Due Diligence Aboriginal Archaeological Heritage Assessment

Parklea Correctional Centre, Parklea, NSW

Proposed Expansion & Additions to Existing Facilities

Report to
NSW Department of Justice

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Document Control

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Glossary and Abbreviations

Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010	Guidelines developed by OEH to guide formal Aboriginal community consultation undertaken as part of an Aboriginal Cultural Heritage Assessment (ACHA).
Aboriginal Heritage Impact Permit (AHIP)	Statutory instrument the Director General of the Office of Environment and Heritage (OEH) issues under Section 90 of the National Parks and Wildlife Act 1974 to allow the investigation (when not in accordance with certain guidelines), impact and/or destruction of Aboriginal objects.
Aboriginal object	A statutory term defined under the National Parks and Wildlife Act 1974 as, 'any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains'.
AHIMS Aboriginal Heritage Information Management System (AHIMS)	The Office of Environment and Heritage (OEH) maintains the Aboriginal Heritage Information Management System (AHIMS) which includes: information about Aboriginal objects that have been reported to the Director General, Department of Premier and Cabinet; information about Aboriginal Places which have been declared by the Minister for the Environment to have special significance with respect to Aboriginal culture archaeological reports.
Alluvial	Referring to sediment deposited by channelled stream and creek flow or overbank (flood) flow.
Artefact	Any product made by human hands or caused to be made through human actions.
B.P.	Before Present. The 'Present' is defined as 1950.
Crest	A landform element that 'stands above all, or almost all points in the adjacent terrain' (Speight 2009:29).
Department of Environment, Climate Change and Water (DECCW)	Now known as the Office of Environment and Heritage (OEH).
Department of Planning and Infrastructure (DPI)	The Consent Authority for development applications made in accordance with Part 3A of the Environmental Planning and Assessment Act 1979.
Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW	Guidelines developed by OEH, outlining the first stage of a two stage process in determining whether Aboriginal objects and/or areas of archaeological interest are present within a subject area. The findings of a due diligence assessment may lead to the development of a ACHA
Effective (survey) Coverage	Quantified estimate of the areas in which surface archaeological materials have been 'detectable' (exposed on the ground surface).
Environmental Assessment (EA)	Document summarising the assessment of environmental impacts of a development which supports an application for approval under the Environmental

	Planning and Assessment Act 1979.
Environmental Planning and Assessment Act 1979	Statutory instrument that provides planning controls and requirements for environmental assessment in the development approval process.
Exposure	Areas of land where natural ground surfaces are exposed through processes such as soil erosion, sparse vegetation cover, and disturbance. The percentage of ground exposures recorded in different landforms contained within a study area are used to calculate effective archaeological survey coverage.
Flat (land form)	Planar landform element that is neither a crest nor a depression that is level or very gently inclined (Speight 2009:22).
Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage	Guidelines developed by OEH to inform the structure and content of an Aboriginal Cultural Heritage Assessment (ACHA).
Isolated Find	An isolated find is usually considered a single artefact or stone tool, but can relate to any product of prehistoric Aboriginal societies. The term "object" is used in the ACHA, to reflect the definitions of Aboriginal stone tools or other products in the National Parks and Wildlife Act 1974.
Lower Slope	Slope element not adjacent below a crest or flat but adjacent above a flat or depression (Speight 2009:21).
Mid Slope	Slope element not adjacent below a crest or flat and not adjacent above a flat or depression (Speight 2009:21).
National Parks and Wildlife Act 1974	The primary piece of legislation for the protection of Aboriginal cultural heritage in NSW. Part 6 of this Act outlines the protection afforded to and offences relating to disturbance of Aboriginal objects. The Act is administered by OEH.
Office of Environment and Heritage (OEH)	The OEH is responsible for managing the Aboriginal Heritage (and other) provisions of the National Parks and Wildlife Act 1974.
Potential Archaeological Deposit (PAD)	Areas assessed as having the potential to contain Aboriginal objects. PADs are commonly identified on the basis of landform types, surface expressions of Aboriginal objects, surrounding archaeological material, disturbance, and a range of other factors. While not defined in the National Parks and Wildlife Act 1974, PADs are generally considered to retain Aboriginal objects and are therefore protected and managed in accordance with that Act.
Proponent	A corporate entity, Government agency or an individual in the private sector which proposes to undertake a development project.
RAP	Registered Aboriginal Party.
Taphonomy	The study of the processes that have acted on an archaeological site to make it as it appears today.

Upper Slope	Slope element adjacent below a crest or flat and not adjacent above a flat or depression (Speight 2009:21).
Visibility	Refers to the degree to which the surface of the ground can be observed. This may be influenced by natural processes such as wind erosion or the character of the native vegetation, and by land use practices.

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Supporting Documentation

Report summary

This due diligence Aboriginal archaeological heritage assessment has been prepared in consultation with the *Deerubbin Local Aboriginal Land Council* (DLALC) on behalf of the *NSW Department of Justice* who propose to expand existing facilities within Parklea Correctional Centre (PCC) in Parklea, NSW.

Methods & objectives

This report follows the *Office of Environments & Heritage's* (OEH) *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (2010) with the objectives of identifying potential Aboriginal archaeological heritage constraints that may exist for the proposal and guiding, if they exist, how these matters are to be managed according to the requirements of the *National Parks & Wildlife Act 1974*.

Previous research

AHIMS searches indicate that while two Aboriginal archaeological sites have previously been recorded within the correctional centre grounds, no site or objects have previously been recorded within or nearby the proposed activity areas for the PCC expansions and additions. Therefore no documented archaeological sites or areas of potential sensitivity will be affected by the proposal.

Field survey and consultation with the DLALC

Field survey confirms that no Aboriginal sites or objects will be harmed by the proposal. The land has been extensively modified over time as a result of the accumulated impacts associated with agricultural use followed by extensive construction and landscaping during recent decades. Each of the redevelopment areas chosen are already extensively disturbed and retain little or no archaeological potential. No specific areas of potential Aboriginal archaeological sensitivity relative to the current proposal have been identified in the course of preparing this report, and through consultation with the DLALC.

Evaluation

On the basis of the above considerations, it is concluded that the proposal is not going to have an adverse impact upon the Aboriginal archaeological heritage values of the place and that no Aboriginal archaeological constraints exist for the proposal proceeding as planned subject to the implementation of the management recommendations below that are provided on the basis of the recognition of the legal requirements and automatic statutory protection provided to Aboriginal 'objects' and 'places' under the terms of the *National Parks and Wildlife Act* of *1974* (as amended), and recognition of the views and advice that has been provided for the project by the DLALC.

I The proposal will not impact upon any *identified* Aboriginal archaeological sites or objects, and the *potential* for undetected Aboriginal archaeological items to occur within the proposed activity areas is assessed to be *low*. It is therefore recommended that there are no *obvious* Aboriginal archaeological

(scientific) constraints to the proposal proceeding as intended and that no further Aboriginal archaeological heritage input is warranted.

II In the (largely) unexpected circumstance that any Aboriginal objects are unearthed as a result of residential housing construction works in the future, it is recommended that activities should temporarily cease within the immediate vicinity of the find locality, be relocated to other areas of the subject site (allowing for a curtilage of at least 50m), and the OEH be contacted to advise on the appropriate course of action to allow the DLALC to record and collect the identified item(s).

1.0 Introduction

1.1 Background

This due diligence Aboriginal archaeological heritage assessment has been prepared in consultation with the *Deerubbin Local Aboriginal Land Council* (DLALC) on behalf of the *NSW Department of Justice* who propose to expand existing facilities within Parklea Correctional Centre (PCC) in Parklea, NSW. The objectives of this report have been to identify potential Aboriginal archaeological heritage constraints that may exist for the proposal and to guide, if they do exist, how these heritage matters are to be managed according to the requirements of the *National parks & Wildlife Act 1974*.

Figure 1.1: Existing urban residential context of Parklea Correctional Centre (NSW Public Works 2015)

Figure 1.2: Existing condition of the land contained within the correctional centre complex (Google 2015)

1.2 Need for this study

PCC encompasses approximately 60 ha of land (Lot 51 in DP 1026712) that is relatively flat and contains the prison buildings with a larger secured area also located outside the prison building walls. The site is crossed by Second Ponds Creek that runs diagonally through the south-western section of the site together with two (modern) wetlands (estimated to be approximately 5ha in area) and a scattering of trees of regrowth and some planted trees as illustrated above. How the site looked before the land was changed by building and wider landscaping indicated below indicates it was already cleared with a meandering creek line with low terrain.

Figure 1.3: Condition of the land in 1977 when it was 'green field' (Blacktown maps online 2015)

Figure 1.4: Nearest known Aboriginal archaeological sites (AHIMS and Google 2015)

Statutory heritage register searches undertaken by *NSW Public Works* during preliminary planning phases for the project identified two Aboriginal archaeological site recordings had previously been made at the south

western and central eastern boundaries of the PCC respectively, but that both recordings were also made outside of the areas of the site to be affected by the proposed expansions (see below), and will not be affected by the proposal.

The environmental assessment requirements issued for the proposal are to '*address Aboriginal Heritage in accordance with the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation 2005 and Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*'. Following initiation of consultation with the DLALC, who had participated in the original recordings of the heritage sites above, coupled with the reasoned probability that intact soil profiles with the potential to contain significant and undisturbed archaeology was unlikely because of each of the future expansion and addition areas are to be sited within already landforms (see below), suggested the 'heritage risk' of the proposal was low.

The wide and lengthy consultation requirements detailed within the above two documents were not considered to be commensurate with the Aboriginal heritage sensitivity of the site under the *National Park and Wildlife Act 1974* (see below). A baseline archaeological assessment, with an Aboriginal heritage values statement also provided by the DLALC, following the *Office of Environments & Heritage's* (OEH) *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (2010) was considered appropriate to the nature and scale of the proposal (see below).

