

Tidapa, Chittick Lane, Cobbitty

Aboriginal Heritage Assessment

Report to The Planning Hub

Camden Local Government Area

July 2020



Artefact Heritage
ABN 73 144 973 526
Level 4, Building B
35 Saunders Street
Pymont NSW 2009
Australia

+61 2 9518 8411
office@artefact.net.au

Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Review type
1	3 March 2020	Josh Symons	Josh Symons	6 March 2020	First draft
2	12 June 2020	Josh Symons	Josh Symons	12 June 2020	Second draft
3	31 July 2020	Josh Symons	Josh Symons	31 July 2020	Final

Last saved:	31 July 2020
File name:	19168_Tidapa, Chittick Lane, Cobbitty_Aboriginal Heritage Assessment _200731
Author:	Anna Darby, Ryan Taddeucci, Isabel Wheeler
Project manager:	Ryan Taddeucci
Name of organisation:	Artefact Heritage Services Pty Ltd
Name of project:	Tidapa, Chittick Lane, Cobbitty
Name of document:	Tidapa, Chittick Lane, Cobbitty Aboriginal Heritage Assessment
Document version:	Final

© Artefact Heritage Services

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

Disclaimer: Artefact Heritage Services has completed this document in accordance with the relevant federal, state and local legislation and current industry best practice. The company accepts no liability for any damages or loss incurred as a result of reliance placed upon the document content or for any purpose other than that for which it was intended.

EXECUTIVE SUMMARY

The Planning Hub is proposing to rezone four Lots (2 – 5, DP239612) located at the end of Chittick Lane, Cobbitty to facilitate future urban development. Artefact Heritage Services Pty Ltd (Artefact Heritage) has been engaged by The Planning Hub to prepare an Aboriginal heritage assessment as part of the planning approvals process. This Aboriginal heritage assessment has been completed in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW 2010) (Due Diligence Code of Practice). The report also includes a high-level constraints assessment which indicates archaeologically sensitive landforms and identified Aboriginal sites to inform constraints mapping. This assessment has included a site visit, search of the AHIMS database and a review of previous archaeological assessments completed within the vicinity of the study area.

Overview of findings

- No previously registered AHIMS sites were identified within the study area
- No previously unrecorded Aboriginal sites were identified within the study area during the site inspection
- Areas of high, medium, and low Aboriginal archaeological sensitivity were identified within the study area.

Recommendations

The following recommendations are made:

- In accordance with the NSW Heritage, DPC due diligence guidelines, this assessment has identified that Aboriginal objects are likely to occur beneath the ground surface within the study area
- In accordance with the NSW Heritage, DPC due diligence guidelines, further archaeological assessment of the study area is required. The first stage of further archaeological investigation would consist of preparation of an Archaeological Report in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010b). The Archaeological Report would define the boundaries of any areas of archaeological potential and provide a detailed assessment of archaeological potential
- The results of the Archaeological Report would inform recommendations on whether additional archaeological investigation, such as test excavation and comprehensive Aboriginal consultation, would be required
- Where test excavation is recommended in the Archaeological Report, further reporting would be required, including preparation of a test excavation methodology, Aboriginal consultation, and a test excavation report. Where Aboriginal objects are identified during further archaeological investigation and an AHIP may be required prior to impacts.
- If changes are made to the development proposal that may result in impacts to areas not covered by this assessment, further archaeological assessment will be required

- Unexpected Aboriginal objects remain protected by the *NPW Act*. If any such objects, or potential objects, are uncovered in the course of the activity, all work in the vicinity should cease immediately. A qualified archaeologist should be contacted to assess the find and NSW Heritage, DPC and Tharawal LALC must be notified
- If human remains, or suspected human remains, are found in the course of the activity, all work in the vicinity should cease, the site should be secured and the NSW Police and the NSW Heritage, DPC should be notified.

CONTENTS

1.0	Introduction.....	1
1.1	Background.....	1
1.2	The study area.....	1
1.3	Authorship.....	1
1.4	Report limitations	1
1.5	Report methodology	1
2.0	Legislative context	3
2.1	State legislation	3
2.1.1	<i>National Parks and Wildlife Act 1974</i>	3
2.1.2	<i>Native Title Act 1994</i>	3
2.1.3	<i>Aboriginal Lands Right Act 1983</i>	3
2.2	Commonwealth legislation.....	3
2.2.1	<i>Environment Protection and Biodiversity Conservation Act 1999</i>	3
2.2.2	<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i>	5
3.0	Environmental context	6
3.1	Landscape, geology and soils	6
3.2	Hydrology.....	6
3.3	Natural resources	9
3.4	Vegetation.....	9
3.5	Historical background	9
4.0	Aboriginal heritage	11
4.1	Aboriginal material culture	11
4.2	Aboriginal ethno-historical context	11
4.3	Aboriginal Heritage Information Management System.....	12
4.4	Previous archaeological assessments	15
4.5	Predictive Model	16
5.0	Site inspection	18
5.1	20 January 2020	18
5.2	4 May 2020	20
6.0	Assessment of archaeological sensitivity	21
7.0	Recommendations.....	25
8.0	References	27
	Appendix 1 – Cubbitch Barta Native Title Claimants report.....	30

FIGURES

Figure 1: Study area outlined in red	2
Figure 2: Study area soil profiles	7
Figure 3: Study area hydrology	8
Figure 4: Parish of Cook historic map	10
Figure 5: Map of study area showing location of AHIMS sites	14
Figure 6: View south of the entrance to the study area	19
Figure 7: View south across the access track located within Lot 2.	19
Figure 8: Electrical substation identified on the western side of the Lot 2 access track	19
Figure 9: Natural scar identified on a young tree	19
Figure 10: Sandstone outcrops identified within a second order ephemeral creek	19
Figure 11: View west across a large artificial dam established in the northern portion of Lot 2	19
Figure 12: View north from Lot 4 of the undulating landscape	20
Figure 13: View northeast of exposed soil profile from the middle of Lot 5	20
Figure 14: Potential modified tree no. 1. View facing east	20
Figure 15: Map of sensitive landforms and ground disturbance	23
Figure 16: Identified areas of archaeological sensitivity	24

TABLES

Table 1: Frequency of recorded site types	13
---	----

ABBREVIATIONS

ACHAR	Aboriginal Cultural Heritage Assessment Report
AHC	Australian Heritage Council
AHIP	Aboriginal Heritage Impact Permit
AHIMS	Aboriginal Heritage Information Management Systems
ALR	<i>Aboriginal Land Rights Act 1983</i>
Artefact Heritage	Artefact Heritage Services Pty Ltd
ATSIHP Act	<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i>
CHL	Commonwealth Heritage List
DCP	Development Control Plan
DECCW	Department of Environment, Climate Change and Water (now NSW Heritage, DPC)
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ha	hectares
km	kilometres
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
m	metres
mm	millimetres
NHL	National Heritage List
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NSW Heritage, DPC	NSW Heritage, Department of Premier and Cabinet
RNE	Register of the National Estate

1.0 INTRODUCTION

1.1 Background

The Planning Hub is proposing to rezone an area of rural land, known as Tidapa, to facilitate future urban development. Artefact Heritage Services Pty Ltd (Artefact Heritage) has been engaged by The Planning Hub to prepare an Aboriginal heritage assessment as part of the planning approvals process. This Aboriginal heritage assessment has been completed in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW 2010) (Due Diligence Code of Practice). The report also includes a high-level constraints assessment which indicates archaeologically sensitive landforms and identified sites to inform constraints mapping.

