

Proposed Construction of a New High School at Jordan Springs East, Penrith City Council, NSW

Preliminary Indigenous Heritage Assessment and Impact Report

Prepared for School Infrastructure NSW on behalf of the NSW Department of Education

December 2024

KAYANDEL
ARCHAEOLOGICAL SERVICES



☎ 02 4627 8622

✉ Info@kayandel.com.au

Document Status

| Version No. | Purpose of Document | Orig | Review | Review Date | Approval for Issue | Date Issued |
|-------------|---------------------------------------|------|--------|-------------|--------------------|-------------|
| 1.0 | Internal Review | BA | NS | 19/01/2024 | NS | 19/01/2024 |
| 1.1 | Client Review | NS | SINSW | 19/01/2024 | SINSW | 14/05/2024 |
| 2.0 | Final Report | NS | NS | 14/05/2024 | NS | 14/05/2024 |
| 2.1 | Revised Final Report | NS | NS | 3/06/2024 | NS | 3/06/2024 |
| 3.0 | Minor amendment to the proposed works | NS | NS | 16/12/2024 | NS | 16/12/2024 |

© 2024 Kayandel

This document is and shall remain the property of Kayandel. The document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

Executive Summary

Kayandel has been commissioned by School Infrastructure NSW (SINSW) (the Proponent) to prepare a desktop Preliminary Indigenous Heritage Assessment and Impact Report (PIHA) to identify whether there is potential for Aboriginal cultural heritage to be affected by the proposed construction of a new high school at Jordan Springs East.

AHIP number C0000362 previously issued by Heritage NSW and includes the Subject Area. Refer to the discussion in Section 4.3 for more details.

The discussion presented in Sections 3.1.1 and 3.3 identifies that the Subject Area has undergone high levels of ground disturbance, including the placement of anthropogenic fill over the Subject Area as part of earthworks undertaken in 2016/2017 to form the current topography (WSP, 2023). Geotechnical investigation completed by WSP (2023) identified that the Subject Area's original soil profile has been removed, and that up to 5m of fill has been emplaced across the Subject Area.

In consideration of previous disturbance levels that have occurred, the Subject Area has been assessed as having nil potential to contain archaeological deposits. As such, it has been determined that no further investigation is required to inform the proposed works (refer to Section 1.2).

Recommendations

On the basis of the information presented in this PIHA it is recommended that:

1. It has been assessed that the works are unlikely to result in any impacts to known or unknown Aboriginal objects;
2. If an application for SSD approval is made, it is recommended that consideration be given to potentially modifying the Aboriginal cultural heritage component of the Planning Secretary's Environmental Assessment Requirements (SEARs) to reflect the issuing of a previous AHIP over the land and historic land disturbance (approved under the AHIP);
3. All relevant staff and contractors should be made aware of their statutory obligations for heritage under the *National Parks and Wildlife Act 1974*, which may be implemented as a heritage induction;
4. If unrecorded Aboriginal object or objects are identified in the Subject Area during works, then all works in the immediate area must cease and the area should be cordoned off. Heritage NSW and the Local Aboriginal Land Council should be contacted so the site can be adequately assessed and managed; and,
5. In the unlikely event that skeletal remains are identified, work must cease immediately in the vicinity of the remains and the area must be cordoned off. The Proponent must contact the local NSW Police who will make an initial assessment as to whether the remains are part of a crime scene, or possible Aboriginal ancestral remains. If the remains are thought to be Aboriginal ancestral remains, Heritage NSW must be contacted by ringing the Enviroline 131 555. If the remains are identified as Aboriginal ancestral remains, a management plan must be developed in consultation with the relevant Aboriginal stakeholders before works recommence.

CONTENTS

| | | |
|----------|--|-----------|
| 1 | Introduction | 1 |
| 1.1 | Location of the Subject Area..... | 1 |
| 1.2 | Proposed Works | 1 |
| 1.3 | Study Limitations | 1 |
| 1.4 | Personnel | 2 |
| 2 | Legislative Context | 4 |
| 3 | Landscape Context | 5 |
| 3.1 | Geology and Soils | 5 |
| 3.1.1 | Previous Geotechnical Investigations..... | 5 |
| 3.2 | Topography and Hydrology..... | 8 |
| 3.3 | Historic Land Disturbance..... | 8 |
| 4 | Archaeological Context | 12 |
| 4.1 | Ethnohistory | 12 |
| 4.2 | AHIMS Database Search | 14 |
| 4.3 | Previous AHIP(s) Issued | 17 |
| 4.4 | Regional Archaeological Context | 1 |
| 4.5 | Relevant Archaeological Investigations..... | 2 |
| 4.6 | Previous Predictive Models..... | 8 |
| 4.7 | Aboriginal Heritage Predictions for the Subject Area | 11 |
| 5 | Site Inspection | 13 |
| 6 | Principal Findings | 16 |
| 7 | Obligations and Recommendations | 17 |
| 7.1 | Obligations | 17 |
| 7.2 | Recommendations..... | 17 |
| 8 | References | 19 |
| | Appendix I. Proposed Plans | 22 |
| | Appendix II. AHIMS Search Results..... | 23 |

LIST OF TABLES

| | |
|---|---|
| Table 1: Kayandel personnel involved in the preparation of this report | 2 |
| Table 2: Results from Geotechnical Investigations of the Subject Area (Extracted from WSP (2023)) . | 6 |
| Table 3: Summary of Historic Aerial Photographs..... | 9 |

| | |
|---|----|
| Table 4: AHIMS Database Search Criteria..... | 14 |
| Table 5: Site features from AHIMS search (Client Service ID 853128) | 14 |

LIST OF FIGURES

| | |
|---|----|
| Figure 1: Subject Area..... | 3 |
| Figure 2: Geotechnical Investigation Plan (Source: WSP (2023, Figure 1)). The Subject Area is outlined in yellow..... | 7 |
| Figure 3: AHIMS Search Results | 15 |
| Figure 4: AHIMS Sites in Proximity | 16 |
| Figure 5: AHIP number C0000362 (AHIMS No. 3647) Attachment 1: Land to which this AHIP applies (outlined in yellow). The location of the Subject Area is circled in red | 0 |
| Figure 6: Approximate location of the Jo McDonald (1997) Sample Areas (source: Jo McDonald CHM (2009, p. 33)). The approximate location of the Subject Area is identified by the yellow circle..... | 4 |
| Figure 7: Aerial photo of Central Precinct showing locations of suggested salvage locations (source: Jo McDonald CHM (2009, p. 51)). Subject Area outlined in red | 5 |
| Figure 8: General location of the 2013 test excavation areas (source: Godden Mackay Logan and Jo McDonald CHM (2013, p. 46)). Subject Area outlined in yellow..... | 7 |

LIST OF PLATES

| | |
|---|----|
| Plate 1: 1947 Aerial Photograph (source: NSW Historical Imagery Viewer) | 9 |
| Plate 2: 1955 Aerial Photograph (source: NSW Historical Imagery Viewer) | 9 |
| Plate 3: 1975 Aerial Photograph (source: NSW Historical Imagery Viewer) | 10 |
| Plate 4: 1991 Aerial Photograph (source: NSW Historical Imagery Viewer) | 10 |
| Plate 5: 2010 Aerial Photograph (source: Nearmap)..... | 10 |
| Plate 6: 2016 Aerial Photograph (source: Nearmap)..... | 10 |
| Plate 7: 2019 Aerial Photograph (source: Nearmap)..... | 11 |
| Plate 8: 2021 Aerial Photograph (source: Nearmap)..... | 11 |
| Plate 9: Looking north across the Subject Area..... | 13 |
| Plate 10: Looking west across the Subject Area..... | 13 |
| Plate 11: Looking east across the Subject Area | 13 |
| Plate 12: Looking northeast across a detention basin..... | 13 |
| Plate 13: View looking west from Academy Street..... | 14 |
| Plate 14: Looking north along Academy Street | 14 |
| Plate 15: Looking southwest from Academy Street | 14 |

| | |
|--|----|
| Plate 16: Looking south towards the detention basin..... | 14 |
| Plate 17: Example of an area with high GSV | 14 |
| Plate 18: Looking south with water connections down the centre | 14 |
| Plate 19: Looking south along the western boundary | 15 |
| Plate 20: Looking south along the edge of the emplaced fill | 15 |
| Plate 21: Looking north along the edge of the emplaced fill | 15 |

This Page is intentionally left Blank

1 INTRODUCTION

Kayandel has been commissioned by School Infrastructure NSW (SINSW) (the Proponent) to prepare a desktop Preliminary Indigenous Heritage Assessment and Impact Report (PIHA) to identify whether there is potential for Aboriginal cultural heritage to be affected by the proposed construction of a new high school at Jordan Springs East.

This report outlines the results of an PIHA which meets the requirements of Heritage NSW's *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW 2010 (Due Diligence Code of Practice)* (DECCW, 2010c) and includes recommendations regarding Aboriginal heritage constraints for the proposed works.

1.1 Location of the Subject Area

The Subject Area is located within the boundaries of Penrith City Council (PCC) Local Government Area (LGA) and the Deerubbin Local Aboriginal Land Council (Deerubbin LALC).

The Subject Area is located approximately 6.5 km northeast of Penrith township. It is located approximately 500m northeast from the intersection of Wianamatta Parkway and Armoury, Jordan Springs East. The site is bounded to the west by Armoury Road to the south by Infantry Street and is dissected by Academy Street (refer to Figure 1).

The Subject Area comprises of part of Lots 2 & 3 DP1248480 (refer to Figure 1).

1.2 Proposed Works

The project is to build a new high school in Jordan Springs with a capacity of up to 1,000 students to cater for anticipated enrolment demand from Jordan Springs and Ropes Crossing. The site is located at the corner of Infantry Street and Armoury Road with a legal description of Lot 2 and Lot 3 in DP 1248480. The project seeks to construct school buildings up to three (3) storeys in height and associated site facilities (refer to Appendix I).

1.3 Study Limitations

This report is limited to a desktop review of aerial photographs and previous Aboriginal heritage investigations of the Subject Area.

This report is based on a review of available Aboriginal archaeological assessments (sourced from the Heritage Branch library, grey literature and Kayandel's report library). It is possible that further Aboriginal archaeological assessments or the emergence of new analysis of the Aboriginal archaeological landscape within the area may support different interpretations of the evidence in this report.

A summary of the statutory requirements regarding heritage is provided in Section 2. This is made based on our experience of working with the NSW Aboriginal heritage and European heritage systems and does not purport to be legal advice. It should be noted that legislation, regulations, and guidelines change over time and users of this report should satisfy themselves that the statutory requirements have not changed since the report was written.

The results from the 'AHIMS Database Search' (Section 4.2) are valid for 12 months from the date of the search. If this report has not been finalised and/or if it is necessary to update this report, and the previous AHIMS search is over 12 months old, it will be necessary to undertake another search of the AHIMS to ensure information is current.

1.4 Personnel

This study has been carried out by Kayandel (refer to Table 1).

| Person | Qualifications | Experience | Tasks |
|----------------|---|------------|---|
| Britt Andrews | B. Arts (His. And Anc. His. And Arch.) – B. Com. And Media Studies (Digital Media and Com.) | 3 years | Background review, report drafting |
| Natalie Stiles | B. Arts (Arch/Palaeo), Grad. Cert. Arts (Arch), MGIS&RemoteSens, GradDipUrbRegPlan | >10 years | Project management, report review, mapping |
| Lance Syme | B. Arts (Arch/Palaeo), Grad. Dip. (Heritage Cons.), M. ICOMOS | >20 years | Project supervision |

Table 1: Kayandel personnel involved in the preparation of this report



2 LEGISLATIVE CONTEXT

The *National Parks & Wildlife Act 1974* provides statutory protection for all Aboriginal 'objects' (consisting of any material evidence of the Aboriginal occupation of NSW) and for 'Aboriginal Places' (areas of cultural significance to the Aboriginal community). Under Section 86 of the *National Parks and Wildlife Act, 1974*, Aboriginal objects are afforded automatic statutory protection in NSW whereby it is an offence to:

Damage, deface or destroy Aboriginal sites without the prior consent of the Director-General of the National Parks and Wildlife Service (now referred to as Heritage NSW).

The Act defines an Aboriginal 'Object' as:

Any deposit, object or material evidence (not being a handicraft for sale) relating to indigenous and non-European habitation of the area that comprises New South Wales, being habitation before or concurrent with the occupation of that area by persons of non-Aboriginal European extraction and includes Aboriginal remains.

The *Due Diligence Code of Practice* was by Heritage NSW (formerly the Department of Environment, Climate Change and Water (DECCW)). The aim of the guidelines is to assist individuals and organisations to exercise due diligence when carrying out activities that may harm Aboriginal objects and to determine whether they should apply for consent in the form of an Aboriginal Heritage Impact Permit (AHIP).

A due diligence assessment should take reasonable and practicable steps to ascertain whether there is a likelihood that Aboriginal sites will be disturbed or impacted during the proposed works. If it is assessed that sites exist or have a likelihood of existing within the development area and may be impacted by the proposed development, further archaeological investigations may be required. If it is found that Aboriginal sites were to exist within the Subject Area, an AHIP would be required if the proposed impacts cannot be avoided. If it is found to be unlikely that Aboriginal sites were to exist within the Subject Area and the due diligence assessment has been conducted in accordance with the *Due Diligence Code of Practice*, then the proposed works could proceed without an AHIP.

The *Native Title Act 1994* was introduced to work in conjunction with the *Commonwealth Native Title Act 1993*. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act. The objective of a search of the NNTT registers is to identify possible Aboriginal Stakeholders that would not perhaps receive representation as part of the Local Aboriginal Land Council or Elders groups. The Subject Area is freehold land, and as such Native Title has been extinguished over the property.

Searches have been carried out for the Subject Area on various heritage databases, including the:

- ✦ State Heritage Inventory;
- ✦ Department of Education's *State Agency Heritage and Conservation Register*;
- ✦ *Penrith Local Environmental Plan 2010*; and,
- ✦ Register of the National Estate.

No heritage items were identified within or abutting the Subject Area.

3 LANDSCAPE CONTEXT

Jordan Springs is located within the Sydney Basin Bioregion, on the Cumberland Plain. The larger scale geology of the Sydney Basin Bioregion is characterised by marine deposition events from the Carboniferous to the early Permian. Numerous coal deposits accumulated before large river systems covered the region in quartz sandstone, known as the Hawkesbury sandstone. The Hawkesbury sandstone, which forms the bedrock for all of the Sydney Basin, dates to the mid Triassic. This bedrock of sandstone is then capped by a thin layer of shale (NSW National Parks and Wildlife Service, 2003). The Sydney Basin Bioregion consists of a geological basin filled with near horizontal sandstones and shales of Permian to Triassic age that overlie older basement rocks of the Lachlan Fold Belt. The sedimentary rocks have been subject to uplift with gentle folding and minor faulting during the formation of the Great Dividing Range. Erosion by coastal streams has created a landscape of deep cliff gorges and remnant plateaus (Branagan & Packham, 2000; NSW National Parks and Wildlife Service, 2003).

3.1 Geology and Soils

The underlying geology of the Subject Area is Quaternary alluvium of fine-grained sand, silt and clay (Clark & Jones, 1991).

A review of the Soil Landscapes of the Soil Landscapes of the Penrith 1:100,000 Sheet map and report indicates that the Subject Area extends across the South Creek soil landscape (Bannerman & Hazelton, 1990).

The South Creek soil is an alluvial soil landscape, occurring on floodplains, valley flats and drainage depressions of the channels on the Cumberland Plain. This soil landscape comprises the present active floodplain of many drainage networks of the Cumberland Plain. Soils are often very deep layered sediments over bedrock or relict soils. Immediately adjacent to drainage lines, and in areas where pedogenesis has occurred, soils are Structured Plastic Clays or Structured Loams. Red and Yellow Podzolic Soils are most common on terraces with small areas of Structured Grey Clays, leached clays and Yellow Solodic Soils (Bannerman & Hazelton, 1990).