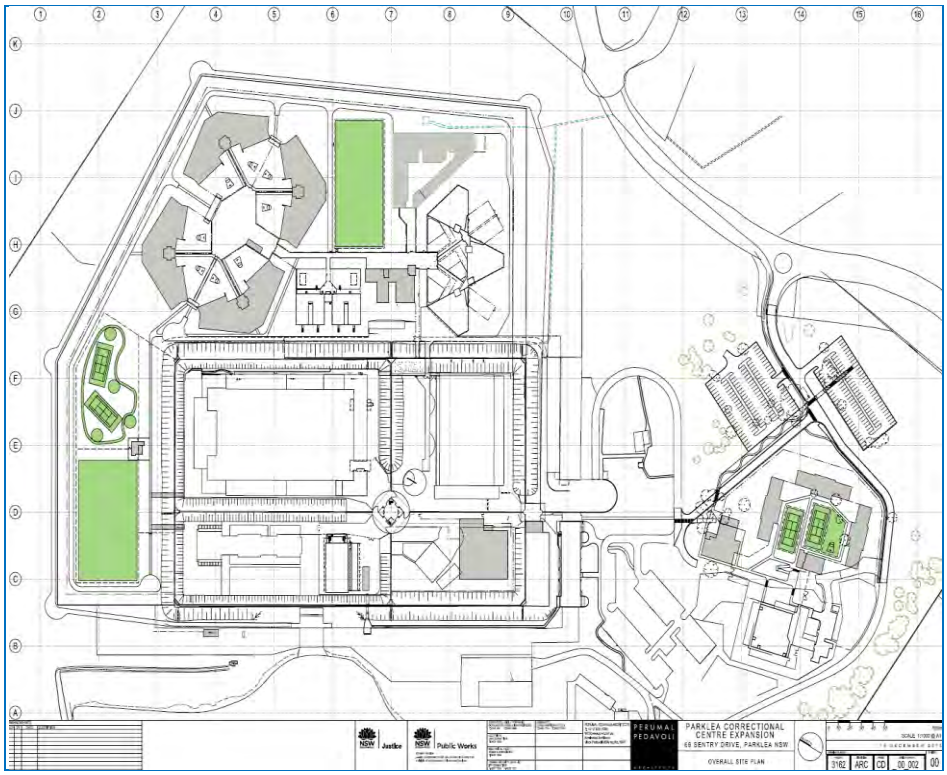
1.3 The proposal

The *Department of Justice* proposes to increase the number of beds available for inmates at Parklea Correction Centre with the creation of 500 new maximum security beds (inside the wall) and 150 minimum security beds (outside the wall) along with the construction of a new recreational playing field to the north of the existing prison buildings, but also within the existing (fenced) site boundary. All of the works are to be located partly or wholly within land previously affected by construction works.

The proposal will require significant earthworks for construction and landscaping that will entirely destroy soil profiles and any archaeological objects and deposits that may be contained and/or survive within the various construction footprints in the individual areas indicated in the site plan below.

However, this potential Aboriginal archaeological impact is greatly diminished because each of the proposed construction locations are either extensively disturbed or have been entirely destroyed in an archaeological sense. The areas proposed for future works include a graded bitumen car parking area (that has been cut and levelled), areas that are already fully landscaped (moved and mounded soil heaps and contoured banks), and in the case of the new playing field, the site is entirely fill redeposited from previous construction and landscaping works at the correctional centre.

Figure 1.5: Proposed expansion and additions to existing facilities (NSW Public Works 2015)



1.4 Statutory protection for Aboriginal cultural heritage

Two pieces of legislation provide automatic statutory protection for Aboriginal heritage and the requirements for its management in NSW: These are the *National Parks and Wildlife Act* (1974 as amended) and *Environmental Planning and Assessment Act* (1979 as amended). The *Office of Environment and Heritage* (OEH) has the principal responsibility for the protection and management of Aboriginal sites, objects, places and cultural heritage values in NSW. These values are managed through the provisions of the *National Parks and Wildlife Act 1974* (NPW Act) which was amended through the *NPW Act Amendment Act 2010*. Key points of the amended Act are as follows:

- Part 6 of the NPW Act provides protection for Aboriginal objects and places by establishing offences of harm which is defined to mean destroying, defacing, damaging or moving an Aboriginal object. Aboriginal objects are defined by the NPW Act 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 (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains*'.
- A declared Aboriginal Place this is of special significance to Aboriginal people and culture is a statutory concept (and may or may not contain Aboriginal objects as physical/tangible evidence) and protection provided to Aboriginal objects and places applies irrespective of the level of their significance or issues of land tenure.

- It is an offence (under Section 86) of the NPW Act to knowingly, or cause or permit harm to an Aboriginal object (or place) without prior written consent from the DG of the OEH. Defences and exemptions to the offence of harm under the NPW Act include that harm is carried out under the terms and conditions of an approved Aboriginal Heritage Impact Permit (AHIP).

1.5 Report method and objectives

This report follows the *Office of Environments & Heritage's* (OEH) *Due Diligence Code of Practice* (2010) with the objectives of identifying potential Aboriginal archaeological heritage constraints or additional cultural heritage considerations that may exist for the proposal as identified by the DLALC, and if they exist, guiding how these matters are to be managed according to the requirements of the *National Parks & Wildlife Act 1974*. This report has also been prepared in accordance with the following heritage recording, assessment and reporting guidelines and standards that are endorsed by the OEH:

- NPWS. 1997. September. Aboriginal Cultural Heritage Standards & Guidelines Kit.
- NSW Department of Environment, Climate Change & Water. (DECCW) 2010a (September). Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales. DECCW. Sydney.
- NSW Department of Environment, Climate Change & Water. (DECCW) 2010b (September). Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales. DECCW. Sydney.

This due diligence Aboriginal heritage assessment was undertaken in accordance with the Due *Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW 2010) which is a step by step formulae that involves '*taking reasonable and practical measures to determine whether your actions will harm an Aboriginal object and, if so, what measures can be taken to avoid that harm'* (ibid:4). The steps in the due diligence processes are:

1. Step 1 *Determining if the activity will disturb the ground surface or any culturally modified trees.*
2. Step 2a *Database search: Aboriginal heritage information management system (AHIMS) and known information sources*.
3. Step 2b *Landscape assessment*.
4. Step 3 *Impact avoidance assessment*.
5. Step 4 *Desktop assessment and visual inspection.*

The 'Code' specifies that if the initial assessment process identifies that Aboriginal objects will or are likely to be harmed, then further investigation and impact assessment is required (**Appendix 3**).

1.6 Aboriginal consultation

The *NSW Aboriginal Land Rights Act 1983* establishes the *NSW Aboriginal Land Council* and Local Aboriginal Land Council's and the Act requires these organisations to take action to protect Aboriginal culture and heritage in the Council's area (subject to any other law) and to promote awareness in the community of the

culture and heritage of Aboriginal people in the Council's area [ALR Act 1983, s52 (1) (m)]. The study area at Parklea falls within the *Deerubbin Local Aboriginal Land Council's* (DLALC) administration boundaries. An inspection of the areas of the PCC to be effected by the proposal was undertaken by DSCA and DLALC Sites Officer Steve Randall on 5 November 2015.

A draft of this report was forwarded to the DLALC for review and comment before finalisation. A copy of the *Cultural Heritage Statement* for the proposal that has been prepared by the DLALC indicates support and endorsement for this report is appended (**Appendix 1**).

1.7 Report outline

This report presents the following:

- An introduction to the project (**Section 1.0**).
- An overview of the environmental setting of the study area (**Section 2.0**).
- A review of previous Aboriginal heritage studies undertaken in the local landscape (**Section 3.0**).
- A summary of the findings of a site inspection and recording of the study area (**Section 4.0**).
- An assessment of the archaeological sensitivity of the site, and the heritage management conclusions that have been established for the redevelopment proposal (**Section 5.0**).
- The provision of Aboriginal archaeological management recommendations (**Section 6.0**).
- Sources and references cited in this report (**Section 7.0**).

2.0 Environmental context

2.1 Topography and drainage

The local landscape comprises gently undulating flats and low rolling hills with broad rounded crests and ridges with gently inclined slopes. The PCC land itself is largely flat to gently sloping low relief terrain land, but overall there is about 10m change in elevation from north to south where the highest land is in the south east corner of the PCC complex. Second Ponds Creek formerly ran through the southern eastern quarter corner of the study area. The meandering drainage evident in 1977 has been progressively changed by damming upstream and via the excavation and landscaping of the large wetland area which serves as a native animal and bird refugia not available elsewhere in the surrounding residential suburbs.

2.2 Geology and soils

The Penrith 1:100,000 Geological Series Sheet 9030 (1991) indicates that the site is underlain by Ashfield Shale (Rwa) that comprises dark-grey to black claystone-siltstone and fine sandstone-siltstone and laminitie. Bringelly Shale (Rwb) dominates the geology of the wider surrounding landscape to the east which comprises shale, carbonaceous claystone, claystone, laminite, fine to medium grained lithic sandstone and rare coal and tuff. Alluvium occurs along the margins and flood plains of Second Ponds Creek drainage. The northern part of the study (around the wetlands) in particular is likely to have been boggy terrain in the past and probably also flood prone at times.

2.3 Past vegetation

The vegetation communities likely to have dominated the shale soils prior to historic clearing comprised Grey Box Woodland and Grey Box-Ironbark Woodland (Bannerman & Hazelton 1990). The former include Grey Box (*Eucalyptus molluccana*), Forest Red Gum (*Eucalyptus tereticornis*) and possibly Red Ironbark (*Eucalyptus fibroses*) with Paperback (*Melaleuca nodosa*), Cabbage Gum (*Eucalyptus amplifolia*), Broad-leaved Apple (*Angophora subvelutina*) and Rough-barked Apple (*Angophora floribunda*). Acacia and Fabaceae, along with a variety of twiners, herbs and grasses would have made up the under-storey. *Grey Box-Ironbark Woodland* species comprise Grey Box*,* Forest Red Gum and Narrow-leaved Ironbark *(Eucalyptus crebra),* along with Thin-leaved Stringybark *(Eucalyptus eugenioides),* Broad-leaved and Rough-barked Apple*.* An under-storey includes *Acacia,* and the medium-high density ground layer is dominated by grasses.

2.4 Silcrete sources in the local landscape

The study area is located some distance from but within reach via trading of extensive geological occurrence of underlying Tertiary Period St Mary's Formation (Ts) at Marsden Park and 'Plumpton Ridge'. Silcrete has been found to be the preferred raw material at most archaeological sites across the Cumberland Plain, and over the last 4-5,000 years people appear to have mainly used locally available silcrete that varied in quality but was used for a wide variety of tasks and improved with time and effort spent on heat-treating (McDonald 2007).