1.2 The study area

The study area consists of four rural Lots (Lots 2 – 5, DP239612) at the end of Chittick Lane, Cobbitty. The study area is located within the Camden Council Local Government Area (Camden Council LGA) within the Parish of Cook and County of Cumberland. It is contained within the boundary of Tharawal Local Aboriginal Land Council (Tharawal LALC).

The location of the study area is illustrated in Figure 1.

1.3 Authorship

This report was written by Anna Darby (Heritage Consultant, Artefact Heritage) and Isabel Wheeler (Heritage Consultant, Artefact Heritage). Ryan Taddeucci (Senior Heritage Consultant, Artefact Heritage) provided management input. The site inspection was undertaken by Anna Darby and Ryan Taddeucci. Josh Symons (Technical Director, Artefact Heritage) provided input and review.

1.4 Report limitations

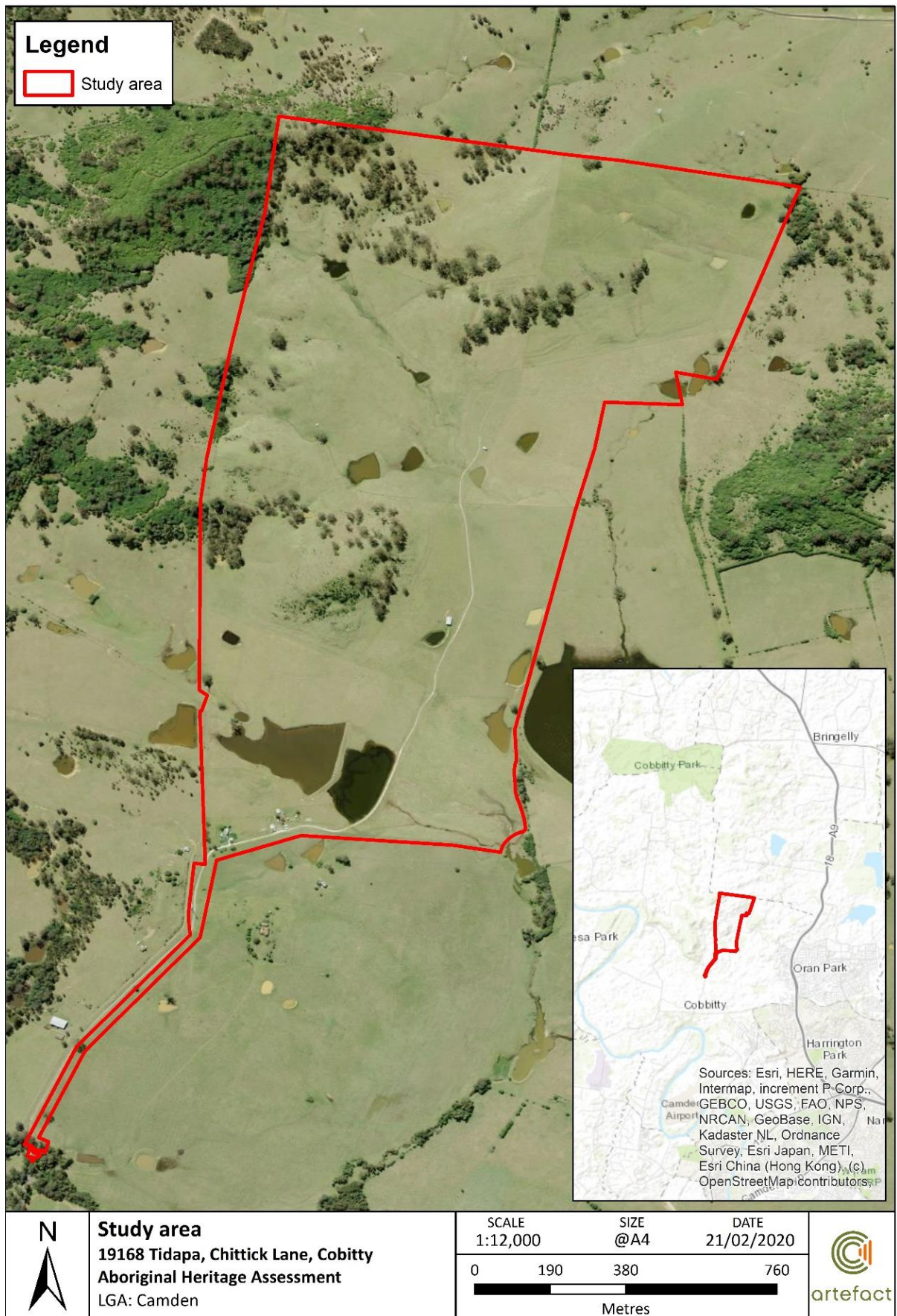
This report presents the results of an Aboriginal Heritage assessment in accordance with the Due Diligence Code of Practice. This report excludes non-Aboriginal (historical) heritage assessment and advice.

1.5 Report methodology

This assessment consisted of the following stages, in line with the Due Diligence Code of Practice:

- Assess the nature of recorded Aboriginal sites in the surrounds of the study area
- Assess the environment and historical background of the study area
- Assess relevant archaeological reports in the surrounds of the study area
- Assess archaeological potential of the study area
- Assess likely impact of the proposal on archaeological potential
- Provide recommendations.

Figure 1: Study area outlined in red



2.0 LEGISLATIVE CONTEXT

2.1 State legislation

2.1.1 *National Parks and Wildlife Act 1974*

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

'damage, deface or destroy Aboriginal sites without the prior consent of the Director-General of the National Parks and Wildlife Service (now NSW Heritage, Department of Premier and Cabinet [NSW Heritage, DPC])'.

The NPW Act defines an Aboriginal 'object' as:

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

2.1.2 *Native Title Act 1994*

The *Native Title Act 1994* was introduced to work in conjunction with the Commonwealth *Native Title Act 1993*. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act. There are no Native Title claims currently registered in the study area.

2.1.3 *Aboriginal Land Rights Act 1983*

The *Aboriginal Land Rights Act 1983* (ALR Act) established Aboriginal Land Councils (at State and Local levels). These bodies have a statutory obligation under the ALR Act to:

- (a) take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law, and
- (b) promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

The study area is within the boundary of the Tharawal LALC.