3.1.1 Previous Geotechnical Investigations

WSP (2023, p. 2) states that anthropogenic fill was placed on the Jordan Springs East site (which includes the Subject Area) during 2016 and 2017 to form the current topography as part of earthworks packages 6.1 and 7 (EW6.1 and EW7). Fill thickness ranges from approximately 1m to 6m, raising the site levels to approximately RL22m AHD up to RL25m AHD.

As part of the Geotechnical Investigation Plan in WSP (2023), three (3) bore holes and three (3) test pits were located within the Subject Area (see Figure 2). Based on the investigation, it was identified that the original soil profile had been removed, and that up to 5m of fill had been emplaced across the Subject Area. An extract of the results from the relevant bore holes and test pits is presented below (see Table 2).

| Context | BH-P2-25 | BH-P2-26 | BH-P2-28 | BH-P2-31 | TP-P2-25 | TP-P2-26 | TP-P2-28 |
|------------|---|--|---|---|--|--|--|
| Context 1 | 0.0m – 0.1m Topsoil – Sandy Silt | 0.0m – 0.1m Topsoil – Sandy Silt | 0.0m – 0.1m Topsoil – Sandy Silt | 0.0m – 0.1m Topsoil – Silty Gravelly Sand | 0.0m – 0.1m Topsoil – Sandy Silt | 0.0-0.1m Topsoil – Sandy Silt | 0.0-0.1m Topsoil – Sandy Silt |
| Context 2 | 0.1m – 2.5m Fill – Gravelly Silty Sand | 0.1-2.5m Fill – Silty Sand | 0.1-1.2m Fill – Silty Sand with gravel | 0.1-1.55m Fill – Gravelly Sand with Clay | 0.1-0.3m Fill - Gravelly Silty Sand | 0.1-1.10m Fill – Silty Sand Gravel | 0.1-0.7m Fill – Clayey Silty Gravelly Sand |
| Context 3 | 2.25-4.0m Fill – Gravelly Silty Clay | 2.5-4.5m Fill – Sandy Clay | 1.2-2.4m Fill – Silty Clay with gravel | 1.55-2.60m Fill - Sandy Gravelly Clay | 0.3-1m Fill – Sandy Silty Gravel | 1.10-1.40m Fill – Silty Sandy Gravel | 0.7-1.40m Fill – Sandy Silty Gravel |
| Context 4 | 4.0-4.95m Clay | 4.5-6.45m Silty Clay | 2.4-3m Fill – Silty Sand with gravel | 2.6-3.55m Fill – Clayey Sand with gravel | 1.0-1.5m Fill – Gravelly Silty Sand | 1.40-2.00m Fill – Sandy Gravelly Clay | 1.40-.2.10m Fill – Clayey Gravelly Sand |
| Context 5 | - | - | 3-4.2m Clayey Sand with gravel | 3.55-4.60m Sandy Clay with trace gravel | 1.5-2.8m Fill – Gravelly Clayey Sand | 2.0-3.0m Fill - Gravelly Clay | 2.10-2.70m Fill – Sandy Gravel |
| Context 6 | - | - | 4.2-5.4m Silty Clay with sand | 4.6-4.95m Clayey Silt with Sand | 2.8-3.3m Fill – Gravelly Sandy Clay | 3.0-3.30m Fill – Sandy Clay | 2.70-3.30m Fill –Sandy Gravelly Clay |
| Context 7 | - | - | 5.4-6.45m Clayey Sand | - | 3.3-4.7m Fill – Sandy Clayey Gravel | 3.30-4.10m Fill – Cobbles and Boulders | 3.30-4.10m Fill – Cobbles and Boulders |
| Context 8 | - | - | - | - | 4.7-5.10m Silty Sandy Clay | 4.10-4.70m Fill – Sandy Gravelly Clay | 4.10-4.30m Fill – Sandy Clayey Gravel |
| Context 9 | - | - | - | - | - | 4.70-4.90m Fill – Clayey Gravel | 4.30-4.40m Sandy Gravelly Silt |
| Context 10 | - | - | - | - | - | 4.90-5m Silty Sandy Clay | - |

Table 2: Results from Geotechnical Investigations of the Subject Area (Extracted from WSP (2023))

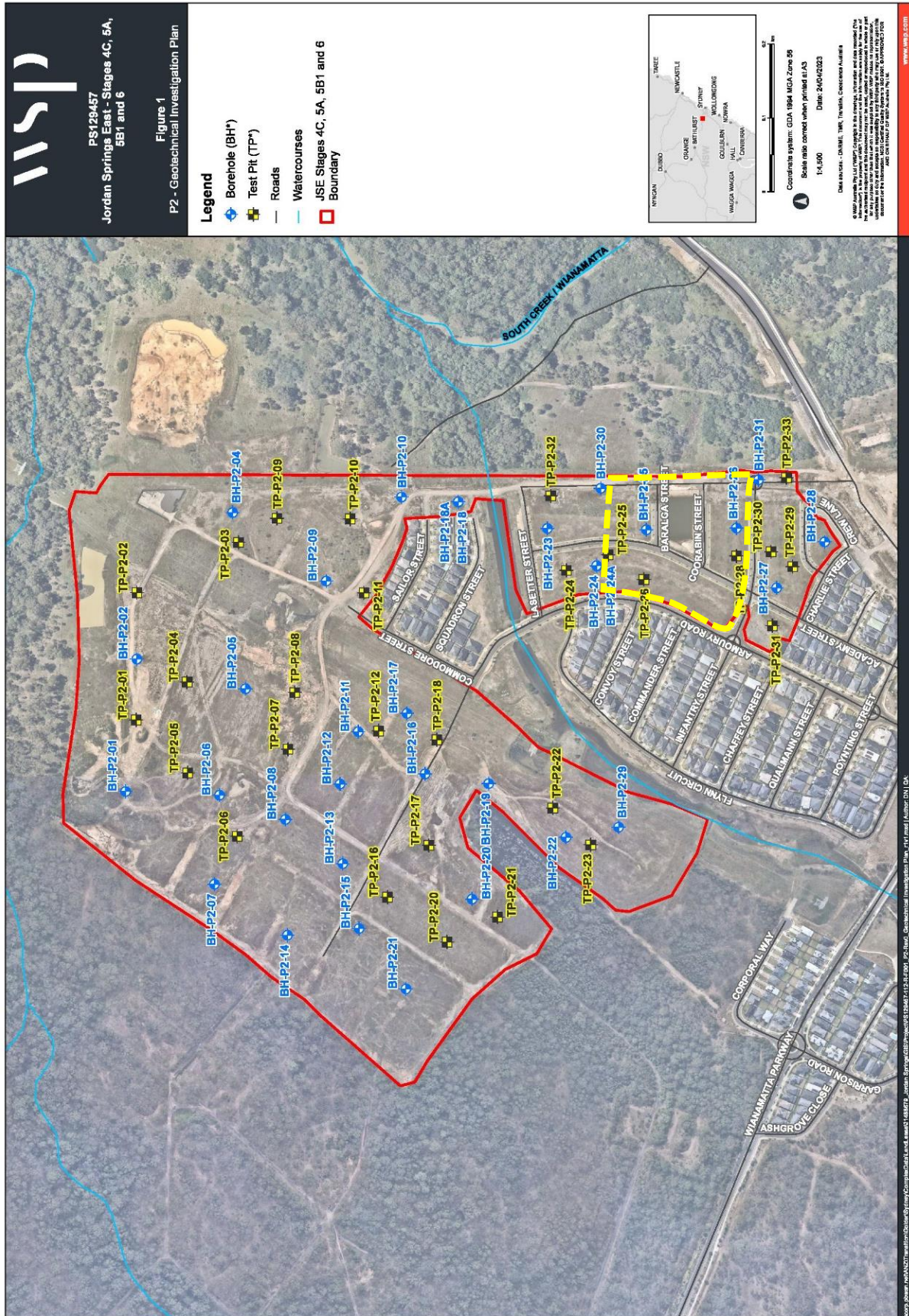


Figure 2: Geotechnical Investigation Plan (Source: WSP (2023, Figure 1)). The Subject Area is outlined in yellow

3.2 Topography and Hydrology

The topography within the Subject Area is predominately determined by the underlying geological formation discussed above (see Section 3.1). The Subject Area is situated on the Cumberland Plain, within the Sydney Basin.

The Subject Area is within the broad physiographic region of Sydney known as the Cumberland Lowlands (Hazelton & Tille, 1990, p. 2). The Cumberland Lowlands largely comprises of generally undulating landscape of low hills or ridges with shallow creek valleys in a rain shadow area, with swamps and lagoons on the floodplain of the Nepean River (NSW National Parks and Wildlife Service, 2003).

The Jordan Springs East area topography was generally flat to undulating prior to filling, occasionally incised by streams or gullies. Natural surface levels ranged from approximately 17 to 20m AHD.

No natural rock outcrops, streams, ponds or any other distinct natural features were noted in the Jordan Springs East area footprint due to the history of fill placement (WSP, 2023, p. 2).

The Subject Area is approximately 200m west of South Creek. On the Cumberland Plain, South Creek is considered to be archaeologically sensitive watercourses. The *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW, 2010c) identifies that land within 200m of any watercourse is a sensitive landform with potential for Aboriginal significance. However, the Subject Area is not considered to be a sensitive landform, as any Aboriginal archaeological deposits would have been removed when the natural A-horizon soil was removed.

3.3 Historic Land Disturbance

The Subject Area is located within the former Australia Defence Industries (ADI) site (formerly the St Marys Munitions Facility) north of St Marys (Brayshaw McDonald, 1994). The St Marys Munitions Facility was established after the outbreak of World War II, when the Commonwealth Government decided to establish an explosive and filling factory at St Marys. According to the ADI plans presented in Brayshaw McDonald (1994), the Subject Area was located on land marked 'flood plain'.

During the Korean War (1950-1953), the St Marys Munitions Facility was re-established. Post-Korean War, construction began on new components of the facility in July 1955. Ammunition production commenced at the factory in 1958. During 1955 and 1958, severe disturbance occurred at various locations across the site (Brayshaw McDonald, 1995, p. 5).

According to the geotechnical investigations by WSP (2023), the natural A-horizon soil has been removed and replaced with fill (refer to Table 2). It suggests that the Subject Area has undergone high levels of ground disturbance.

In addition, historic aerials and satellite images dating from between 1947-2021 were reviewed as part of preparing this PIHA (see Plate 1 to Plate 8). These aerials provide a summary of development at the site and within the surrounding area (refer to Table 3).

| Date | Description |
|------|---|
| 1947 | This aerial photograph shows the Subject Area as an undeveloped open woodland, with a number of stands of trees scattered across the site. |
| 1955 | In this aerial, the Subject Area is consistent with the earlier photograph. There is evidence of land clearance and earthworks occurring to the southeast and east of the Subject Area, with a small amount occurring in the south-east corner of the site. |
| 1975 | This aerial shows that there appears to be no change to the Subject Area. |
| 1991 | This aerial is consistent with the 1975 photograph of the Subject Area. |
| 2010 | This aerial is consistent with the 1975 and 1991 photographs of the Subject Area. |
| 2016 | In this aerial, it is evident that high levels of earthworks have occurred across the Subject Area as part of a large civil works program for the establishment of the development of a residential subdivision. |
| 2019 | The civil works program occurring with the Subject Area is ongoing. A detention basin has been excavated in the central eastern portion of the Subject Area. The roads within the Subject Area as shown in Figure 1 are being constructed. |
| 2021 | Construction on the majority of the road within the Subject Area appear to have been completed. No additional works appear to have occurred. |

Table 3: Summary of Historic Aerial Photographs

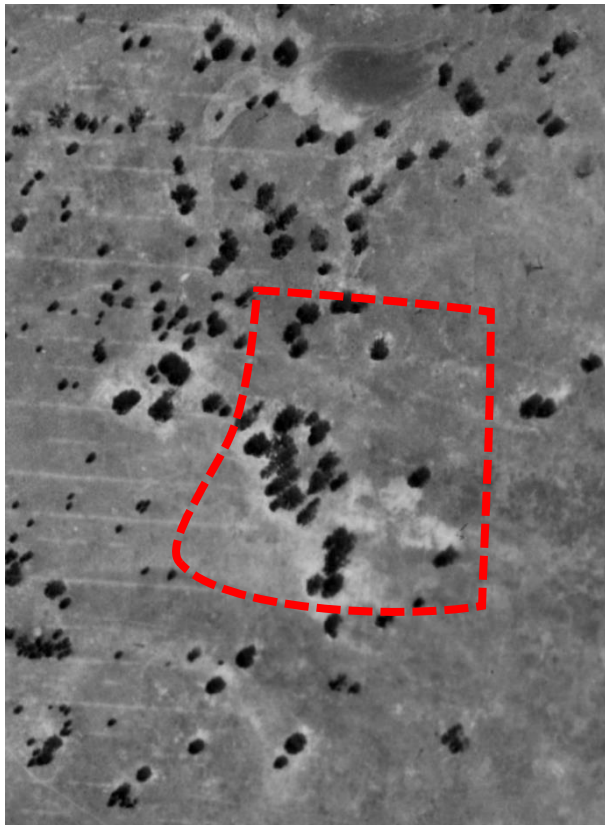


Plate 1: 1947 Aerial Photograph (source: NSW Historical Imagery Viewer)



Plate 2: 1955 Aerial Photograph (source: NSW Historical Imagery Viewer)



Plate 3: 1975 Aerial Photograph (source: NSW Historical Imagery Viewer)



Plate 4: 1991 Aerial Photograph (source: NSW Historical Imagery Viewer)



Plate 5: 2010 Aerial Photograph (source: Nearthmap)



Plate 6: 2016 Aerial Photograph (source: Nearthmap)



Plate 7: 2019 Aerial Photograph (source: Nearmap)



Plate 8: 2021 Aerial Photograph (source: Nearmap)

4 ARCHAEOLOGICAL CONEXT

4.1 Ethnohistory

Early historical observations described the Cumberland Plain as a mosaic of Aboriginal groups associated with particular areas of land. These groups were described as 'tribes' in many historical observations, when in fact they were more likely small territorial clans or local clans consisting of extended family groups, forming larger land-using bands linked through marriage and communal participation in subsistence gathering activities (Attenbrow, 2010, p. 22; Brook & Kohen, 1991).

Prior to the appropriation of their land by Europeans, Aboriginal people lived in small family or clan groups that were associated with territories or places. It seems that territorial boundaries were fairly fluid, although details are not known. Despite conflicting views between historical sources of the exact boundaries of tribal groups in the region, the linguistic evidence does identify distinct language groups at the time of European contact. According to Tindale (1974b), the original inhabitants of the Jordan Springs/Penrith area are most commonly believed to be from the Darug language group – also known as Dharug, Dhar'-rook, Dharruk, Dharook, Daruk, Dharuk, and Dharuck (for consistency, all references in this report will be to Darug). Tindale (1974a, p. 193) describes the boundary of the Darug as being from the mouth of the Hawkesbury River; inland to Mount Victoria, Campbelltown, Liverpool, Camden, and Penrith; at Windsor. Whilst there is much information available regarding the coastal Aboriginal people of Sydney, much less information is available for the Aboriginal people of the Cumberland Plain.

The modelling for Tindale (1974b) was based on an uncritical adoption of the Radcliffe-Brown model of social organization in which the band is perceived as the most important structural feature in Aboriginal social organisation. Tindale's tribal boundaries were largely defined according to what he understood to be language groups (Flood, 1980, p. 107). Tindale's work was conceptualized according to a model of band social organisation in which the 'horde' or clan was considered to be the group which possessed political power and proprietary rights to land (Rumsey, 1989, p. 70). The 'tribes' which Tindale determined to have existed were seen as coterminous with language groups with the implication that these groupings were territorial units.

The British noted a difference between the dialects of the Aboriginal people along the coast compared with those further inland, on the Cumberland Plain. Captain Tench observed when two Aboriginal men from the coast conversed with an Aboriginal man further inland (Tench, 1793, p. 122):

they conversed on a par and understood each other perfectly, yet they spoke different dialects of the same language; many of the most common and necessary words used in life bearing no similitude, and others being slightly different.

