

Figure 11. Watercolour by Joseph Lycett of a group of Aboriginal men hunting kangaroos, c.1817 (Source: National Library of Australia, PIC MSR 12/1/4 #R5689, Object ID 138501179, http://nla.gov.au/nla.obj-138501179/view).

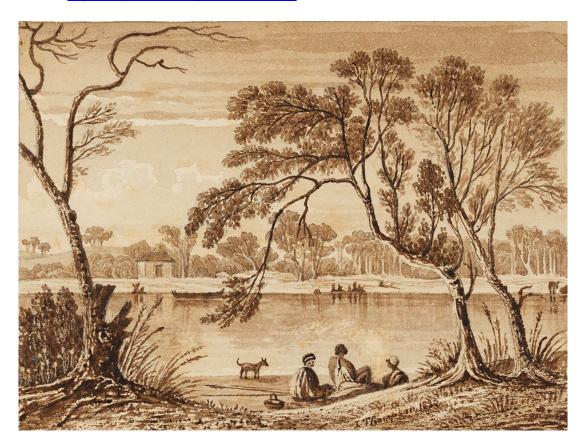


Figure 12. Sketch of the mouth of the Cooks River by John Thompson, 1830 (Source: Dixson Library, State Library of New South Wales, DL PXX 31 Image 2a, http://archival.sl.nsw.gov.au/Details/archive/110331218).

4.3 The Site

The Alexandria area appears to have been part of traditional Cadigal land. The traditional Cadigal custodians spoke a coastal variant of the Darug language, and were considered part of the coastal salt water people. Their traditional land encompassed southern Sydney; extending from the entrance of the Port Jackson Harbour to Cockle Bay, down south to South Head, and as far inland as Petersham (Phillip 1790 [1792]:309; King in Hunter 1793 [1968]:411).

Movement into and away from the local area, however, was not restricted; in fact many of Sydney's earliest roads followed well-known Aboriginal trackways. In May 1788, Governor Arthur Phillip led a party to investigate the murders of two convict men on the Cockle Bay foreshore, following an Aboriginal track from today's Haymarket area all the way to Botany Bay (Bradley 1788 [1969]). This track, often referred to in primary sources, roughly followed the route of today's Botany Bay Road and was an important corridor for trade and movement for Aboriginal people in early Sydney (e.g. Tench 1789; Tench Jan-Feb 1788; Hunter 1793: Sept 1789). Many of the main thoroughfares such as George Street, Oxford Street and King Street, Newtown were Aboriginal trading routes and tracks to grasslands or bountiful fishing areas (Heiss 2002:8; Davis 2012).

At the time of arrival of Europeans in the Sydney region, the area between Redfern and Botany Bay provided a diverse landscape characterised by series of low ridgelines interspersed with relatively open valley drainage lines, freshwater swamps, tea tree country and sand dunes (Jo McDonald Cultural Heritage Management Pty Ltd 2004:7). Boxleys Lagoon (at the site of Redfern Park) was noted as a resource-rich area in the historic period, and was likely a focus for Aboriginal occupation prior to 1788. It was reportedly the home of vast numbers of red-bills, wild ducks, snipe, landrail and other game rarely seen elsewhere in Sydney. 'Eels were also plentiful in the water, and in the bush were bandicoots, possums and native cats which the youths of the time would chase with dogs when the nights were favourable...' (Obed West, cited in Marriot 1988:45-46).

Generally, European occupation of traditional hunting lands deprived Aboriginal groups of sources of food and access to camping and ceremonial sites; however, in areas where settlement was sparse, at least initially, traditional Aboriginal subsistence practices could continue. The diaries of early colonial settlers reveal that at least some traditional practices, such as fishing, continued along the Cooks River and its tributaries into the early nineteenth century. In the winter of 1835, James Backhouse and George Walker met a group of five Aboriginal people fishing along the Cooks River near today's Marrickville Golf Course:

The man and his wife were seated on their knees in the canoe, in which they had a fire, on a flat stone. The man propelled the canoe by means of a paddle, that he applied first on one side and then on the other. He used a spear in fishing, made of a long stick, with four, long, wooden prongs, attached to it, by means of string and Grass-tree Gum. This he brought slowly, almost into contact with the fish, before striking. While fishing, he kept up a noise like the blowing of a Porpoise, and accompanied it by showers of saliva, that disturbed the surface of the water, like small rain. He seldom failed in transfixing his finny prey (Backhouse 1843:288).

Eventually, the spread of European settlement, coupled with the spread of small pox and other infectious diseases, forced some Aboriginal inhabitants to either relocate into the potentially hostile lands of neighbouring Aboriginal groups, to partially integrate into colonial society as fringe dwellers, or to resist. Resistance by Aboriginal groups was often met with retaliatory action by white settlers and the colonial administration. A combination of these factors led to the demise of traditional lifestyles and a decrease in the Aboriginal population, particularly in and around the early centres of colonial settlement.

