Orion Consulting Engineers

M

Royal Randwick Racecourse Night Racing

LGA: Randwick

Aboriginal Heritage Due Diligence Assessment

24 October 2017

McCARDLE CULTURAL HERITAGE PTY LTD

ACN 104 590 141 • ABN 89 104 590 141

PO Box 166, Adamstown, NSW 2289

Mobile: 0412 702 396 • Fax: 4952 5501 • Email: mcheritage@iprimus.com.au



Report No: J17057

Approved by: Penny McCardle

Position: Director

Signed:

Date: 24 October 2017

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EXECUTIVE SUMMARY

This Archaeological Due Diligence Report has been prepared to support a State Significant Development (SSD) application for Night Racing at the Royal Randwick Racecourse (Royal Randwick). The Australian Turf Club (ATC) is looking for opportunities to improve the racing experience at Royal Randwick for spectators, increase revenue and re-invest into its people, racing infrastructure and entertainment facilities.

Royal Randwick has been part of Australia's racing culture for over 150 years and is the country's oldest horse racing venue, with a history of racing dating back to 1833. Today, Royal Randwick enjoys a reputation as being one of Australia's premier racing venues and is considered the Jewel in the Crown of Sydney racing - hosting some of the world's richest turf races, including The TAB Everest and the Longines Queen Elizabeth Stakes.

As part of a vision to secure Royal Randwick's long-term future and enhance its status as a worldclass destination for thoroughbred racing, the ATC has prepared a proposal to introduce night racing at Royal Randwick. The night racing events will create a new spectator experience, attract new audiences and enhance the status of Royal Randwick on the state, national and international racing stage. The night racing events will also provide an alternative night time cultural and sporting event with the opportunity for providing increased tourism and boosting Sydney's nighttime economy.

The scope of the proposal includes:

- Consent for up to 16 night racing events per annum (predominately between October and April).
- New trackside lighting to facilitate televised broadcasting.
- Upgrade to Spectator Precinct lighting for patron safety.
- Temporary Electricity Generators.

Orion Consulting Engineers engaged McCardle Cultural Heritage Pty Ltd (MCH) to undertake the Archaeological Due Diligence Assessment for the proposed Night Racing events at Royal Randwick Racecourse. The proposed project relates to the full extent of the racetrack, and the Spectator Precinct located in the north-west corner of the project area.

In accordance with the Environmental Planning and Assessment Act 1979, this assessment has been undertaken at the request of the project's Secretary's Environmental Assessment Requirements (SEARs). Specifically, in relation to Aboriginal archaeology, the SEARs Key Issues: Statutory and Strategic Context (Section 1) requests the EIS to address the relevant planning provisions, goals and strategic planning objectives in the following:

Table 1 SEARs (archaeology component)

Key Issues	The EIS must address the relevant planning provisions, goals and strateg							
	planning objectives in the following:							
	 Guide to investigating, assessing and reporting on Aboriginal Cultural heritage in NSW (DECCW, 2011, and 							
	Aboriginal Consultation Requirements for Proponents 2010							

Due to the significant long-term impacts to the project area since 1833, resulting in no original landforms remaining and a highly disturbed landscape, and hence any cultural materials that may have been present removed/destroyed, an archaeological Due Diligence Assessment is required rather than an Aboriginal Cultural Heritage Assessment (ACHA). A due diligence assessment relates to the physical identification of Aboriginal objects, sites and places. Community consultation, as per the Aboriginal Consultation Requirements for Proponents, is only required once Aboriginal objects, sites or places have been identified and an Aboriginal Heritage Impact Permit (AHIP) is deemed necessary. Section 5.2 of the 2010 Due Diligence Code of Practice for the protection of Aboriginal Objects in NSW specifically states that;

'consultation with the Aboriginal community is not a formal requirement of the due diligence process' (2010:8).

The assessment has been undertaken to meet the NSW Office of Environment and Heritage (OEH), Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011), the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW, the brief and the SEARs.

Royal Randwick racecourse is one of the largest recreation areas in the highly urbanised Eastern Suburbs of Sydney. Located within a major open space and entertainment precinct, the project area includes Lot 2009 DP1169042 and is crown land, leased to ATC who own and operate the racecourse. The proposal seeks approval for up to 16 night racing events per annum, the instillation of associated trackside lighting infrastructure (either in the infield or the outfield) to facilitate televising the events, and upgrades to lighting within the Spectator Precinct for patron safety. The proposed project relates to the full extent of the racetrack, and the Spectator Precinct located in the north-west corner of the project area. This may entail open trenching to supply conduits for power reticulation. There are no other structural works proposed.

The project area is situated on Quaternary alluvium, gravels, sands, silt and clays (Sydney Geological Map 1966 Consisting of the Disturbed Tuggerah Soil Landscape, the project area would have formed part of a gently undulating to rolling coastal dune field. However, the Royal Randwick Racecourse have been in operation since the 1800's and continued works have resulted in a completely disturbed landscape, with the complete removal of the original landform and the importation of fill of soils. No original landform or deposits remain within the project area. The project area is located approximately 2.3 kilometres north-east of Mill Stream Kemps and 2.5 kilometres west of the Ocean. No other fresh water sources are nearby, hence the project area is situated within an environment that would not have provided the necessary resources and subsistence resources to survive or camp, but may have been utilised for hunting and gathering and/or travel.