There are tendencies in the archaeology for mudstone materials to have been more prevalent during the mid Holocene and further back in time to create a broadly 'bi-modal' raw material preference alongside silcrete. At Plumpton Ridge, dates from a significant archaeological stone extraction site indicate that initial use and occupation of the place by Aboriginal people occurred around 2,000 years ago and it is probable that older archaeological deposits associated with buried palaeochannel sources of silcrete on Eastern Creek and elsewhere will be identified in the future.

Aboriginal objects in and around 'Plumpton Ridge' in general are frequently found intermixed with 'background' distributions of naturally occurring silcrete in the form of gravels, fragments and both small and large cobbles that has led some researchers to conclude only limited evidence exists to support the extensive use of the naturally occurring silcrete source as a quarry by Aboriginal people in some locations (JMCHM 2006:38). There are difficulties inherent in the identification and assessment of Aboriginal artefacts of silcrete that often occur in and amongst background distributions of naturally occurring silcrete.

3.0 Aboriginal archaeological context

3.1 Regional overview

Kohen (1986) developed one of the first models to explain prehistoric Aboriginal occupation of the Cumberland Plain and focused on archaeological site occurrence, chronology and function. At the time, few archaeological sites had been excavated and fewer still had been dated. Allowing for this, Kohen suggested Aboriginal occupation of the region primarily occurred during the mid to late Holocene (approximately 5,000 BP) and was related to an increase in Aboriginal population in the area and the introduction of a new stone tool technology (the 'small tool tradition'). Prior to this time, Kohen argues Aboriginal occupation of the area was concentrated on and around the Nepean River and the coast. Kohen (ibid:229ff) suggested at the time that the patterns of Aboriginal landuse across the study area could be summarised as follows:

> 1) Large campsites are clustered along the waterways, and in particular along the Nepean Rive and the larger reeks.
>
> 2). Ridge tops were frequently used, either for short-term visits during which task-specific activities were carried out using small number soft tool s (perhaps including butchering game, the repair of wooden artefacts or obtaining raw materials in the case of silcrete quarries), or for more permanent sites where water was locally available.
>
> 3). There are no environmental zones which show a total absence of Aboriginal activity. Isolated finds therefore may be expected throughout the area. Such finds will include edge ground hatchet heads, discarded flakes and worn out tools.
>
> 4). Raw material for the manufacture of stone tools were obtained both in the form of silcrete (probably from Plumpton Ridge, although other outcrops also exist) and from the gravel beds of the Nepean River (chert, basalt, quartz and quartzite).

A subsequent site location predictive model by Smith (1989) for the southern Cumberland Plain refined Kohen's work and suggested archaeological sites would be most commonly found along permanent creeks and around swamp margins, and that creek flats and banks were considered to be focal topographical features for site location (Smith 1989:2).

White & McDonald (2010:32-34) provide the following (abridged) summary of more recent research over the last twenty years to assist in orientating later sections of this report:

> *'Stream Order: Water supply is often thought to be a significant factor influencing peoples' land-use strategies. Large and/or permanent water supplies may have supported large numbers of people and/or long periods of occupation while small and/or ephemeral water supplies may have been able to support only small numbers of people and/or transient occupation.*

The stream order method identifies the smallest tributary stream as 1st order, two 1st order streams to join to form a 2nd order streams, two 2nd order stream, two 2nd order streams join to form a 3rd order stream, two 3rd order streams join to form a 4th order stream and so on.

[Aboriginal] *artefact distributions varies significantly with stream order.*

Landform: 'Creek Flats' are flood plains with flat to gently inclined surfaces, adjacent to streams. 'Terraces' are former flood plains but no longer [are] *frequently flooded and occur at higher elevations than flats. 'Ridges' occur at the top of slopes, forming watersheds. 'Hillslopes' are roughly subdivided into lower, middle and upper to describe their relative position in valleys. Lower slopes comprise the lower third of slopes above valley floors, mid-slopes comprise the middle third of valley slopes between valley floors and ridge tops, and upper slopes comprise the upper third of slopes below ridge tops.*

Artefact distribution varies significantly with landform.

Distance from Water: Proximity to water was previously thought to be a primary determinant of site location on the Cumberland Plain. Distance from water is considered here in relation to stream order [as described below].

Previous studies on the Cumberland Plain indicated that 'sites' would be clustered within 50m of water.

Aspect: The orientation of open land surfaces may have influenced people's choices of artefact discard locations: north-facing slopes tend to be drier and provide shelter from colder southeast or southwest winds. Slopes facing northeast receive morning sun in winter and are sheltered from hot afternoon sun in summer.

Geology: Geology defines landforms and drainage, influences habitat formation and provides different resources such as sandstone suitable for grinding, and diversity of plant resources. Within the RHDA, the Wianamatta group of shales forms an undulating topography, and overlies Hawkesbury sandstone which is exposed on some lower slopes and along larger streams as platforms, low ledges, boulders and (rarely) rockshelters.

Distance to Silcrete Sources: Silcrete is the predominant artefact lithology in the RHDA, with silicified tuff predominant in only a few stratigraphically deeper [excavated] *assemblages which are technologically similar to late Pleistocene or early Holocene assemblages from Parramatta. Numerous studies have shown the effects of increasing distance from stone sources on attributes of lithic assemblages, as people used various strategies to conserve available lithic supplies when distant from quarries – 'distance-decay theory'. One conservation strategy could have been to discard fewer artefacts, therefore resulting in lower artefact densities with increasing distance from known lithic sources'.*

A prehistoric Aboriginal landuse model to explain the phases of Aboriginal occupation of the region that has (JMCHM 2002a:475), which takes into account the above archaeological trends and site determinants is summarised below. As previously noted, early archaeological dates for the region are rare and most tend to

cluster around the main rivers (Hawkesbury-Nepean & Parramatta) rather than the 'inland' or 'hinterland' landscapes of the region.

Pre-Bondaian (before 9,000 BP)

Preference for the use of silicified tuff for stone toll artefact manufacture, unless the investigated site is too great a distance from known sources and is often augmented with quartz and unheated silcrete materials. Cores and tools vary in size (some are quite large), but there are no backed artefacts, elouera, or ground stone implements. Unifacial flaking is a predominant technique for stone tool production during this period.

Early Bondaian (9,000 to 4,000 BP)

The archaeology suggests a preference for the use of silicified tuff to decline during this period where a greater use is made of local stone materials. Backed artefacts appear sporadically and bipolar flaking widely in use but rarely at individual sites.

Middle Bondaian (4,000 to 1,000 BP)

The use of different raw material types varied between sites and within sites over time. This is the main phase of backed artefact production and the introduction of asymmetric alternating flaking. Substantially smaller cores and tools are prevalent. Ground stone artefacts appear, though infrequently and present at fewer than half the dated sites. Elouera are present but rare.

Late Bondaian (1,000 BP to contact)

The use of different raw material types continued to vary. Backed artefacts decline, becoming rare or absent from most sites. Bipolar flaking techniques are evident at most sites. Ground stone at most dated sites in low frequencies. Elouera continued to be present but are rare.

3.2 Local archaeological context

3.2.1 Literature review

ENSR Australia conducted an archaeological investigation of the Alex Avenue and Riverstone Precincts within the North West Growth Centre in 2008 and identified 23 Aboriginal sites in addition to 14 previously recorded, with a total of 37 recorded Aboriginal sites within the two precincts combined. The investigations found larger sites with higher archaeological significance tended to be concentrated within 100m of First Ponds Creek, and the highest density of archaeological material identified was called the 'A7 Complex' and consisted of several artefact scatters and two areas of PAD within an area covering approximately 1,000m north-south and 400m east-west along both sides of First Ponds Creek (ENSR 2008: 71). A second site ('RAA11') re-recorded by Aecom (2010) located on a local hill crest which forms part of the larger northwest facing ridge between Eastern Creek and First Ponds Creek is also of note. ENSR (2008:59) describe the site as follows:

> *The site was originally identified by Darwala-Lia (1999) as RL 8, and was documented as 16 stone artefacts including silcrete flakes, utilised flakes, cores and flaked basalt river pebbles. While a number of transects undertaken by ENSR investigated the area, no artefactual materials was identified. However, the area did retain one of the highest concentrations of silcrete cobbles/fragments/pieces (>50 pieces per sqm) within the Riverstone study area.....Several of these silcrete pieces did retain diagnostic features, but not enough to be identified as artefactual. It should be noted that the area is only 400m from the extensive A7 Complex, and as such it is not infeasible that this area was the location for silcrete at the site and the surrounding sites at First Ponds Creek.*
>
> *This is not considered an Aboriginal artefact scatter, but retains Aboriginal cultural value, and consideration of preservation of this area should be considered...'.*

However, the ENSR report (2008:86) suggests that RA11 may be the only silcrete source that exhibits the same scale and intensity of the Plumpton Ridge silcrete sources and is was a 'good example' of the St Marys Formation (ibid:91). Aecom's reassessment divided silcrete cobbles and fragments into four size classes; boulders (>640m), large cobbles (300-640mm), small cobbles (64-300mm) and gravel (<64mm). Three Aboriginal objects were recorded at the site in an area of naturally occurring silcrete that occurred as cobbles and boulders at the 50m contour or above. Aecom (2010) conclude that the extensive distribution of flaked stone artefacts reported by Darwala-Lia does not occur; instead there is an extensive distribution of angular silcrete fragments in association with some silcrete cobbles where the former have been misidentified as Aboriginal artefacts. The Aecom study also noted that adjacent lands were completely devoid of silcrete and where thick piles of silcrete cobbles had been collected and stacked up along fence lines and in stockpiles suggesting a significant amount of this 'rocky' material had been historically removed (ploughed up and or taken away from the surface) but confirmed this '*silcrete source was a confirmed Aboriginal quarry*, *albeit one with rare artefactual evidence'*. It is noteworthy that the area is not mapped to be geologically underlain by Ts deposits, but rather Bringelly Shale, and would there represent a previously unrecorded archaeological and geological find.