Aboriginal people who stayed in the area in the early to mid-1800s tended to live on the fringes of white society and became increasingly dependent on welfare. Historical records of blanket distribution lists of the 1830s show that apart from a group living in government boatsheds at Circular Quay, few people identified as Aboriginal were living in Sydney. Such was the decline in population that by 1858, George Thornton reported in a letter to the Colonial Secretary that there were only two Sydney Aboriginal people remaining (Ellmoos 2013). Many had moved to places such as La Perouse on Botany Bay, south of the CBD.

4.4 Contemporary Connections

The Aboriginal community of the Sydney region has had a history that is remarkable for both continuity and change throughout the period from the arrival of European people to the present day. Connections to land and landscape remain a fundamental issue to the Aboriginal community. In addition to particular places, significance may also be attached to more general concepts of the natural landscape, to places of significance in recent history and/or to places with strong opportunities for reconnection to country, cultural continuity and renewal, or that may demonstrate issues of contemporary importance to Aboriginal people. Some Aboriginal people may identify as descendants of the original inhabitants of the Alexandria area and/or the Sydney region or from people that broadly originate from country in which the Darug language was spoken. Other Aboriginal people have a historical connection based on several generations of activism in the area.

The available historical records are largely silent regarding the presence and activities of Aboriginal people at Alexandria from the 1840s, though it has been noted that a number of local Aboriginal people were employed at the Eveleigh Railway Workshops (Extent Heritage 2016:32-33; Irving and Cahill 2010:328). When the workshop opened in 1875, it provided jobs for as many as 1,500 artisans and skilled workers, many of whom were local Aboriginal people from Redfern and Darlington, or from the Aboriginal community at La Perouse. Aboriginal men were drawn to the workshops by the availability of affordable rental housing in Redfern, its growing Aboriginal community, and its proximity to Central Station, where Aboriginal people had arrived from rural regions in search of work.

Many Aboriginal men also worked in the Alexandria goods yard loading trains with kegs and potatoes and on the waterfront docks at Walsh Bay and Darling Harbour, while a number of Aboriginal women worked for the Federal Match Factory in Alexandria (Heiss 2013). Other local industries where Aboriginal people worked were the Henry Jones & Co IXL Jam Factory on Golden Grove Street in Chippendale, Francis Chocolates on Stirling Street in Redfern, and the Australian Glass Manufacturers on South Dowling Street at Waterloo.

4.4.1 Federal Match Factory

In the period between 1913 and 1922, the Federal Match Company acquired a large portion of land in the central and southern portions of the Site and established a match company. The box covers were used to support the war effort, promote war bonds and explain the new decimal currency. The premises comprised a brick and concrete factory with an iron roof, a brick and iron store and two concrete tennis courts. Renovations to the premises in 1931 included extensions to the factory building, new administrative offices and a bowling green.

There is little documentation about the operation of the Federal Match Company, however it has been noted that the Federal Match Company was known for its social practices, including provision of recreational facilities such as tennis courts and bowling greens, and daily staff lunch including soup and bread. Reportedly, the Company was also well known as an employer of Aboriginal women and was affectionately known as the Wellington Match Company due to a high number of employees from the rural NSW town of Wellington (City of Sydney 2013:47).

4.4.2 Alexandria Park

The founding of the first Aboriginal Football Club – the Redfern All Blacks – in 1944 had important political, social and symbolic ramifications for the Site. As historian Heidi Norman has shown, the Rugby League games held on the adjacent Alexandria Park, allowed the broader Aboriginal community to gather and unite in support of an all-Aboriginal team (Norman 2006). The games became an important expression of community pride and Aboriginal identity (Tatz 1995: 10). Other Aboriginal teams followed the All Blacks and, from 1971, an annual 'knockout', occasionally held in the area of study, facilitated the largest gathering of Aboriginal people in the country. It is often referred to as a 'modern day corroboree' (Norman 2009).