2.2 Commonwealth legislation

2.2.1 *Environment Protection and Biodiversity Conservation Act 1999*

The *Environment and Heritage Legislation Amendment Act (No.1) 2003* amends the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to include 'national heritage' as a matter of National Environmental Significance and protects listed places to the fullest extent under the Constitution. It also establishes the National Heritage List (NHL) and the Commonwealth Heritage List (CHL).

The *Australian Heritage Council Act 2003* (AHC Act) establishes a new heritage advisory body - the Australian Heritage Council (AHC), to the Minister for the Environment and Heritage and retains the Register of the National Estate (RNE).

The *Australian Heritage Council (Consequential and Transitional Provisions) Act 2003* repeals the *Australian Heritage Commission Act 1975*, amends various Acts as a consequence of this repeal and allows the transition to the current heritage system.

Together the above three Acts provide protection for Australia's natural, Indigenous and non-Indigenous heritage. The new features include:

- A new NHL of places of national heritage significance.
- A new CHL of heritage places owned or managed by the Commonwealth.
- The creation of the AHC, an independent expert body to advise the Minister on the listing and protection of heritage places.
- Continued management of the Register of the National Estate (RNE).

National Heritage List

The NHL is a list of places with outstanding heritage value to our nation, including places overseas. So important are the heritage values of these places that they are protected under the EPBC Act. This means that a person cannot take an action that has, will have, or is likely to have, a significant impact on the national heritage values of a national heritage place without the approval of the Australian Government Minister for the Environment and Heritage. It is a criminal offence not to comply with this law and there are significant penalties.

No items listed on the NHL are located within the study area.

Commonwealth Heritage List

The CHL is a list of places managed or owned by the Australian Government and not of relevance to this project.

No items listed on the CHL are located within the study area.

Register of the National Estate

The RNE is an evolving record of Australia's natural, cultural and Aboriginal heritage places that are worth keeping for the future. The AHC compiles and maintains the RNE under the *Australian Heritage Council Act 2003*. Places on the RNE that are in Commonwealth areas, or subject to actions by the Australian Government, are protected under the EPBC Act by the same provisions that protect Commonwealth heritage places (see above).

Following amendments to the *Australian Heritage Council Act 2003*, the RNE was frozen on 19 February 2007, meaning no new places can be added, or removed. From 2012, all references to the RNE were removed from the EPBC Act and the AHC Act. The RNE is now maintained on a non-statutory basis as a publicly available archive.

No items listed on the RNE located within the study area.

2.2.2 *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*

The Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (ATSIHP Act), deals with Aboriginal cultural property (intangible heritage) in a wider sense. Such cultural property intangible heritage includes any places, objects and folklore that 'are of particular significance to Aboriginals in accordance with Aboriginal tradition'. These values are not currently protected under the NPW Act. In most cases, archaeological sites and objects registered under the State Act will also be Aboriginal places subject to the provisions of the Commonwealth Act. There is no cut-off date and the ATSIHP Act may apply to contemporary Aboriginal cultural property as well as ancient sites. The ATSIHP Act takes precedence over state cultural heritage legislation where there is conflict. The Commonwealth Minister who is responsible for administering the ATSIHP Act can make declarations to protect these areas and objects from specific threats of injury or desecration. The responsible Minister may make a declaration under Section 10 of the Commonwealth Act in situations where state or territory laws do not provide adequate protection of intangible heritage places.

3.0 ENVIRONMENTAL CONTEXT

The environmental context of the study area is to assist in the prediction of:

- The potential of the landscape over time to have accumulated and preserved Aboriginal objects
- The ways Aboriginal people have used the landscape in the past with reference to the presence of resource areas, surfaces for art, other focal points for activities and settlement
- The likely distribution of the material traces of Aboriginal land use based on the above.

3.1 Landscape, geology and soils

The study area is located within the Cumberland Plain, a large low-lying and gently undulating landform in the Sydney Basin. The formation of the basin began between 300 to 250 million years ago when river deltas gradually replaced the ocean that had extended as far west as Lithgow (Pickett and Alder 1997). The oldest, Permian layers of the Sydney Basin consist of marine, alluvial and deltaic deposits that include shales and mudstone overlain by Coal Measures. By the Triassic period the basin consisted of a large coastal plain, with deposits from this period divided into three main groups, the Narrabeen Group, Hawkesbury Sandstone and the Wianamatta Group (Clark and Jones 1991; Pickett and Alder 1997).

The geology of the study area is characterised by the Wianamatta Liverpool Sub-Group. The Liverpool Sub-Group comprises Bringelly Shale over Hawkesbury Sandstone and Ashfield Shale and consists of shale and some sandstone beds and outcrops. Local relief is between ten and 50 m with undulating slopes of less than ten per cent (Bryan 1966).

Soils in the study area consist of the Blacktown soil landscape, the Luddenham soil landscape and the Piction soil landscape (Figure 2). The Blacktown soils are shallow (<100 centimetres [cm] deep) consisting of red and brown podzolic soils on crests, upper slopes and well drained area and yellow podzolic soils on lower slopes and along drainage lines between 10-30 cm. The Blacktown soil landscape is generally associated with gently undulating rises. The soils are primarily poorly drained with very little erosional activity with minor sheet and gully erosion in zones stripped of vegetation. The northern section of the study area consists of Luddenham soils which are characterised by shallow (<100 cm deep) brown podzolic soils and massive earthy clays on crests, moderately deep, between 70 and 150 cm, red podzolic soils on upper slopes. Yellow podzolic soils and prairie soils are usually found on lower slopes and drainage lines. These soils are highly affected by erosion and are usually associated with rolling to steep low hills.

3.2 Hydrology

The southern tip of the study area crosses Cobbitty Creek and is also located approximately 1.6 kilometres (km) north of The Nepean River. The study area also contains several ephemeral draining lines which have been dammed.