Kelleher Nightingale (2012) report previous studies (both surface survey and subsurface excavation) in the Area 20 Precinct has identified an extensive spread of Aboriginal artefacts along Second Ponds Creek, with other sites situated on raised areas away from the main drainage line. Silcrete was the dominant raw material, followed by low concentrations of silicified tuff and quartz. The most extensive excavations conducted to date were by JMCHM (2005) that included eight sites. A total of 230 test pits were excavated and 40,909 artefacts were recovered including 7,922 from surface collection. The investigations sampled creek flat, lower slope, mid-slope, upper slope and ridge top landforms (JMCHM 2005:64). Test excavations at four locations along the (then) proposed Windsor Road upgrade between Mile End Road in Rouse Hill and Level Crossing Road in Vineyard (Therin 2004) sampled four different landforms including minor drainage a major creek line, level ground greater than 200m from a source of permanent water and upper hill slope/hill crest. A total of 1,840

artefacts were recovered with the highest artefact density identified on the northern margin of Second Ponds Creek. Baker (1998 and 2000) reported on field survey and subsequent test and salvage excavation within the Caddies Creek valley on the eastern side of Windsor Road (Mungerie Park). Excavation of a total of 211 square metres of deposit recovered 994 artefacts from the test pits and 4,510 artefacts from three open area excavations. Later test and salvage excavation at three sites, RH/CD5, RH/CD10 and RH/CD7 on Caddies Creek (JMCHM 2007) retrieved 18,263 artefacts from 545 sqm and the highest artefact density was recorded at RH/CD5 that was situated on a lower slope landform within 120m of Caddies Creek and near its confluence with a second order stream (ibid:302).

Kelleher Nightingale (2009, 2012) report on the findings of Aboriginal heritage investigations within the Growth Centres Precincts at Marsden Park (and Industrial) and predicted on the basis of previous archaeological investigations in the region and the unique environmental characteristics of the (Marsden Park) Precinct that:

- natural silcrete gravels and other culturally significant raw material types occur amongst Rickabys Creek Gravel that is exposed across large parts of the precinct;
- silcrete artefacts are likely to occur across significant parts of the study area. The highest density of archaeological deposit will occur in association with low-lying spurs and waterways through the centre of the precinct, as well as in association with South Creek and higher order tributaries in the west and north west of the precinct.

Investigations of the Marsden Park Precinct identified 67 archaeological sites comprising 43 previously identified and 24 new recordings. The Marsden Park Nature Reserve in what is currently referred to as the Shanes Park Air Services Australia land had previously been identified as having potential to contain unusual or higher density site types than other areas in the local landscape (Smith 1988:11) Thirteen open artefact scatters (MP40– 52, AHIMS # 45-5-0678 to # 45-5-0690) were assessed as having moderate to high significance (Smith 1988:137) and most were located on slopes or raised ground/ridges overlooking a Melaleuca swamp and/or a tributary to South Creek. Silcrete was the predominant raw material at each site, followed by tuff, chert, quartz, quartzite and basalt.

Notable sites amongst the thirteen include Site MP48 (AHIMS # 45-5-0686) that was a large artefact scatter across both banks of a South Creek tributary that continued to a ridgeline west of the creek where over 170 artefacts were recorded including 90% silcrete and the remainder indurated mudstone. The surface density of artefacts was interpreted to indicate a subsurface potential of 40,000 artefacts. Subsequent assessment of MP48 found there was a high level of naturally occurring silcrete gravel and cobbles in ground exposures and in the creek bank and it was concluded the subsurface density of artefacts was not likely as high as previously thought (AMBS 1996:8). A second site, MP40 (AHIMS # 45-5-0678), was a large open artefact scatter on a flat rise and west facing slopes of tributary of South Creek where 100 artefacts were observed. Silcrete the most predominant material with low numbers of indurated mudstone and a quartzite artefact also identified. The site was considered to have potential for further subsurface artefacts away from the track on the crest of the

rise. A third site, MP43 (AHIMS # 45-5-0681), was a dense scatter of artefacts on creek flats and gentle north facing slopes of a tributary of South Creek. Over 100 artefacts were recorded, predominantly silcrete with low numbers of chert and indurated mudstone. A concentration of 70 silcrete artefacts was identified on the crest of the slope, considered to represent a silcrete knapping floor. The site was determined to have potential for further artefacts to occur at the relatively undisturbed location.

Marsden Park Industrial Precinct borders the south east boundary of the Marsden Park Precinct and assessment in 2009 (Kelleher Nightingale 2009) identified 63 Aboriginal archaeological sites and four areas of potential archaeological deposit (PAD) (Kelleher Nightingale Consulting (KNC) 2009, Comber Consultants 2008, Brayshaw and Haglund 1997). Clusters of archaeological activity (sites) were identified at 12 landforms as having greater archaeological potential than others, and two were ranked as demonstrating high significance, and ten as moderate significance. A total of 32 sites were identified outside of the 12 heritage significant landforms. These 32 sites were assessed as having low archaeological significance. The four areas of PAD were assessed as demonstrating moderate to high archaeological potential. Silcrete was the primary raw material across all sites, with low levels of tuff, chert and quartz.

Part of the Colebee land grant, a site of historical and cultural value to Aboriginal stakeholders, was located in the south eastern portion of the industrial precinct. The land was given to Colebee and Nurragingy in 1816 by Governor Macquarie and represents the first land grant to an Aboriginal person after colonisation. It was assessed as being of exceptional Aboriginal cultural heritage significance. JMCHM Pty Ltd undertook a major archaeological salvage investigation of the Colebee Release Area that incorporates parts of Plumpton Ridge (and is bordered on its eastern side by Eastern Creek) in 2006. Three broad landscapes were selected for salvage excavation that comprised the riverine corridor of Eastern Creek, the mid-range slopes between Eastern Creek and Plumpton Ridge, and the margins of Plumpton Ridge at approximately 50m AHD elevation.

A total of 687m² were {hand) excavated that produced an assemblage of over 80,000 stone artefacts, with silcrete sourced from Plumpton Ridge dominating. Other raw materials included silicified tuff, silicified wood, quartz, quartzite and hornfels. Of the seven areas investigated (referred to SA23 which was located on an elevated hill slope adjacent to the Eastern Creek riparian corridor) produced over 45,000 artefacts recovered from 60 m² of open area excavation. Artefact densities here ranged from between 333 and 1,855/m² which is one of the richest archaeological deposits currently known for the Cumberland Plain. The excavation results indicated that the Plumpton Ridge quarry site was used extensively by Aboriginal people, though probably with greatest intensity over the last few thousand years (JMCHM 2006:136).

3.2.2 AHIMS site searches and evaluation

The Aboriginal Heritage Information Management System (AHIMS) is a database operated by the OEH that is regulated under section 90Q of the *National Parks and Wildlife Act 1974*. AHIMS contains information and

records related to registered Aboriginal archaeological sites and Aboriginal objects (as defined under the NPW Act) and declared Aboriginal places (as defined under the NPW Act) in NSW.

AHIMS searches indicate two Aboriginal heritage sites have previously been recorded within the correctional centre grounds (see **Appendix 2**), but that both of these sites are located well away from the proposed construction and activity areas and will not be affected by the proposal. These sites comprise:

- AHIMS Site #45-5-0357 QH 1 Quakers Hill RH/SP10 (PAD29 and ISF 10) 56 306360 6266390
- AHIMS Site #45-5-2293 PK/PC1 Rouse Hill 56 307110 6266580

Figure 3.1: The works proposed will not affect the two nearest known Aboriginal archaeological sites below

The AHIMS site card for site PK/PC1 reports two flake stone artefacts, comprising an unidentified green volcanic stone and a quartz bipolar flake, were originally located on the bank of a gully located just beyond the perimeter fence of the facility in 1933. The items were recorded during field survey undertaken as part of the Rouse Hill Infrastructure Project (RHIP) Stage One. The artefacts were not in situ, but had washed down from upstream. Consent to Destroy the site was subsequently issued subject to archaeological test excavation being undertaken first. The area tested at PK/PC1 was defined '*as the area between the Prison fence and the next fence to the east; a distance of 350m*'. Two grader trenches, 1m wide and 25m long and excavated in 10cm levels and screened, and a number of smaller grader 'cuts' in the vicinity of the original finds, recovered two further artefacts; a large silcrete core and a silcrete flaked piece. The low number of finds recovered did not warrant any further investigation of the site.

AHIMS Site #45-5-0357 is described to have comprised a scatter of fifteen stone artefacts located 800m from the northwest corner of the 'prison dam' at the start of Second Ponds Creek on the eastern side. The predominantly silcrete and quartz artefacts were scattered over an exposure measuring 15m x 10m. Two of

the finds (flaked pieces) were reported to have use wear, and two others to have secondary working. The site was assessed to retain the potential to retain subsurface archaeological deposit.

3.2.3 An Aboriginal land use model

Aspects of models for Aboriginal site distribution on the (northern) Cumberland Plain that appears applicable to the subject sites on Edmund Street. Sites located in landscapes with more permanent water have often been found to be extensive and complex, with evidence for repeated and overlapping behaviours/activities being reflected in the types and amount of flaked stone artefacts recovered. Sites with more ephemeral water supply, in contrast, are typically found to be sparser and contain evidence suggestive of more localised, 'one-off', behaviour/activity. In addition, spatial patterning in flaked stone artefact distributions can, in certain circumstances, be evaluated within a three-tiered model of 'Activity Overprint Zones' incorporating 'Complex', 'Dispersed', and 'Sparse' Zones whereby:

- Complex zones will most likely exhibit overlapping knapping floors and high density concentrations of artefacts indicative of repeated, long-term occupation events.
- Dispersed zones may include knapping floors. However, these are typically spatially discrete due to less frequent occupation.
- Sparse zones will most likely exhibit consistently low frequencies/densities of artefacts. Artefact discard in these zones is likely to have resulted from discard in the context of use or loss rather than manufacture. Beyond the "sparse" zone archaeological evidence may be present, but in such low density that the sampling intensity used in this project would fail to pick it up reliably" (Baker 2000: 54).
- Flaked stone artefact production and maintenance will generally leave a more obtrusive archaeological 'signature' than resource extraction (e.g. food collection and processing). These activities will also most likely occur closer to the residential core while resource extraction will typically occur away from it.

On the basis of these searches and the previous background archaeological review, it can be predicted that the subject site may contain the following types of Aboriginal archaeological evidence. :

- *Open Camp Sites*: These sites will most likely occur on dry and elevated topographies above flood prone zones but close to creek lines with favourable sight lines and communication attributes. Repeatedly or continuously occupied sites are more likely to be located on elevated ground situated at principal creek confluences in the local landscape. Surface scatters of flaked stone artefacts (or potentially durable food remains such as animal and fish bone or shell preserved in alluvium) may be the result of mobile hunting activities, while single or low density occurrences might relate to tool loss, tool maintenance activities or abandonment. These types of sites are often buried in alluvial or colluvial deposits and only become visible when subsurface sediments are exposed by erosion or disturbance. The soils at the site include shale, ironstone and naturally occurring silcrete items, and the identification of Aboriginal objects (artefacts) inter-mixed with natural materials that may superficially resemble artefacts can be problematic.