A search of the OEH AHIMS register has shown that 8 known Aboriginal sites are currently recorded within three kilometres of the project area and include 3 PADs, 2 AFT, 2 ART and 1 HAB/PAD. Closer examination of the search showed that sites 45-6-2896 (HAB/PAD) and 45-6-2897 (PAD) are the same site. One PAD (46-6-3245) has been identified along the western boundary of the project area. The PAD includes houses along Doncaster Ave and its location and extent is shown in Figure 2.2. No report associated with the PAD is avaliable from OEH and contact with the archaeologist has identified that the report is strictly confidential at this time and no information is avaliable.

No precious assessments had been undertaken in the surrounding area and a predictive model was developed based on the AHIMS results and general archaeological site spatial patterns in relation

to landforms and proximity to water. The key landforms with evidence of past Aboriginal land use are typically along creek banks and flats in close proximity to water sources. The most commonly occurring site types were predicted to be artefact scatters and isolated artefacts manufactured form silcrete or tuff. Given the complete removal of the original land form, construction and maintenance of the racecourse since the 1800's distance it is highly unlikely that any cultural materials remain in the project area.

The survey confirmed that the project area had been subject to previous long term intensive land uses including complete clearing and removal of all original landforms, fill imported for the construction of the racecourse and grandstands since the 1800's and maintenance activities. No Aboriginal objects, sites or places were identified during the survey.

MCH concluded that the project area is located at distance form reliable water and as such may have been utilised for hunting and gathering and/or as a travel route which is manifest in the archaeological record as a background scatter of artefacts across the landscape. However, given the complete removal of the original landform and hence any cultural materials contained within it, there is very limited to no potential for cultural materials to be present within the project area.

No archaeological sites or PADs were identified and the project area is heavily disturbed through past landuses and as such there are no impacts to the archaeological record. The cumulative impact to Aboriginal heritage in the area is assessed as being limited given that:

- The net development footprint (i.e. the area of direct impact) is small and does not affect an original landform;
- The project area is highly disturbed through past land uses that resulted in the complete removal of all original landforms and any cultural materials contained within
- No sites or PADs were identified; and
- The placement of the development within this area, in particular within a highly disturbed context, ensures the cumulative impacts are focused in the areas of lower to no potential and therefore are kept to a minimum.

The following recommendations are provided:

- The persons responsible for the management of onsite works will ensure that all staff, contractors and others involved in construction and maintenance related activities are made aware of the statutory legislation protecting sites and places of significance. Of particular importance is the National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010, under the National Parks and Wildlife Act 1974,
- 2) Should any Aboriginal objects be uncovered during works, all work will cease in that location immediately and the Environmental Line contacted, and
- 3) If site 45-5-3968 (isolated find located outside the project area) will be impacted by the proposed development an AHIP will be required.

This report has met the requirements and considered the relevant environmental and archaeological information, the project land condition, the nature of the proposed development activity and impacts, as well as preparing appropriate recommendations.

GLOSSARY

Aboriginal Site: an Aboriginal site is the location of one or more Aboriginal archaeological objects, including flaked stone artefacts, midden shell, grinding grooves, archaeological deposits, scarred trees etc.

Artefact: any object that is physically modified by humans.

Artefact scatter: a collection of artefacts scattered across the surface of the ground (also referred to as open camp sites).

Assemblage: a collection of artefacts associated by a particular place or time, assumed generated by a single group of people, and can comprise different artefact types.

Background scatter: a term used to describe low density scatter of isolated finds that are distributed across the landscape without any obvious focal point.

Contact site: a site that displays interaction between early colonists and Aboriginal Australians.

Debitage: small pieces of stone debris that break off during the manufacturing of stone tools. These are usually considered waste and are the by product of production (also referred to as flake piece).

Formation processes: human caused (land uses etc) or natural processes (geological, animal, plant growth etc) by which an archaeological site is modified during or after occupation and abandonment. These processes have a large effect on the provenience of artefacts or features.

Harm: is defined as an act that may destroy, deface or damage an Aboriginal object or place. In relation to an object, this means the movement or removal of an object from the land in which it has been situated

Stratified Archaeological Deposits: layers detected within the soil or sediments that are attributable to separate depositional events in the past, the deposit is said to be stratified. The integrity of sediments and soils are usually affected by 200 years of European settlement and activities such as land clearing, cultivation and construction of industrial, commercial and residential developments.

Taphonomy: the study of processes which have affected organic materials such as bone after death; it also involves the microscopic analysis of tooth-marks or cut marks to assess the effects of butchery or scavenging activities.

Typology: the systematic organization of artefacts into types on the basis of shared attributes.