Figure 2: Study area soil profiles

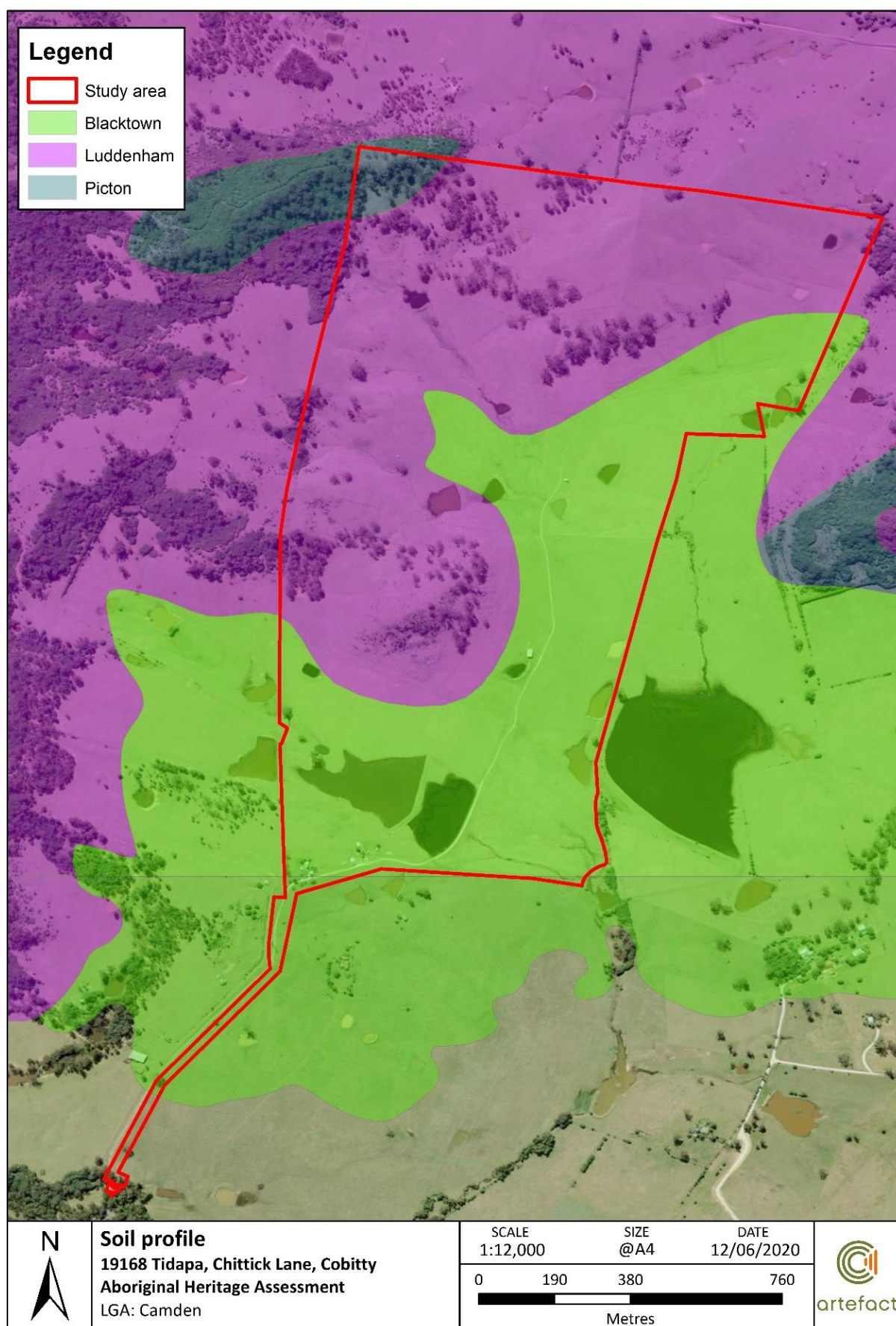
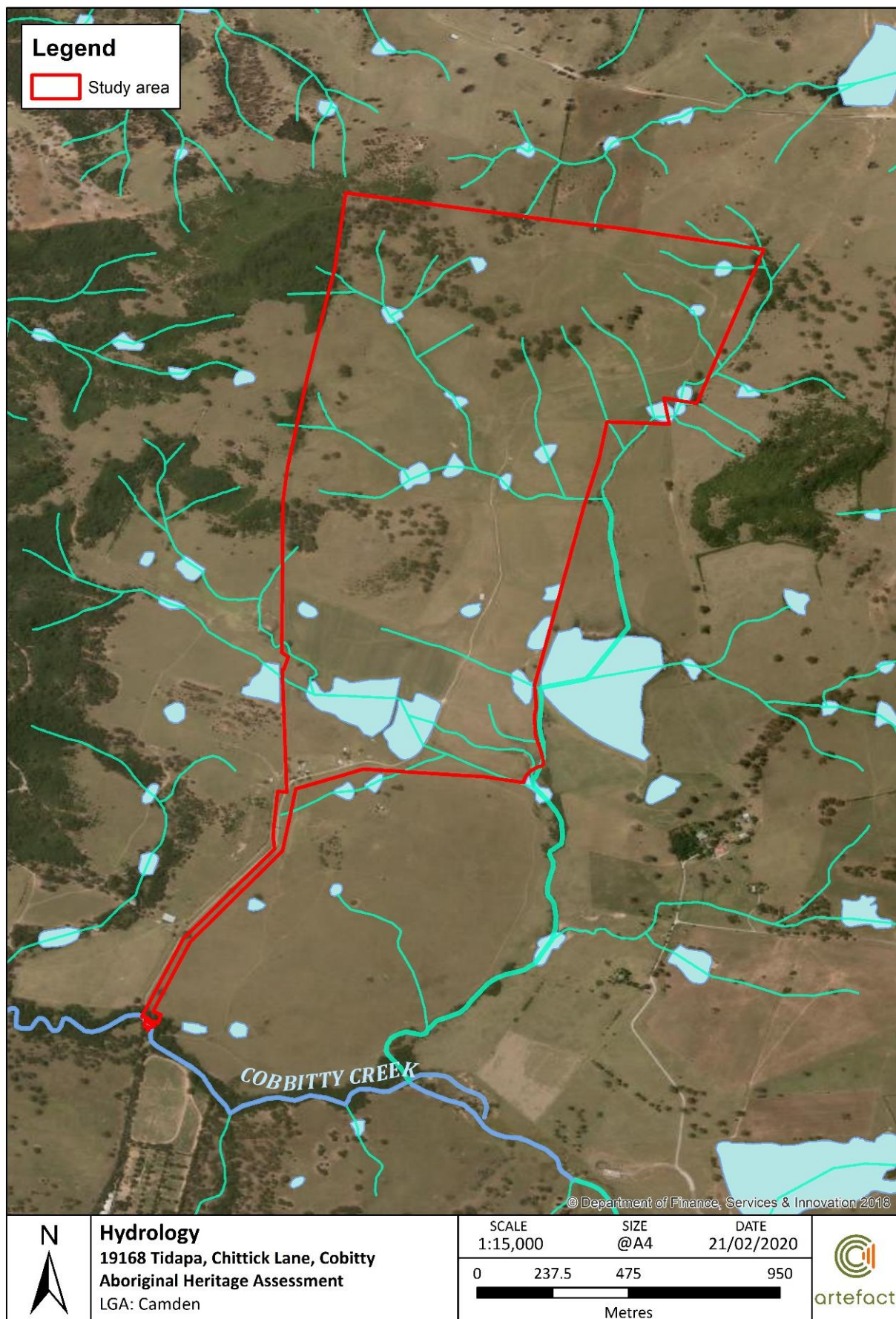


Figure 3: Study area hydrology



3.3 Natural resources

Aboriginal people utilised different landscapes and resource strategies across the Sydney Basin. Different resources may have been available seasonally, necessitating movement or trade across the landscape (Attenbrow 2010: 78). Aboriginal people hunted kangaroo and wallaby and snared possums and other small animals and birds for food and skins. Plants were likewise an important source of nutrition for past Aboriginal peoples with numerous plant species utilised for food, manufacture and medicinal purposes (Attenbrow 2010: 41).