Mathews (1901) describes the extent of the tribal boundaries as:

adjoin[ing] the Thurrawal on the north, extending along the coast to the Hawkesbury River, and inland to what are now Windsor, Penrith, Campbelltown, and intervening towns.

In 1794, the Darug nation was known as the 'woods tribes' and was estimated to comprise about 1500 people. The Hawkesbury River – which they called the Dyarubbin – was home to many different clans. The Bediagal clan estimated at 500 people was the largest, and they camped in extended family groups between 20 and 60 people, living a hunter-gatherer lifestyle (Ryan, 2013)

The traditional lifestyles of Aboriginal groups such as the Darug depended largely on the environment in which they lived. Differences were noted in language between the coastal and inland tribes. The

Darug people's economy and subsistence was based on a hunter gatherer society. Whilst coastal groups utilised marine and estuarine resources, hinterland groups relied on freshwater and terrestrial animals and plants (Kohen, 1986b).

Inland population densities were assessed by early settlers as being less than those on the coast. Historical sources regarding the Cumberland Plain suggest that there was a minimum population density of 0.5 persons per km². This is comparable to the coastal zone around Port Jackson with estimates being around 0.75 persons per km² (Attenbrow, 2010).

Changes in settlement patterns are also evident in the archaeological record. Up to 7,000 years ago, rock shelters seem to be the main occupation site used by Aboriginal peoples in the western region of Sydney. Between 4,000 and 1,500 years ago, both rock shelters and open campsites were used. From 1,500 years ago to the spread of European settlement, open campsites were favoured. Much of the archaeological evidence relating to Aboriginal occupation of the region has been found on creek and riverbanks. This has led to the supposition that the Darug spent most of the year near rivers and creeks, moving into the forest during winter (Karskens, 1991, pp. 12-13).

The majority of the surviving cultural material comes in the form of stone tools. The stone used to manufacture tools generally came from two sources: the gravel beds of the Nepean River or silcrete outcrops adjacent to South and Eastern creeks. Basalt pebbles were used for chopping tools and hatchet heads, while chert and silcrete were fashioned into items such as scrapers, spear barbs and cutting tools (Kohen, 1986a, p. 19).

The arrival of European settlers caused major social and economic upheaval for the Aboriginal people living on the Cumberland Plain. Contact with Europeans introduced diseases, such as smallpox, that drastically altered the size and structure of the Aboriginal population, whilst the expansion of settlements and establishment of farmland subsumed the traditional areas used to meet subsistence needs activities (Attenbrow, 2010). While early meetings between the two groups began friendly, conflict soon arose over land and resource use. The new settlers cleared the bush, destroyed traditional food sources, drove off game, and prevented the Darug from gaining access to traditional hunting and gathering areas. One of the earliest incidents occurred in July 1891 when *"a large body of natives appeared in the grounds of one of the new settlers of Prospect Hill, who, alarmed at the sight of a number of natives ... fired off his musquet [sic]"* (Kohen, 1986a, p. 23). Aboriginal people burned his hut in retaliation, but were subsequently fired on by another of the settlers (Karskens, 1991, pp. 14-15; Kohen, 1986a, pp. 23-24).

The remnants of the tribal bands - that had once spread across the whole of the Cumberland Plain - began settling on estates near South Creek, at Eastern Creek and at Bells Creek. Traditional practices continued, but the Darug began to depend more and more on food, clothing and shelter provided by Europeans (Kohen, 1986a).

The Subject Area lies approximately 20kms southeast of the site of the 1794 Hawkesbury River massacre, near Windsor. Ryan (2013) notes that this event, which occurred on the 1st of September 1794, marks the first recorded massacre of Indigenous Australians, and the start of the Hawkesbury frontier wars.

From the late nineteenth century, efforts by the government to control Aboriginal people were substantially increased, and it became correspondingly difficult for local Aboriginal people to maintain a physical connection to their country. However, recent research has allowed an increased

understanding of how Aboriginal people were able to maintain connections to country and varying degrees of social and economic independence from European society (Goodall & Cadzow, 2009).

4.2 AHIMS Database Search

The locations and details of Aboriginal sites are considered culturally sensitive information. It is recommended that this information, including the AHIMS data and GIS imagery, is removed from this report if it is to enter the public domain.

Kayandel carried out a search of the AHIMS database on the 9th of January 2024 using the Client Service ID 853128 with the coordinates set out in Table 4 below.

| Zone 56, GDA94 | Easting | Northing |
|----------------|---------|----------|
| Minimum | 290156 | 6263293 |
| Maximum | 294156 | 6267293 |

Table 4: AHIMS Database Search Criteria

The search area was a 4km square centred upon the Subject Area (see Figure 3 and Appendix II). The results of the AHIMS search are presented in Table 5. A total of one hundred and sixteen (116) Aboriginal sites have been registered within the search area.

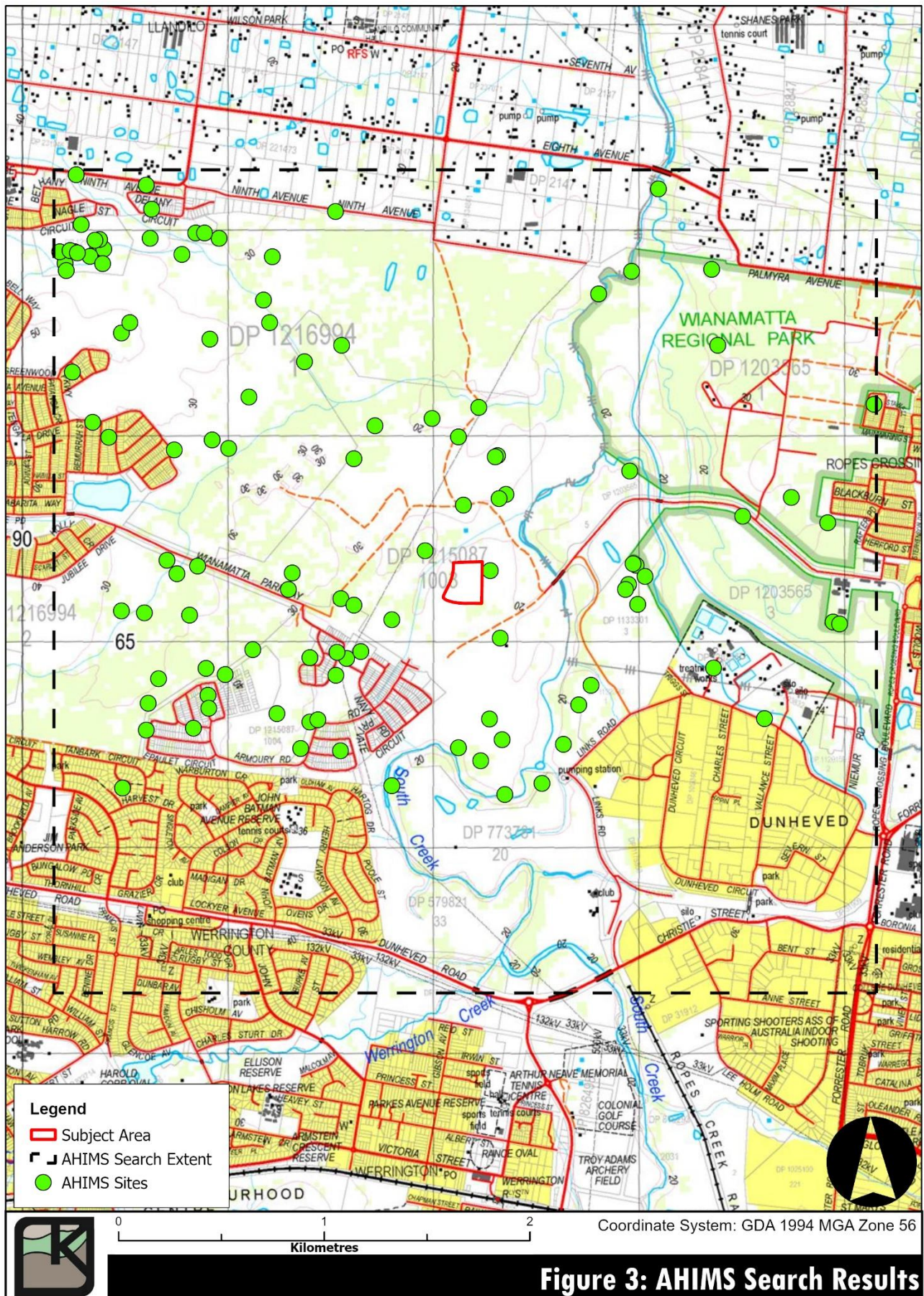
It should be noted that the distribution of sites in the AHIMS database reflects where site surveys have been conducted, where exposure and visibility conditions have enabled the detection of sites, and where sites have survived modern land disturbance. The distribution of sites from AHIMS may not be a true reflection of the existing Aboriginal sites in an area.

| Site types | Total | % |
|--|------------|---------------|
| Open Camp Site | 69 | 59.5% |
| Isolated Find | 27 | 23.3% |
| Open Camp Site with PAD | 15 | 12.9% |
| Potential Archaeological Deposit (PAD) | 2 | 1.7% |
| Quarry Site | 2 | 1.7% |
| Duplicate Site Recording | 1 | 0.9% |
| Total | 116 | 100.0% |

Table 5: Site features from AHIMS search (Client Service ID 853128)

The AHIMS search indicates that sixty-nine (69) of the one hundred and sixteen (116) identified sites are Open Camp Sites (see Table 5). The results are indicative of the number of archaeological assessments that have occurred within the local region, as well as the nature of the landscape, containing numerous permanent water sources to facilitate longer term habitation.

According to review of previous archaeological investigations AHIMS #45-5-4340 (SMDS-CP3) extended into the Subject Area (refer to Figure 4). Godden Mackay Logan and Jo McDonald CHM (2013, p. 70) noted that AHIMS #45-5-4340 comprised of Jo McDonald CHM's SA3 (1997 excavation location), CP13-6 (identified by Godden Mackay Logan as part of the 2013 field survey), and CP3 (the Godden Mackay Logan Area 2013 3 test excavation area). Refer to Section 4.5 for a summary of each of the relevant Aboriginal heritage investigations.





4.3 Previous AHIP(s) Issued

Following Godden Mackay Logan and Jo McDonald CHM (2013) completing the Aboriginal cultural heritage assessment process for St Marys Development Site - Central Precinct (refer to Section 4.5), Maryland Development Company Pty Ltd (AHIP Applicant) lodged an AHIP under s.90 of the *National Parks and Wildlife Act 1974*. Heritage NSW (formerly the Office of Environment and Heritage (OEH)) granted AHIP number C0000362 (AHIMS No. 3647) on 5th June 2014, which is valid for 15 years.

AHIP number C0000362 allowed for impact to identified Aboriginal sites (including AHIMS #45-5-4340 (SMDS-CP3), which as noted in Section 4.2, extended into the Subject Area), as well as unknown Aboriginal sites within the area shown in Figure 5.

As discussed in more detail in Section 4.5, it was proposed that salvage excavation would occur at AHIMS #45-5-4340 (SMDS-CP3) as part of mitigating harm approved by the AHIP. Review of Schedule B2 (salvage excavation) of the AHIP has identified that salvage excavation was proposed for the entirety of the site. Once the salvage works had been completed at AHIMS #45-5-4340 (SMDS-CP3) the site could be destroyed by the development works (refer to "Schedule C: Aboriginal objects which may be harmed through the proposed works" of the approved AHIP).

According to the AHIMS extensive search results, AHIMS #45-5-4340 (SMDS-CP3) has since been destroyed under the AHIP and is no longer extant.

As AHIMS #45-5-4340 (SMDS-CP3) has been destroyed as well as any unknown Aboriginal sites within the area shown in Figure 5, there are no Aboriginal constraints for the Subject Area.

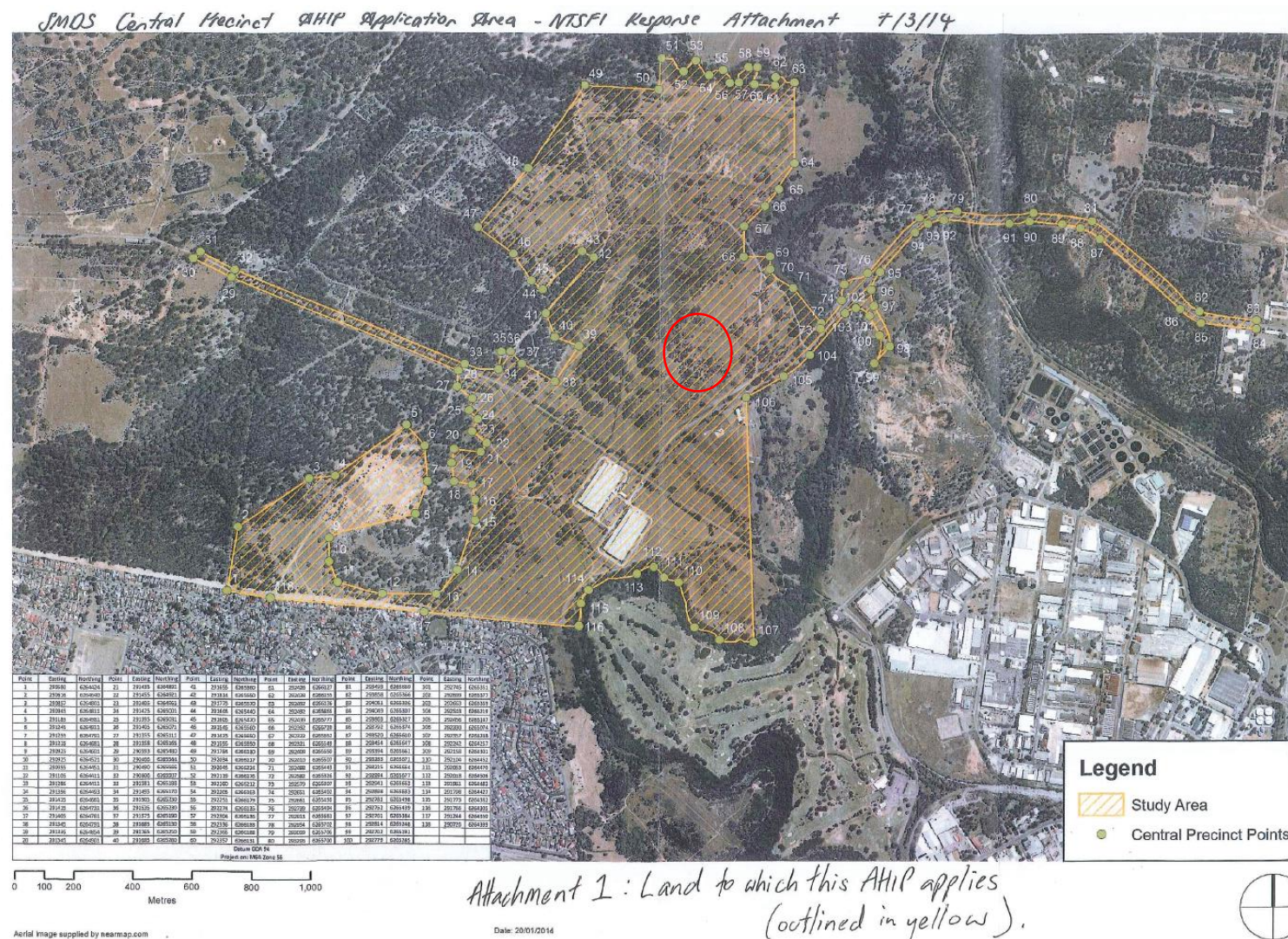


Figure 5: AHIP number C0000362 (AHIMS No. 3647) Attachment 1: Land to which this AHIP applies (outlined in yellow). The location of the Subject Area is circled in red

4.4 Regional Archaeological Context

Archaeological investigations generally fall into three categories - large projects that have been carried out within a research-orientated academic framework and broad management context; archaeological surveys carried out by interested amateurs; and archaeological investigations which have been carried out within a commercial contracting framework and deal with specific localities subject to development or redevelopment.