ACRONYMS

ACHMP Aboriginal Cultural Heritage Management Plan

AHIMS Aboriginal Heritage Information Management System. Data base of recorded

sites across NSW managed by OEH

OEH Office of Environment and Heritage

OEH AHIMS SITE ACRONYMS

ACD Aboriginal ceremonial and dreaming

AFT Artefact (stone, bone, shell, glass, ceramic and metal)

ARG Aboriginal resource and gathering

ART Art (pigment or engraving)

BOM Non-human bone and organic material

BUR Burial

CFT Conflict site

CMR Ceremonial ring (stone or earth)

ETM Earth mound

FSH Fish trap

GDG Grinding groove

HAB Habitation structure

HTH Hearth

OCQ Ochre quarry

PAD Potential archaeological deposit.

SHL Shell

STA Stone arrangement

STQ Stone quarry

TRE Modified tree (carved or scarred)

WTR Water hole

1 INTRODUCTION

1.1 INTRODUCTION

McCardle Cultural Heritage Pty Ltd (MCH) were engaged by Orion Consulting Engineers to undertake an Archaeological Due Diligence Assessment for the proposed Night Racing events at Royal Randwick Racecourse. The proposal seeks approval for up to 16 night racing events per annum, the instillation of associated lighting infrastructure to facilitate televising the events, and upgrades to lighting within the Spectator Precinct for patron safety. The proposed project relates to the full extent of the racetrack, and the Spectator Precinct located in the north-west corner of the project area.

In accordance with the Environmental Planning and Assessment Act 1979, this assessment has been undertaken at the request of the project's Secretary's Environmental Assessment Requirements (SEARs). Specifically, in relation to Aboriginal archaeology, the SEARs Key Issues: Statutory and Strategic Context (Section 1) requests the EIS to address the relevant planning provisions, goals and strategic planning objectives in the following:

Table 1.1 SEARs (archaeology component)

Key Issues	The EIS must address the relevant planning provisions, goals and strategic				
	planning objectives in the following:				
	Guide to investigating, assessing and reporting on Aboriginal				
	Cultural heritage in NSW (DECCW, 2011, and				
Aboriginal Consultation Requirements for Proponents 2010					

Due to the significant long-term impacts to the project area since 1833, resulting in no original landforms remaining and a highly disturbed landscape, and hence any cultural materials that may have been present destroyed, an archaeological Due Diligence Assessment is required rather than an Aboriginal Cultural Heritage Assessment (ACHA). A due diligence assessment relates to the physical identification of Aboriginal objects, sites and places. Community consultation, as per the Aboriginal Consultation Requirements for Proponents, is only required once Aboriginal objects, sites or places have been identified and an Aboriginal Heritage Impact Permit (AHIP) is deemed necessary. Section 5.2 of the 2010 Due Diligence Code of Practice for the protection of Aboriginal Objects in NSW specifically states that;

'consultation with the Aboriginal community is not a formal requirement of the due diligence process' (2010:8).

The purpose of a due diligence assessment is to assist proponents to exercise due diligence when carrying out activities that may harm Aboriginal objects or Aboriginal places and to determine whether that should apply for a consent to harm Aboriginal objects or Places through an Aboriginal Heritage Impact Assessment (AHIP). The purpose of this due diligence report is to demonstrate that all reasonable and practicable measures have been undertaken to prevent harm to any Aboriginal objects and/or place within the project area.

The assessment has been undertaken to meet the NSW Office of Environment and Heritage (OEH), Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011), the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW, the brief and the SEARs.

This report has met the requirements and considered the relevant environmental and archaeological information, the project land condition, the nature of the proposed development activity and impacts, as well as preparing appropriate recommendations.

1.2 THE PROJECT AREA

Royal Randwick racecourse is one of the largest recreation areas in the highly urbanised Eastern Suburbs of Sydney. Located within a major open space and entertainment precinct, the project area includes Lot 2009 DP1169042 and is crown land, leased to ATC who own and operate the racecourse. The location and extent of the project area is illustrated in Figures 1.1 and 1.2.

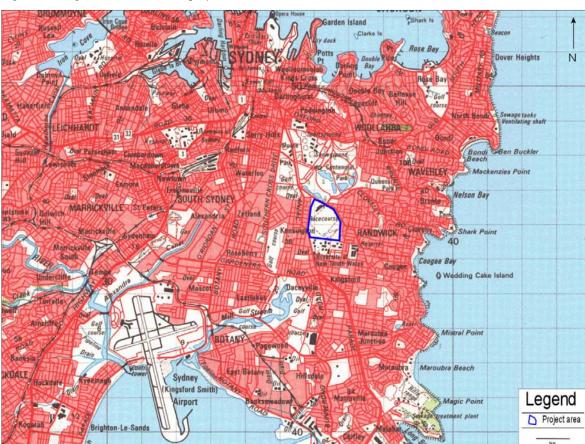


Figure 1.1 Regional location of the project area



Figure 1.2 Aerial location of the project area

1.3 DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposal seeks approval for up to 16 night racing events per annum, the instillation of associated trackside lighting infrastructure (either in the infield or the outfield as shown in Figure 1.2) to facilitate televising the events, and upgrades to lighting within the Spectator Precinct for patron safety. The proposed project relates to the full extent of the racetrack, and the Spectator Precinct located in the north-west corner of the project area. This may entail open trenching to supply conduits for power reticulation. There are no other structural works proposed.

