A sonic drill rig was used to dig to bedrock with the excavated material subsequently sieved. Test excavations yielded no artefacts; however, the Parramatta Pleistocene Sand Terrace was present (GML 2016).

AMAC 2018– Test Excavation – 32 Smith Street, Parramatta
Test excavations revealed that the sand sheet was not present, and the site was heavily disturbed with 15 Aboriginal objects located. The assemblage consisted of debitage and broken flakes. A comparison of surrounding sites of a similar nature including those containing the Parramatta Pleistocene Sand Terrace, indicates that a moderate artefact density consists of between 26/sqm and 30/sqm (McDonald 2003 and 2005), while a low artefact density consists of between 2.6/sqm and 20.0/sqm (AHMS 2004 and McDonald 2003). Therefore, the finds were determined to be of low density.

The artefact density across the site was 3.08/sqm, with the highest on site being 17/sqm located in trench 14 and the second highest 11/sqm in trench 7. These two trenches are adjacent to each other (AHMS, 2014).Test excavation was undertaken by Comber which resulted in the retrieval of a variety of artefact densities. Archaeological excavations at the Parramatta Square site uncovered a low discontinuous scatter of artefacts primarily located in the upper deposit. The artefact assemblages allowed Comber to draw the conclusions that raw material usage change with depth and the presence of four silcrete backed artefacts demonstrates

that the site was being occupied during the Bondaian phase and probably within the last 5,000 years (Stenning 2020). A series of hearths were located supporting the claim that the site was used repeatedly and over an extended period of time the area by Aboriginal people of the Parramatta region.

Evidence from archaeological excavations across Parramatta has demonstrated that artefact density is expected to decrease with distance from the Parramatta River which supports the prevailing predictive modelling of the region.

Niche 2020 – Test Excavation –Parramatta Square
Test excavation at Parramatta Square revealed that the sand sheet was not present, however, a similar soil profile to the AMAC Macquarie St excavation was located. The site was heavily disturbed with 11 Aboriginal objects identified from the 10 test pits. A comparison of surrounding sites of a similar nature including those containing the Parramatta Pleistocene Sand Terrace, indicates that a moderate artefact density consists of between 26/sqm and 30/sqm (McDonald 2003 and 2005), while a low artefact density consists of between 2.6/sqm and 20.0/sqm (AHMS 2004 and McDonald 2003). Therefore, the finds were determined to be of low density.

The artefact density across the site was 3.08/sqm, with the highest on site being 17/sqm located in trench 14 and the second highest 11/sqm in trench 7. These two trenches were adjacent to each other (AHMS, 2014).

AMAC 2020 – Test Excavation – 85–97 Macquarie Street, Parramatta
In 2020, AMAC undertook test excavations at 85–97 Macquarie Street, Paramatta. This followed the initial Aboriginal Cultural Heritage Assessment and Aboriginal Heritage Impact Permit (AHIP-4627) application compiled by Unearthed Archaeology and Heritage (2020). Eleven artefacts were uncovered during excavations, resulting in a relative artefact density of 0.846/sqm. These were predominately silcrete debitage and broken flakes, with no complete A1 horizon identified. Due to the high disturbance, the site was determined to be of low archaeological significance. It was recommended that an additional AHIP be obtained to enable cultural salvage and the site card for AHIMS Site 45-6-3767 be updated from a Potential Archaeological Deposit to an Artefact Scatter.

Unearthed Archaeology Pty Ltd 2023 – Aboriginal Due Diligence Sue Savage Reserve
In 2023, Unearthed Archaeology conducted a Due Diligence at the Sue Savage Reserve for the City of Parramatta. Due to the presence of AHIMS 45-5-0791 within the study area, the assessment recommended that an Aboriginal Cultural Heritage Assessment Report (ACHAR) be undertaken including full consultation with the Aboriginal community in accordance with the *Aboriginal cultural heritage consultation requirements for proponents (2010).* This was to be followed by Aboriginal archaeological test excavations under *The Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (2010).* After the completion of the test excavations, it was recommended that an Aboriginal Heritage Impact Permit (AHIP) for harm be obtained prior to the proposed works commencing, and depending on the results of the test excavations, a program of archaeological salvage excavations be undertaken should it be required.