5 ARCHAEOLOGICAL RECORD

5.1 Key Findings

- Aboriginal sites in the Port Jackson catchment area typically include shell midden sites in rockshelters and in open contexts, as well as archaeological deposits (comprising bone, stone or organic material). The range and predominance of shellfish species varies according to distance from the harbour mouth; with rock platform and ocean species dominating midden assemblages near the mouth of Sydney Harbour, while middens further up the estuary contained fewer species and no ocean species. Aboriginal burials in rockshelters and open middens were also found.
- The vast majority of sites in the Sydney CBD and surrounds, however, are artefact scatter sites and isolated finds, as well as potential archaeological deposits. Proximity to water and a range of natural resources is an important factor in site patterning in the area.
- European development has destroyed a significant number of Aboriginal sites that would have originally existed along the shores of Sydney Harbour, its bays, and its associated streams and swampy lagoons. In spite of this, previous archaeological investigations clearly indicate the potential for Aboriginal cultural material to survive within deposits underlying buildings and below filled ground in the Sydney CBD – on urban sites, where remnant portions of the original soil profile still exist.
- Of particular relevance to the Site has been the identification of Aboriginal stone objects, shell
 midden material and human remains associated with aeolian sand dune contexts of the
 Tuggerah Soil Landscape, at the Royal Sydney Golf Club, Sheas Creek/Alexandra Canal and
 the Randwick Stabling Yard.
- Although historical development and occupation of the Site has involved ground disturbance, in general material has been introduced rather than removed, and this would have tended to conserve, or cap, any cultural deposits that may have been present.
- Aboriginal occupation of the Site in the past is considered probable, given that the site is located within the Tuggerah dunefield and is within 200m of the former Sheas Creek swamp. However, the available evidence also indicates that parts of the Site were originally low-lying, and may not have been suited to long-term or repeated Aboriginal occupation. The potential for the presence of Aboriginal objects may, therefore, be higher to the north-western section of the Site, which sat at a higher elevation than the surrounding landscape.
- Since 2010, no Aboriginal Heritage Impact Permits (AHIPs) have previously been issued within the Site.

5.2 Regional Background

Aboriginal occupation of NSW spans at least 40,000 years (Stockton and Holland 1974; Nanson et al. 1987), although dates of more than 40,000 years have been claimed for artefacts and human remains found in barrier sands of Lake Mungo, in the Willandra Lakes Region (Shawcross 1998; Bowler et al. 2003). The dates of these sites fall at about the beginning of the Last Glacial Maximum, a period from about 30,000 to 18,000 BP, when temperatures were between 6 °C and 10 °C cooler than they are today and rainfall was less frequent. At the height of the Last Glacial Period, about 21,000 BP, areas

of rainforest and tall open forest contracted and areas of woodland became more extensive than in the periods before 44,000 BP and after 11,000 BP (Attenbrow 2010:37).

Aboriginal occupation in the Sydney region dates back well into the Pleistocene period. This evidence comes from radiocarbon dating of charcoal retrieved from excavated sites on the city's fringes; at Burrill Lake (c 20,000 years before present [BP]), Bass Point (c 17,000 BP), and Loggers Shelter in Mangrove Creek (c 11,000 BP) (Bowdler 1970; Lampert 1971; Attenbrow 1981, 2004; AMBS 2006:87).

Archaeological sites dating to the Holocene period, and particularly the late Holocene (the last 5000 years), are more frequently identified in the Sydney region. This is thought to reflect an intensification of the occupation of the area in this period, but also greater survivability of these sites (McDonald 1994). There appears to have been a preference for the occupation of the coastal zone in this period, possibly due to a greater reliance on marine resources through increasing populations, territoriality and greater climatic variability. Excavation of sites at Sheas Creek (Haworth et al. 2004) Quibray Bay (Roy and Crawford 1981), Kurnell (McDonald 2008 and Dallas 2005) and the Botany Cone Swamp 5 site (Smith et al. 1990) identified shell, bone and organic materials with dates of up to c. 4 ka (Attenbrow 2010:18-19).

5.2.1 Spatial Patterns of Archaeology

Regional studies of the Sydney region have revealed that Aboriginal sites are distributed across the whole range of physiographic units and environmental zones, although certain types of sites may be more frequently associated with certain parts of the landscape (for example, shelter site are particularly common in areas of Hawkesbury Sandstone), and different parts of the landscape contain different resources, which may be seasonally available or highly localised (AMBS 2010:15; Koettig 1996). Accordingly, the Port Jackson archaeological record differs from that of the Cumberland Plain of Sydney, partly due to resource availability (Attenbrow 1990:30).

A study of the regional archaeology of the Port Jackson catchment was undertaken by Val Attenbrow in 1989 and 1990. The project involved documentary research on previous archaeological work in the catchment, detailed recording and verification of registered sites and targeted field survey in areas where no sites had previously been identified. A total of 369 sites were identified; comprising 126 open middens, 203 middens in rockshelters, 6 open middens associated with small rockshelters, 27 deposits in rockshelters, and 7 open deposits (Attenbrow 1990:42). Surface evidence from middens indicated that the range and predominance of shellfish species varied according to distance from the harbour mouth, with rock platform and ocean species dominating midden assemblages near the mouth of Sydney Harbour. Middens further up the estuary contained fewer species and no ocean species (Attenbrow 1990:49). Evidence from some excavated sites suggested Aboriginal people have been occupying the harbour foreshores and collecting shellfish for at least 4,500 years, and indicated a change in the predominance of particular shellfish species over time (Attenbrow 1990:61). She also found that most middens were located within 10m of the high-water level; and burials were placed in open middens as well as within deposits within rockshelters.

Attenbrow noted a range of factors which may affect site distribution patterns, including greater visibility of shell in estuarine zones (compared to stone artefacts), greater visibility of rockshelters and rock platforms on Hawkesbury sandstone compared to artefact bearing sediment on Wianamatta shales, and recording bias in estuarine and sandstone areas compared to the western half of the Port Jackson catchment where development has been concentrated, including the southern side of Sydney Harbour and the Parramatta River (Attenbrow 1990:43-45).