Any development or impacts occurring within the project area will have regard to and managed in accordance with the requirements and provisions of the National Parks and Wildlife Act 1974. The proposed development is a State Significant Development (SSD) application and the document forms part of the Environmental Impact Assessment (EIS)

1.4 OBJECTIVES OF THE DUE DILIIGENCE ASSESSMENT

The objectives and primary tasks of this due diligence assessment were to:

- Address the SEARs Key Issues: Statutory and Strategic Context (Section 1): Guide to investigating, assessing and reporting on Aboriginal Cultural heritage in NSW (DECCW, 2011, and Aboriginal Consultation Requirements for Proponents 2010;
- Undertake a search of the OEH Aboriginal Heritage Management System (AHIMS) and other relative registers;
- Undertake preliminary research into the environmental and archaeological contexts of the project area;
- Develop a predictive model of site location for the project area;
- Undertake a field survey of the project area;
- Assess the potential impacts of the proposed development on any identified Aboriginal sites or potential archaeological deposits (PADs) identified within the project area;
- Assess the significance of any identified Aboriginal objects or sites identified within the project area;
- Complete and submit site cards to the OEH for any Aboriginal sites identified; and
- Provide appropriate recommendations.

1.5 LEGISLATIVE CONTEXT

The following overview of the legislative framework, is provided solely for information purposes for the client, and should not be interpreted as legal advice. MCH will not be liable for any actions taken by any person, body or group as a result of this general overview and MCH recommends that specific legal advice be obtained from a qualified legal practitioner prior to any action being taken as a result of the general summary below.

Land managers are required to consider the affects of their activities or proposed development on the environment under several pieces of legislation. Although there are a number of Acts and regulations protecting Aboriginal heritage, including places, sites and objects, within NSW, the three main ones include:

- National Parks and Wildlife Act (1974, as amended)
- National Parks and Wildlife Regulation (2009)
- Environmental Planning and Assessment Act (1979)

1.5.1 NATIONAL PARKS AND WILDLIFE ACT (1974, AS AMENDED)

The National Parks and Wildlife Act (1974), Amended 2010, is the primary legislation for the protection of Aboriginal cultural heritage in New South Wales. The NPW Act protects Aboriginal heritage (places, sites and objects) within NSW and the Protection of Aboriginal heritage is outlined in s86 of the Act, as follows:

• "A person must not harm or desecrate an object that the person knows is an Aboriginal object" s86(1)

- "A person must not harm an Aboriginal object" s86(2)
- "A person must not harm or desecrate an Aboriginal place" s86(4)

Penalties apply for harming an Aboriginal object, site or place. The penalty for knowingly harming an Aboriginal object (s86[1]) and/or an Aboriginal place (s86[4]) is up to \$550,000 for an individual and/or imprisonment for 2 years; and in the case of a corporation the penalty is up to \$1.1 million. The penalty for a strict liability offence (s86[2]) is up to \$110,000 for an individual and \$220,000 for a corporation.

Harm under the National Parks and Wildlife Act (1974, as amended) is defined as any act that; destroys defaces or damages the object, moves the object from the land on which it has been situated, causes or permits the object to be harmed. However, it is a defence from prosecution if the proponent can demonstrate that;

- 1) harm was authorised under an Aboriginal Heritage Impact Permit (AHIP) (and the permit was properly followed), or
- 2) the proponent exercised due diligence in respect to Aboriginal heritage.

The 'due diligence' defence (s87[2]), states that if a person or company has applied due diligence to determine that no Aboriginal object, site or place was likely to be harmed as a result of the activities proposed for the Project Area, then liability from prosecution under the NPW Act 1974 will be removed or mitigated if it later transpires that an Aboriginal object, site or place was harmed. If any Aboriginal objects are identified during the activity, then works should cease in that area and OEH notified (DECCW 2010:13). The due diligence defence does not authorise continuing harm.

The archaeological due diligence assessment and report has been carried out in compliance with the NSW DECCW 2010 Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW.

1.5.2 NATIONAL PARKS AND WILDLIFE REGULATION (2009)

The National Parks and Wildlife Regulation 2009 provides a framework for undertaking activities and exercising due diligence in respect to Aboriginal heritage. The Regulation (2009) recognises various due diligence codes of practice, including the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW which is pertinent to this report, but it also outlines procedures for Aboriginal Heritage Impact Permit (AHIP) applications and Aboriginal Cultural Heritage Consultation Requirements (ACHCRs); amongst other regulatory processes.