3.4 Vegetation

It is likely that the vegetation around the study area would have comprised of dry sclerophyll forest. Common trees include spotted gum, forest red gum and grey box. Broad-leaved ironbark, narrow-leaved ironbark, woollybutt, and forest oak are less common. Understorey shrub species include blackthorn, coffee bush, hickory and hairy clerodendrum. Grasses include wire grass, bordered panic grass, paddock lovegrass and kangaroo grass (Benson, 1981).

3.5 Historical background

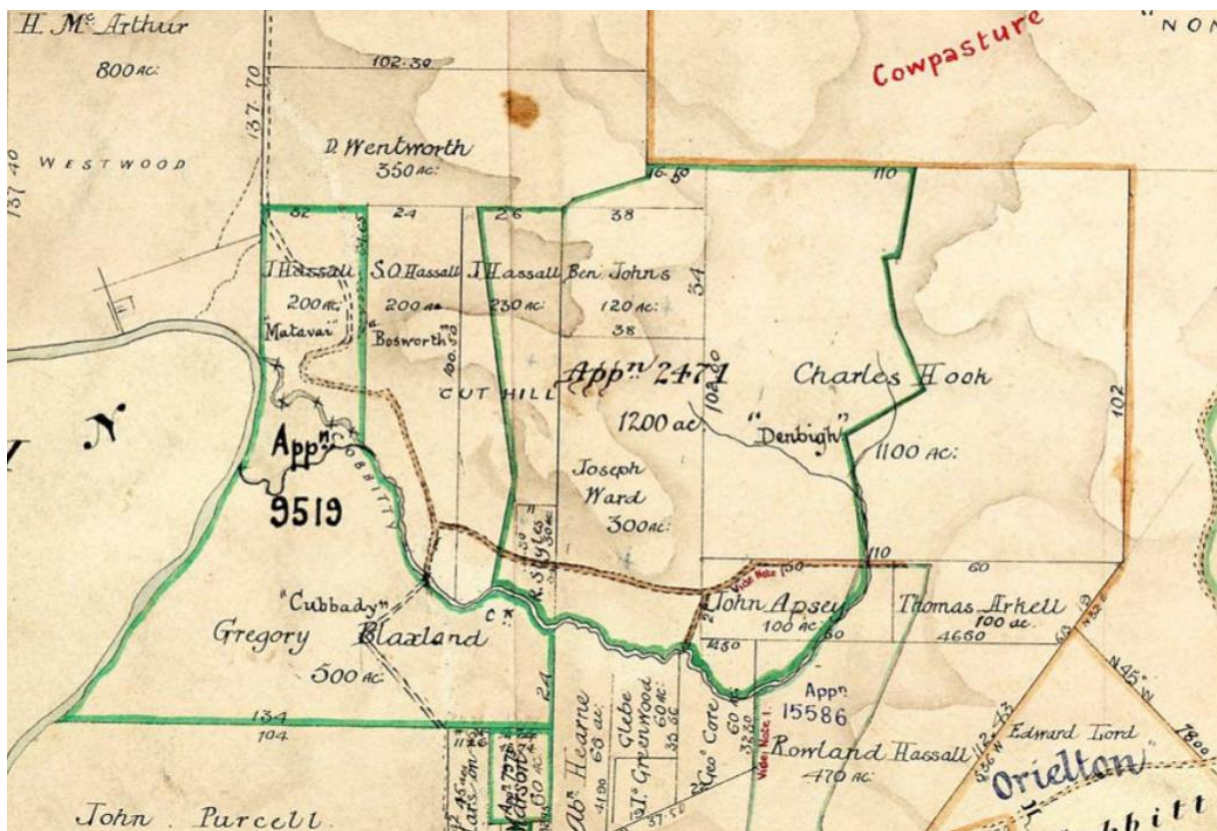
Early incentive for European exploration in the Camden and Campbelltown districts was the presence of a herd of wild cattle descended from two bulls and four cows that had escaped the first settlement in Sydney in 1788 (Wrigley 2001). Thirteen years later, Governor Hunter explored the region personally after learning of the cattle from other colonists and named the district the Cowpastures (Mylrea 2002:6). The southern limit of the Cowpastures was Stone quarry Creek at Picton extending beyond Narellan to the north, though its northern boundary was never formally defined (Atkinson 1988:8-9).

The study area is located within the Parish of Cook. Charles Hook was granted 1100 acres in 1810. Born in Argyllshire, Scotland, Charles Hook arrived in Sydney in 1808 to join the Australian branch of the Howrah distillery with his friend Robert Campbell. Since Campbell was an open supporter of the deposed governor William Bligh, the company was subject to hostility from the rebels and Hook was soon arrested on a charge of sedition for propagating Bligh's proclamation that NSW was in mutiny. He was in gaol for one month. Hook continued to work for the Howrah distillery until 1816 when debts paralysed the company, and he retired to his property 'Denbigh' in the Parish of Cook. He lived with his neighbour until a house was built on his own land. He continued to live on his land despite feeling the stress of managing a commercial house in decline, describing himself to be "like a Bear chained to a Stake and Baited by every Dog in the Colony". He died in 1826 at the age of 64 and was buried on 25 September in St John's cemetery in Paramatta.

The Camden area was predominately part of a wider an agricultural district until very recently and even now agricultural activities play a major role in the local area. During the 1840s, wheat cultivation was a major industry in the district and several flour mills were established to process this wheat (Atkinson 1988:31). However, in the early 1860s, an outbreak of rust destroyed the wheat industry and landholders diversified into other avenues of agricultural production (Atkinson 1988:95). These included sheep, cattle, dairying, crops such as oats, and fruit and vegetable cultivation. During the 1930s depression, many of the large properties in the area were subdivided and smaller farms for orchards or poultry became more common (Willis n. d.).

Since the 1950s, the development of the Camden region has been strongly affected by state government planning policies. The 1968 Sydney Region Outline Plan encouraged the growth of Narellan (Willis n. d.) and from the 1970s, urbanisation in the area rapidly increased.

Figure 4: Parish of Cook historic map



4.0 ABORIGINAL HERITAGE

4.1 Aboriginal material culture

Aboriginal people have lived in the Sydney region for up to 30,000 years, as indicated by radiocarbon dating from investigations in Parramatta (JMcD CHM 2005:87-94). Evidence of Aboriginal occupation has been found dated to 50-60,000BP at Lake Mungo in NSW. As such, it is likely that Aboriginal people have lived in the Sydney region for even longer than indicated by the oldest recorded dates known at present. The archaeological material record provides evidence of this long occupation, but also provides evidence of a dynamic culture that has changed through time.