5.3 Local Information

A limited number of Aboriginal sites have been identified and recorded in urban Sydney contexts. The majority of Aboriginal sites identified within the Sydney CBD, Botany and surrounding suburbs were recorded during the course of historical archaeological excavations associated with development projects. Aboriginal sites and objects were identified in pockets of remnant topsoil either beneath or between historical archaeological contexts; or within remnant aeolian dunes of the Tuggerah soil landscape dunefield. Recorded site types include open campsites (for example, at the KENS site (Steele & Czastka 2005), on William Street, at Angel Place (Steele & Barton 1998) and Moores Wharf), shell middens (at Sheas Creek, Bennelong Point, Lilyvale and Goat Island), rock engravings (at Dawes Point Park and the MSB Tower), rock shelters (Goat Island Cave) and, occasionally, burials (First Government House and the Royal Sydney Golf Club (JMCHM 2010)).

The limited number of recorded sites within the Sydney area is directly related to the long and intensive history of development. More than 200 years of European development has destroyed the majority of Aboriginal sites that would have originally existed along the shores of Sydney Harbour, its bays, and its associated streams and swampy lagoons. Of particular note was the early colonial practice of excavating Aboriginal shell middens to extract shells for lime burning, for use in the production of mortar. Archaeological test excavation of the Grace Brothers site, Broadway revealed evidence for extensive historic disturbance dating from the first use of the site in the 1840s, such that no Aboriginal artefacts were recovered. As a result, it was considered that any potential archaeological deposits had been removed, extensively truncated and/or disturbed (Dominic Steele Heritage Consulting 1997: 14-15). A similarly disturbed soil profile was observed at sites across the Sydney area; for example, during archaeological test excavations at the University of Sydney Central Site, Darlington Campus (JMCHM 2006:4), at the Redfern Courthouse and Police Station (Austral Archaeology 2007), the National Centre of Indigenous Excellence at 180 George Street, Redfern (AHMS 2007b), at Cleveland and Woodburn Streets, Redfern (AHMS 2014), at 60-78 Regent Street, Redfern (Artefact Heritage 2014) and at 100-110 Euston Road, Alexandria (AMBS 2010).

In spite of this, previous archaeological investigations clearly indicate the potential for Aboriginal cultural material to survive within deposits underlying buildings and below filled ground in the Sydney CBD. Evidence of Aboriginal occupation prior to the arrival of European people clearly exists on some urban sites, where remnant portions of the original soil profile still exist. The 1997 excavations at Angel Place, along the margins of the former Tank Stream, are an excellent case in point. During an historical archaeological investigation, 54 Aboriginal artefacts were recovered from remnant topsoils immediately below the earliest historical levels on site (Steele & Barton, 1998). The results from Angel Place demonstrated that even in areas of earliest European settlement, Aboriginal objects and sites may still survive, buried at depth within remnant soils. Although the evidence from Angel Place was recovered from isolated pockets of surviving remnant soils, the range of artefact types (core reduction, small flakes and heat affected debitage) and raw materials (silcrete, indurated mudstone and chert) suggests the site was originally a continuous complex occupation site along the margins of the Tank Stream. Excavation of the Quadrant development on Broadway in 2003 (Steele & Czastka 2003) also identified 20 undiagnostic Aboriginal flaked stone artefacts in a discrete pocket of remnant A-horizon topsoil.

Of particular relevance to the Site has been the identification of Aboriginal objects, shell midden material and human remains within aeolian sand dune contexts of the Tuggerah dunefield. Excavation at Sheas Creek [now Alexandra Canal] in the 1890s revealed the presence of two shell horizons. Archaeological evidence in these horizons included stone axes and butchered bone. The finds were made in two locations, 232m and 824m to the north of Ricketty Street, Alexandria (Attenbrow 1984); that is, along the stretch of the Canal about 2.4km to the south-west of the Site. A sample of the bone was later dated to $5,520 \pm 70$ BP (conventional age) (JMCHM 2005: 9).

Similarly, excavation at the Royal Sydney Golf Club recovered several human remains (at least three individuals) and over 5,700 artefacts (to depths of up to 1m), within a disturbed and truncated dune deposit of the Tuggerah dunefield, some 7km to the north east of the Site. The assemblage was of middle to late Bondaian age and was dominated by quartz with lesser proportions of silcrete, silicified tuff, silicified wood, quartzite and other fine-grained siliceous material. Several backed blades and bipolar flakes and cores were recovered (JMCHM 2010). More recently, work within the Botany Lowlands physiographic region at the Randwick Stabling Yard has recovered some 32,000 stone 'items' (including complete and broken tools, as well as flaked debitage and unworked stone/manuports), though the results of this study have yet to be published or verified (*Sydney Morning Herald*, 30 March 2016; Transport for NSW 2017).