1.5.3 ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979 (EP&A ACT)

EP&A Act establishes the statutory framework for planning and environmental assessment in NSW and the implementation of the EP&A Act is the responsibility of the Minister for Planning, statutory authorities and local councils. The EP&A Act contains three parts which impose requirements for planning approval:

- Part 3 of the EP&A Act relates to the preparation and making of Environmental Planning Instruments (EPIs), State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs).
- Part 4 of the EP&A Act establishes the framework for assessing development under an environmental planning instrument (EPI). The consent authority for Part 4 development is

generally the local council, however the consent authority may by the Minister, the Planning Assessment Commission or a joint regional planning panel depending upon the nature of the development.

- Part 4, Division 4.1 of the EP&A Act establishes the assessment pathway for State Significant Development (SSD) declared by the State Environmental Planning Policy (State and Regional Development) 2011 (NSW). Once a development is declared as SSD, the Director-General will issue Director-General Requirements (DGRs) outlining what issues must be considered in the EIS.
- Part 5 of the EP&A Act provides for the control of 'activities' that do not require
 development consent and are undertaken or approved by a determining authority.
 Development under Part 5 that are likely to significantly affect the environment is required
 to have an EIS prepared for the proposed activity.
- Part 5.1 of the EP&A Act establishes the assessment pathways for State significant infrastructure (SSI). Development applications made for SSI can only be approved by the Minister. Once a development is declared as SSI, the Director-General will issue DGRs outlining what issues must be addressed in the EIS.

The applicable approval process is determined by reference to the relevant environmental planning instruments and other controls, LEPs and State Environmental Planning Policies (SEPPs). This project falls under Part 4 (SSD).

It is noted that the Proponent is submitting a State Significant Development (SSD) development application for the proposed night racing, and this report forms part of the Environmental Impact Statement (EIS) prepared in response to the Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning and Environment on 21 September 2017.

1.6 QUALIFICATIONS OF THE INVESTIGATOR

Penny McCardle: Principal Archaeologist/Forensic Anthropologist has 15 years experience in Indigenous archaeological assessments, excavation, research, reporting, analysis and consultation. Twelve years in skeletal identification, biological profiling and skeletal trauma identification.

- BA (Archaeology and Palaeoanthropology, University of New England 1999
- Hons (Archaeology and Palaeoanthropology): Physical Anthropology), University of New England 2001
- Forensic Anthropology Course, University of New England 2003
- Armed Forces Institute of Pathology Forensic Anthropology Course, Ashburn, VA 2008
- Analysis of Bone trauma and Pseudo-Trauma in Suspected Violent Death Course, Erie College, Pennsylvania, 2009
- Currently undertaking a PhD, University of Newcastle, 2017

1.7 REPORT STRUCTURE

The report includes Section 1 which outlines the project, Section 2 presents the environmental and archaeological context, Section 3 provides the results and discussion and Section 4 presents the Impact Assessment, Section 5 discusses the mitigation measures and Section 6 provides the management recommendations.

2 ENVIRONMENTAL AND ARCHAEOLOGICAL CONTEXT

The archaeological due diligence process and assessment requires that the available knowledge and information in relation to the environmental and archaeological contexts is considered. The purpose of this is to assist in identifying whether Aboriginal objects, sites or places are likely to be present within the project area based on archaeological predictive modelling and in what condition they may be found in given the environmental impacts.

2.1 LOCAL ENVIRONMENT

Past site location and land use are closely linked to the environment including the landform, geology, geomorphology, soils, waterways and associated resources. The environmental context is important to identify potential factors relating to past Aboriginal land use patterns. The project area is situated on Quaternary alluvium, gravels, sands, silt and clays (Sydney Geological Map 1966 Consisting of the Disturbed Tuggerah Soil Landscape, the project area would have formed part of a gently undulating to rolling coastal dune field (Chapman and Murphy 1989). However, the Royal Randwick Racecourse has been in operation since the 1800's and continued works have resulted in a completely disturbed landscape, with the complete removal of the original landform and the importation of fill of soils. No original landform or deposits remain within the project area.

The project area is located approximately 2.3 kilometres north-east of Mill Stream Kemps and 2.5 kilometres west of the Ocean. No other fresh water sources are nearby, hence the project area is situated within an environment that would not have provided the necessary resources and subsistence resources to survive or camp, but may have been utilised for hunting and gathering and/or travel.

The project area is not located within an environment that would have provided resources required for sustainable occupation of the area. Utilised for travel, the evidence of such past Aboriginal land uses (see below) is manifesting the archaeological record as a background scatter of isolated or very low density artefacts scatters across the entire landscape. However, significant impacts form the racecourse construction since the 1800's has resulted in the original deposits being removed and this can be expected to have had significant impacts upon the archaeological record.

2.2 ARCHAEOLOGICAL CONTEXT

A review of the archaeological literature of the region, and more specifically the Lake Macquarie area and the results of a OEH AHIMS search provide essential contextual information for the current assessment.