The spread of urban development across the Cumberland Plain, particularly over the last few decades, has meant that archaeological investigations have intensified as a result for the need of Environmental Impact Assessments. Most archaeological investigations conducted within the Cumberland Plain have been restricted to small study areas, defined by individual developments, and with limited project briefs. As a result, the understanding of Aboriginal utilisation and occupation of the Cumberland Plain is constantly being revised and refined as archaeological data becomes available for the area (AMBS, 2012; Kayandel, 2018; NOHC, 2003).

Regional trends within the Cumberland Plain indicate that Aboriginal sites are likely to be located in close proximity to permanent watercourses, on creek banks and alluvial flats, or on high ground, and within range of food resources and the raw materials for tool making. However, some exception to the regional model have been demonstrated in excavations at Mungerie Park and Parklea Leisure Centre, where large artefact scatters were identified up to 200-250m from major watercourses. McDonald suggested that this site distribution pattern may be due to surface visibility and site formation processes, rather than a true depiction of the cultural distribution of artefacts across the landscape (AMBS, 2012).

Extensive excavation across the Cumberland Plain has shown that areas with no surface evidence often contain sub-surface deposits buried beneath current ground surfaces, and particularly so in aggrading soil landscapes. In a 1997 study Jo McDonald CHM (1997b) found that:

- ✦ 17 out of 61 excavated sites had no surface artefacts before excavation; and,
- ✦ The ratio of surface material to excavated material was 1:25.

The character and composition of the excavated sites in McDonald's study could not be properly predicted on the basis of the surface evidence. It seems that surface evidence (or even the absence of surface evidence) does not necessarily indicate the potential, nature, or density of sub-surface material.

McDonald's results clearly highlight the limitations of surface survey in identifying archaeological deposits in this landscape. The study also shows the importance of test excavation in establishing the nature and density of archaeological material on the Cumberland Plain.

A later study by White and McDonald (2010) developed a predictive model for the distribution of Aboriginal objects across the Cumberland Plain. This is summarised as follows:

Topographic and stream order variables correlate with artefact density and distribution. High artefact density concentrations may have resulted from large number of artefact discard activities and/or from intensive stone flaking. Highest artefact densities occur on terraces and lower slopes associated with 4th and 2nd order streams, especially 50–100 metres from 4th order streams. Upper slopes have sparse discontinuous artefact distributions, but artefacts are still found in these landscape settings. (White & McDonald, 2010, p. 29)

Broadly speaking, Aboriginal people have occupied wider New South Wales area from the Late Pleistocene. Several Pleistocene occupation sites have been identified in the Blue Mountains and within the New South Wales coastal regions (Turbet, 2001). Nanson, Young, and Stockton (1987) excavated a site at Cranebrook Terrace near Penrith with radiocarbon dates of 41,700 +/- 2000-3000. Attenbrow (2010) excavated sites in the Blue Mountains with radiocarbon dates of 22,000 years BP.

Sites on the south coast of New South Wales, such as Burrill Lake (c.20,000) and Bass Point (c.17,000), provide complimentary dates for their use (Bowdler, 1970; Lampert, 1971). At the time of these periods of occupation, both sites would have been within hinterland areas, some distance away from the sea. In the case of Burrill Lake, the sea would have been up to some 16km further east than at present (McDonald, 1992).

4.5 Relevant Archaeological Investigations

Numerous Aboriginal heritage investigations of Jordan Springs (former ADI site) as part of its rehabilitation and residential subdivision. This section summarises the previous Aboriginal heritage investigations that have included the Subject Area.

Brayshaw McDonald (1994)

Brayshaw McDonald was engaged by ADI to provide Aboriginal heritage consultancy services for the rehabilitation of the ADI Site (formerly the St Marys Munitions Facility). As noted in Section 3.3, the Subject Area was located in an area identified as "flood plain".

The ADI site includes arms of the South and Ropes Creeks, as well as the confluence of these two watercourses. Over the three decades, archaeological investigations on the Cumberland Plain have identified that watercourses such as South Creek and Ropes Creek are archaeologically sensitive watercourses.

As part of the preliminary Aboriginal heritage advice provided in 1994, Brayshaw McDonald (1994, p. 2) noted that as part of earlier investigations at the ADI site, eighteen (18) Aboriginal sites were known to occur. It appears that this advice was limited to a desktop review.

Brayshaw McDonald (1995)

Following on from the 1994 advice, Brayshaw McDonald (1995) was engaged by the ADI and Lendlease Developments to provide Aboriginal archaeological management advice which considered the recommendations made in Brayshaw McDonald (1994, p. 2) and the results of the archaeological investigation by Kinhill Engineers (1995) as part of the Review of Environmental Factors (REF).

In the review of the archaeological investigation by Kinhill Engineers (1995) it was noted that Archaeological Zone 1 comprising of Quaternary terraces and floodplains adjacent to South Creek, which the Subject Area was situated on, was considered to contain relatively undisturbed archaeological deposits. This archaeological zone was assessed to have high archaeological sensitivity. However, Brayshaw McDonald (1995, p. 21) argued that Kinhill Engineers were using the terms archaeological zone and sensitive zone interchangeably and did not have a clear definition for defining an area of archaeological potential.

Brayshaw McDonald (1995, p. 1 & 2) recommended that consideration be given to establishing archaeological conservation zones that was representative of the landforms within the ADI site.

Jo McDonald CHM (1997a, 1997b, 1997c)

In 1997, a test excavation programme was undertaken across the former ADI Site for the initial ground-truthing of the strategic management model (SMM).

The report noted that the early planning work for the St Marys Development site targeted at providing a conservation outcome for Indigenous cultural heritage generally across the site, and at facilitating the systematic management of Indigenous cultural heritage in the resultant development Precincts. A strategic management model (SMM) was devised, the overriding aim of which was the preservation of a representative sample of intact landscapes across the St Marys Project.

Five sample areas were tested (Jo McDonald CHM, 1997a, 1997b), and sub-surface artefacts were found in all tested areas. A total of 3,461 stone artefacts were recovered from a combined 113 (1m x 1m) test squares. A range of artefact types were encountered, with most relating to microblade and microlith production (Jo McDonald CHM, 1997c, p. 3 & 4).

While the current Subject Area is situated between Sample Areas 3 (SA3), SA4 and SA5 (Jo McDonald CHM, 1997b, p. 81 & 82), it is closest to SA3 (see Figure 6).

SA3, excavated on alluvial terrace landform on the western bank of South Creek, was found to be heavily disturbed by decontamination works (Jo McDonald CHM, 1997b, p. 82). It had been previously cleared for grazing, and its topsoil had been previously stripped. A total of eighteen test pits were excavated, with only one square containing more than 50 artefacts. A total of 1,163 lithic items were retrieved here, of which 458 (39%) were identifiable stone artefacts. Artefact densities recovered were low (0-1 artefacts/m²). No activity focus was identified (Jo McDonald CHM, 1997a, pp. 33-39, and Figure 3; 1997b, p. 82). On a lower terrace, through which part of the proposed fence line runs, modern alluvium accounted for much of the deposit. This terrace area has been zoned archaeological management zone 3-4 due to previous high levels of disturbance (Jo McDonald CHM, 1997b, Table 20).

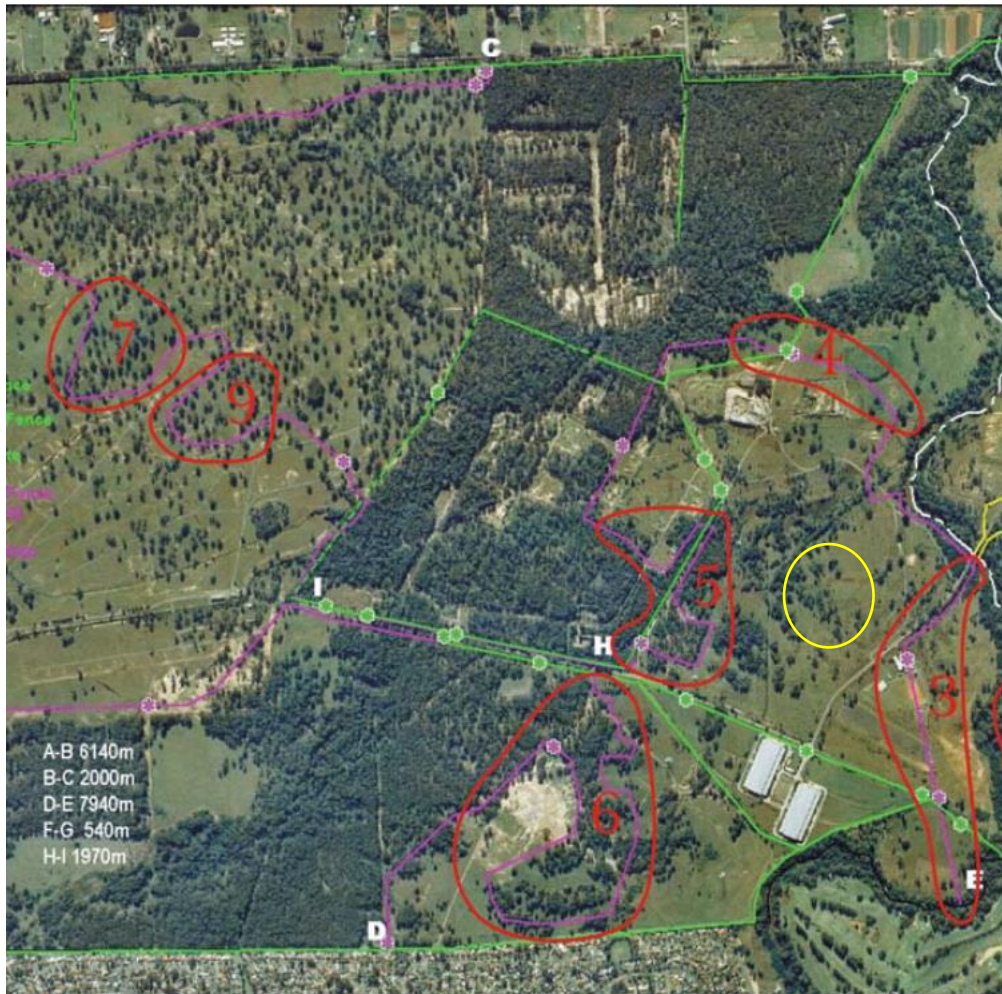


Figure 6: Approximate location of the Jo McDonald (1997) Sample Areas (source: Jo McDonald CHM (2009, p. 33)). The approximate location of the Subject Area is identified by the yellow circle

Jo McDonald CHM (2009)

The former ADI site at St Marys at the time was known as the St Marys Development site, was endorsed by the NSW Government for inclusion on the Urban Development Program (UDP) in 1993. Jo McDonald CHM (2009) was engaged to prepare an Aboriginal heritage archaeological assessment of the St Marys Development site's Central Precinct, the current Subject Area is situated within this precinct.

As part of the investigation, Jo McDonald CHM undertook consultation with the local Aboriginal stakeholders.

On the basis of the SSM, the current Subject Area was located in Zone 3 "moderate potential for intact archaeological evidence". It was recommended that the parts of Zone 3 that would be impacted by developable activities should subject to archaeological investigation, including an excavation program.

The investigation by Jo McDonald CHM (2009) involved a 4 day field survey.

A total of nine new locations with surface stone artefacts were recorded during this survey, most of these being found on areas where there had been some form of previous disturbance. In addition,

four areas of PAD were also documented. None of these finds were recorded within the current Subject Area.

As a result of the 2009 investigation as well as either studies, a total of 25 surface sites with almost 300 artefacts had been recorded within the Central Precinct and Regional Open Space (ROS).

It was proposed that open area salvage excavation be undertaken in eight target areas. These locations were intended to be a representative sample of the landforms within the precinct. Area 3 was located in the southeast portion of the current Subject Area (refer to Figure 7).

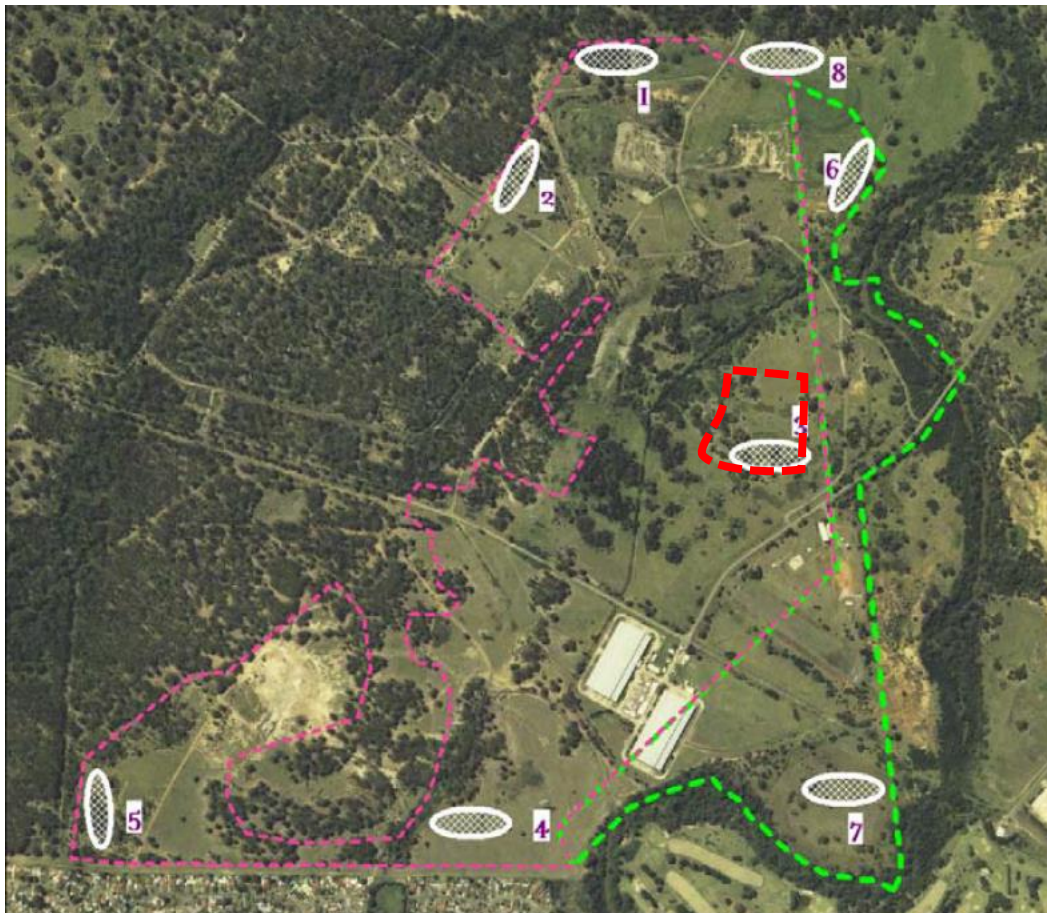


Figure 7: Aerial photo of Central Precinct showing locations of suggested salvage locations (source: Jo McDonald CHM (2009, p. 51)). Subject Area outlined in red

It was recommended that once Council had approved the Development Application, that an application should be made to the Department of Environment and Climate Change (now Heritage NSW) for a Section 87/90 application for Consent with salvage.

Godden Mackay Logan and Jo McDonald CHM (2013)

In 2013, Godden Mackay Logan and Jo McDonald CHM were engaged to Aboriginal Cultural Heritage Assessment Report (ACHAR) and an Archaeological Technical Report (ATR) for the St Marys Development Site Central Precinct which would be used to support an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the *National Parks and Wildlife Act 1974*.

The previous archaeological investigations of the Central Precinct no longer met the then new guidelines for Aboriginal heritage investigations, and as such it was necessary to prepare a new assessment to meet the guidelines:

- ✦ *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b)
- ✦ *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010a); and,
- ✦ *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH, 2011).

As part of undertaking the new investigation, a field survey and archaeological excavation program were also completed. The 2013 field survey was undertaken in order to inspect and identify target areas of the archaeological excavation program. The ACHAR notes that a number of Aboriginal stone artefacts were recorded during the survey.