Areas of potential archaeological deposit have also been identified in relatively undisturbed sand dunes and swampy contexts, at the Redfern RSL site (Cultural Resources Management 2009), at 157-163 Cleveland Street, Redfern (Cultural Resources Management and Biosis Research 2011), and the former Rachel Forster Hospital at 134-150 Pitt Street, Redfern (AHMS 2007a).

A due diligence Aboriginal heritage assessment was undertaken for the northern part of the Site (the playing field) by Comber Consultants in 2016. A site inspection found evidence for cutting and levelling across large parts of the playing field site. This was broadly confirmed during geotechnical testing for the site, where imported fill material between 40cm and 100cm was encountered. The report stated that should ground disturbance be constrained to the fill deposits, then there was no requirement to undertake any additional assessment (Comber Consultants 2016:18). However, the report also included a more cautious assessment, noting that 'in the unlikely event that subsurface archaeological evidence remains, it will be located below the fill and will not be disturbed'.

5.4 AHIMS Data

The Aboriginal Heritage Information Management System (AHIMS) database is managed by OEH, and includes the location and description of Aboriginal objects and sites previously recorded through academic research and cultural resource management (see **Appendix 2-1** for further explanation of Aboriginal site features). An extensive search of the AHIMS database was carried out on 7 September 2017 (AHIMS Client Service ID: 300359) encompassing a 5km² area centred on the Alexandria Park Community School site (**Figure 13** and **Appendix 2-2**).

The search identified 15 Aboriginal sites within the search area. Of these 15 Aboriginal sites, 13 are listed as valid sites; two sites 'Sheas Creek Dugong' (AHIMS ID #45-6-0751) and 'Moore Park AS1' (#45-6-3155) are listed as being destroyed. There are no registered Aboriginal sites within the Site.

In the AHIMS system, sites are recorded with one or more of 20 site features, which describe the characteristics of each site. For the 15 sites within the search area, a total of 20 instances of six site features has been recorded. The most frequently recorded sites in the area are artefact sites (comprising both isolated finds and artefact scatters), followed by potential archaeological deposits, and Aboriginal resource/gathering sites. A pigmented/engraved art site, shell midden site and deposit containing non-human bone and organic material have also been identified (**Table 2, Figure 13**).

Table 2. Aboriginal sites in the vicinity of the Site summarised by site feature.

Site Feature	Site Count	Total (%)
Artefact	8	40
Potential Archaeological Deposit	7	35
Aboriginal Resource and Gathering	2	10
Art (Pigment or Engraved)	1	5
Non-human bone and Organic Material	1	5
Shell	1	5
Total	20	100

Most of the registered sites have been identified during archaeological survey and test excavation within the Sydney University Grounds, or for small-scale developments in Chippendale and Ultimo. Interestingly, it appears as though only three sites have been registered within deep Tuggerah dunefield soils; namely an artefact scatter ('Moore Park AS1 #45-6-3155) along Anzac Parade; an artefact/resource and gathering/non-human bone/organic material site ('Sheas Creek Dugong' #45-6-0751) and a shell midden ('Wynyard St Midden' #45-6-0297). There appears to be anomalies with the site recording and location of the latter of these sites, given that there is no 'Wynyard Street' in Redfern and the site card refers to the site as being '100m south of Redfern Station' in 'a park on [the] west side of the street. The coordinates provided on the AHIMS site card place the midden between Botany Road and Wyndham Street, Redfern. It is considered that the site is located on Wyndham Street, Redfern, approximately 600 m to the north of the present Site, not in Wynyard Street, Sydney. No further details are provided.

The spatial patterning and nature of these registered AHIMS sites is partly due to the developed nature of the local area: modified trees are unlikely to remain given that the pre-contact vegetation has been cleared; and where the ground surface is not visible it is unlikely that artefacts will be identified. Furthermore, the distribution of previously identified sites in the vicinity of the Site is likely to reflect the location and intensity of previous Aboriginal heritage investigations, rather than accurately represent patterns of past Aboriginal occupation of the landscape.

A search of the OEH public and archived Aboriginal Heritage Impact Permit (AHIP) Register reveals that no AHIPs have previously been issued within the Site since 2010.

5.5 Predictive Model

Archaeological predictive models identify, locate and map where archaeological resources are likely to survive. They can apply to small single sites or large areas, and can be simple exercises or enhanced by the use of specially designed GIS based spatial models. This section provides a summary of the predictive model created for the Site. The model for the Site is shown in **Figure 14**, and is based on series of environmental and archaeological variables.

Although historical development and occupation of the Site has involved ground disturbance, in general material has been introduced rather than removed, and this would have tended to conserve, or cap, any cultural deposits that may have been present.

Aboriginal occupation of the Site in the past is considered probable, given that the site is located within the Tuggerah dunefield system and is within 200m of the former Sheas Creek swamp. However, the available evidence also indicates that parts of the Site were originally low-lying, especially along the southern boundary; may not have been suited to long-term or repeated Aboriginal occupation, and have low archaeological potential. The potential for the presence of Aboriginal objects is therefore high in the north-western portion of the Site, which sat at a higher elevation than the surrounding landscape and offering commanding views of the wider area.