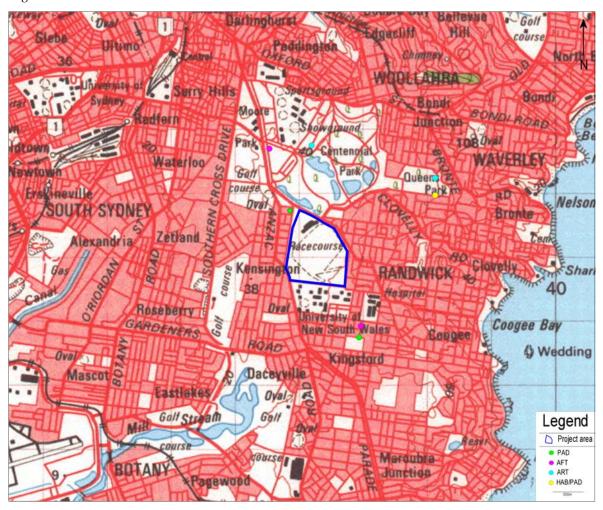
2.2.1 OEH ABORIGINAL HERITAGE INFORMATION MANAGEMENT SYSTEM (AHIMS)

There are many limitations with an AHIMS search including incorrect site coordinates due to errors and changing of computer systems at OEH over the years that failed to correctly translate old coordinate systems to new systems. Secondly, OEH will only provide up to 110 sites per search, thus limiting the search area surrounding the project area and enabling a more comprehensive analysis and finally, few sites have been updated on the OEH AHIMS register to notify if they have been subject to a s87 or s90 and as such what sites remain in the local area and what sites have been destroyed, to assist in determining the cumulative impacts, is unknown. In addition to this, other limitations include the number of studies in the local area, high levels of erosion have proven to disturb sites, site contents, and the extent of those disturbances is

unknown. Thus the OEH AHIMS search is limited and provides a basis only that aids in predictive modelling.

A search of the OEH AHIMS register has shown that 8 known Aboriginal sites are currently recorded within three kilometres of the project area and include 3 PADs, 2 AFT, 2 ART and 1 HAB/PAD. Closer examination of the search showed that sites 45-6-2896 (HAB/PAD) and 45-6-2897 (PAD) are the same site. The AHIMs results are provided in Annex A and the location of sites is shown in Figure 2.1.

Figure 2.1 Known sites



One PAD (46-6-3245) has been identified outside the project area at towards the north-western boundary of the project area. The PAD includes houses along Doncaster Ave. No report associated with the PAD is available from OEH and contact with the archaeologist has identified that the report is strictly confidential at this time and no information is available.

2.2.2 HERITAGE REGISTER LISTINGS

The State Heritage Register and Inventory, the national heritage List, The National Trust Register, the Commonwealth Heritage List and the Randwick Local Environmental Plan have no Aboriginal objects, sites or places listed.

2.2.3 SUMMARY OF THE REGIONAL AND LOCAL ARCHAEOLOGICAL CONTEXT

There are no local assessments registered on AHIMS. Given there are similar trends in archaeological patterning across NSW that shows there is a relationship between proximity to fresh water and landform in site location and land uses by past Aboriginal people, the following broad predictions for the archaeology and past Aboriginal land use of the local area, including the project area are provided:

- archaeological evidence of past Aboriginal peoples will be limited and will be representative of background scatter within close proximity to first order creek lines;
- archaeological evidence within close proximity of second order streams will again be representative of background scatter and will likely consist of one-off camp locations and / or isolated events;
- archaeological evidence in close proximity to third order creeks will consist of repeated occupation by small groups of people. Archaeological expressions will likely consist of knapping floors and evidence of repeated use over time; and
- archaeological evidence along major fourth order creek lines will consist of continued and repeated use by past Aboriginal peoples and may include stratified deposits.

2.3 SYNTHESIS OF ENVIRONMENTAL AND ARCHAEOLOGICAL CONTEXTS

The site types identified throughout the area appear to be either low density/small occupation activities or sites that were associated with more secular activities. The broader landform assessment also suggests that larger sites indicative of larger camping groups may be located on elevated land forms in close proximity to reliable water sources and associated resources compared to locations at distance from such necessary resources where large scale habitation is not possible, but may have been utilised as activity areas away from the main camp. Based on the AHIMS results and general archaeological site, within a five kilometre radius of our project area, it can be expected that:

- The majority of sites are located within 50 metres of a water source;
- Artefact densities decrease with increased distance from reliable water source;
- Main site types are artefact scatters and isolated finds;
- Mudstone/tuff and silcrete are by far the most common raw material types represented at sites in the region;
- flakes, broken flakes and flaked pieces are the most common artefact types recorded;
- The vast majority of artefactual material in the region was observed on exposures with good to excellent ground surface visibility.

2.4 PREDICTIVE MODEL FOR THE PROJECT AREA

Due to issues surrounding ground surface visibility and the fact that the distribution of surface archaeological material does not necessarily reflect that of sub-surface deposits, it is essential to establish a predictive model.

The OEH AHIMS register results, general archaeological site spatial patterns in relation to landforms and proximity to water and the environmental context provide an indication of site types and site patterning in the area. The key landforms with evidence of past Aboriginal land use are typically along creek banks and flats in close proximity to water sources. The most commonly occurring site types were predicted to be artefact scatters and isolated artefacts manufactured form silcrete or tuff.