The existing archaeological record is limited to certain materials and objects that are able to withstand degradation and decay. As a result, the most common type of Aboriginal objects remaining in the archaeological record are stone artefacts. Archaeological analyses of these artefacts and their contexts have provided the basis for the interpretation of change in material culture over time. Technologies used for making tools changed, along with preference of raw material. Different types of tools appeared at certain times, for example ground stone hatchets are first observed in the archaeological record around 4,000 yBP in the Sydney region (Attenbrow 2010: 102). It is argued that these changes in material culture were an indication of changes in social organisation and behaviour.

The Eastern Regional Sequence was first developed by McCarthy in 1948 to explain the typological differences he was seeing in stone tool technology in different stratigraphic levels during excavations such as Lapstone Creek near the foot of the Blue Mountains (McCarthy *et al* 1948). The sequence had three phases that corresponded to different technologies and tool types (the Capertian, Bondaian and Eloueran). The categories have been refined through the interpretation of further excavation data and radiocarbon dates (Hiscock & Attenbrow 2005; JMcD CHM 2005). It is now thought that prior to 8,500 yBP tool technology remained fairly static with a preference for silicified tuff, quartz and some unheated silcrete. Bipolar flaking was rare with unifacial flaking predominant. No backed artefacts have been found of this antiquity. After 8,500 yBP silcrete was more dominant as a raw material, and bifacial flaking became the most common technique for tool manufacture. From about 4,000 yBP to 1,000 yBP backed artefacts appear more frequently. Tool manufacture techniques become more complex and bipolar flaking increases (JMcD CHM 2006). It has been argued that from 1,400 to 1,000 years before contact there is evidence of a decline in tool manufacture. This reduction may be the result of decreased tool making, an increase in the use of organic materials, changes in the way tools were made, or changes in what types of tools were preferred (Attenbrow 2010: 102). The reduction in evidence coincides with the reduction in frequency of backed blades as a percentage of the assemblage.

4.2 Aboriginal ethno-historical context

Aboriginal people traditionally lived in small family or clan groups that were associated with particular territories or places. Tribal boundaries in eastern Australia have largely been reconstructed on the basis of surviving linguistic evidence and, as such, are only approximate.

Specific to Catherine Field as reported by Kelleher Nightingale Consulting in July 2012:

The study area was located in somewhat of a transitional area between different language groups. The Georges River/Appin/Camden area has been used as an arbitrary boundary between the Darug, Dharawal and Gundungurra language groups (Attenbrow 2002: 34). The Darug language was divided between coastal and hinterland dialects and spread from Port Jackson west to the Cumberland

Plain, the Gundungurra language was predominantly associated with the hinterland and spread from the southern Cumberland Plain across the southern Blue Mountains and the Dharawal language was largely associated with coastal groups and spread from Botany Bay south to the Shoalhaven River and west to the Georges River area (Attenbrow 2002: 34).

Early historical accounts of Aboriginal people are inevitably subject to the writer's bias, however, they do provide valuable observations of Aboriginal customs and life during the early period of European occupation. Language dialects varied across the Cumberland Plain, although early Europeans recorded observations of interaction and mutual intelligibility between Darug speakers from different regions. Captain Watkin Tench detailed an interaction between two Aboriginal men, one from the coast and one from inland, and noted the range of variability between dialects. Tench observed that though the men conversed on par and understood each other perfectly, many words for common things bore no similarities, yet other words were only slightly different (Tench 1793:122).

Subsistence activities also varied throughout the different regions of the Cumberland Plain, particularly between coastal and inland groups (Kohen 1986:77). Coastal groups were observed to rely on resources such as fish and shellfish, whereas inland groups relied more on small animals, plants and freshwater fish and eels (Tench 1793:230, Kohen 1986:77). Banksia flowers, wild honey, varieties of wild yam and Burrawong nut were recorded as important food sources (Collins 1798 Kohen 1985:9), particularly for inland groups. Small animals such as bandicoots and wallabies were hunted through traps and snares (Kohen 1985:9). Captain Tench observed the prowess of Darug men in carving toeholds into trees in order to swiftly climb while hunting possums, sometimes supplemented by smoking the animals out with fire (Tench 1793:82).

4.3 Aboriginal Heritage Information Management System

The location of Aboriginal sites is considered culturally sensitive information. It is advised that this information, including the Aboriginal Heritage Information Management System (AHIMS) data appearing on the heritage map for the proposal be removed from this report if it is to enter the public domain.

An extensive search of the AHIMS database was undertaken on 17 January 2020 (AHIMS search ID 477793).

The area surrounding the study area was searched in order to gain information on the archaeological context of the study area, and to ascertain whether any previously recorded Aboriginal sites are located within the study area. The details of the AHIMS search parameters are as follows:

GDA 1994 MGA 56	285296 – 289296 m E 6233516 – 6237516 m N
Buffer	0 m
Number of sites	13

A total of 13 sites were identified in the extensive AHIMS search area. The distribution of recorded sites within the AHIMS search area is shown in Figure 5. NSW Heritage, DPC lists 20 standard site features that can be used to describe a site registered with AHIMS, and more than one feature can be used for each site. The frequency of recorded site types is summarised in Table 1. For the 13 sites within the search area, three site features were recorded. The majority of recorded sites (84.61 per cent) are artefacts (n=11).

Table 1: Frequency of recorded site types

Site feature	Frequency	Per cent (%)
Artefact	11	84.61
Artefact, Potential Archaeological Deposit (PAD)	1	7.69
Potential Archaeological Deposit (PAD)	1	7.69
Total	13	100.00

The nature and location of the registered sites is a reflection of the past Aboriginal occupation from which they derive, but is also influenced by historical land-use, and the nature and extent of previous archaeological investigations. Although Aboriginal land use included the whole landscape, archaeological evidence indicates that repeated and long-term occupation of specific areas within the landscape often correlates with areas where fresh water and associated resources are available. Certain site types, such as culturally modified trees, are particularly vulnerable to destruction through historical occupation, while others, such as stone artefacts, are more resilient.

No registered Aboriginal sites are recorded with the study area. One registered Aboriginal site, OPD-13 (AHIMS ID 45-5-3362) is located in an adjacent property 70 m to the east.

OPD-13 (AHIMS ID 45-5-3362) was recorded in 2007 and is described as an open lithic scatter and was observed on the eroding banks of the dam and drainage channel approximately 250 m south of the transmission line. The northern extent of the site is the bank of the dam, southern extend is on the east bank of the drainage channel underneath and east of a large eucalypt and thicket of wild olives. Artefacts within the scatter were described as a white tuff fragment (10 – 20 mm), one pink silcrete fragment (10 – 20 mm) and one pink silcrete core with three multidirectional negative flake scars.