On the basis of the archaeological sites registered in the region, a review of previous archaeological studies and the environmental context, the following conclusions can be drawn regarding the potential presence and location of Aboriginal sites within the Site:

- Artefact scatter sites, isolated finds and potential archaeological deposits are the most common sites within the broader area, and can occur across most landforms, even in disturbed contexts. Artefact sites may be present within the Site; both in introduced fills and within Tuggerah sands across the site.
- Equally, Aboriginal shell midden sites and burials are generally located close to the coast and estuarine rivers, and are often found in soft sand dune contexts such as those present within

the site. It is difficult to accurately predict the location of these sites; however, burial sites can occasionally be identified on the ground surface by rounded depressions, shallow mounds, or localised patches of vegetation, through archaeological excavation, or ground-penetrating radar techniques (NSW National Parks and Wildlife Service 2003:18). Carved or scarred trees mark burial locations as well as ceremonial grounds and occur within the coastal zone - however, their distribution is equally difficult to predict, and they are often destroyed as a result of clearance, sandmining and other urban development.

- The Site has been extensively cleared and no remnant vegetation remains. As such, it is extremely unlikely that scarred or carved trees will be present within the Site.
- There is no suitable stone resource material within the Site owing to its underlying geology.
 Therefore, it is considered unlikely that stone quarries, shelters, engravings or grinding grooves will be present within the Site.

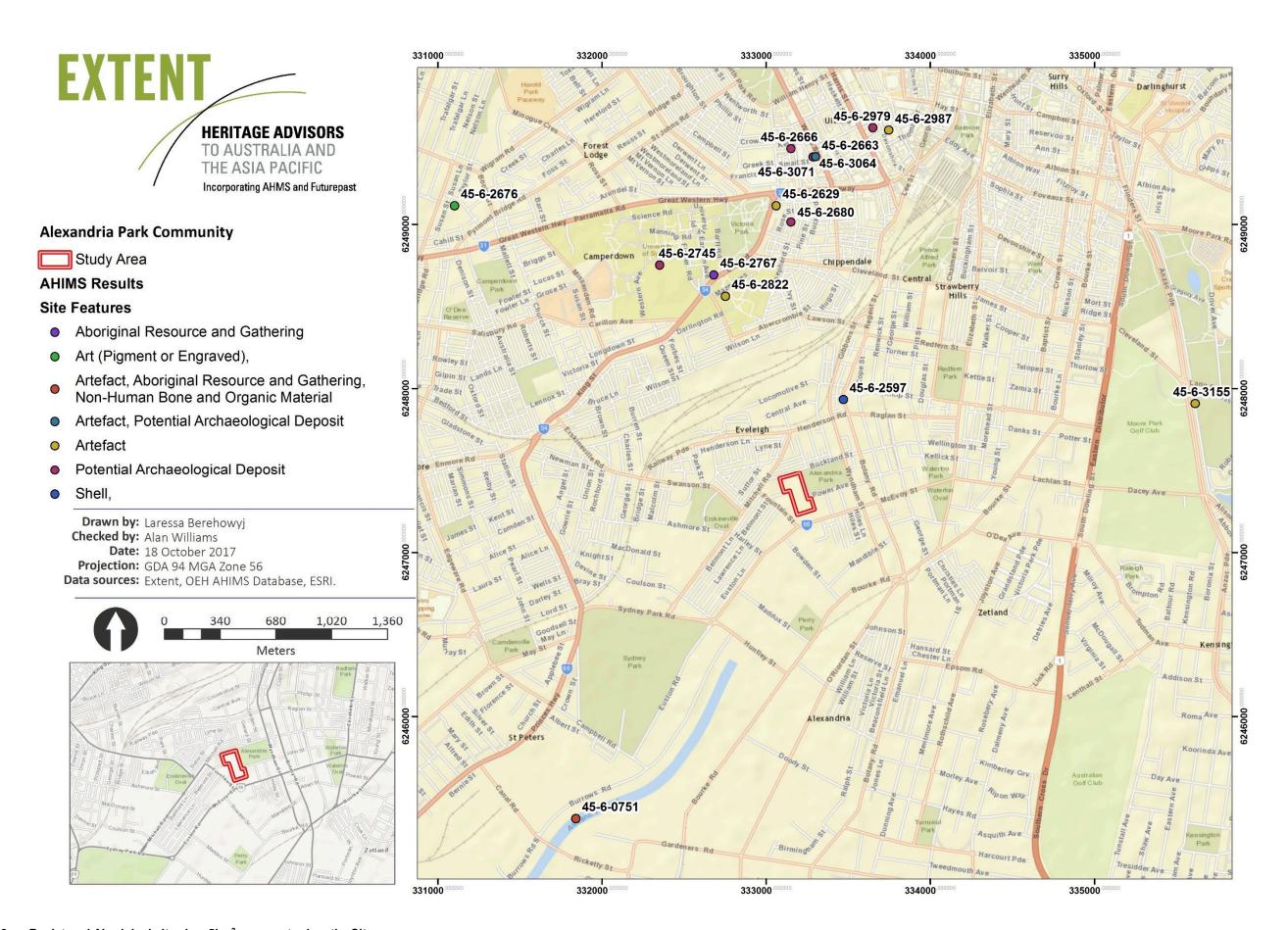


Figure 13. Registered Aboriginal sites in a 5km² area centred on the Site.