Given the complete removal of the original land form, construction and maintenance of the racecourse since the 1800's distance it is highly unlikely that any cultural materials remain in the project area.

3 RESULTS AND DISCUSSION

To comply with the due diligence requirement that a visual inspection of the project area be undertaken, an archaeological survey was undertaken by MCH archaeologist Penny McCardle on 18 October 2017. The survey focused on areas of high ground surface visibility and exposures (erosional features, race track under re-construction).

The survey confirmed that the project area had been subject to previous long term intensive land uses including complete clearing and removal of all original landforms, fill imported for the construction of the racecourse and grandstands since the 1800's and maintenance activities.

Visibility was moderate due to race track grass cover and concrete walkways. Examples of the precinct lighting areas and trackside lighting areas are provided in Figures 3.1 and 3.2. Figure 3.3 shows the numerous tracks and different ground levels for each rack, providing proof that the previous construction works since the 1800's had removed the original landforms.

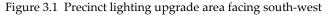
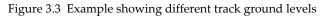




Figure 3.2 Trackside lighting location example







The total effective coverage for the project area is not provided due to the nature of the project area (original landform removed, large constructed areas and large concrete areas) which renders the effective coverage data ineffective in this case.

The level and nature of the investigation is considered satisfactory to provide an effective assessment of the potential of Aboriginal present within the investigation area. No Aboriginal objects, sites or places were identified during the survey.

In view of the predictive modelling and the results obtained from the assessment, it is concluded that the survey provides a valid basis for determining the probable impacts of the proposal and formulating recommendations for the management of any unexpected finds during construction. The survey results demonstrate the absence of Aboriginal objects due to significant land uses and associated impacts within the specific project area.

3.1 CONCLUSION

Proximity to water was an important factor in past occupation of the area, with sites reducing in number significantly away from water with most sites located within 50 metres of reliable water. The project area is located at distance form reliable water and as such may have been utilised for hunting and gathering and/or as a travel route which is manifest in the archaeological record as a background scatter of artefacts across the landscape. However, given the complete removal of the original landform and hence any cultural materials contained within it, there is very limited to no potential for cultural materials to be present within the project area.

4 ASSESSMENT OF IMPACTS

The archaeological record is a non-renewable resource that is affected by many processes and activities. As outlined in Section 2 and Section 3, the various natural processes and human activities have impacted on archaeological deposits through both site formation and taphonomic processes.

4.1 IMPACTS

The OEH Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (2010:21) describes impacts to be rated as follows:

- 1) Type of harm: is either direct, indirect or none
- 2) Degree of harm is defined as either total, partial or none
- 3) Consequence of harm is defined as either total loss, partial loss, or no loss of value

No archaeological sites or PADs were identified and the project area is heavily disturbed through past landuses and as such there are no impacts to the archaeological record.

4.2 CUMULATIVE IMPACTS

The cumulative impact to Aboriginal heritage in the area is limited given that:

- The net development footprint (i.e. the area of direct impact) is small and does not affect an original landform;
- The project area is highly disturbed through past land uses that have resulted in the complete removal of all original landforms and any cultural materials contained within
- No sites or PADs were identified;
- The placement of the development within this area, in particular within a highly disturbed context, ensures the cumulative impacts are focused in the areas of lower to no potential and therefore are kept to a minimum.

Mitigation measures to minimise these impacts are outlined in the following chapter.

5 MITIGATION AND MANAGEMENT STRATEGIES

Specific strategies, as outlined through the DECCW (2010b) Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010b), the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011), and the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010c), are considered below for the management of the identified site within the project area.

5.1 CONSERVATION/PROTECTION

Conservation is the first avenue and is suitable for all sites, especially those considered high archaeological significance and/or cultural significance. Conservation includes the processes of looking after an indigenous site or place so as to retain its significance and are managed in a way that is consistent with the nature of peoples' attachment to them.

As the project area is highly disturbed through past land uses and associated impacts and no sites or PADs were identified, conservation/protection is not warranted.

5.2 FURTHER INVESTIGATION

An Aboriginal Heritage Impact Permit (AHIP) is no longer required to undertake test excavations (providing the excavations are in accordance with the Code of Practice for Archaeological Investigations in NSW). Subsurface testing is appropriate when a PAD has been identified, and it can be demonstrated that sub-surface Aboriginal objects with potential conservation value have a high probability of being present, and that the area cannot be substantially avoided by the proposed activity.

As the project area is highly disturbed through past land uses and associated impacts and no sites or PADs were identified, further investigations are not justified.

5.3 AHIP

If harm will occur to an Aboriginal object or Place, then an AHIP is required form the OEH. If a systematic excavation of the known site could provide benefits and information for the Aboriginal community and/or archaeological study of past Aboriginal occupation, a salvage program may be an appropriate strategy to enable the salvage of cultural objects. The AHIP may also include surface collection of artefacts.

As no sites or PADs were identified an AHIP is not required.