Coast History and Heritage 2023 – Aboriginal heritage Study – Hornsby Local Government Area
In 2018, the Hornsby Shire Council requested a comprehensive Heritage Study be completed to assist in determining planning control measures for heritage in the Hornsby LGA. Coast History and Heritage completed this Heritage Study in 2023,

focusing upon known Aboriginal and historic sites, and areas of archaeological potential. Recommendations for heritage management were divided into immediate, medium and long term goals. This included the implementation of cultural heritage training program, creation of an Aboriginal Heritage Land Use Planning Map and updates to the existing heritage inventory.

The practical ramifications of the results of the aforementioned archaeological assessments and excavation indicates there is **low-moderate** potential for Aboriginal archaeological objects to be present within the study area, particularly if *intact* original soil profiles are present.

4.3 AHIMS SEARCH RESULTS

The Archaeological Heritage and 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 the 5th September 2018 (ID 368737) and 20th July 2020 (ID521443). Both searches resulted in 7 registered sites within 1000 m of the study area. A recent updated search of AHIMS was conducted on the 10th April 2024 (ID882318) resulting in no new registered sites. 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
45-6-2513	CFC (Baulkham Hills) SEE 45-6-2472	Valid	Shelter with Art, Shelter with Deposit
45-6-2472	CF6	Valid	Shelter with Art, Shelter with Deposit
45-6-2097	Darling Mills S. F. 2	Valid	Shelter with Deposit
45-6-2163	CF5;Cumberland S.F.;	Valid	Shelter with Deposit
45-6-2041	Darling Mills S.F. 1	Valid	Shelter with Deposit
45-6-2160	CF1 a b; Cumberland S.F.;	Valid	Shelter with Art, Shelter with Deposit
45-6-2161	CF3;Cumberland S. F.;	Valid	Shelter with Deposit