- *Isolated Artefacts*: These items occur without any associated evidence for prehistoric activity or occupation. Isolated finds can occur anywhere in the landscape and may represent the random loss, deliberate discard or abandonment of artefacts, or the remains of dispersed artefact scatters. Manuports are items consisting of raw materials of stone that do not naturally occur within the soil profiles of a given region. Transported onto a site by Aboriginal people from sources elsewhere, these items will have subsequently been discarded before use as flaked or ground stone tools.

4.0 Site inspection

4.1 Site inspection and recording

The fieldwork followed standard methods (see NPWS 1997 and OEH 2010) and the site recording included consideration of landforms, topography, nature and extent of ground exposures/visibility; and extent of disturbances. The fieldwork work was recorded through photography and field notes and a sample of the images recorded that characterise the nature of the block are presented below.

4.2 Field observations

The inspection of the proposed construction areas that may be affected by the proposal has revealed:

- No Aboriginal archaeological sites or objects have been located.
- The probability that undetected Aboriginal sites or features of significance are present and survive within the areas to be affected by the proposal is limited, and in places, non-existent. The site as a whole is highly to almost totally disturbed and appears likely to retain few areas of intact subsurface soil profiles that may contain archaeology.
- Allowing for the fact that the site is close to the original alignment of Second Ponds Creek, but that much of the terrain is low lying topography, there are no additional expectations that the land to be affected by the proposal would have specifically been chosen to be used or visited *intensively* or *repeatedly* by people in the past that would have marked the site as a particularly desirable campsite location over others with more favourable attributes. It is more likely that the land may have been visited sporadically by people over time as they moved to and from more attractive places in the local landscape in the wider catchments of Seconds Ponds Creek that may have offered more varied and predictable resources.

4.3 Due Diligence considerations

Step 1. Will the activity disturb the ground surface?

The redevelopment will require bulk earthworks and building in selected areas, all of which in one shape of form, have been variously disturbed by past activity and retain highly diminished archaeological potential as a result of the accumulated historical impacts.

Step 2a. Search the AHIMS database and use any other sources of information of which you are already aware

Two Aboriginal archaeological heritage sites are located within or just outside the PCC grounds. The nearest known site is an unremarkable surface find recording of flaked stone artefacts located just outside the eastern boundary of the correctional centre that will not be affected by the additions at the place. The second Aboriginal heritage site within the study area is located well away (to the west) from the proposed activity areas and will not be affected by the proposal.

Step 2b. Activities in areas where landscape features indicate the presence of Aboriginal objects

The only landscape feature contained within the study area that indicate (or increase the likelihood for) the presence of Aboriginal objects is the proximity of Second Ponds Creek which however has been extensively disturbed as a result of the construction and landscaping of the existing wetlands area in the complex where the original flow of the creek in the 1970s was free and meandering across terrain of low relief. The proposed activity areas themselves comprise portions of unremarkable sloping and undulating landforms with no remarkable or otherwise noteworthy characteristic.

Step 3. Can you avoid harm to the object or disturbance of the landscape feature?

No identified Aboriginal objects will be impacted by the proposal.

Step 4: Desktop assessment and visual inspection

The section of flood plain and toe slopes taken in by the PCC complex was just prior to the establishment of the correctional centre a parcel of 'standard' cleared riverbank land with a long agricultural history and is not remarkable on archaeological grounds in terms of the landform it contains. The areas chosen for the expansions and additions each retain minimal potential to retain intact subsurface archaeological profiles as a result of past building and gross landscaping.

Step 5. Further investigations and impact assessment

No further heritage assessment of the proposed activity areas for the proposal appears to be warranted.

Figure 4.1: Existing visitor's car parking area that is to be redeveloped as part of the proposal. The shallow clay soils in this locality will have been extensively graded and possibly entirely stripped and replaced with sub-grade materials before the surface was formalised. Archaeology is unlikely to survive here.

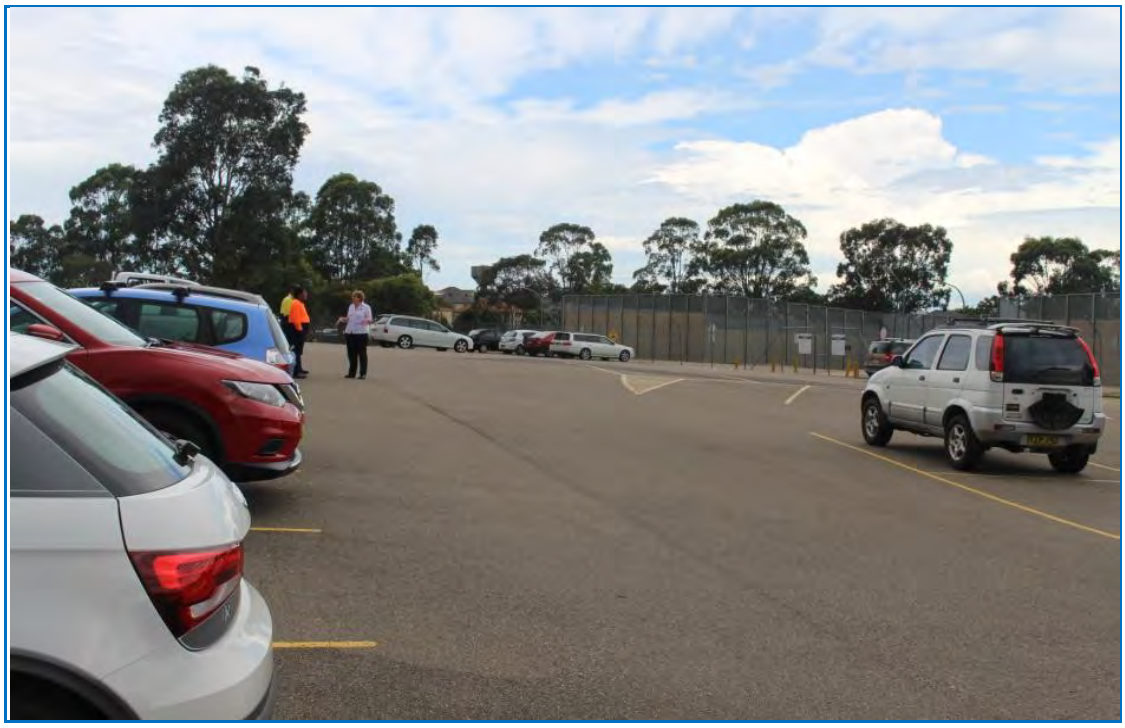


Figure 4.2: Much of this land, already flat and featureless terrain, has also be extensively landscaped in places where entire areas of topsoil have been cut, redeposited and encountered

Figure 4.3: The cut in the foreground is for drainage control, and the mounding in the background are stockpiles from previous landscaping works in the areas to be affected by the proposal. The soils below the grass are very shallow or absent with little top soil profile evident

Figure 4.4: The earth wall in the background has been constructed from materials taken from the foreground in this image and other areas within the fenced PCC building complex

Figure 4.5: This image shows the nature and scale of the landscape modification and change to the original topography of the land. The soil materials exposed are up-cast and redeposited basal clay materials probably pushed aside during the construction of the earth mound and fence line to the left and/or access path to the right

Figure 4.6: Typical soil profiles (disturbed) exposed in the areas to be affected by the proposal. The materials retain no Aboriginal archaeological potential

5.0 Conclusions

5.1 Aboriginal archaeological heritage impact statement

The background Aboriginal archaeological and cultural heritage research, site inspection, analysis and assessment of the proposed PCC redevelopment proposal indicate that:

- No Aboriginal sites or objects will be harmed by the proposal. The land has been extensively modified over time as a result of the accumulated impacts associated with past timber felling and vegetation clearance, ploughing, and in recent decades, grading and constructions. Each of the activity areas chosen are already and retain little or no archaeological potential.
- No specific areas of potential Aboriginal archaeological sensitivity relative to the current proposal have been identified in the course of preparing this report, and through consultation with the DLALC.

5.2 Evaluation

On the basis of the above considerations, it is concluded that the proposal is not going to have an adverse impact upon the Aboriginal archaeological heritage values of the place and that no Aboriginal archaeological constraints exist for the proposal proceeding as planned subject to the implementation of the management recommendations provided below.

6.0 Management Recommendations

6.1 Basis for Recommendations

These recommendations are provided on the basis of the:

- recognition of the legal requirements and automatic statutory protection provided to Aboriginal 'objects' and 'places' under the terms of the *National Parks and Wildlife Act* of *1974* (as amended), and recognition of the views and advice that has been provided for the project by the DLALC.

6.2 Recommendations

I The proposal will not impact upon any *identified* Aboriginal archaeological sites or objects, and the *potential* for undetected Aboriginal archaeological items to occur within the proposed activity areas is assessed to be *low*. It is therefore recommended that there are no *obvious* Aboriginal archaeological (scientific) constraints to the proposal proceeding as intended and that no further Aboriginal archaeological heritage input is warranted.

II In the (largely) unexpected circumstance that any Aboriginal objects are unearthed as a result of construction works in the future, it is recommended that activities should temporarily cease within the immediate vicinity of the find locality, be relocated to other areas of the subject site (allowing for a curtilage of at least 50m), and the OEH be contacted to advise on the appropriate course of action to allow the DLALC to record and collect the identified item(s).

III Two copies of this report should be forwarded to:

Ms Fran Scully
Archaeologist
Regional Operations Group Greater Sydney
Office of Environment and Heritage
PO Box 644
PARRAMATTA, NSW, 2124

IV A copy of this report should be forwarded to:

The Chairperson
Deerubbin Local Aboriginal Land Council
PO Box 40
PENRITH BC, NSW, 2751

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Appendix 1

DLALC Cultural Heritage Statement

Appendix 2

AHIMS Site Searches

Office of Environment & Heritage

NSW GOVERNMENT

AHIMS Web Services (AWS)

Search Result

Purchase Order/Reference : Parklea basic

Client Service ID : 203832

Dominic Steele Archaeological Consulting

Date: 13 December 2015

21 Macgregor Street
CROYDON New South Wales 2132

Attention: Dominic Steele

Email: dsca@bigpond.net.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 51, DP:DP1026712 with a Buffer of 50 meters, conducted by Dominic Steele on 13 December 2015.