Following the survey, six areas were identified for the archaeological excavation program – Area 3 included portions of the central eastern part of the Subject Area (refer to Figure 8). A total of 157 test units were excavated across the 6 areas, with six being expanded into 1m x 1m squares. A total of 432 cultural lithics of which 266 were identified as being stone artefacts were recovered from the Central Precinct.

The ACHAR proposed a salvage excavation programme as part of mitigating the harm from the sought for AHIP – one of the locales proposed for salvage was Area 3 (CP3). It was intended that the salvage excavation would investigate the results of the 2013 excavation program in relation to Jo McDonald CHM's SA3 1997 test excavation results. The extent of the salvage at Area 3 would be dependent the nature of the recovered lithic assemblage but would be between 100m² and 200m².



Figure 3.10 General location of 2013 test excavation areas. (Source: GML + JMcDCHM 2013)

Figure 8: General location of the 2013 test excavation areas (source: Godden Mackay Logan and Jo McDonald CHM (2013, p. 46)). Subject Area outlined in yellow

GML Heritage (2018)

Between August and December 2014, GML Heritage (2018) undertook the Aboriginal archaeological salvage excavation of AHIMS #45-5-4340 (SMDS-CP3) (which was one of four salvage locations) in accordance with AHIP number C0000362 (AHIMS No. 3647) (refer to Section 4.3).

This summary will be limited to the results of the salvage excavation at SMDS Central Precinct 3 (CP3), which was located on a relatively large, open flat terrace associated with two paleochannels of South Creek (GML Heritage, 2018, p. 132) (GML Heritage, 2018, p. 132).

Four Open Areas (OA4, OA10, OA11 and OA12), as well as a slot trench connecting OA4 and OA11 (referred to as OA4T), were excavated across CP3. A total of 168m² were excavated across all of CP3, recovering a total of 7087 cultural lithics, including lithics from the original test units around which open area excavations were conducted¹ (20 cultural lithics in total were recovered from the initial test units). The cultural lithics consisted of 4561 artefacts and 2526 other lithics. A total of 113 modern

artefacts were also recovered including glass shards, metal fragments, terracotta ceramic sherds. These items included the remains of three bullet casings. The recovery of bullet fragments from CP3 was not unexpected as the area was once used as a firing range and the terracotta shards are likely the remains of clay shooting targets.

The spatial and vertical distributions, raw materials and technical aspects of the assemblages indicated that CP3 was likely occupied on many occasions with diverse, and often overlapping, lithic discard activities. The lack of raw material conservation techniques applied to larger cores, combined with smaller, more exhausted cores and small flakes from OA12/A, was considered to be further evidence to confirm the complex nature of occupation across CP3, suggesting that raw material conservation across the site varied between occupation events.

Overall, the spatial and vertical distributions, raw materials, and technical aspects of the assemblages from CP3 indicated that CP3 was likely occupied on many occasions over a long span of time, where diverse lithic discard activities were conducted, demonstrating evidence for site complexity.

4.6 Previous Predictive Models

Most archaeological investigations in the greater Cumberland Plain area have been conducted to assess the impact of a specific development on Aboriginal heritage including many State Significant Developments. These investigations often rely on surface survey, which may not be representative of the site as a whole.

Previous archaeological research undertaken in the Cumberland Plain has shown that stream order and landform were important factors influencing artefact density and distribution, and consequently how Aboriginal people utilised the landscape (McDonald, 2008). The predictive model for the Cumberland Plain has shown that Aboriginal sites are likely to occur on lower slopes, or flats at distances of 50-100m from the confluences of 3rd/4th order water courses.





A select number of recently produced comprehensive predictive models relevant and that share similar significant features with the Subject Area are discussed below.

Haglund (1980)

Based on the predictive model prepared by Haglund (1980), it was predicted that open artefact scatters were more likely to occur near water courses such as creeks and soaks and on high ground near water.

Smith (1989)

Smith (1989) made the following predictions for the Cumberland Plain:

-  Sites are most likely to occur in association with water sources;
-  Permanency of the water source, however, is not a determining factor for site location, with a significant quantity of sites found along temporary creek lines;
-  Sites on the Londonderry Clay/Rickabys Creek Formation are likely to be found in association with gravel exposures;
-  Sites dominated by silcrete are less likely to be found west of Marsden Park and South Creek than east of those areas. Isolated finds in these areas are also less likely to be made from silcrete;

- ✦ Sites east of South Creek are likely to be principally stone tool and silcrete manufacturing and processing sites;
- ✦ Sites in the northern Cumberland Plain are expected to have a lower frequency of implements than those in the south;
- ✦ Woodland areas will typically contain sites at lower densities than open forest areas;
- ✦ Surface sites appear to be more common than subsurface sites, and undisturbed stratified sites are rare due to the degree of disturbance;
- ✦ Sites with over 50 artefacts are rare, although very large sites (500+ artefacts) do occur. There is no apparent patterning to the occurrence of these large sites. The pattern of distribution of site size appears to be determined predominantly by visibility; and
- ✦ Sites cannot be divided neatly into 'single use' categories, as most sites were the location of numerous activities.

Brayshaw McDonald (1995)

Brayshaw McDonald (1995) made the following predictions regarding the ADI Site (formerly the St Marys Ammunitions Facility):

- ✦ The general model is one of small groups ranging over a given territory;
- ✦ Archaeological material is likely to occur across the entire study area;
- ✦ Areas of archaeological potential occur wherever there has been limited prior surface disturbance;
- ✦ The size (density and complexity) of archaeological features will vary according to permanence of water (i.e., stream order), landscape unit, and proximity to lithic resources in the following way:
 - In the headwaters of upper tributaries (i.e., 1st order creeks) archaeological evidence will be sparse and represent little more than a background scatter;
 - In the middle reaches of minor tributaries (i.e., 2nd order creeks) there will be archaeological evidence for sparse but focussed activity (e.g., one-off camp locations, single episode knapping floors);
 - In the lower reaches of tributary creeks (e.g., 3rd order creeks) there will be archaeological evidence for more frequent occupation. This will include repeated occupation by small groups, knapping floors (perhaps used and re-used) and evidence of more concentrated activities;
 - On major creeklines such as South and Ropes Creeks there will be archaeological evidence for more permanent or repeated occupation. Sites will be complex and may even be stratified;
- ✦ Creek junctions may provide foci for site activity; the size of the confluence (in terms of stream ranking nodes) could be expected to influence the size of the site;
- ✦ Ridgetop locations between drainage lines will usually contain limited archaeological evidence, although knapping floors or other forms of one-off occupation may be in evidence in such a location;
- ✦ Naturally outcropping silcrete will have been exploited, and evidence for extraction activities (decortication, testing, and limited knapping) would be found in such locations; and,
- ✦ Sites in close proximity to an identified stone source would cover a range of size and cortex characteristics. As one moves away from the resources, the general size of artefacts in the assemblage should decrease, as should the percentage of cortex.

Jo McDonald CHM (2006)

Jo McDonald CHM (2006) made the following predictions regarding the Former ADI Site, in addition to the predictive model produced by Brayshaw McDonald (1995), and referenced above:

- ✦ Where open sites are found in aggrading and stable landscapes, many are intact and have the potential for internal structural integrity. Sites in alluvium possess potential for stratification;
- ✦ Although ploughing occurs in many areas of the Cumberland Plain, it only affects the deposit up to ~30cm depth, and even then, ploughed knapping floors have been located that are still relatively intact;
- ✦ Many sites contain extremely high artefact densities, with variability depending on the range of activity areas and site types present;
- ✦ The complexity of the archaeological record for the Cumberland Plain is far greater than was previously identified on the basis of surface recording and more limited test excavation;
- ✦ Gross site patterning is identifiable on the basis of environmental factors; sites on permanent water are more complex than sites on ephemeral or temporary waterlines;
- ✦ Ridgetops and spurs between creeks may contain archaeological evidence, the density and nature of which may vary according to the proximity of major creeks; and,
- ✦ Sites in close proximity to an identified stone source would cover a range of size and cortex characteristics. As one moves away from the resources, the general size of artefacts in the assemblage should decrease, as should the percentage of cortex. The increasing number of newly discovered silcrete sources has made the testing of the distance decay model more difficult, and suggests that this model is inadequate for explaining raw material preferences and distribution around the Cumberland Plain.

White and McDonald (2010)

White and McDonald (2010) analysed artefact distribution on the north of the Cumberland Plain by examining the results from a number of archaeological investigations in the Rouse Hill area. This research found that artefact distribution varies significantly with stream order, with higher densities of artefacts located next to larger streams. First order streams had a mean density of 0.7 artefacts/m², while for 2nd order streams this was 6.5 artefacts/m², and at 4th order streams this increased to 13.9 artefacts/m². There was not enough data on 3rd order streams to make a comparison (White & McDonald, 2010).

Distance from water was also tested, as this was believed to be a primary determinant of where people camped and hence where artefact density would be represented in the archaeological record. For 1st order streams, distance from water was not a statistically important, with this just being a background scatter. For 2nd order streams, artefact density is highest within 50m of water and declines with increasing distance from water. For 4th order streams, artefact density was found to be highest 51-100m from the stream and lower closer to the stream (<50m) and in declining densities greater than 100m from the stream. White and McDonald propose that lower densities within 50m of larger streams may be reflective of a range of factors including erosion and sheet wash adjacent to major streams. Behaviour may also be a factor such as people conducting knapping, artefact discard and hunting activities slightly further away (White & McDonald, 2010, p. 33).

In terms of landforms, terraces yielded the highest densities. Terraces had a mean density of 20.8 artefacts/m². Mean densities for other landforms are as follows: creek flat 3.8 artefacts/m², lower

slope 8.4 artefacts/m², mid slope 3.8 artefacts/m², and upper slope and ridge top 0.4 artefacts/m² (White & McDonald, 2010).

Biosis (2019)

Biosis (2019) made the following predictions regarding another site in Jordan Springs, approximately 2.5km west of the Subject Area:

- ✿ Artefact scatter sites can range from high-density concentrations of flaked stone and ground stone artefacts to sparse, low-density 'background' scatters and isolated finds;
- ✿ There is a high potential for stone artefact sites to be present in undisturbed portions of the study area, as they have been previously recorded in the region across a wide range of landforms;
- ✿ There is a moderate potential for PADs to be present within undisturbed landforms in the study area, as they have been previously recorded in the region across a wide range of landforms;
- ✿ Shell middens can be located in the vicinity of permanent water sources, however there is a low potential for shell midden sites to be present, as none have been recorded within or in the vicinity of the study area;
- ✿ There is a low potential for quarries to be present within the study area;
- ✿ There is a low potential for grinding grooves to be present within the study area due to the lack of suitable horizontal sandstone rock outcrops;
- ✿ There is a low potential for scarred trees to be present due to extensive European land clearance;
- ✿ Aboriginal burial sites are generally situated within deep, soft sediments, caves, or hollow trees. Areas of deep sandy deposits will have the potential for Aboriginal burials, however the soil profiles present within the study area are not commonly associated with burials;
- ✿ There is a lack of sandstone exposures or overhangs in the study area, so rock shelters will not be encountered; and,
- ✿ There are no post-contact sites previously recorded within the study area.

4.7 Aboriginal Heritage Predictions for the Subject Area

The review of the environmental context, results of the AHIMS search and site analyses can be used to inform a site distribution model with consideration of the details of the landscape of the Subject Area. In the surrounding region, open camp sites are the most prevalent site type.

The below predictions have been made for the Subject Area:

- ✿ Given the extent to which the Subject Area has previously been disturbed, there is considered to be low-to-nil potential for artefact scatters to be present within the Subject Area;
- ✿ Areas of cut and fill disturbance are considered unlikely to contain Aboriginal archaeological deposits because artefact bearing soil units would have been removed. These areas are considered to have negligible archaeological sensitivity;
- ✿ Scarred and carved trees would not be expected in areas where land clearance has resulted in the removal of old growth trees;
- ✿ PADs may occur in locations with minimal previous land disturbance;
- ✿ Artefact scatters are most commonly linked to the close proximity of permanent water sources in areas such as creek and riverbanks and alluvial flats;
- ✿ Aboriginal sites with large numbers of artefacts can occur on ridge tops and hill crests; and,

- ✦ While the proximity of the Subject Area to South Creek would typically indicate the potential for Aboriginal sites to be present, the removal of the natural A-horizon soil profile within the Subject Area would have removed any Aboriginal archaeological deposits present. As such, Aboriginal archaeological sites are not anticipated to be present within the Subject Area.

5 SITE INSPECTION

Pedestrian survey was undertaken at the Subject Area on the 2nd May 2024 by Natalie Stiles. The main aims of the field assessment were to identify Aboriginal objects, identify areas with potential to retain intact subsurface archaeological deposits, and to assess the overall intactness of the Subject Area.

The field assessment included the completion of visual inspections throughout all readily accessible portions of the Subject Area. Detailed inspections were carried out at the location of ground surface exposures, which may contain stone artefacts.

There were no mature trees present within the Subject Area.

Ground Surface Visibility (GSV) was low across the majority of the Subject Area, as much of the Subject Area was grassed with areas of asphalt (refer to Plate 9 to Plate 21).

No previously unrecorded Aboriginal objects were identified during the survey.



Plate 9: Looking north across the Subject Area



Plate 10: Looking west across the Subject Area



Plate 11: Looking east across the Subject Area



Plate 12: Looking northeast across a detention basin



Plate 13: View looking west from Academy Street



Plate 14: Looking north along Academy Street



Plate 15: Looking southwest from Academy Street



Plate 16: Looking south towards the detention basin



Plate 17: Example of an area with high GSV



Plate 18: Looking south with water connections
down the centre



Plate 19: Looking south along the western boundary



Plate 20: Looking south along the edge of the emplaced fill



Plate 21: Looking north along the edge of the emplaced fill

6 PRINCIPAL FINDINGS

This Preliminary Indigenous Heritage and Impact Assessment has been prepared in accordance with Heritage NSW's *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW 2010* (DECCW, 2010c).

The discussion presented in Sections 3.1.1 and 3.3 identifies that the Subject Area has undergone high levels of ground disturbance, including the placement of anthropogenic fill over the Subject Area as part of earthworks undertaken in 2016/2017 to form the current topography (WSP, 2023). Geotechnical investigation completed by WSP (2023) identified that the Subject Area's original soil profile has been removed, and that up to 5m of fill has been emplaced across the Subject Area.

No previously recorded or unrecorded Aboriginal objects, PADs or archaeologically sensitive landforms were identified as a result of the background research of the Subject Area. Kayandel notes that while the Subject Area's positioning approximately 200m west of South Creek (an archaeologically sensitive watercourse) would typically signify its potential to be an archaeologically sensitive landform, as per the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW, 2010c), in this case is not considered to be a sensitive landform, as any Aboriginal archaeological deposits would have been removed at the time that the natural A-horizon soil was removed.

AHIP number C0000362 (AHIMS No. 3647) was issued by Heritage NSW (formerly OEH) on 5th June 2014. The AHIP is valid for 15 years. As discussed in Section 4.3, the AHIP area includes the Subject Area (refer to Figure 5). Refer to the discussion in Section 4.3 for more details.

In consideration of previous disturbance levels, the Subject Area has been assessed as having nil potential to contain archaeological deposits. As such, it has been determined that no further investigation is required to inform the proposed works (refer to Section 1.2).

7 OBLIGATIONS AND RECOMMENDATIONS

Specific clauses within the *National Parks and Wildlife Act, 1974* (as amended) and the *National Parks and Wildlife Regulations 2009* give rise to certain obligations. Recommendations for other tasks and activities to be undertaken come from the application of industry standards. Where an activity or task must be undertaken to comply with relevant legislation it will be detailed in Section 7.1, where a task or activity is recommended to be undertaken to meet the current industry standards it is presented in Section 7.2.

7.1 Obligations

1. Should Aboriginal sites and/or objects be found during the proposed work, work must cease immediately, and Heritage NSW must be contacted to inspect the artefacts; and,
2. An AHIP under Part 6 of the *National Parks and Wildlife Act, 1974* is required for any impacts to Aboriginal objects.