6 RECOMMENDATIONS

6.1 GENERAL

- 4) The persons responsible for the management of onsite works will ensure that all staff, contractors and others involved in construction and maintenance related activities are made aware of the statutory legislation protecting sites and places of significance. Of particular importance is the National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010, under the National Parks and Wildlife Act 1974,
- 5) Should any Aboriginal objects be uncovered during works, all work will cease in that location immediately and the Environmental Line contacted, and
- 6) If site 45-5-3968 (isolated find located outside the project area) will be impacted by the proposed development an AHIP will be required.

REFERENCES

Chapman, G.A., and Murphy, C.L. 1989. Soil Landscapes of the Sydney 1:100 000 Sheet. Soil Conservation Service of NSW, Sydney.

Department of Environment, Climate Change and Water (DECCW). 2010a. *Aboriginal Cultural Heritage Consultation Requirements for Proponents* 2010. Department of Environment, Climate Change and Water NSW, Sydney.

Department of Environment, Climate Change and Water (DECCW). 2010b. *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. Department of Environment, Climate Change and Water NSW, Sydney.

Department of Environment, Climate Change and Water (DECCW). 2010c. Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW. Department of Environment, Climate Change and Water NSW, Sydney.

Office of Environment and Heritage (OEH), 2011. Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW. Department of Environment, Climate Change and Water NSW, Sydney.

APPENDIXA

AHIMS Search Results



AHIMS Web Services (AWS) Search Result

Purchase Order/Reference: Randwick Racecourse

Client Service ID: 306828

Penny Mccardle Date: 13 October 2017

Po Box 166

Adamstown New South Wales 2289

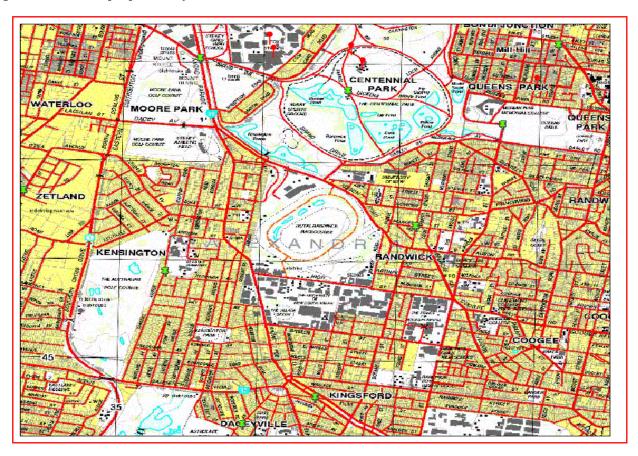
Attention: Penny Mccardle

Email: mcheritage@iprimus.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum: GDA, Zone: 56, Eastings: 334400 - 338400, Northings: 6244320 - 6248320 with a Buffer of 50 meters. Additional Info: assessment, conducted by Penny Mccardle on 13 October 2017.

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



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

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

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

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

Important information about your AHIMS search

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

ABN 30 841 387 271

Email: ahims@environment.nsw.gov.au

Web: www.environment.nsw.gov.au

• This search can form part of your due diligence and remains valid for 12 months.



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

Your Ref/PO Number : Randwick Racecourse

Client Service ID: 306828

<u>SiteID</u>	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	<u>SiteFeatures</u>	<u>SiteTypes</u>	Reports
45-6-0647	Centennial Park	AGD	56	336273	6247961	Open site	Valid	Art (Pigment or Engraved) : -	Rock Engraving	
	Contact	Recorders	ASR	SYS				<u>Permits</u>		
45-6-2495	Prince of Wales Hospital Aboriginal;Hearth;	AGD	56	337040	6245140	Open site	Valid	Artefact : -	Open Camp Site	
	Contact	Recorders	Mar	y Dallas Cons	ulting Archaeo	logists		<u>Permits</u>	1055	
45-6-0675	Randwick Queen's Park Waverley	AGD	56	338204	6247450	Closed site	Valid	Art (Pigment or Engraved) : -	Shelter with Art	
	Contact	Recorders	Mich	nael Guider				<u>Permits</u>		
45-6-2897	Queens Park PAD (duplicate see 45-6-2896)	AGD	56	338203	6247179	Closed site	Valid	Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders	Mr.F	aul Irish				<u>Permits</u>		
45-6-2896	Queens Park PADs	GDA	56	338203	6247179	Open site	Valid	Habitation Structure : 1, Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	Recorders	Don	Dominic Steele Archaeological Consulting				Permits		
45-6-3155	Moore Park AS1	GDA	56	335613	6247909	Open site	Destroyed	Artefact : -		
	Contact	Recorders	Arte	fact - Cultura	l Heritage Man	agement ,Mr.Josh Sy	mons,Mr.Alex Tim	ms <u>Permits</u>	4019	
45-6-3342	Not a site	GDA	56	337014	6244960	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u> <u>Recorders</u>			Mary Dallas Consulting Archaeologists, Ms. Tamika Goward				<u>Permits</u>		
45-6-3245	Doncaster Ave PAD	GDA	56	336037	6246916	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	GML	Heritage Pty	Ltd,Doctor.Ti	m Owen		<u>Permits</u>		