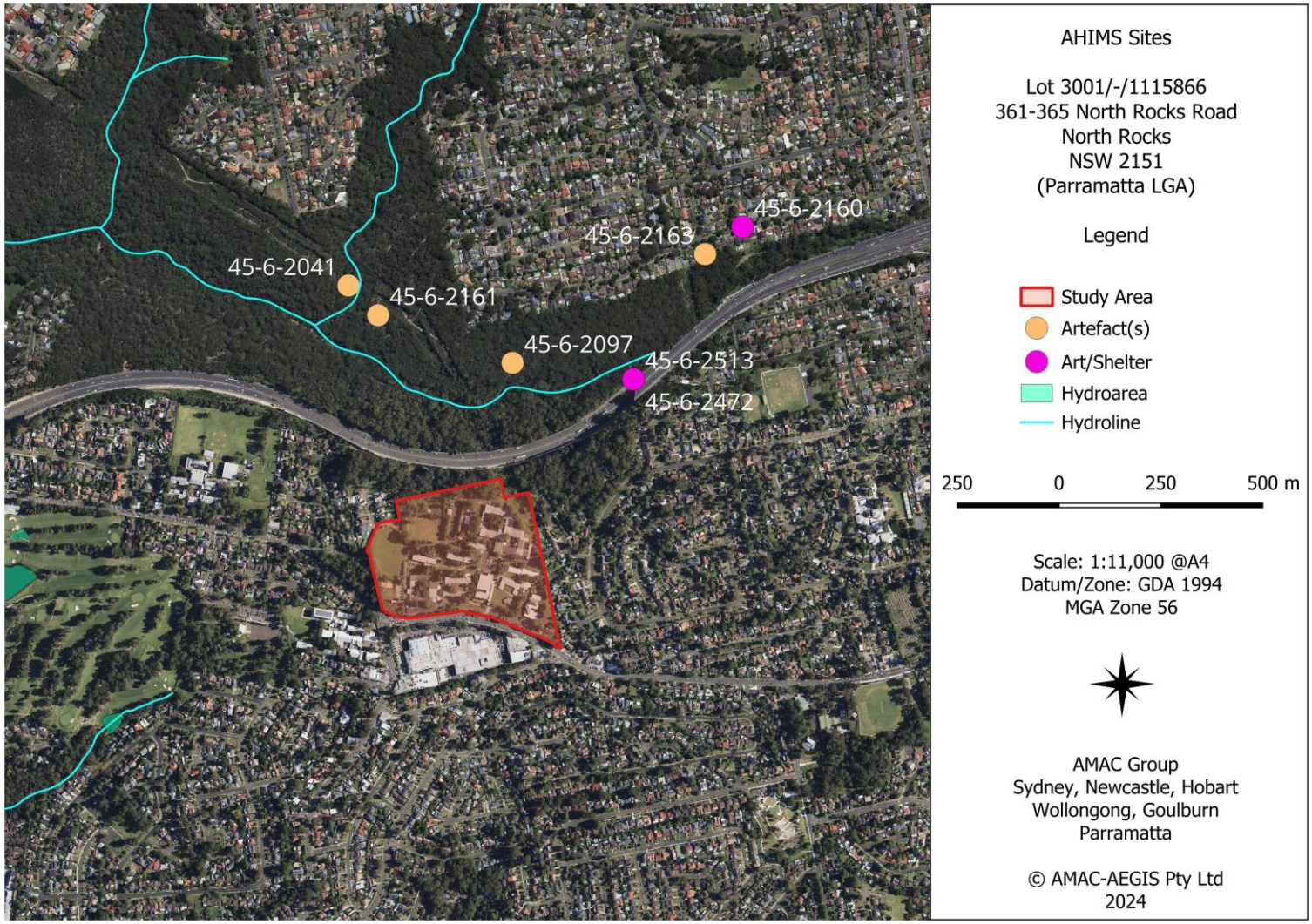

Figure 4.1 **AHIMS Search Results.**
AHIMS (2024) Six Maps (2024).

4.4 SUMMARY OF ARCHAEOLOGICAL PREDICTIVE MODEL FOR THE REGION

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 inland 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 and gather 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).

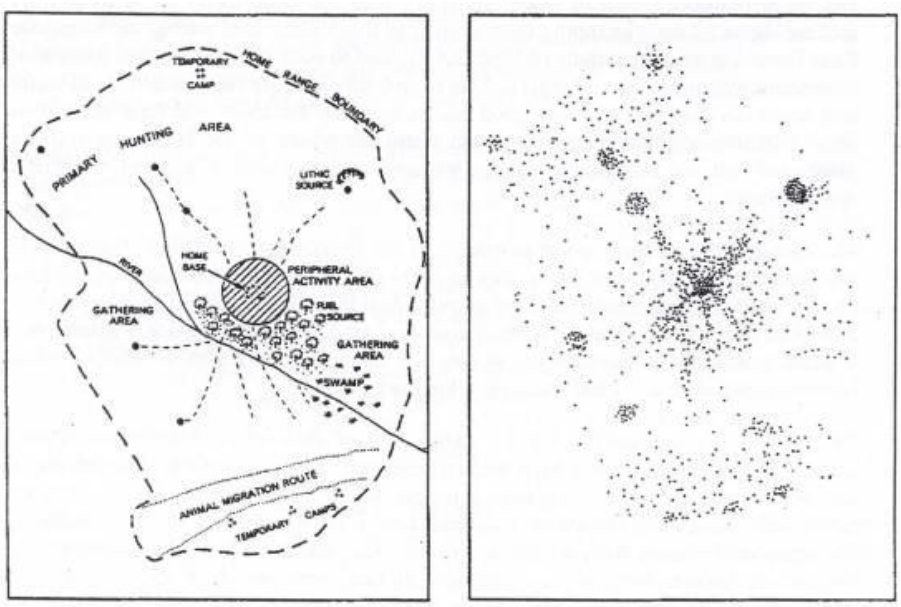

Figure 4.2 Examples of forager settlement patterns.
Foley (1981)

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.

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

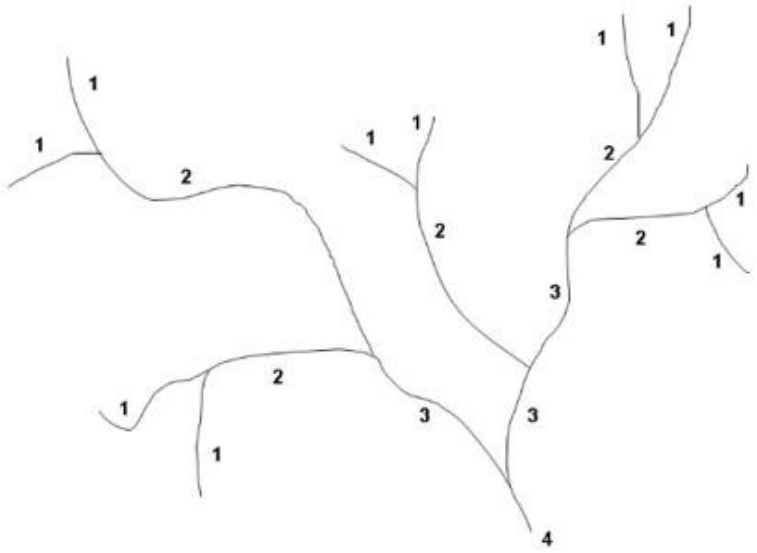

Figure 4.3 **Strahler's hierarchy of tributaries.**
Strahler (1957).