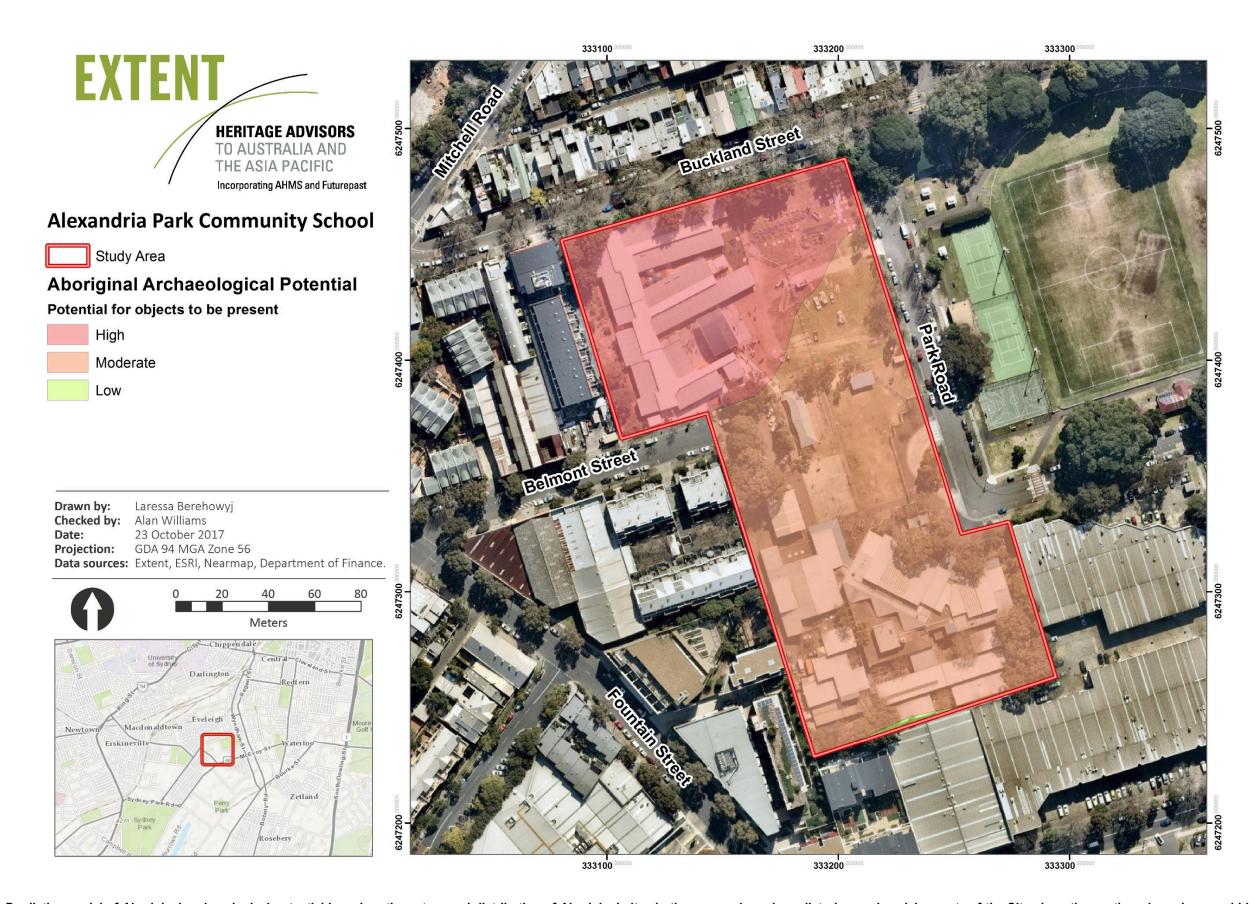


Figure 14. Predictive model of Aboriginal archaeological potential based on the nature and distribution of Aboriginal sites in the area and previous disturbance. Low-lying parts of the Site along the southern boundary would have been ill-suited to long term or repeated occupation, and have low archaeological potential; while those elevated parts of the site in the north-western portion would have had commanding views of the surrounding landscape, and have high archaeological potential.