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:

2	**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.
- This search can form part of your due diligence and remains valid for 12 months.

3 Marist Place, Parramatta NSW 2150
Locked Bag 5020 Parramatta NSW 2220
Tel: (02) 9585 6380 Fax: (02) 9873 8599

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au

Office of Environment & Heritage

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : Parklea ext
Client Service ID : 203833

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
45-5-0357	QH 1 Quakers Hill RH/SP10 (PAD29 and ISF 10)	AGD	56	306360	6266390	Open site	Valid	Artefact : -	Open Camp Site	260,1018,9814 4,982B1
	Contact	Recorders	Mary Dallas Consulting Archaeologists					Permits	1068,1900,1979,2366	
45-5-2293	PE/PC1 Rouse Hill	AGD	56	307110	6266580	Open site	Valid	Artefact : -	Open Camp Site	2544,982B1
	Contact	Recorders	Helen Brayshaw					Permits	630	

Report generated by AHIMS Web Service on 13/12/2015 for Dominic Steele for the following area at Lot : 51, DP:DP1026712 with a Buffer of 50 meters. Additional Info : for an gis. Number of Aboriginal sites and Aboriginal objects found is 2

DSCA ● 21 MACGREGOR STREET ● CROYDON NSW 21322 ● (02) 9715 1169 ● 0411 88 4232 ● dsca@bigpond.net.au

#663

CONSENT TO DESTROY ISSUED 30/6/94 [ ] New recording [✓] Additional Info

National Parks and Wildlife Service

Box 1967, Hurstville NSW 2220. Tel: (02) 585 6444

Standard Site Recording Form ~~xxxxxxxxx~~ Revised 12/92

1:250,000 map sheet: SYDNEY NPWS Code [4.5]

AMG Grid reference (Full reference - please include leading digits): 250K 307060 mE; 250K 6266580 mN

307 25K 10 5/8 6266 25K 580

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

1:25K, 50K, 100K map name: RIVERSTONE

HEAD OFFICE USE ONLY:
NPWS Site no: 45-5-2293
Site types: open
Accessioned by: [illegible] Date: 3Nov93
Data entered by: _____ Date: _____
Owner/Manager:
Address:

Site name: PKPC1 Locality/property name:

NPWS District: North Met. Region: Central

Reason for investigation RHIP (Stage One) Development.

Portion no:
Parish:

Photos taken? Yes
How many attached? —

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

Other sites in locality? Yes
Are sites in NPWS Register? Yes
Site Types include: Open Sites, Grinding Grooves, Rockshelters with Deposit

Have artefacts been removed from site? Yes
By whom? Elizabeth Rich
When? August 1993
Deposited where? To be lodged at Avs mus.

Is site important to local Aborigines? Yes
Give contact(s) name(s) + address(es) Tony Kendelk Durak LALC, Mt Druitt Village NSW

Contacted for this recording? Yes
(Attach additional information separately) If not, why not?

Verbal/written reference sources (including full title of accompanying report). Elizabeth Rich Archaeological Investigation of Sites PK/PC1-5, Parklea, NSW. Test Excavation Report September 1993. NPWS Report Catalogue # C-2654

Checklist: surface visibility, damage/disturbance/ threat to site

Condition of site: Some disturbance from currently active floodplain of the gully in which site is located. Some disturbance also from Excavation.

Recommendations for management & protection (attach separate sheet if necessary):
Consent to Destroy.

Site recorded by: J. McDonald Date: April 1993.
Address/institution: McDonald and Grayshaw
51 Thompson Street Drummoyne NSW.

Test Excavation Report - Sites PK/PC 1 - 5 **Page 3**

Map 2: Location of the study area (from Riverstone 1:25,000).

2. Consent to Destroy sites PK/PC2 and PK/PC3 be issued subject to archaeological salvage of the knapping floors at locations S17-G845 and S14-629/630.

3. The north-eastern side of the proposed Burdekin Road should be fenced off (eg. with parawebbing) to avoid accidental damage to the untested part of site PK/PC3 and the PK/CD1+2 site complex. The proposed road south-east of chainage 660 (i.e. the dam on PK/PC3) would be a sufficient extent of this protective work.

4. A plan of management be prepared which provides for the protection of site PK/PC4 in the proposed open space. If that site cannot be protected in the long-term then additional archaeological work should be carried out.

2. ABORIGINAL CONSULTATION

The Rouse Hill Development Area falls within the boundaries of the Daruk LALC. Ongoing consultation and liaison with the Land Council is being carried out by Brayshaw McDonald Pty Ltd, while the Land Council has a contract direct with Rouse Hill (Stage 1) Pty Ltd.

The Land Council were actively involved in the archaeological work described in this report. The Land Council was represented by Des Hickey and Steve Randall and assistance was provided by Russell Taylor, Don Dodd, Stewart Reynolds, Anthony Barker, Richard Taylor, Tim Bell, Ronald Davison, Ivan Morris, Albert Wilson and Denis Cavanagh.

A copy of the present report together with a summary of the archaeological findings and recommendations are being submitted to the Aboriginal sites sub-committee of the Daruk LALC for consideration.

3. ENVIRONMENTAL CONTEXT

3.1 The study area

The study area is located at Parklea on the Cumberland Plain in north-west metropolitan Sydney (see Map 1).

The study area forms the upper catchment of a gully which drains into Caddies Creek north of Sunnyholt Road. The area is approximately 600m north-south and 700m east-west, covering approximately 42 hectares (see Maps 2 and 3). The area is drained by three minor gullies.

3.2 Geomorphology

The study area is located on hillslopes underlain by Ashfield shale bedrock, with minor deposits of alluvium along the gullies and larger deposits around the gully confluences. The hill crest immediately west of the study area is formed of Minchinbury sandstone with a thin capping of Bringelly Shale.

The sedimentary stratigraphy exposed in the gully has a lower unit of partly cemented gravels which are pre-Holocene in age and indicate a period of

Environmental context ...

instability with higher-energy flows than at present (see Appendix 4). This unit was inspected for *in situ* artefacts and datable material but none were found.

Alluvial fills above the gravels indicate at least four episodes of gullying and infilling of low energy channels. Within the present study area, however, the channels have stayed within fairly narrow banks and form the currently active channel and its floodplain.

Alluvium around the gully confluences, which tended to be more extensive than along the gully banks, was either heavily disturbed by dam construction or contained only sparse archaeological material. The site complex of PK/CD1+2 downstream of the present study area contained chronologically ordered sediments but generally these sediments and their archaeological potential do not extend upstream into the present study area.

3.3 Topography

Topography is gently-sloping and the study area has not been affected by sheet erosion or slope wash coming from hillslopes higher above [as was the case on PAD 16 (Haglund 1993b) for example]. The minor gullies are flanked by slightly elevated flattish slopes which would have provided ideal camping spots.

3.4 Vegetation

Most native vegetation has been cleared and at the time of the investigations the study area supported a thick cover of grasses. Mature trees occurred on and south of site PK/PC4, and a single gum occurred on PK/PC3.

3.5 Existing forms of disturbance

The study area has been disturbed by previous land use. The area has been cleared and hillslopes west and south of PK/PC2 have very irregular surfaces. Six dams have been constructed along the three gullies. Air photos show that the paddock north of PK/PC3 has been cultivated, although clear signs of cultivation were not found elsewhere within the study area.

3.6 Archaeological setting

The present study area comprises an "upper catchment" of small temporary drainage lines, with significant sites along permanent creeks occurring to the east, south-east and west. The PK/CD1+2 site complex, found to be of archaeological significance, occurs to the east around the confluence of the gully and Caddies Creek. The significant site complex formed by PK/CD3-6 occurs 1.5km to the south-east around the confluence of two arms of Caddies Creek. The significant site complex of Second Ponds Creek #45-5-429 occurs over the ridge to the west just 1.5km away.

These sites are associated with permanent or semi-permanent drainage lines. In contrast, the present study area had only minor, temporary drainage lines. The present investigations would complement previous work in looking at how different landscape settings were used.

Environmental context ...

5.0 RESULTS Site PK/PC1

5.1 Description of area

This site was originally recorded as two artefacts on the north bank of the gully, just beyond the perimeter fence of Parklea Prison. Two exposures were present; one 25m² and the other 50m². The larger exposure was on the south bank of the gully and showed a substantial section of A unit soils on B unit (bedrock derived) clays. The smaller exposure along the north side of the gully was of alluvium. The artefacts were a quartz bipolar flake and the distal fragment of a flake of a green volcanic material (McDonald 1993d). Geomorphological advice confirmed that the two artefacts were out-of-context, having been deposited as part of the currently-active floodplain of the gully. The artefacts had apparently washed down from higher upstream, indicating that archaeological material once continued beyond the study area within the area now taken up by Parklea Prison.

The study area east of the reported site location had no other exposures on which artefacts might have been revealed. The eroded banks of the gully were below the level of current flooding and therefore unsuitable as camp site locations. The dam wall 200m east of the `site' was grassed at the time of the investigations. Consequently, nothing could be learned of the archaeology of this part of the study area from surface evidence.

5.2 Rationale and methods

This part of the study area was arbitrarily defined as the area between the Prison fence and the next fence to the east; a distance of c.350m. It included both sides of the gully. In this area the gully formed a minor drainage line and large concentrations of archaeological material were not expected. However, it was considered important to test this assumption.

A grader was used to make drain-like cuts parallel to both sides of the gully, crossing the flattish elevated areas considered most likely to have potential as site locations (Maps 3 and 5; Plate 1). The "cuts" were approximately 1m wide with sloping profiles through the A unit soil and into the upper part of the clay (Plate 2). The loose soil (spoil) was placed along one side of the grader cut. Two persons then walked along the cut, one searching the cut for artefacts and the other checking the spoil. Two artefacts were found: a large silcrete core exposed *in situ* in the lower part of the A_1 horizon (Plate 3) at S21-E1174 and another silcrete piece was found on the spoil 1m away. Following heavy rain the grader cuts were again searched but no other artefacts were found.