Table 4.2 **Relationship between landscape unit and site distribution for region.**

Landscape Unit /Site types	Site Distribution and activity
1st order stream	Archaeological evidence will be sparse and reflect little more than a background scatter.
Middle reaches of 2nd order stream	Archaeological evidence will be sparse but focus activity (one off camp locations, single episodes and knapping floor).
Upper reaches of 2nd order stream	Archaeological evidence will have a relatively sparse distribution and density. These sites contain evidence of localised one-off behaviour.
Lower reaches of 3rd 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 4th 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.

This predictive model has been refined with focus on the dominant environment and landscape zones of the Cumberland Lowlands, such as the Wianamatta Group Shales, Hawksbury Sandstone, Quaternary alluvium, Quaternary Aeolian and Tertiary alluvium. Attenbrow (2002) discovered that the Quaternary alluvial deposits had a greater concentration of archaeological sites, which is likely the result of these deposits being located towards major creeklines and rivers, such as Eastern Creek, Second Ponds Creek etc. Areas of alluvial deposits were found by Kohen (1986) to contain artefact scatters of a large and complex nature the closer they were to permanent creeks.

Umwelt (2004) have 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).

4.5 ARCHAEOLOGICAL PREDICITVE MODEL FOR THE STUDY AREA

The following section gives an indication of the likelihood of certain site types being located within the study area. These indications are based on the research and results of assessments and excavations in the vicinity of the study area and also from the greater Cumberland Region.

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

Site Type	Research	Likelihood
Open Artefact Scatters	Higher order streams are located within the vicinity of the study area. The dearth of known reliable raw material source within nearby landscape units, would suggest that the artefacts may be significant in number but smaller in size on account to greater levels of stone tool reduction. Excavations/Surveys in the vicinity of the study area indicate the presence of deposits that are suggestive of concentrated and repeated occupation.	Likely within undisturbed parts of the study area.
Isolated Artefacts	Higher order streams are located within the vicinity of the study area. The dearth of known reliable raw material source within nearby landscape units, would suggest that the artefacts may be significant in number but smaller in size, on account to greater levels of stone tool reduction. Excavations/Surveys in the vicinity of the study area indicate the presence of deposits that are suggestive of concentrated and repeated occupation.	Likely within undisturbed parts of the study area.
Grinding Grooves	Boulders of sandstone or outcrops do not occur in the landscape units represented in the study area.	Unlikely/
Stone Resource Sites	Rock outcrops of suitable flaking material are almost absent from the soil landscapes represented within the study area.	Unlikely/
Scarred Trees	Trees of sufficient age onsite were inspected. No scarring/modified was present.	Unlikely/
Sandstone Shelters	The study area does not contain sandstone overhangs	Unlikely/
Burials	Undisturbed sandy loam deposits do not lie within the study area and the soil landscapes in which the study area is located are generally acidic. Skeletal remains tend to decompose very quickly in acidic soil profiles.	Unlikely/
Ceremonial Sites	Consultation with relevant Aboriginal parties and individuals is taking place, however it is possible that such information may become available in the future as a result of further consultation	Possible that Ceremonial/Social sites will be present within the study area

4.6 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	
0	No effective disturbance; natural	**3**	Extensive clearing (e.g.: poisoning and ringbarking)	**6**	Cultivation: grain fed
1	No effective disturbance other than grazing by hoofed animals	**4**	Complete clearing: pasture native or improved, but never cultivated	**7**	Cultivation; irrigated, past or present
2	Limited clearing (e.g.: selected logging)	**5**	Complete clearing: pasture native or improved, cultivated at some stage	**8**	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.

4.6.1 Disturbance Summary

Background research indicates that past European land use has led to the clearing of the land. Deep excavations for building foundations have been undertaken on the site with the standing buildings being predominately one – two storeys with associated services. There has also been the construction of pathways and land modification including sporting fields, of-moderate disturbance.

In light of this and in the context of the information provided about the land use of the site, its proximity to major tributaries, the following has been predicted;

Moderate/High disturbance to sections of the landscape: Sub-surface Aboriginal objects with potential conservation value have a **low- moderate** probability of being present within the study area.