6 FIELD INVESTIGATION

6.1 Key Findings

- Preliminary field survey found no surface artefacts, midden material, bone or culturally modified trees in the Site, though the survey was hindered by poor ground surface visibility.
- There was some evidence for localised historic disturbance from the demolition of original 1910s - 1970s factory buildings, and later from landscaping and service installation for the current school grounds, but no evidence of substantial excavations (e.g. basements). Reworked soils of the Tuggerah soil landscape were observed, together with introduced hard setting clay fill material, across the Site.
- Large parts of the Site were identified as having moderate to high archaeological potential to contain subsurface cultural material.

6.2 General

Field inspections of the Site were undertaken on 1 September 2017 by Extent Heritage archaeologists Alistair Hobbs and Lorna Cooper, and on 19 October 2017 by Extent Heritage archaeologist Laressa Berehowyj and Metropolitan LALC Cultural and Heritage Officer Selina Timothy. The main aims of the field investigations were to:

- Verify the desktop review outlined in preceding sections;
- Identify any extant Aboriginal objects or sites present within the Site through visual observation;
- Identify any potential deposits or landforms of archaeological interest that may be present within the Site; and
- Identify evidence of previous and existing disturbance that may have had a detrimental impact to any Aboriginal objects that may have been present.

During the surveys, detailed field notes and photographs were taken to document landform units, soil profiles, ground surface visibility and vegetation types. Any areas of ground exposure were examined for archaeological evidence such as midden material (shell or bone) or Aboriginal stone artefacts, as well as for evidence of previous disturbance. Overall, ground surface visibility across the Site was poor (5%), but exposures were found disparately across key areas of the site to determine the potential for cultural materials.

All field investigation was undertaken in accordance with the OEH's Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010b).

6.3 Results

Topographically, the Site is characterised by a broad, low and relatively flat plain that slopes slightly down from Buckland Street in the north to the site's southern boundary. Prior to European settlement, the site would have had a more undulating topography of sand dune crests and swales, and it is likely that those elevated parts of the Site would have afforded significant views across the Sheas Creek

swamp and surrounding sand dune landscape. Based on its proximity to nearby estuarine/creek resources, the Site is likely to have been an attractive location for Aboriginal occupation.

The Site is currently used as a functioning school, and comprises mainly hard surfaces (buildings, concrete footpaths and paved areas) with some lawn areas. The southern half of the Site is characterised by existing buildings that were constructed in the 1980s onwards, and feature relatively shallow concrete slab foundations (**Plate 1** and **Plate 2**). None of the buildings have basements or below-ground elements, though large parts of this part of the Site are paved, covered in synthetic grass or have sunken drainage pits (**Plate 3** and **Plate 4**). The north-western part of the Site is characterised by a series of temporary demountable building structures that were constructed in c.2016, and feature localised brick pier foundations (**Plate 5** to **Plate 8**). The north-eastern part of the Site is a construction site, and a number of large buildings on elevated brick piers are currently under construction (**Plate 9** and **Plate 10**). The remainder of the Site contains a sports court, playing field with existing services (including water and electricity), sand pit and play equipment (**Plate 11** to **Plate 13**). The site has been extensively cleared of all of its native sclerophyll and sand heath vegetation. Where present, vegetation comprises introduced trees, shrubs and grasses, and is contained within dressed gardens across the site.

Ground surface exposures in the central and southern portions of the Site, revealed evidence for some localised ground surface disturbance. In the southern part of the Site, a north-south oriented concrete lined drainage canal was observed. This canal was likely installed prior to the 1940s when industrial waste was discharged into the Alexandra Canal. The installation of this concrete lined drain is likely to have involved considerable ground surface disturbance (2-3m below ground surface). In the central part of the Site, a sandy deposit containing mortar, concrete, brick and rubble was observed (Plate 14 and Plate 15). This deposit is likely a demolition fill deposit containing reworked Tuggerah soils; it covers most of the Site and likely relates to the demolition of existing factory buildings on site.

The Site appears to have been levelled and landscaped over the course of its development, which in turn has truncated the natural soil profile of the Site, to a degree. Based on the geotechnical investigations (GeoEnviro Consultancy 2016), there is approximately 40–340 cm of fill covering the Site. The under-lying soil profile could not be reliably investigated as part of the site inspection due to the level of introduced fill, landscaping and paving present on the site.

Although no Aboriginal objects were found on the ground surface during the inspection, large parts of the Site were identified as having moderate to high potential to contain subsurface cultural material.



Plate 1. Southern area gardens and school buildings, view north.



Plate 2. Southern area school buildings and concrete pavement, view southwest.



Plate 3. Southern area preschool playground, view west.



Plate 4. Southern area central courtyard, view east.



Plate 5. North-western area temporary school buildings on piers, view northeast.



Plate 6. North-western area temporary school buildings on piers, view northeast.



Plate 7. North-western area temporary school outdoor court, view northeast.



Plate 8. North-western area temporary school elevated deck breezeway, view north.



Plate 9. North-eastern area construction site, view north.



Plate 10. North-eastern construction area building on brick piers, view southeast.



Plate 11. Central area playing field, view north.



Plate 12. Central area playground, view west.