As it would have been possible for other artefacts to be present in the loose spoil (and difficult to see) samples of ten buckets of soil were wet sieved. These came from the location of the two finds: S21-E1174, and then two more samples 10m apart were sieved from S21-D1183 and S21-C1193. No artefacts were found.

As a test of the above method two trenches 1m long and 25cm wide were excavated in 10cm spits, 5m from either side of the grader cut at S20-T1173 and S21-I1173. No artefacts were recovered from these trenches.

CONSENT #: 663
(HO use only)

NATIONAL PARKS AND WILDLIFE ACT 1974
SECTION 90

CONSENT

CONSENT TO CARRY OUT THE DESTRUCTION OF AN ABORIGINAL RELIC/PLACE

WHEREAS the Aboriginal relics described in Schedule "A" are situated upon the land described in Schedule "B", and which constitute relics within the meaning of Section 90 of the National Parks and Wildlife Act 1974, and WHEREAS application has been made by:

Mr L. M. Rose

of (address in full):

Rose Consulting Group
PO Box 6745
Delivery Centre
Blacktown, NSW , 2148.

FOR CONSENT to destroy those relics in the course of:

Construction of proposed housing development at Stanhope Estate Parklea.

NOW I, Neil Craig Shepherd, Director-General of National Parks and Wildlife, in pursuance of Section 90 of the said Act, and subject to the Conditions hereunder set out DO HEREBY CONSENT to the destruction of the said relics by the said applicant.

TERMS AND CONDITIONS OF THIS CONSENT

This Consent is issued subject to General Terms and Conditions covering all archaeological Permits and Consents, as well as the

NSW National Parks and Wildlife Service
Revised September 1993

#663 30/6/93 New recording [ ] Additional Info

~~CONSENT TO DESTROY ISSUED~~

National Parks and Wildlife Service

Box 1967, Hurstville NSW 2220. Tel: (02) 585 6444

Standard Site Recording Form ~~xxxxxxxxxx~~ Revised 12/92

45-5-2293

1:250,000 map sheet: SYDNEY NPWS Code 1145

AMG Grid reference (Full reference - please include leading digits): 250K 3 0 7 0 6 0 mE (25K) 250K 6 2 6 5 8 0 mN (25K, 5/8 Riverstone)

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

1:25K, 50K, 100K map name: 1:4k (Blacktown 1)

HEAD OFFICE USE ONLY:
NPWS Site no: 45-5-2293
Site types: open
Accessioned by: SJK Date: 17 MAY 199
Data entered by: ~ Date: ~

Owner/Manager:
Address:

Site name: PK/PC1 Locality/property name:

NPWS District: Nth Met Region: Central.

Reason for investigation: RHIP (stage 1) additional survey.

Portion no:
Parish:

Photos taken? Yes
How many attached? 1

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

Other sites in locality? Yes
Are sites in NPWS Register? Yes
Site Types include: open

Have artefacts been removed from site? NO
By whom?
When?
Deposited where?

Is site important to local Aborigines? Yes
Give contact(s) name(s) + address(es): TONY KOWDEK 5/271 Beames Ave. Mt. Druitt. N.S.W 2770.

Contacted for this recording? Yes
(Attach additional information separately) If not, why not?

Verbal/written reference sources (including full title of accompanying report): McDonald 1993. Additional Archaeological Survey of the RHIP (stage 1) works along Caddies and Second Ponds Creeks, Rouse Hill. NPWS Report Catalogue # C-2544

Checklist: surface visibility, damage/disturbance/ threat to site

Condition of site: average. Major disturbance upstream in Parklea Prison, cleared + ponds dredged

Recommendations for management & protection (attach separate sheet if necessary): test excavation prior to development

Site recorded by: Brayshaw McDonald Date: April 21, 1993
Address/institution:

Additional surface survey - RHIP (Stage 1) Area vii

45-5-2293

Site Number: _____ Site Name: PK/PC1 Date: 21.4.93

Map Name (1:4k) Blacktown 2 Grid reference: 307060 6266580 - 307110 6266580

Topography: minor creekline, hillslope Aggrading/degrading: degrading

Distance to creek: 0m Nearest creek: prison tributary Elevation: 66m AHD

Stream order: _____ Relationship to LEP boundary: outside

Soils: Wianamatta shale, duplex A/B clear (but diff) on southern and northern banks Landuse History: Cleared, possibly ploughed, grazed; immediately outside prison complex - gross disturbance upstream - golf course.

Vegetation: Grasses, scattered sparse Eucalypts, bullrushes on established dams downstream + scattered Casuarinas.

R'ship between site & RHIP stage 1 works: within DOH Precinct 1; 'dua' lots + Neighb'rhood lots

Assessment of impact on site: Destruction likely; plans show housing lots in this vicinity

Assessment of site's research potential: average; apparent low density of material + likely level of disturbance

Comments: soil profile different on both sides of erosion.

Type of exposure : sheetwash/gully Number and areas of exposures 2:25 msq + 50m sq

Visibility on exposure (%): 70% background noise = gravels, grass tufts

Surrounding ground visibility (%): 0 background noise = grass

Extent artefact scatter: 5m % of exposure with artefacts 20% Knapping features: no

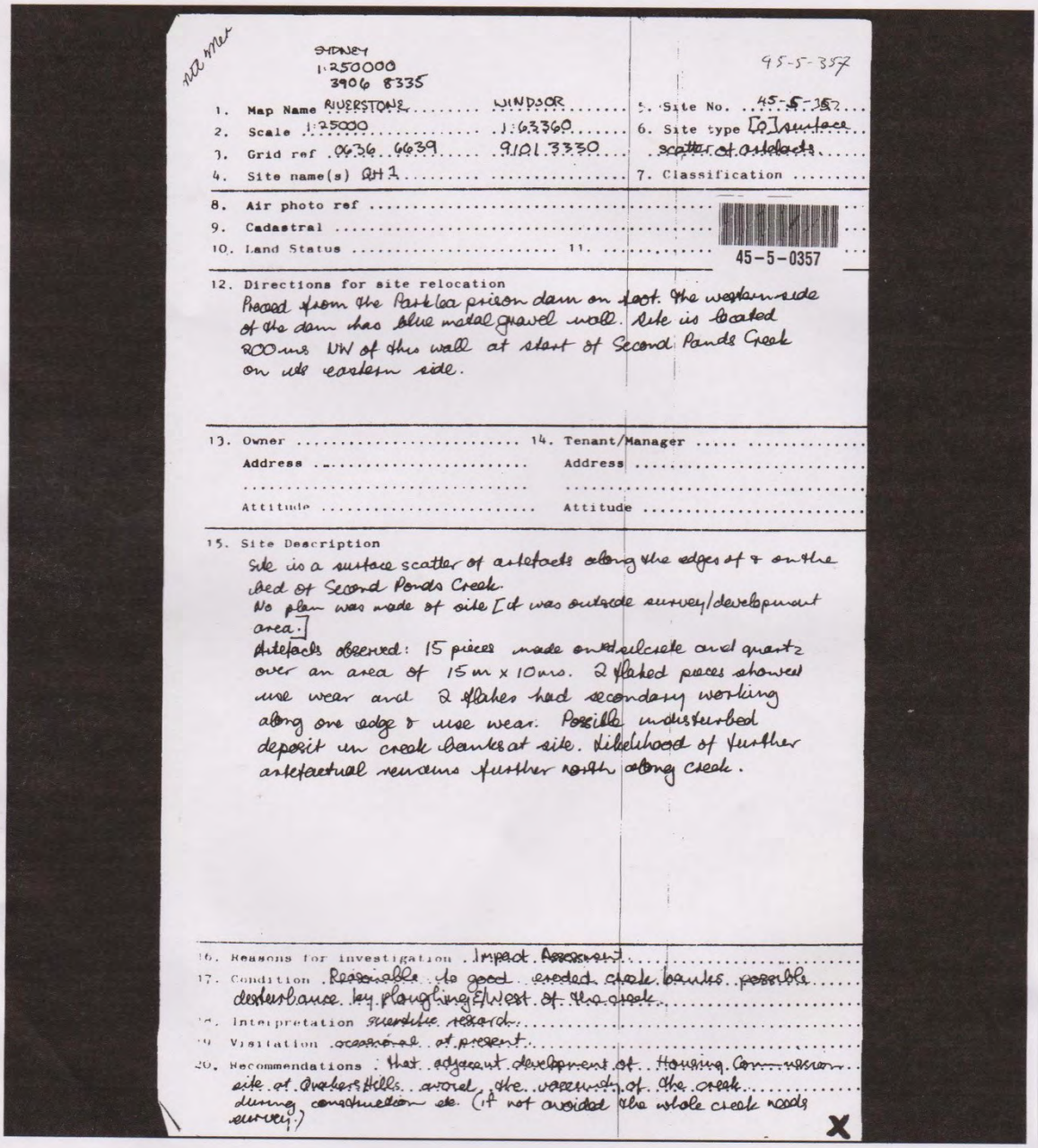
Diagnostic Artefacts: bipolar quartz Assemblage characteristics: sparse and disparate

Maximum artefact density: 1/m sq Average artefact density 2/25m sq

Raw materials present: (% proportions) quartz; fine grained volc (50:50)

Recorder: McDonald and Barton

Appendix 2 ...



SYDNEY
1:250000
3906 8335

95-5-357

1. Map Name RIVERSTONE ..... WINDSOR ..... 5. Site No. 45-5-357
2. Scale 1:25000 ..... 1:63360 ..... 6. Site type Surface
3. Grid ref 0636 6639 ..... 9101 3330 ..... scatter of artefacts
4. Site name(s) RH 1 ..... 7. Classification .....
8. Air photo ref .....
9. Cadastral .....
10. Land Status ..... 11. .....