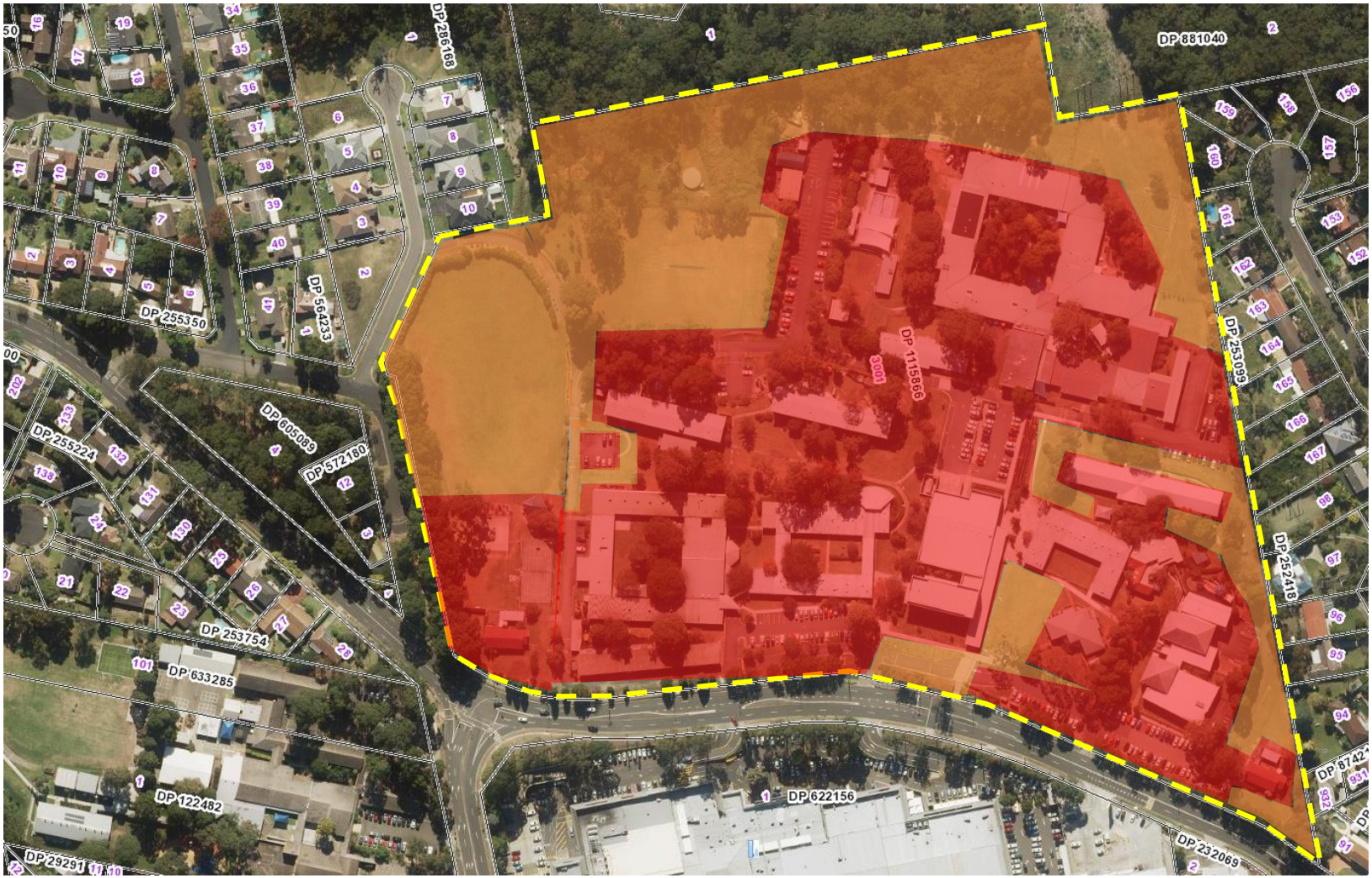

Figure 4.4 Disturbance map of study area
Red – high disturbance and orange – moderate disturbance. Six Maps (accessed 06/09/2018) AMAC (2018)

5.0 SITE INSPECTION

The field inspection was undertaken on the 24th August 2018 by archaeological Benjamin Streat of AMAC Group.

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 dense grass/weeds covering areas of the site as well as bitumen surface encompassing the western end of the study area. 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;
- attempts will be made to relocate the registered sites within the study area and assess their condition;
- 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;

5.2 INSPECTION RESULTS

The study area consisted predominately of cleared dry grassed grounds. Clusters of gums and native trees and shrubs were visible along the boundary of the school grounds as well as pockets within the centre and along paved walkways and access ways. All trees were inspected however, were not deemed mature age.