Figure 5: Map of study area showing location of AHIMS sites



4.4 Previous archaeological assessments

Archaeological assessment has taken place in the vicinity of the study area, primarily located east towards Catherine Field and Oran Park. The following is a summary of relevant previous reports.

Harrington Park and Mater Dei rezoning project (Australian Museum Business Services 2006)

The Harrington Park and Mater Dei study area extended along The Northern Road from Harrington Park (2.5km southeast of the study area) to its intersection with Cobbitty Road.

The 2006 study of the Harrington Park and Mater Dei development areas followed on from a Phase 1 preliminary study which identified the need for further investigation (Central West Archaeological and Heritage Services 2004). The Phase 1 study identified 16 Aboriginal sites, including five possible scarred trees. The Phase 2 investigations identified a further 19 sites. A large portion of the study area was assessed as having a medium to high archaeological sensitivity with generally low disturbance levels. It was recommended that large sections of the precinct should be zoned for conservation with 60 per cent of the recorded sites within the conservation areas.

Archaeological investigation of the Oran Park precinct in the South West Growth Centre (Jo McDonald Cultural Heritage Management 2007).

The Oran Park precinct, located at the intersection of The Northern Road and Cobbitty Road, was located 2.5km southeast of the study area. The survey undertaken by JMcDCHM aimed to locate Aboriginal sites within the precinct and recommend appropriate conservation or mitigation measures. A total of 44 sites and four areas of archaeological potential were located during the survey with several sites having very high densities of artefacts. Site OPR-15 comprised of 193 recorded artefacts located on the banks of a minor tributary in the north-eastern section of the precinct.

The majority of the area along The Northern Road was assessed as having a low/moderate archaeological sensitivity with only 15 per cent of the total precinct assessed as having a high archaeological sensitivity.

The Northern Road upgrade preliminary Aboriginal archaeological assessment (Biosis 2008).

The Biosis study assessed the area of the proposed upgrade of The Northern Road from the Old Northern Road, Narellan to Bringelly/Greendale Road at Bringelly, approximately 4.5kms southeast of the current study area. The study involved a desktop assessment and a site survey. The field survey focused on creeks, drainage features and prominent rises, and any previously recorded sites within the corridor. Although the ground surface visibility throughout the study area was low, a total of eight Aboriginal sites and two areas of potential archaeological deposit were identified during the survey. Two of these sites were scarred trees, one was an artefact scatter and five were isolated finds.

Oran Park and Turner Road Precincts Aboriginal heritage investigation for proposed Infrastructure service routes and site options (Kelleher Nightingale Consulting KNC 2008).

This study involved the Aboriginal heritage assessment of proposed infrastructure service routes and sites under consideration for the early release areas of Oran Park and Turner Road Precincts, approximately 7km east-southeast of the current study area. The survey of these routes located seven Aboriginal sites, and five areas of potential archaeological deposit.

The assessment recommended that there were no constraints on development within the road corridor on either side of The Northern Road due to high levels of disturbance. It was recommended that a number of sites may be impacted by the proposed works outside the road corridor and within the Oran Park and Turner Road precincts. A Section 90 AHIP was recommended for these sites if they were to be impacted by the Oran Park and Turner Road proposal.

Excavation of HPK9 (AHIMS 52-2-3382) (KNC 2009)

Excavation of the site AHIMS No. 52-2-3382 was undertaken by KNC in 2007. The site is located approximately 450m south of the Catherine Field Precinct, that is, approximately 6.8km southeast of the present study area. The site was located on a small elevated area overlooking Campbell Rivulet, a tributary of Narellan Creek. The assemblage recovered was dominated by silcrete (70%), with quartz making up a further 26%. It was interpreted as representing small single knapping events dating to the last 5,000 years.

Archaeological excavations at the Oran Park and Turner Road precincts (AECOM 2009).

The archaeological test excavations at Oran Park involved a program of test pitting and open area excavations. Three hundred and forty test pits were excavated across a variety of landform units, with 160m² of open area excavated during salvage excavations. A total of 4780 artefacts were recovered from Phase 1 and Phase 2 excavations, with around three quarters of the artefacts made of silcrete. Approximately five per cent of the assemblage comprised of tools or cores including backed artefacts and scrapers.

The results of the excavations indicated a low density spread of archaeological material across the precinct which is argued to reflect a 'pre-contact landscape of extensive but low intensity Aboriginal activity with evidence of strategic defensive positioning of campsites within a cultural interaction zone between different language groups' (AECOM 2009:ES1).

Bringelly Road upgrade Camden Valley Way to The Northern Road Aboriginal cultural heritage assessment (KNC 2010a).

The KNC study followed on from the Austral Archaeology preliminary investigation for the Bringelly Road upgrade route, approximately 8.5km north-northeast of the current study area. Forty-four Aboriginal sites were located along the Bringelly Road corridor during the KNC and Austral site surveys. The majority of artefacts recorded were made of silcrete, mudstone or tuff. Artefacts were predominantly flakes or flake fragments, with smaller numbers of cores, flaked pieces and blades.

Camden Valley Way, Cobbitty Road to Cowpasture Road (KNC 2010b)

KNC assessed a stretch of Camden Valley Way prior to a proposed upgrade, approximately 6.6km from the current study area. The investigation resulted in the identification of 14 Aboriginal archaeological sites within or immediately adjacent to the road corridor. Ten of the sites were artefact scatters, two were isolated artefacts, and two were scarred trees. Two of the sites were assessed as having high archaeological potential, and one moderate potential. A further six were assessed as being of moderate archaeological significance.

719 & 729 Camden Valley Way, Catherine Field: ACHAR (Artefact 2016)

Artefact Heritage (2016) conducted an Aboriginal Cultural Heritage Assessment Report prior to proposed development, approximately 5.5 kms northeast from the current study area. There was one recorded Aboriginal archaeological site in the area (AHIMS No.52-2-3925 (CFPP-01)), but it could not be found during the investigation. The study area was determined to have low archaeological potential due to substantial historical ground disturbance.

4.5 Predictive Model

Beth White and Jo McDonald have recently contributed to the debate over site prediction on the Cumberland Plain in their discussion on the nature of Aboriginal site distribution as interpreted through lithic analysis of excavated sites in the Rouse Hill Development Area (RHDA) (White and McDonald 2010). This analysis brings together data from 631 dispersed 1m x 1m test squares from

19 sample areas, which yielded 4,429 stone artefacts in total. The findings of this study generally support earlier models that predicted correlations between proximity to permanent water sources and site location, but also highlighted the relationship between topographical units and Aboriginal occupation.