7.2 Recommendations

The following recommendations regarding Aboriginal heritage are based on consideration of:

- ✦ The legal requirements of the *National Parks and Wildlife Act 1974* (as amended), whereby it is illegal to damage, deface or destroy an Aboriginal relic without first obtaining the written consent of the Director General of National Parks & Wildlife Service;
- ✦ The results of the background research, archaeological survey and assessment;
- ✦ The high-level of historic ground disturbance;
- ✦ The issuing of an AHIP which included the land considered in this assessment;
- ✦ The likely impacts of the proposed works; and,
- ✦ That the approval pathway for the project will be as a State Significant Development (SSD).

It is therefore recommended that:

1. It has been assessed that the works are unlikely to result in any impacts to known or unknown Aboriginal objects;
2. If an application for SSD approval is made, it is recommended that consideration be given to potentially modifying the Aboriginal cultural heritage component of the Planning Secretary's Environmental Assessment Requirements (SEARs) to reflect the issuing of a previous AHIP over the land and historic land disturbance (approved under the AHIP);
3. All relevant staff and contractors should be made aware of their statutory obligations for heritage under the *National Parks and Wildlife Act 1974*, which may be implemented as a heritage induction;
4. If unrecorded Aboriginal object or objects are identified in the Subject Area during works, then all works in the immediate area must cease and the area should be cordoned off. Heritage NSW and the Local Aboriginal Land Council should be contacted so the site can be adequately assessed and managed; and,
5. In the unlikely event that skeletal remains are identified, work must cease immediately in the vicinity of the remains and the area must be cordoned off. The Proponent must contact the local NSW Police who will make an initial assessment as to whether the remains are part of a crime scene, or possible Aboriginal ancestral remains. If the remains are thought to be Aboriginal ancestral remains, Heritage NSW must be contacted by ringing the Enviroline 131 555. If the remains are identified as Aboriginal ancestral remains, a management plan must

be developed in consultation with the relevant Aboriginal stakeholders before works recommence.

8 REFERENCES

- AMBS. (2012). *Indigenous Heritage Assessment Project: Austral & Leppington North Precincts, South West Growth Centres* (Vol. 2: Sensitive Aboriginal Site Information and Appendices (Not for Public Exhibition)). Report for NSW Department of Planning and Infrastructure.
- Attenbrow, V. (2010). *Sydney's Aboriginal Past. Investigating the Archaeological and Historical Records* (2nd ed.). Sydney: UNSW Press.
- Bannerman, S. M., & Hazelton, P. A. (1990). *Soil Landscapes of the Penrith 1:100,000 Sheet map and report*. Sydney: Soil Conservation Service of NSW.
- Biosis. (2019). *Jordan Springs Public School, Jordan Springs: Archaeological Report* (Vol. Final Report). Prepared for School Infrastructure NSW.
- Bowdler, S. (1970). *Bass Point, the excavation of a south-east Australian shell midden, showing cultural and economic change*. (B.A. (Hons)). Sydney University, Sydney.
- Branagan, D. F., & Packham, G. H. (2000). *Field Geology of New South Wales*. Sydney: Department of Mineral Resources New South Wales.
- Brayshaw McDonald. (1994). *An Assessment of the Archaeological Context and Landuse History for Aboriginal Archaeology in the Australian Defence Industries Site, St Mary's, NSW*. Report Prepared for ADI Ltd, NSW Property Group.
- Brayshaw McDonald. (1995). *Further Assessment of Archaeological Management Strategies for the ADI Site, St Marys, NSW*. Prepared for ADI and Lend Lease Development.
- Brook, J., & Kohen, J. L. (1991). *The Parramatta Native Institution and the Black Town: A History*. Kensington, New South Wales: New South Wales University Press.
- Clark, N. R., & Jones, D. C. (1991). *Penrith 1:100 000 Geological Sheet 9030* (1st edition ed.). Sydney: Geological Survey of New South Wales.
- DECCW. (2010a). *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*. Sydney South: Department of Environment, Climate Change and Water NSW
- DECCW. (2010b). *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. Sydney South: Department of Environment, Climate Change and Water NSW
- DECCW. (2010c). *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*. Sydney South: Department of Environment, Climate Change and Water NSW
- Flood, J. M. (1980). *The Moth Hunters: Aboriginal prehistory of the Australian Alps*. Canberra: Australian Institute of Aboriginal Studies.
- GML Heritage. (2018). *SMDS Central Precinct - Aboriginal Archaeological Salvage Excavation Post Excavation Report* (Vol. 1: Main Report Sections 1–8). Prepared for Maryland Development Company Pty Ltd.
- Godden Mackay Logan, & Jo McDonald CHM. (2013). *St Marys Development Site, Central Precinct: Aboriginal Cultural Heritage Assessment Report*. Prepared for Maryland Development Company Pty Ltd.
- Goodall, H., & Cadzow, A. (2009). *Rivers and resilience: Aboriginal people on Sydney's Georges River*. UNSW Press.

- Haglund, L. (1980). *Preliminary Survey to Assess Archaeological Resources in the Area of the Proposed Kerrabee Dam*. Prepared for National Parks and Wildlife Service of NSW and the Water Resources Commission.
- Hazelton, P. A., & Tille, P. J. (1990). *Soil landscapes of the Wollongong-Port Hacking 1:100 000 Sheet*. Sydney: Soil Conservation Service of NSW.
- Jo McDonald CHM. (1997a). *ADI Site St Marys. Test Excavation of five sites - Interim Report*. Report to Lend Lease - ADI Joint Venture in response to the Section 22 Committee.
- Jo McDonald CHM. (1997b). *Interim Heritage Management Report ADI Site, St Marys*.
- Jo McDonald CHM. (1997c). *Surface survey at the Central end of the ADI Site, St Marys NSW: An initial attempt to groundtruth the proposed archaeological management strategy*. Report prepared for ADI and Lend Lease Development.
- Jo McDonald CHM. (2006). *Archaeological Salvage Excavations at the St Marys Project Eastern Precinct: Site ADI: EPI (NPWS #45-5-2994)*. Report prepared for Lend Lease.
- Jo McDonald CHM. (2009). *Archaeological Assessment of Indigenous Heritage values in the Central Precinct of the St Marys Development Site, St Marys*. Report to Maryland Development Company.
- Karskens, G. (1991). *Holroyd: A Social History of Western Sydney*. Sydney: New South Wales University Press.
- Kayandel. (2018). *Proposed Residential Subdivision, Lots 44 & 45 DP2475 Twentieth Avenue, Hoxton Park, Liverpool City Council LGA, NSW: Aboriginal Cultural Heritage Assessment Report*. Prepared on behalf of the Uniprop Holdings Pty Ltd.
- Kinhill Engineers. (1995). *Australian Defence Industries Site - St Marys, Regional Environmental Study: Technical Report No. 4. Characteristics of the Site (Vol. Second Draft)*. Prepared for Joint Planning Team, Department of Planning.
- Kohen, J. L. (1986a). *An Archaeological Study of Aboriginal Sites Within the City of Blacktown*. Prepared for the Blacktown City Council.
- Kohen, J. L. (1986b). *Prehistoric Settlement in the Western Cumberland Plain: Resources, Environment and Technology*. (Doctor of Philosophy Doctor of Philosophy). Macquarie University, Sydney.
- Lampert, R. J. (1971). *Burrill Lake and Currarong: Coastal sites in southern New South Wales (J. Golson Ed. Vol. 1)*. Canberra, ACT: Department of Prehistory, Research School of Pacific Studies, Australian National University.
- Mathews, R. H. (1901). The Gundungurra Language. *Proceedings of the American Philosophical Society*, 40(167), 140-148.
- McDonald, J. (1992). *The Archaeology of Angophora Reserve Rock Shelter*. Sydney: National Park and Wildlife Services.
- McDonald, J. (2008). *Dreamtime Superhighway: Sydney Basin Rock Art and Prehistoric Information Exchange*. Canberra: ANU E-Press.
- Nanson, G. C., Young, R. W., & Stockton, E. D. (1987). Chronology and Palaeoenvironment of the Cranebrook Terrace (near Sydney) Containing Artefacts more than 40,000 Years Old. *Archaeology in Oceania*, 22(2), 72-78.

- NOHC. (2003). *Georges River Program Stage 2: Proposed Recycled Water Pipeline and Overflow Abatement Works at Glenfield and Liverpool Sewage Treatment Plants: Assessment of Indigenous Heritage*. Prepared for Parsons Brinckerhoff Pty Ltd on behalf of Sydney Water.
- NSW National Parks and Wildlife Service. (2003). Sydney Basin Bioregion. In *The Bioregions of New South Wales: their biodiversity, conservation and history* (pp. 185-196). Retrieved from <http://www.environment.nsw.gov.au/resources/nature/sydneyBasin.pdf>
- OEH. (2011). *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*. South Sydney: Office of Environment and Heritage
- Rumsey, A. (1989). Language Groups in Australian Aboriginal Land Claims. *Anthropological Forum*, VI(1), 69-79.
- Ryan, L. (2013). Untangling Aboriginal resistance and the settler punitive expedition: the Hawkesbury River frontier in New South Wales, 1794–1810. *Journal of Genocide Research*, 15(2), 219-232. doi:10.1080/14623528.2013.789206
- Smith, L. (1989). *Archaeological Site Survey and Analysis of Sites on the Northern Cumberland Plain*. Report for National Parks and Wildlife Service.
- Tench, W. (1793). *A Complete Account of the Settlement at Port Jackson: Including An Accurate Description of the Situation of the Colony; of the Natives; and Of Its Natural Productions*. London: G. Nicol and J. Sewell.
- Tindale, N. B. (1974a). *Aboriginal Tribes of Australia - Their Terrain, Environmental Controls, Distribution, Limits and Proper Names*. Canberra: Australian National University Press.
- Tindale, N. B. (Cartographer). (1974b). Tribal Boundaries in Aboriginal Australia
- Turbet, P. (2001). *The Aborigines of the Sydney District before 1788 revised edition*. East Roseville: Kangaroo Press.
- White, B., & McDonald, J. (2010). Lithic Artefact Distribution in the Rouse Hill Development Area, Cumberland Plain, New South Wales. *Australian Archaeology*, 70, 29-38.
- WSP. (2023). *Jordan Springs East - Stage 3 to 6 Geotechnical Investigation Report - Factual*. Prepared for Lendlease Communities.

Appendix I. Proposed Plans



NSW Department of Education – School Infrastructure

7.0 Option 1 - 1000 Students

A 3 Storey high school that creates a new school address to Armory Road.

- 48 Teaching spaces (1000 students) + 3 teaching space SLU hub
- Open play space - 10000m² = 10m²/student

7.1 Option features

- All buildings sit outside of the nominated bushfire buffer zone
- Strong street presence and visibility within precinct
- Good use of street frontage for school access
- Open play space connects to adjacent bushland and potential green link

7.2 Option challenges

- The school building scale within the 1-2 storey contexts requires consideration of the building setback. A 10m nominal setback has been used.
- Locating buildings and extensive vegetation within the bushfire buffer zone is restricted

Jordan Springs High School – Concept Master Plan for a new school

Appendix II. AHIMS Search Results

The locations and details of Aboriginal sites are considered culturally sensitive information. It is recommended that this information, including the AHIMS data, is removed from this PIHAI if it is to enter the public domain.



AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : KA-227

Client Service ID : 853128

Kayandel Archaeological Services

Date: 09 January 2024

PO Box 440 15 Henry Street

Picton New South Wales 2571

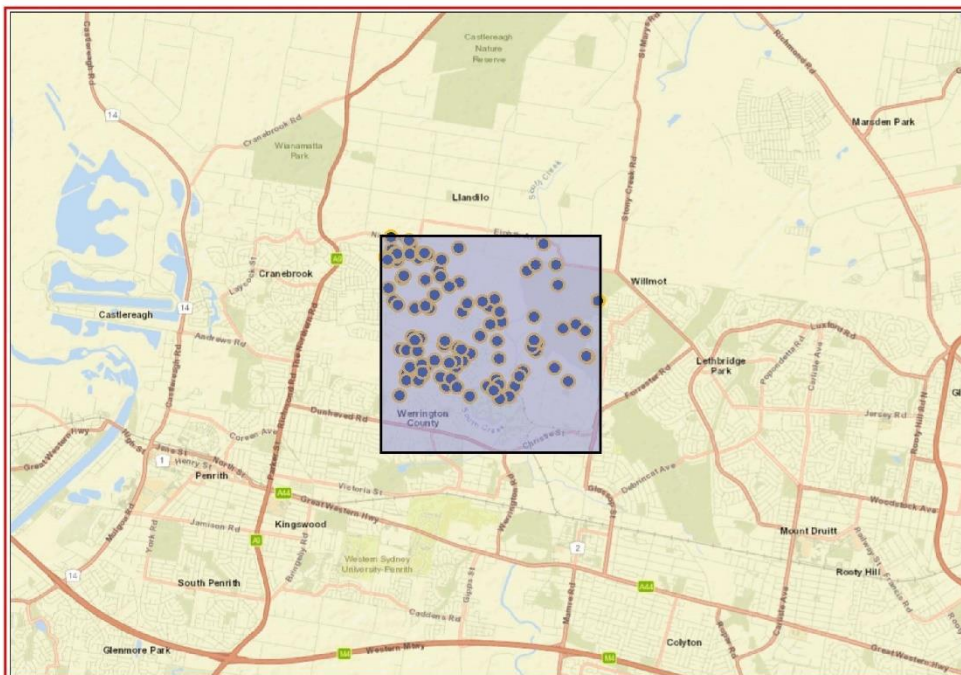
Attention: Lance Syme

Email: lance.syme@kayandel.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 290156.0 - 294156.0, Northings : 6263293.0 - 6267293.0 with a Buffer of 0 meters, conducted by Lance Syme on 09 January 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:

| | |
|-----|---|
| 116 | Aboriginal sites are recorded in or near the above location. |
| 0 | Aboriginal places have been declared in or near the above location. * |

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

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

Important information about your AHIMS search

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

Proposed Construction of a New High School at Jordan Springs East, Penrith City Council
Preliminary Indigenous Heritage Assessment and Impact Report



AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : KA-227
Client Service ID : 853132

| SiteID | SiteName | Datum | Zone | Easting | Northing | Context | Site Status ** | SiteFeatures | SiteTypes | Reports |
|-----------|--|---------------------------|---|---------|----------|-----------|----------------|--------------------------------|------------------------|----------------------|
| 45-5-1043 | ADI-42; | AGD | 56 | 290140 | 6266120 | Open site | Valid | Artefact : - | Isolated Find | 102450,102577 |
| | Contact | Recorders | Doctor.Jo McDonald | | | | | Permits | | |
| 45-5-1044 | ADI-43; | AGD | 56 | 291070 | 6266470 | Open site | Valid | Artefact : - | Open Camp Site | 102577 |
| | Contact | Recorders | Doctor.Jo McDonald | | | | | Permits | 873 | |
| 45-5-1045 | ADI-44; | AGD | 56 | 291100 | 6266360 | Open site | Valid | Artefact : - | Open Camp Site | |
| | Contact | Recorders | Doctor.Jo McDonald | | | | | Permits | | |
| 45-5-1046 | ADI-45; | AGD | 56 | 290500 | 6267030 | Open site | Valid | Artefact : - | Isolated Find | 102450 |
| | Contact | Recorders | Doctor.Jo McDonald | | | | | Permits | | |
| 45-5-1047 | ADI-46; | AGD | 56 | 290160 | 6267080 | Open site | Valid | Artefact : - | Isolated Find | 102450 |
| | Contact | Recorders | Doctor.Jo McDonald | | | | | Permits | | |
| 45-5-1051 | ADI-50; | AGD | 56 | 291270 | 6266170 | Open site | Valid | Artefact : - | Open Camp Site | |
| | Contact | Recorders | Doctor.Jo McDonald | | | | | Permits | | |
| 45-5-1052 | ADI-51; | AGD | 56 | 290810 | 6266280 | Open site | Valid | Artefact : - | Open Camp Site | 102450 |
| | Contact | Recorders | Doctor.Jo McDonald | | | | | Permits | | |
| 45-5-1053 | ADI-52; | AGD | 56 | 290380 | 6266310 | Open site | Valid | Artefact : - | Open Camp Site | 102450 |
| | Contact | Recorders | Doctor.Jo McDonald | | | | | Permits | | |
| 45-5-1054 | ADI-53; | AGD | 56 | 290420 | 6266360 | Open site | Valid | Artefact : - | Open Camp Site | 102450 |
| | Contact | Recorders | Doctor.Jo McDonald | | | | | Permits | | |
| 45-5-1055 | ADI-54; | AGD | 56 | 290820 | 6265790 | Open site | Valid | Artefact : - | Isolated Find | 102450,102577,103618 |
| | Contact | Recorders | Doctor.Jo McDonald | | | | | Permits | 3057 | |
| 45-5-0992 | ADI-2; | AGD | 56 | 293400 | 6265420 | Open site | Valid | Artefact : -, Stone Quarry : - | Open Camp Site, Quarry | |
| | Contact | Recorders | Margrit Koettig, Rex Silcox, Miss. Marjorie Sullivan, Phil Hughes | | | | | Permits | | |
| 45-5-0993 | ADI-3; | AGD | 56 | 292850 | 6265640 | Open site | Valid | Artefact : -, Stone Quarry : - | Open Camp Site, Quarry | |
| | Contact | Recorders | Margrit Koettig, Rex Silcox, Miss. Marjorie Sullivan, Phil Hughes | | | | | Permits | | |
| 45-5-1008 | ADI-18; | AGD | 56 | 291450 | 6266250 | Open site | Valid | Artefact : - | Open Camp Site | |
| | Contact | Recorders | Margrit Koettig, Rex Silcox, Miss. Marjorie Sullivan, Phil Hughes | | | | | Permits | | |
| 45-5-1009 | ADI-19; | AGD | 56 | 291420 | 6266900 | Open site | Valid | Artefact : - | Open Camp Site | 102577 |
| | Contact | Recorders | Margrit Koettig, Rex Silcox, Miss. Marjorie Sullivan, Phil Hughes | | | | | Permits | 2082 | |
| 45-5-1012 | ADI-5; | AGD | 56 | 293280 | 6266250 | Open site | Valid | Artefact : - | Open Camp Site | |
| | Contact | Recorders | Margrit Koettig, Rex Silcox, Miss. Marjorie Sullivan, Phil Hughes | | | | | Permits | | |
| 45-5-1013 | ADI-6; | AGD | 56 | 292860 | 6266610 | Open site | Valid | Artefact : - | Open Camp Site | |
| | Contact | Recorders | Margrit Koettig, Rex Silcox, Miss. Marjorie Sullivan, Phil Hughes | | | | | Permits | | |
| 45-5-0347 | St Marys Commonwealth Weapons Testing Area | AGD | 56 | 292990 | 6267010 | Open site | Valid | Artefact : - | Open Camp Site | 260,1018 |
| | Contact | Recorders | C Bennett | | | | | Permits | | |

Report generated by AHIMS Web Service on 09/01/2024 for Lance Syme for the following area at Datum :GDA, Zone : 56, Eastings : 290156.0 - 294156.0, Northings : 6263293.0 - 6267293.0
with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 116

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

Page 1 of 8

Proposed Construction of a New High School at Jordan Springs East, Penrith City Council
Preliminary Indigenous Heritage Assessment and Impact Report



AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : KA-227
Client Service ID : 853132

| SiteID | SiteName | Datum | Zone | Eastings | Northing | Context | Site Status ** | SiteFeatures | SiteTypes | Reports |
|-----------|---------------------|------------------|------|----------|----------|--|----------------|----------------|----------------|--------------------|
| 45-5-0266 | South Creek;; | GDA | 56 | 291550 | 6264470 | Open site | Destroyed | Artefact : - | Open Camp Site | 260,1018 |
| | Contact | Recorders | | | | Margrit Koettig,GML Heritage Pty Ltd - Surry Hills,Ms.Erin Mein | | Permits | 3647 | |
| 45-5-0269 | Ninth Avenue EKC 33 | AGD | 56 | 292700 | 6266500 | Open site | Valid | Artefact : - | Open Camp Site | 260,1018,1119 |
| | Contact | Recorders | | | | ASRSYS | | Permits | | |
| 45-5-1014 | ADI-7; | AGD | 56 | 290900 | 6265750 | Open site | Valid | Artefact : - | Open Camp Site | 102450 |
| | Contact | Recorders | | | | Margrit Koettig,Rex Silcox,Miss.Marjorie Sullivan,Phil Hughes | | Permits | | |
| 45-5-1016 | ADI-8; | GDA | 56 | 292327 | 6265017 | Open site | Destroyed | Artefact : - | Open Camp Site | |
| | Contact | Recorders | | | | Margrit Koettig,Rex Silcox,Miss.Marjorie Sullivan,Phil Hughes,GML Heritage Pty Ltd | | Permits | 3647 | |
| 45-5-1017 | ADI-9 | GDA | 56 | 292123 | 6264485 | Open site | Destroyed | Artefact : - | Open Camp Site | |
| | Contact | Recorders | | | | Margrit Koettig,Rex Silcox,Miss.Marjorie Sullivan,Phil Hughes,GML Heritage Pty Ltd | | Permits | 3647 | |
| 45-5-1018 | ADI-10 | GDA | 56 | 292348 | 6264257 | Open site | Destroyed | Artefact : - | Open Camp Site | |
| | Contact | Recorders | | | | Margrit Koettig,Rex Silcox,Miss.Marjorie Sullivan,Phil Hughes,GML Heritage Pty Ltd | | Permits | 3647 | |
| 45-5-0702 | WD63 | AGD | 56 | 290650 | 6265140 | Open site | Valid | Artefact : - | Open Camp Site | 1380,102450,102577 |
| | Contact | Recorders | | | | Laura-Jane Smith | | Permits | 873 | |
| 45-5-0703 | WD64 | AGD | 56 | 290560 | 6264630 | Open site | Valid | Artefact : - | Open Camp Site | 1380 |
| | Contact | Recorders | | | | Laura-Jane Smith | | Permits | | |
| 45-5-0704 | WD65 | GDA | 56 | 290905 | 6264740 | Open site | Destroyed | Artefact : - | Open Camp Site | 1380,102577 |
| | Contact | Recorders | | | | Laura-Jane Smith,GML Heritage Pty Ltd - Surry Hills,Ms.Erin Mein | | Permits | 3647 | |
| 45-5-0705 | WD66 | AGD | 56 | 290790 | 6264680 | Open site | Valid | Artefact : - | Open Camp Site | 1380,102450 |
| | Contact | Recorders | | | | Laura-Jane Smith | | Permits | | |
| 45-5-0708 | WD69 | AGD | 56 | 290380 | 6264960 | Open site | Valid | Artefact : - | Open Camp Site | 1380,102450 |
| | Contact | Recorders | | | | Laura-Jane Smith | | Permits | | |
| 45-5-0710 | WD71 | AGD | 56 | 290510 | 6264510 | Open site | Valid | Artefact : - | Open Camp Site | 1380 |
| | Contact | Recorders | | | | Laura-Jane Smith | | Permits | | |
| 45-5-0711 | WD-72 | GDA | 56 | 290490 | 6264290 | Open site | Destroyed | Artefact : - | Open Camp Site | 1380,102577 |
| | Contact | Recorders | | | | Laura-Jane Smith,GML Heritage Pty Ltd - Surry Hills,Ms.Erin Mein | | Permits | 3647 | |
| 45-5-0712 | WD73 | GDA | 56 | 290835 | 6264580 | Open site | Destroyed | Artefact : - | Open Camp Site | 1380,102577 |
| | Contact | Recorders | | | | Laura-Jane Smith,GML Heritage Pty Ltd - Surry Hills,Ms.Erin Mein | | Permits | 3647 | |
| 45-5-0713 | WD74;; | GDA | 56 | 291240 | 6264650 | Open site | Destroyed | Artefact : - | Open Camp Site | 1380,102577 |
| | Contact | Recorders | | | | Laura-Jane Smith,GML Heritage Pty Ltd - Surry Hills,Ms.Erin Mein | | Permits | 3647 | |
| 45-5-0714 | WD75; | GDA | 56 | 291400 | 6264610 | Open site | Destroyed | Artefact : - | Open Camp Site | 1380 |
| | Contact | Recorders | | | | Laura-Jane Smith,GML Heritage Pty Ltd - Surry Hills,Ms.Erin Mein | | Permits | 3647 | |
| 45-5-3097 | ADI Site | AGD | 56 | 291000 | 6266000 | Open site | Valid | Artefact : - | | |
| | Contact | Recorders | | | | Doctor.Jo McDonald | | Permits | | |

Report generated by AHIMS Web Service on 09/01/2024 for Lance Syme for the following area at Datum :GDA, Zone : 56, Eastings : 290156.0 - 294156.0, Northings : 6263293.0 - 6267293.0
with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 116

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

Page 2 of 8

Proposed Construction of a New High School at Jordan Springs East, Penrith City Council
Preliminary Indigenous Heritage Assessment and Impact Report



AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : KA-227
Client Service ID : 853132

| SiteID | SiteName | Datum | Zone | Eastings | Northings | Context | Site Status ** | SiteFeatures | SiteTypes | Reports |
|-----------|--------------------------|-------|------|------------------|--|-----------|---------------------|--|----------------|----------------------|
| 45-5-3037 | 3M St Marys | AGD | 56 | 293258 | 6264682 | Open site | Valid | Artefact : -, Potential Archaeological Deposit (PAD) : - | | |
| | <u>Contact</u> | | | <u>Recorders</u> | Jim Wheeler | | | <u>Permits</u> | 2196 | |
| 45-5-3179 | ADI/FF-24 | AGD | 56 | 293813 | 6265388 | Open site | Valid | Artefact : 6 | | |
| | <u>Contact</u> T Russell | | | <u>Recorders</u> | Mr.Mark Rawson | | | <u>Permits</u> | 2430 | |
| 45-5-3180 | ADI/FF-23 | AGD | 56 | 293636 | 6265512 | Open site | Valid | Artefact : 10 | | |
| | <u>Contact</u> T Russell | | | <u>Recorders</u> | Mr.Mark Rawson | | | <u>Permits</u> | 2430 | |
| 45-5-3328 | ADI/FF-3 | AGD | 56 | 290637 | 6265743 | Open site | Valid | Artefact : 5 | | 99635,102450, 103618 |
| | <u>Contact</u> T Russell | | | <u>Recorders</u> | Jo McDonald Cultural Heritage Management see GML | | | <u>Permits</u> | 3057 | |
| 45-5-3330 | ADI/FF-29 | AGD | 56 | 292529 | 6264312 | Open site | Valid | Artefact : 2 | | 99635 |
| | <u>Contact</u> T Russell | | | <u>Recorders</u> | Jo McDonald Cultural Heritage Management see GML | | | <u>Permits</u> | | |
| 45-5-3334 | ADI/FF-33 | GDA | 56 | 291401 | 6264923 | Open site | Destroyed | Artefact : 7 | | 99635 |
| | <u>Contact</u> T Russell | | | <u>Recorders</u> | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | <u>Permits</u> | 3647 | |
| 45-5-3335 | ADI/FF-34 | GDA | 56 | 291356 | 6264481 | Open site | Destroyed | Artefact : 3 | | 99635 |
| | <u>Contact</u> T Russell | | | <u>Recorders</u> | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | <u>Permits</u> | 3647 | |
| 45-5-1019 | ADI-11 | GDA | 56 | 291800 | 6264300 | Open site | Destroyed | Artefact : - | Open Camp Site | |
| | <u>Contact</u> | | | <u>Recorders</u> | Margrit Koettig,Rex Silcox,Miss.Marjorie Sullivan,Phil Hughes,GML Heritage Pty Ltc | | | <u>Permits</u> | 3647 | |
| 45-5-3316 | Western Sydney 4 and PAD | GDA | 56 | 292275 | 6264625 | Open site | Destroyed | Artefact : 2, Potential Archaeological Deposit (PAD) : - | | 100554 |
| | <u>Contact</u> Searle | | | <u>Recorders</u> | Navin Officer Heritage Consultants Pty Ltd,GML Heritage Pty Ltd - Surry Hills,GML | | | <u>Permits</u> | 3647 | |
| 45-5-3377 | ADI/RC-3 | AGD | 56 | 294039 | 6265963 | Open site | Valid | Artefact : - | | |
| | <u>Contact</u> S Scanlon | | | <u>Recorders</u> | Jo McDonald Cultural Heritage Management see GML | | | <u>Permits</u> | 2733 | |
| 45-5-1011 | ADI-4; | AGD | 56 | 293250 | 6266620 | Open site | Valid | Artefact : - | Open Camp Site | |
| | <u>Contact</u> | | | <u>Recorders</u> | Margrit Koettig,Rex Silcox,Miss.Marjorie Sullivan,Phil Hughes | | | <u>Permits</u> | | |
| 45-5-3378 | ADI/RC-4 | AGD | 56 | 294039 | 6265963 | Open site | Valid | Artefact : 1 | | |
| | <u>Contact</u> S Scanlon | | | <u>Recorders</u> | Jo McDonald Cultural Heritage Management see GML | | | <u>Permits</u> | | |
| 45-5-3429 | Dunheved 1 | GDA | 56 | 292767 | 6264789 | Open site | Partially Destroyed | Artefact : - | | |
| | <u>Contact</u> | | | <u>Recorders</u> | Doctor.Jo McDonald,GML Heritage Pty Ltd - Surry Hills,GML Heritage Pty Ltd - Surry | | | <u>Permits</u> | 2937,4804 | |
| 45-5-3430 | Dunheved 2 | GDA | 56 | 292708 | 6264694 | Open site | Destroyed | Potential Archaeological Deposit (PAD) : -, Artefact : - | | |
| | <u>Contact</u> | | | <u>Recorders</u> | Doctor.Jo McDonald,GML Heritage Pty Ltd - Surry Hills,GML Heritage Pty Ltd - Surry | | | <u>Permits</u> | 2937,4804 | |

Report generated by AHIMS Web Service on 09/01/2024 for Lance Syme for the following area at Datum :GDA, Zone : 56, Eastings : 290156.0 - 294156.0, Northings : 6263293.0 - 6267293.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 116

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

Page 3 of 8

Proposed Construction of a New High School at Jordan Springs East, Penrith City Council
Preliminary Indigenous Heritage Assessment and Impact Report



AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : KA-227
Client Service ID : 853132

| SiteID | SiteName | Datum | Zone | Easting | Northing | Context | Site Status ** | SiteFeatures | SiteTypes | Reports |
|----------------|--|------------------|------|--|----------|-----------|------------------------|---|-----------|---------------|
| 45-5-3431 | Dunheved 3 | AGD | 56 | 292882 | 6265182 | Open site | Valid | Potential Archaeological Deposit (PAD) : -, Artefact : - | | |
| Contact | | Recorders | | Doctor.Jo McDonald | | | | Permits | 3722 | |
| 45-5-3432 | Dunheved 4 | AGD | 56 | 292846 | 6265088 | Open site | Valid | Artefact : -, Potential Archaeological Deposit (PAD) : - | | |
| Contact | | Recorders | | Doctor.Jo McDonald | | | | Permits | 3722 | |
| 45-5-3433 | Dunheved 5 | AGD | 56 | 292925 | 6265127 | Open site | Valid | Artefact : -, Potential Archaeological Deposit (PAD) : - | | |
| Contact | | Recorders | | Doctor.Jo McDonald | | | | Permits | 3722 | |
| 45-5-3586 | ADI-FF21 | AGD | 56 | 290600 | 6265206 | Open site | Valid | Artefact : 7 | | 102450,103618 |
| Contact | | Recorders | | Mr.Mark Rawson | | | | Permits | 3057 | |
| 45-5-3587 | ADI-FF11 | AGD | 56 | 290527 | 6266912 | Open site | Partially Destroyed | Artefact : 21 | | 102450,103618 |
| Contact | | Recorders | | Mr.Mark Rawson | | | | Permits | 3057,3728 | |
| 45-5-3588 | ADI-FF20 | GDA | 56 | 290854 | 6265368 | Open site | Destroyed | Artefact : 1 | | 102450,103618 |
| Contact | | Recorders | | Mr.Mark Rawson,GML Heritage Pty Ltd - Surry Hills,GML Heritage Pty Ltd - Surry H | | | | Permits | 3057,3647 | |
| 45-5-3595 | ADI-CP9 (Springwood) | GDA | 56 | 290909 | 6264677 | Open site | Destroyed | Artefact : 2 | | |
| Contact | | Recorders | | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | Permits | 3647 | |
| 45-5-3596 | ADI-CP7 (Springwood) | GDA | 56 | 291551 | 6265210 | Open site | Destroyed | Artefact : 18 | | |
| Contact | | Recorders | | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | Permits | 3647 | |
| 45-5-3597 | ADI: FF/29 (Riverstone) Duplicate of 45-5-3300 | GDA | 56 | 292529 | 6264312 | Open site | Valid | Artefact : 2 | | |
| Contact | | Recorders | | Jo McDonald Cultural Heritage Management see GML | | | | Permits | | |
| 45-5-3601 | ADI: FF/33 | GDA | 56 | 291401 | 6264923 | Open site | Destroyed | Artefact : 7 | | |
| Contact | | Recorders | | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | Permits | 3647 | |
| 45-5-3602 | ADI: FF/34 | GDA | 56 | 291356 | 6264481 | Open site | Destroyed | Artefact : 3 | | |
| Contact | | Recorders | | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | Permits | 3647 | |
| 45-5-3603 | ADI-FF2 (Springwood) | GDA | 56 | 290490 | 6264290 | Open site | Valid | Artefact : 7 | | |
| Contact | | Recorders | | Jo McDonald Cultural Heritage Management see GML | | | | Permits | | |
| 45-5-3604 | ADI-FF4 (Springwood) | GDA | 56 | 290423 | 6265994 | Open site | Valid | Artefact : 1 | | 102450 |
| Contact | | Recorders | | Jo McDonald Cultural Heritage Management see GML | | | | Permits | | |
| 45-5-3605 | ADI-FF5 (Springwood) | GDA | 56 | 290345 | 6266066 | Open site | Valid | Artefact : 2 | | 102450 |
| Contact | | Recorders | | Jo McDonald Cultural Heritage Management see GML | | | | Permits | | |
| 45-5-3609 | ADI-FF9 (Springwood) | GDA | 56 | 290210 | 6266840 | Open site | Valid | Artefact : 2 | | 102450 |

Report generated by AHIMS Web Service on 09/01/2024 for Lance Syme for the following area at Datum :GDA, Zone : 56, Eastings : 290156.0 - 294156.0, Northings : 6263293.0 - 6267293.0
with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 116

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

Page 4 of 8

Proposed Construction of a New High School at Jordan Springs East, Penrith City Council
Preliminary Indigenous Heritage Assessment and Impact Report



AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : KA-227

Client Service ID : 853132

| SiteID | SiteName | Datum | Zone | Easting | Northing | Context | Site Status ** | SiteFeatures | SiteTypes | Reports |
|-----------|-------------------------|---------------------------|--|---------|----------|-----------|----------------|-------------------------|----------------|-------------|
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML | | | | | Permits | 4846 | |
| 45-5-3610 | ADI-FF10 (Springwood) | GDA | 56 | 290368 | 6266912 | Open site | Valid | Artefact : 8 | | 102450 |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML | | | | | Permits | 4846 | |
| 45-5-3611 | ADI-FF12 (Springwood) | GDA | 56 | 290778 | 6266882 | Open site | Valid | Artefact : 6 | | 102450 |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML | | | | | Permits | | |
| 45-5-3612 | ADI-FF13 (Springwood) | GDA | 56 | 291218 | 6266870 | Open site | Valid | Artefact : 1 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML | | | | | Permits | | |
| 45-5-3613 | ADI-FF14 (Springwood) | GDA | 56 | 290989 | 6264840 | Open site | Destroyed | Artefact : 2 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | | Permits | 3647 | |
| 45-5-3614 | ADI-FF15 | GDA | 56 | 291123 | 6264962 | Open site | Destroyed | Artefact : 20 | | 102450 |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | | Permits | 3647 | |
| 45-5-3615 | ADI-FF16 (Springwood) | GDA | 56 | 291296 | 6265254 | Open site | Valid | Artefact : 1 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML | | | | | Permits | | |
| 45-5-3616 | ADI-FF17 (Springwood) | GDA | 56 | 291315 | 6265335 | Open site | Valid | Artefact : 1 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML | | | | | Permits | | |
| 45-5-3617 | ADI-FF18 (Springwood) | GDA | 56 | 291717 | 6266049 | Open site | Destroyed | Artefact : 8 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | | Permits | 3647 | |
| 45-5-3618 | ADI-FF19 (Springwood) | GDA | 56 | 292354 | 6265716 | Open site | Destroyed | Artefact : 3 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | | Permits | 3647 | |
| 45-5-0706 | WD67 | AGD | 56 | 290710 | 6264940 | Open site | Valid | Artefact : - | Open Camp Site | 1380,102450 |
| | Contact | Recorders | Laura-Jane Smith | | | | | Permits | | |
| 45-5-0707 | WD68 | AGD | 56 | 290490 | 6264950 | Open site | Valid | Artefact : - | Open Camp Site | 1380,102450 |
| | Contact | Recorders | Laura-Jane Smith | | | | | Permits | | |
| 45-5-3589 | ADI-CP1 (Springwood) | GDA | 56 | 291439 | 6264621 | Open site | Destroyed | Artefact : 44 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | | Permits | 3647 | |
| 45-5-3590 | ADI-CP3 (Springwood) | GDA | 56 | 291580 | 6264919 | Open site | Destroyed | Artefact : 25 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | | Permits | 3647 | |
| 45-5-3591 | ADI-CP4 (Springwood) | GDA | 56 | 291533 | 6264949 | Open site | Destroyed | Artefact : 46 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | | Permits | 3647 | |
| 45-5-3592 | ADI-CP5 (Springwood) | GDA | 56 | 291527 | 6264837 | Open site | Destroyed | Artefact : 46 | | |
| | Contact | Recorders | GML Heritage Pty Ltd - Surry Hills,GML Heritage Pty Ltd - Surry Hills,Ms.Erin Mein | | | | | Permits | 3647 | |
| 45-5-3593 | ADI-CP6 (Springwood) | GDA | 56 | 291649 | 6264952 | Open site | Destroyed | Artefact : 21 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | | Permits | 3647 | |
| 45-5-3594 | ADI-CP8 (Riverstone) | GDA | 56 | 292313 | 6265905 | Open site | Destroyed | Artefact : 1 | | |
| | Contact | Recorders | Jo McDonald Cultural Heritage Management see GML,GML Heritage Pty Ltd - Surry | | | | | Permits | 3647 | |
| 45-5-4331 | IF-25-1 | GDA | 56 | 290605 | 6264570 | Open site | Destroyed | Artefact : 1 | | |

Report generated by AHIMS Web Service on 09/01/2024 for Lance Syme for the following area at Datum :GDA, Zone : 56, Eastings : 290156.0 - 294156.0, Northings : 6263293.0 - 6267293.0
with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 116

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

Page 5 of 8

Proposed Construction of a New High School at Jordan Springs East, Penrith City Council
Preliminary Indigenous Heritage Assessment and Impact Report



AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : KA-227
Client Service ID : 853132

| SiteID | SiteName | Datum | Zone | Eastings | Northing | Context | Site Status ** | SiteFeatures | SiteTypes | Reports |
|-----------|-------------------------|---------------------------|------|----------|----------|-----------|----------------|--|-----------|---------|
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4332 | PAD FF2 | GDA | 56 | 291615 | 6265890 | Open site | Destroyed | Artefact : 1, Potential Archaeological Deposit (PAD) : 1 | 3647 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4333 | PAD FF4 | GDA | 56 | 292302 | 6265898 | Open site | Destroyed | Potential Archaeological Deposit (PAD) : 1 | 3647 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4334 | ADI-CP10 | GDA | 56 | 291799 | 6265107 | Open site | Destroyed | Artefact : 1 | 3647 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4335 | CP13-2 | GDA | 56 | 292222 | 6266138 | Open site | Destroyed | Artefact : 1 | 3647 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4336 | CP13-3 | GDA | 56 | 292123 | 6265995 | Open site | Destroyed | Artefact : 1 | 3647 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4337 | CP13-5 | GDA | 56 | 292148 | 6265663 | Open site | Destroyed | Artefact : 1 | 3647 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4338 | CP13-9 | GDA | 56 | 292336 | 6264523 | Open site | Destroyed | Artefact : 1 | 3647 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4339 | SMDS-CP1 | GDA | 56 | 292320 | 6265695 | Open site | Destroyed | Artefact : 1, Potential Archaeological Deposit (PAD) : 1 | 3647 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4355 | SMDS-ND1 | GDA | 56 | 292972 | 6265379 | Open site | Valid | Artefact : 1, Potential Archaeological Deposit (PAD) : 1 | 3722 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4356 | SMDS-ND2 | GDA | 56 | 292935 | 6265255 | Open site | Valid | Artefact : 1, Potential Archaeological Deposit (PAD) : 1 | 3722 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4357 | ND13-2 | GDA | 56 | 292995 | 6265182 | Open site | Valid | Artefact : 1 | 3722 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4340 | SMDS-CP3 | GDA | 56 | 292278 | 6265345 | Open site | Destroyed | Artefact : 1, Potential Archaeological Deposit (PAD) : 1 | 3647 | |
| | Contact | Recorders | | | | | | Permits | | |
| 45-5-4341 | SMDS-CP4 | GDA | 56 | 292231 | 6264421 | Open site | Destroyed | Artefact : 1, Potential Archaeological Deposit (PAD) : 1 | 3647 | |

Report generated by AHIMS Web Service on 09/01/2024 for Lance Syme for the following area at Datum :GDA, Zone : 56, Eastings : 290156.0 - 294156.0, Northings : 6263293.0 - 6267293.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 116

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

Page 6 of 8

Proposed Construction of a New High School at Jordan Springs East, Penrith City Council
Preliminary Indigenous Heritage Assessment and Impact Report



AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : KA-227
Client Service ID : 853132

| SiteID | SiteName | Datum | Zone | Easting | Northing | Context | Site Status ** | SiteFeatures | SiteTypes | Reports |
|-----------|---|------------------|------|---------|----------|-----------|----------------|--|-----------|---------|
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-4342 | SMDS-CP6 | GDA | 56 | 291994 | 6266084 | Open site | Destroyed | Artefact : 1, Potential Archaeological Deposit (PAD) : 1 | 3647 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-4343 | SMDS-CP6-1 | GDA | 56 | 291994 | 6266084 | Open site | Valid | Artefact : 1, Potential Archaeological Deposit (PAD) : 1 | 3647 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-4360 | SMDS-CP2 | GDA | 56 | 291961 | 6265443 | Open site | Destroyed | Artefact : -, Potential Archaeological Deposit (PAD) : - | | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-4896 | Site 1D IF | GDA | 56 | 291614 | 6265178 | Open site | Valid | Artefact : -, Potential Archaeological Deposit (PAD) : - | 3647 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-4833 | RC1_IF | GDA | 56 | 293945 | 6265096 | Open site | Valid | Artefact : - | 4351 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-5171 | RC2_S1 | GDA | 56 | 293976 | 6265086 | Open site | Valid | Artefact : 1 | | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-5157 | SWIF-01 | GDA | 56 | 293612 | 6264626 | Open site | Valid | Artefact : 1 | | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-5275 | St Marys Basin Works Artefact Scatter 2 | GDA | 56 | 290256 | 6266896 | Open site | Valid | Artefact : - | | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-5276 | St Marys Basin Works Artefact Scatter 1 | GDA | 56 | 290398 | 6266909 | Open site | Valid | Artefact : - | 4846 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-5361 | SMDS AS7 Isolated Artefact | GDA | 56 | 290332 | 6266872 | Open site | Valid | Artefact : - | 4846 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-5362 | SMDS AS6 Artefact Scatter | GDA | 56 | 290184 | 6266895 | Open site | Valid | Artefact : - | 4846 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-5363 | SMDS AS8 Isolated Artefact | GDA | 56 | 290288 | 6267028 | Open site | Valid | Artefact : - | 4846 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-5364 | SMDS AS9 Artefact Scatter | GDA | 56 | 290216 | 6266803 | Open site | Valid | Artefact : - | 4846 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-5365 | SMDS AS1 Basin V6 Isolated Artefact | GDA | 56 | 290959 | 6266961 | Open site | Valid | Artefact : - | 4846 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |
| 45-5-5366 | SMDS AS4 Isolated Artefact | GDA | 56 | 290378 | 6266955 | Open site | Valid | Artefact : - | 4846 | |
| | <u>Contact</u> | <u>Recorders</u> | | | | | | <u>Permits</u> | | |

Report generated by AHIMS Web Service on 09/01/2024 for Lance Syme for the following area at Datum :GDA, Zone : 56, Eastings : 290156.0 - 294156.0, Northings : 6263293.0 - 6267293.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 116

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

Page 7 of 8



AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref/PO Number : KA-227

Client Service ID : 853132

| SiteID | SiteName | Datum | Zone | Easting | Northing | Context | Site Status ** | SiteFeatures | SiteTypes | Reports |
|-----------|--|------------------|---|---------|----------|-----------|----------------|----------------|-----------|---------|
| 45-5-5367 | SMDS AS5 Isolated Artefact | GDA | 56 | 290234 | 6266901 | Open site | Valid | Artefact : - | | |
| | Contact | Recorders | GML Heritage Pty Ltd - Surry Hills, Miss. Hannah (extent heritage) Morris | | | | | Permits | 4846 | |
| 45-5-5368 | SMDS AS3 Artefact Scatter and PAD | GDA | 56 | 290269 | 6266889 | Open site | Valid | Artefact : - | | |
| | Contact | Recorders | GML Heritage Pty Ltd - Surry Hills, Miss. Hannah (extent heritage) Morris | | | | | Permits | | |
| 45-5-5369 | SMDS AS2 Basin V6 Artefact Scatter | GDA | 56 | 290846 | 6266987 | Open site | Valid | Artefact : - | | |
| | Contact | Recorders | GML Heritage Pty Ltd - Surry Hills, Miss. Hannah (extent heritage) Morris | | | | | Permits | 4846 | |
| 45-5-5591 | Basin C Background Scatter 1 | GDA | 56 | 290356 | 6266951 | Open site | Valid | Artefact : - | | |
| | Contact | Recorders | GML Heritage Pty Ltd - Surry Hills, Ms. Sophie Jennings | | | | | Permits | | |
| 45-5-5592 | Basin C Background Scatter 2 | GDA | 56 | 290393 | 6266838 | Open site | Valid | Artefact : - | | |
| | Contact | Recorders | GML Heritage Pty Ltd - Surry Hills, Ms. Sophie Jennings | | | | | Permits | | |
| 45-5-5593 | Basin C Access Road Background Scatter | GDA | 56 | 290624 | 6266961 | Open site | Valid | Artefact : - | | |
| | Contact | Recorders | GML Heritage Pty Ltd - Surry Hills, Ms. Sophie Jennings | | | | | Permits | | |
| 45-5-5594 | Basin V6 AS3 | GDA | 56 | 290888 | 6266986 | Open site | Valid | Artefact : - | | |
| | Contact | Recorders | GML Heritage Pty Ltd - Surry Hills, Ms. Sophie Jennings | | | | | 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 09/01/2024 for Lance Syme for the following area at Datum :GDA, Zone : 56, Eastings : 290156.0 - 294156.0, Northings : 6263293.0 - 6267293.0
with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 116

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

Page 8 of 8