A number of buildings currently stand on the property and are mainly red bricked (Figure 5.2). There is also interactive play equipment and playgrounds located around the property which are found to impact the ground surface. The study area is located along a ridge, small areas of exposed soil were inspected (Figure 5.3 – 5.6).

Although visibility was high, exposure was found to be low. However, of the soil observed, natural soils were identified. Indicating that there is a possible for intact soils to be present.

Table 5.1 Site Inspection Coverage.

Unit	Landform	Area (sq. m)	Visibility (%)	Exposure (%)	Effective Coverage (sq. m)	Effective Coverage (%)
Unit 1	Ridge	124,400	40%	20%	9,952	8%

Figure 5.1 **Man-made dam and drainage channel on site.**
AMAC (2018) Image 1001.

Figure 5.2 **South facing displaying current land use as a school.**
AMAC (2018) Image 1028.

Figure 5.3 **Low vegetation and area of exposed soil.**
AMAC (2018) Image 1004.

Figure 5.4 **Area of exposed soil.**
AMAC (2018) Image 1011.

Figure 5.5 **Area of exposed soil and sand.**
AMAC (2018) Image 1017.

Figure 5.6 **Area of exposed soil containing vehicular tracks.**
AMAC (2018) Image 1021.

Figure 5.7 **Fenced boundary – cleared areas and low vegetation.**
AMAC (2018) Image 1013.

Figure 5.8 **North east facing displaying low vegetation as well as current school grounds and access ways.**
AMAC (2018) Image 1014.

Figure 5.9 **Sloped ridge low vegetation butting access way.**
AMAC (2018) Image 1020.

Figure 5.10 **North east facing displaying clearance of sporting field with some areas of exposure soil.**
AMAC (2018) Image 1027.

Figure 5.11 South facing displaying natural low gradient slope of study area with current school buildings in background and areas of exposure and disturbance visible.
AMAC (2018) Image 1034.

Figure 5.12 Drainage channel below access way. Low gradient slope visible.
AMAC (2018) Image 1031.

6.0 SIGNIFICANCE ASSESSMENT

The processes of assessing significance for items of cultural heritage value are set out in *The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance: the Burra Charter* (amended 1999; 2013) formulated in 1979 and based largely on the Venice Charter of International Heritage established in 1966. As part of the archaeological assessment for significance, a key step in the process is to assess the potential impact of a proposed activity to reflect the cultural significance or value of an object, site, or place in the recommendations for conservation, management, or mitigation. As defined in the 'Burra Charter' (ICOMOS 1988) cultural significance is broken into four parts: aesthetic, historic, scientific, and social value for past, present, or future generations. Cultural significance is a concept which assists in understanding the value of (pre-) historical places as a means to enrich the present and be of value to future generations (ICOMOS 1988). The Burra Charter is considered best practice standard for cultural heritage management and conservation for archaeological and cultural significance for Aboriginal people in Australia. The Burra Charter Guidelines (ICOMOS 1988) set out the following four criteria for the assessment of archaeological and cultural significance.

6.1 ARCHAEOLOGICAL & CULTURAL SIGNIFICANCE

6.1.1 Social Significance

The Social value embraces the qualities for which a place, object, or site has become a focus of spiritual, political, national, or other cultural sentiment to a majority or minority group. (Australia ICOMOS 1988). According to the *Guide to investigating, assessing, and reporting on Aboriginal cultural heritage in NSW*, "social or cultural value can only be identified though consultation with Aboriginal people" (OEH 2011:8).

No social significance can as yet be assigned to the study area. However, natural soils are present on site and further investigation has been recommended.

6.1.2 Historic Significance

A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase, or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment (Australia ICOMOS 1988).

No historic significance can as yet be assigned to the study area. However, natural soils are present on site and further investigation has been recommended.

6.1.3 Scientific Significance

The scientific value of any given location will depend on the importance of the data that can be obtained from any archaeological material located on its rarity, quality, and on the degree to which this may contribute further substantial information to a scientific research process (Australia ICOMOS 1988).

No scientific significance can as yet be assigned to the study area. However, natural soils are present on site and further investigation has been recommended.

6.1.4 Aesthetic Significance

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture, and material of the fabric; the smells and sounds associated with the place and its use (Australia ICOMOS 1988).

No aesthetic significance can as yet be assigned to the study area. However, natural soils are present on site and further investigation has been recommended.