45-5-0357

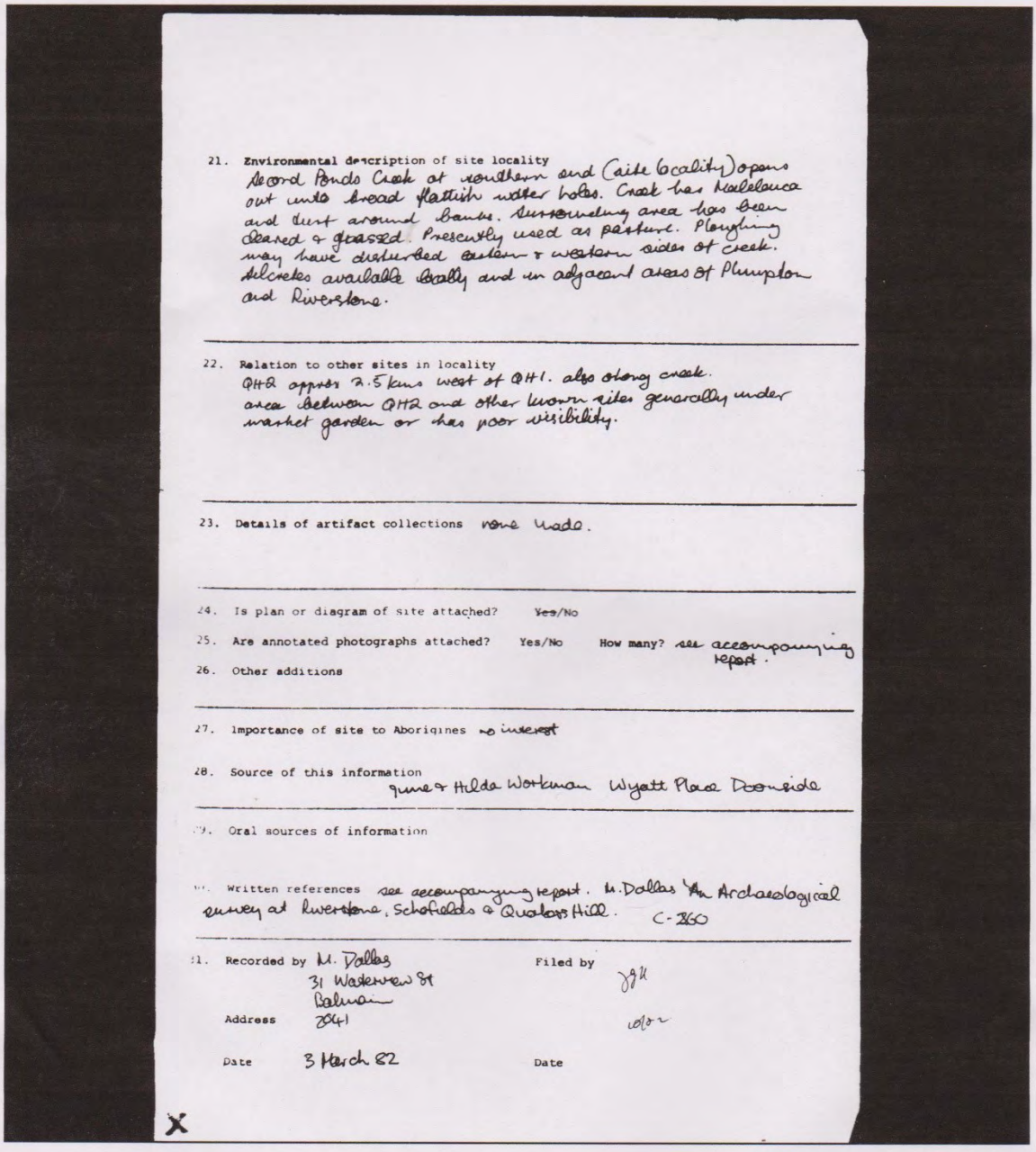
12. Directions for site relocation
Proceed from the Parklea prison dam on foot. The western side of the dam has blue metal gravel wall. Site is located 200ms NW of this wall at start of Second Ponds Creek on the eastern side.

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

15. Site Description
Site is a surface scatter of artefacts along the edges of & on the bed of Second Ponds Creek.
No plan was made of site [it was outside survey/development area.]
Artefacts observed: 15 pieces made on silcrete and quartz over an area of 15m x 10ms. 2 flaked pieces showed use wear and 2 flakes had secondary working along one edge & use wear. Possible undisturbed deposit in creek banks at site. Likelihood of further artefactual remains further north along creek.

16. Reasons for investigation Impact Assessment
17. Condition Reasonable to good eroded creek banks possible disturbance by ploughing E/West of the creek
18. Interpretation scientific research
19. Visitation occasional at present
20. Recommendations that adjacent development of Housing Commission site at Quakers Hills avoid the vicinity of the creek during construction etc. (if not avoided the whole creek needs survey.)

X



21. Environmental description of site locality
Record Ponds Creek at southern end (site locality) opens out into broad flattish water holes. Creek has Melaleuca and Rush around banks. Surrounding area has been cleared & grassed. Presently used as pasture. Ploughing may have disturbed eastern & western sides of creek. Silcretes available locally and in adjacent areas of Plumpton and Riverstone.

22. Relation to other sites in locality
QH2 appox 2.5 kms west of QH1. also along creek. area between QH2 and other known sites generally under market garden or has poor visibility.

23. Details of artifact collections none made.

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

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

26. Other additions

27. Importance of site to Aborigines ~~no interest~~

28. Source of this information
June & Hilda Workman Wyatt Place Doonside

29. Oral sources of information

30. Written references see accompanying report. M. Dallas 'An Archaeological survey at Riverstone, Schofields & Quakers Hill. C-360

31. Recorded by M. Dallas
31 Waterview St
Balmain
Address 2041
Date 3 March 82

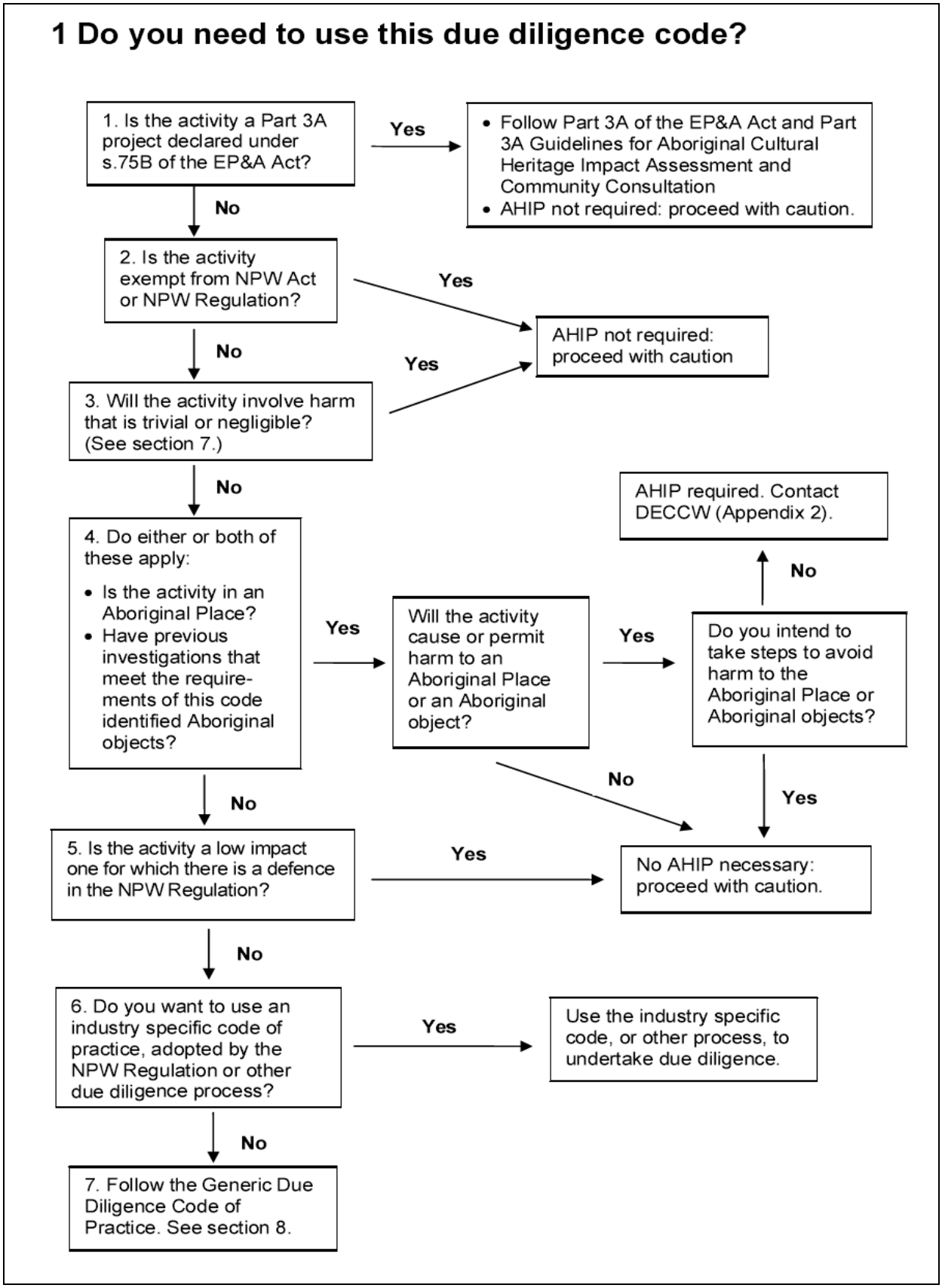
Filed by
Date

X

Appendix 3

OEH Due Diligence Code of Practice

Protection of Aboriginal Objects in NSW – NPWS Act 1974


1 Do you need to use this due diligence code?
1. Is the activity a Part 3A project declared under s.75B of the EP&A Act?
Yes
• Follow Part 3A of the EP&A Act and Part 3A Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation
• AHIP not required: proceed with caution.
No
2. Is the activity exempt from NPW Act or NPW Regulation?
Yes
AHIP not required: proceed with caution
No
Yes
3. Will the activity involve harm that is trivial or negligible? (See section 7.)
No
AHIP required. Contact DECCW (Appendix 2).
No
4. Do either or both of these apply:
• Is the activity in an Aboriginal Place?
• Have previous investigations that meet the require-ments of this code identified Aboriginal objects?
Yes
Will the activity cause or permit harm to an Aboriginal Place or an Aboriginal object?
Yes
Do you intend to take steps to avoid harm to the Aboriginal Place or Aboriginal objects?
No
Yes
No
5. Is the activity a low impact one for which there is a defence in the NPW Regulation?
Yes
No AHIP necessary: proceed with caution.
No
6. Do you want to use an industry specific code of practice, adopted by the NPW Regulation or other due diligence process?
Yes
Use the industry specific code, or other process, to undertake due diligence.
No
7. Follow the Generic Due Diligence Code of Practice. See section 8.

8 The generic due diligence process