7.0 PROPOSED ACTIVITY

This section outlines the proposed activity including the staging and timeframes a long with the potential harm of the proposed activity on Aboriginal objects and or declared Aboriginal places, assessing both the direct and indirect result of the activity on any cultural heritage values associated with the study area.

This report has been prepared to support a Planning Proposal PP-2021-3409 for rezoning at No's 361-365 North Rocks Road, North Rocks.

The site was previously occupied by Next Sense (formerly the Royal Institute for Deaf and Blind Children), however has now been secured by EG given the site is now surplus to Next Sense's operational needs and their relocation to a new campus in Macquarie Park.

The Planning Proposal seeks to create North Rocks Village (see Figure 7.1), a Housing Diversity Precinct as expressed in Council's Local Strategic Planning Statement (LSPS). It will deliver a genuine mix of housing opportunities within a garden village setting that is respectful of existing neighbourhood character, in addition to new open space including an oval and village square. It also includes a community 'hub' comprising a library and multi-purpose community facility. The Planning Proposal will facilitate:

- Approximately 795 new residential dwellings (including apartments, townhouses, and detached dwellings)
- Approximately 130 independent living units and aged care (seniors housing)
- Approximately 4,400m^2 new community facilities
- Approximately 2,800m^2 retail/commercial floor space
- Associated landscaping, road network, public open space improvements, and increased tree canopy cover

The Planning Proposal was initially submitted to the City of Parramatta Council in June 2021, however, has since been subject to a rezoning review process (ref RR2022/31). On 21 March 2024, a *Record of Decision to Submit Planning Proposal to Gateway Determination* was issued by the Sydney Central Planning Panel. This decision recommends the proposal proceeds to Gateway Determination, subject to conditions, which included some recommended design modifications.
The Planning Proposal has now been amended to adopt the panel recommendations. Key design amendments can be summarised as follows:

- Minor adjustments to building heights, including a range of 2-6 storeys across the site,
- Minor amendments to building layouts, and
- A masterplan which may facilitate an approximate 1.1:1 Floor Space Ratio.

The whole of the study area will be impacted as part of any proposed development on the site of which any intact soils will be impacted on including any Aboriginal archaeological and cultural material that may or may not be present.

Figure 7.1 **North Rocks Masterplan.**
Hassel (2024).

8.0 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 impact of the proposed development on any Aboriginal archaeological material that may be present;
- The requirements of the consent authority (The Parramatta Council).

8.1 RECOMMENDATIONS

A background analysis of the environment and archaeological context revealed that the study area has moderate/high surface disturbances however, less disturbed areas were observed and may contain intact Aboriginal objects and/or deposits of conservation value.

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.

Natural soils were identified during the site inspection to suggest *intact* soils may be present.

The proposed activity is not:

- located within a sand dune system, or;
- located within 200m below or above a cliff face, or;
- within 20m of or in a cave, rock shelter, or a cave mouth.

The study area is:

- located on a ridge top, ridge line or headland, or;
- located within 200m of waters.

Based on the locale of water and major water tributaries, such as Lake Parramatta and Darling Mills Creek, 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.

In accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010b), it is recommended that further archaeological and cultural assessment is necessary in the form of an ACHAR, as the proposed development zone is located within 200m of waters and upon a ridgeline. Dependent on the design and location of development activities within the study site, archaeological test excavation may be required in accordance with Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010a).

These recommendations should be carried out in conjunction with any application at DA Stage. These do not necessarily need to be carried out with regards to rezoning;

- Full Aboriginal community consultation should take place in accordance with Part 6; National Parks and Wildlife Act, *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010);
- Further assessment is required in the form of a full Aboriginal Cultural Heritage Assessment in accordance Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010c).
- Subsequent to this report and in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010b), a program of systematic, sub surface archaeological test excavation should be undertaken to establish the nature and extent of any archaeological objects and/or deposits that are/may be present.

GLOSSARY

Term	Definition
Aboriginal Object	A term now used (formerly 'relic') within the NSW *National Parks and Wildlife Act, 1974* 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."
AHIP	Aboriginal Heritage Impact Permit, issued under Part 6 of the National Parks and Wildlife Act 1974 , where harm to an Aboriginal object or Aboriginal place cannot be avoided.
Alluvial	Describes material deposited by, or in transit in flowering water.
AMAC	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
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.

Term	Definition
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.
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

Term	Definition
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 SEARCH RESULT

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : 361-365 North Rocks Rd.
Client Service ID : 882308

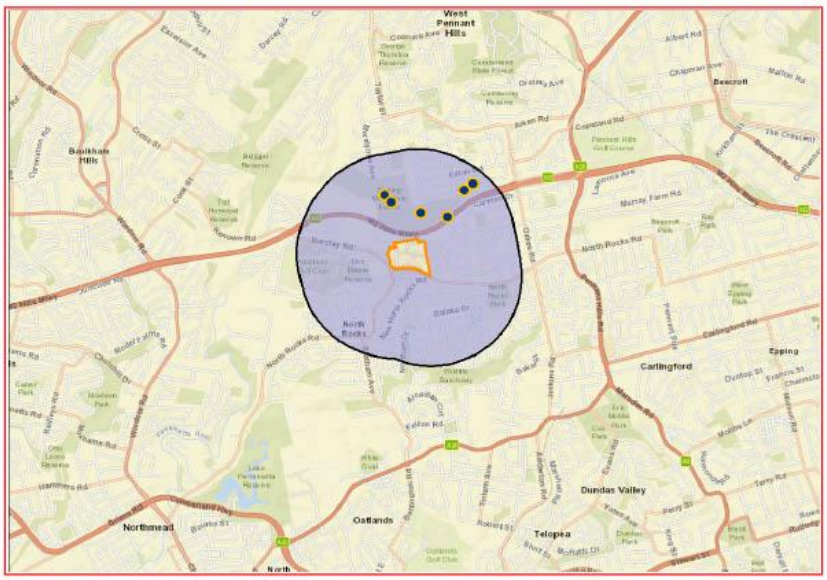
AMAC Group P/L
122c Percival Rd
Stanmore New South Wales 2048
Attention: Martin Carney
Email: amac@archaeological.com.au

Date: 10 April 2024

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 3001, DP:DP1115866, Section : - with a Buffer of 1000 meters, conducted by Martin Carney on 10 April 2024.

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) 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 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.

Level 6, 10 Valentine Ave, Parramatta 2150
Locked Bag 5020 Parramatta NSW 2124
Tel: (02) 9585 6345

ABN 34 945 244 274
Email: ahims@environment.nsw.gov.au
Web: www.heritage.nsw.gov.au

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 361-365 North Rocks Rd.

Client Service ID : 882318

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
45-6-2041	Darling Mills S.F. 1	AGD	56	317050	6262430	Closed site	Valid	Artefact : -	Shelter with Deposit	1776,1809,1911,2113,2114
	Contact	Recorders	Val Attenbrow					Permits		
45-6-2161	CF3;Cumberland S. F.;	AGD	56	317123	6262357	Closed site	Valid	Artefact : -	Shelter with Deposit	1776,1779,2113,2114
	Contact	Recorders	Mr.Rick Bullers,Ms.Tessa Corkill					Permits		
45-6-2097	Darling Mills S. F. 2	AGD	56	317453	6262240	Closed site	Valid	Artefact : -	Shelter with Deposit	1776,1809,1911,2113,2293
	Contact	Recorders	Val Attenbrow,Mr.Rick Bullers,Ms.Tessa Corkill					Permits	287	
45-6-2472	CF6	AGD	56	317750	6262200	Closed site	Valid	Artefact : -, Art (Pigment or Engraved) : -	Shelter with Art,Shelter with Deposit	
	Contact	Recorders	Ms.Tessa Corkill					Permits		
45-6-2163	CF5;Cumberland S.F.;	AGD	56	317926	6262507	Closed site	Valid	Artefact : -	Shelter with Deposit	1776,1779,2114
	Contact	Recorders	Mr.Rick Bullers,Ms.Tessa Corkill					Permits		
45-6-2160	CF1 a b;Cumberland S.F.;	AGD	56	318018	6262574	Closed site	Valid	Art (Pigment or Engraved) : -, Artefact : -	Shelter with Art,Shelter with Deposit	1776,2114
	Contact	Recorders	Mr.Rick Bullers,Ms.Tessa Corkill					Permits		
45-6-2513	CFC (Baulkham Hills) SEE 45-6-2472	AGD	56	317750	6262200	Closed site	Valid	Art (Pigment or Engraved) : -, Artefact : -	Shelter with Art,Shelter with Deposit	
	Contact	Recorders	ASRSYS					Permits		

**** 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 10/04/2024 for Martin Carney for the following area at Lot : 3001, DP:DP1115866, Section : - with a Buffer of 1000 meters.. Number of Aboriginal sites and Aboriginal objects found is 7

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.

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