The major findings of the study were that artefact densities were most likely to be greatest on terraces and lower slopes within 100m of water. The stream order model was used to differentiate between artefact densities associated with intermittent streams as opposed to permanent water. It was found that artefacts were most likely within 50-100m of higher (4th) order streams, within 50m of second order streams, and that artefact distribution around first order streams was not significantly affected by distance from the watercourse (White and McDonald 2010: 33). Overall landscapes associated with higher order streams (2nd order or greater) were found to have higher artefact densities, higher maximum densities, and more continuous distribution than lower order intermittent streams. The analysis also concluded that while there were statistically viable correlations that demonstrated a relationship between stream order, land form unit and artefact distribution across the RHDA, the entire area should be recognised as a cultural landscape with varied levels of artefact distribution (White and McDonald 2010: 37). This predictive model has been transferred to other areas of the Cumberland Plain, especially those on shale soil geology, as landscape, soils and artefacts patterning are similar throughout the region.

The results of excavations at the Oran Park precinct have been argued to suggest that correlations between stream confluence, or stream order, and artefact density do not hold for this area. Instead it was argued that 'the evidence supports a more even spread of archaeological deposit comprising predominantly low density artefact distribution with occasional campsite concentrations in areas with good outlook over the main valley up to locations anywhere to several hundred meters away from the watercourses' (AECOM 2009: 50).

5.0 SITE INSPECTION

5.1 20 January 2020

An inspection of the study area was completed by Ryan Taddeucci (Senior Heritage Consultant, Artefact Heritage), and Anna Darby (Heritage Consultant, Artefact Heritage) on 20 January 2020. The aim of the site inspection was to gain an overall impression of the intactness of the study area and identify the potential for archaeologically sensitive landforms. The inspection was undertaken on foot, using handheld Global Positioning System and physical maps. Photographs were taken to record different aspects of the landform units within the study areas, vegetation, levels of disturbance and any areas of archaeological potential.

The study area was accessed through an unsealed road in the southern portion of Lot 2 (Figure 6). The southernmost portion of the road had been defined by erosion from vehicle activity, but the northern half of the track was defined by imported gravels (Figure 7). Built structures were observed in the southern portion of Lot 2 for residential and pastoral purposes, including an electrical substation (Figure 8). An alignment of overhead powerlines ran along the access track to the residential structures located in Lot 2.

With the exception of a pumping station established near a dam in Lot 3, Lot 2 was the only part of the study area which included permanent built structures. Disturbance within the study area included the extensive clearance of native vegetation to accommodate pastoral usage and the establishment of several dispersed dams. Modification of the landscape for pastoral activities has resulted in the majority of the study area being covered in low grasses for cattle grazing. The ubiquitous grasses limited ground surface visibility to occasional areas of erosion associated with vehicle tracks, artificial dams (Figure 11), and built structures.

Occasional Eucalyptus species trees were identified in association with second order creek lines (Figure 10). These trees are unlikely to be remnants of the original landscape as no old growth trees were identified and it is likely that these trees have grown since the entire study area was cleared. One scarred tree was identified, but as the tree was part of the regrowth and the scar was found to extend to the base of the tree, it is unlikely that the scar is the result of past Aboriginal activity (Figure 9). A deep area of erosion was identified in the centre of Lot 5, which indicated that the deposit within that portion of the study area is comprised of an upper layer of silt approximately 200 mm transitioning down onto a deep deposit (> 1 m) of highly plastic clay, interpreted as degraded bedrock (Figure 13).

The study area is located on an undulating landform which slopes up towards a steep crest in the northeast (Figure 12). Infrequent sandstone outcrops were identified in the northern portion of the study area and a sample was inspected for evidence of anthropogenic markings (Figure 10). None of the sandstone outcrops inspected featured any evidence of anthropogenic marking.

No Aboriginal objects were identified during the site inspection. However, the site features frequent first and second order creek lines and as a result the major of the study area is considered to be an archaeological sensitive landform as defined by the NSW Heritage, DPC Due Diligence Code of Practice. Ground disturbance was limited to the several dams which have been established across the site, occasional vehicle tracks and the few structures established in the southern portion of the study area.

Figure 6: View south of the entrance to the study area



Figure 7: View south across the access track located within Lot 2.



Figure 8: Electrical substation identified on the western side of the Lot 2 access track



Figure 9: Natural scar identified on a young tree



Figure 10: Sandstone outcrops identified within a second order ephemeral creek



Figure 11: View west across a large artificial dam established in the northern portion of Lot 2



Figure 12: View north from Lot 4 of the undulating landscape



Figure 13: View northeast of exposed soil profile from the middle of Lot 5



5.2 4 May 2020

An additional inspection of the study area was completed by Ryan Taddeucci (Senior Heritage Consultant, Artefact Heritage), and Rebecca Chalker (Site Officer, Cubbitch Barta Native Title Claimants) on 4 May 2020. The aim of the site inspection was to provide Cubbitch Barta Native Title Claimants with an opportunity to assess the cultural significance of the study area to be incorporated into this assessment. A letter report produced by Glenda Chalker (Cubbitch Barta Native Title Claimants) on 9 June 2020, outlining the findings of the assessment. The Cubbitch Barta Native Title Claimants letter report has been included as Appendix 1 to this report.

A potentially modified tree was identified in the northwest portion of Lot 3 (Figure 14). The tree was located immediately east of an access track on a southerly descending slope. The tree featured two scars located close to the ground surface (<250 mm). One of the scars was identified as a younger cut and appeared to be the product of damage from a machine. The other scar featured a termite nest and is likely to be the product of termite damage. Based on the assessment criteria outlined in the Aboriginal Scarred Trees in New South Wales: A Field Manual (Department of Environment and Conservation [NSW]), it is unlikely that the scars are a result of traditional Aboriginal activities. Therefore, the tree is not considered an Aboriginal object under the NPW Act.

It was noted that large sections of the study area had been subject to erosion that had removed the upper soil horizons, leaving the C horizon. The C horizon is the product of degrading bedrock and is considered to be archaeologically sterile.

Figure 14: Potential modified tree no. 1. View facing east



6.0 ASSESSMENT OF ARCHAEOLOGICAL SENSITIVITY

Archaeological sensitivity is closely related to observed levels of ground disturbance. However, other factors are also considered when assessing archaeological potential, such as whether artefacts were located on the surface, and whether the area is within a sensitive landform unit according to the predictive statements. The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW 2010) lists five archaeologically sensitive landforms:

- Within 200 m of waters (the whole or any part of: any river, stream, lake, lagoon, swamp, wetlands, natural watercourse, tidal waters)
- Within a sand dune system
- On a ridge top, ridge line or headland
- Within 200 m below or above a cliff face
- Within 20 m of or in a cave, rock shelter, or a cave mouth.

The Due Diligence Code of Practice defines disturbed land as:

Sec 7.5 (4) For the purposes of this clause, land is disturbed if it has been the subject of human activity that has changed the land's surface, being changes that remain clear and observable.

Examples of activities that may have disturbed land include the following:

- (a) soil ploughing*
 - (b) construction of rural infrastructure*
 - (c) clearing of vegetation,*
 - (d) construction of buildings and the erection of other structures,*
 - (e) construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure).*
-

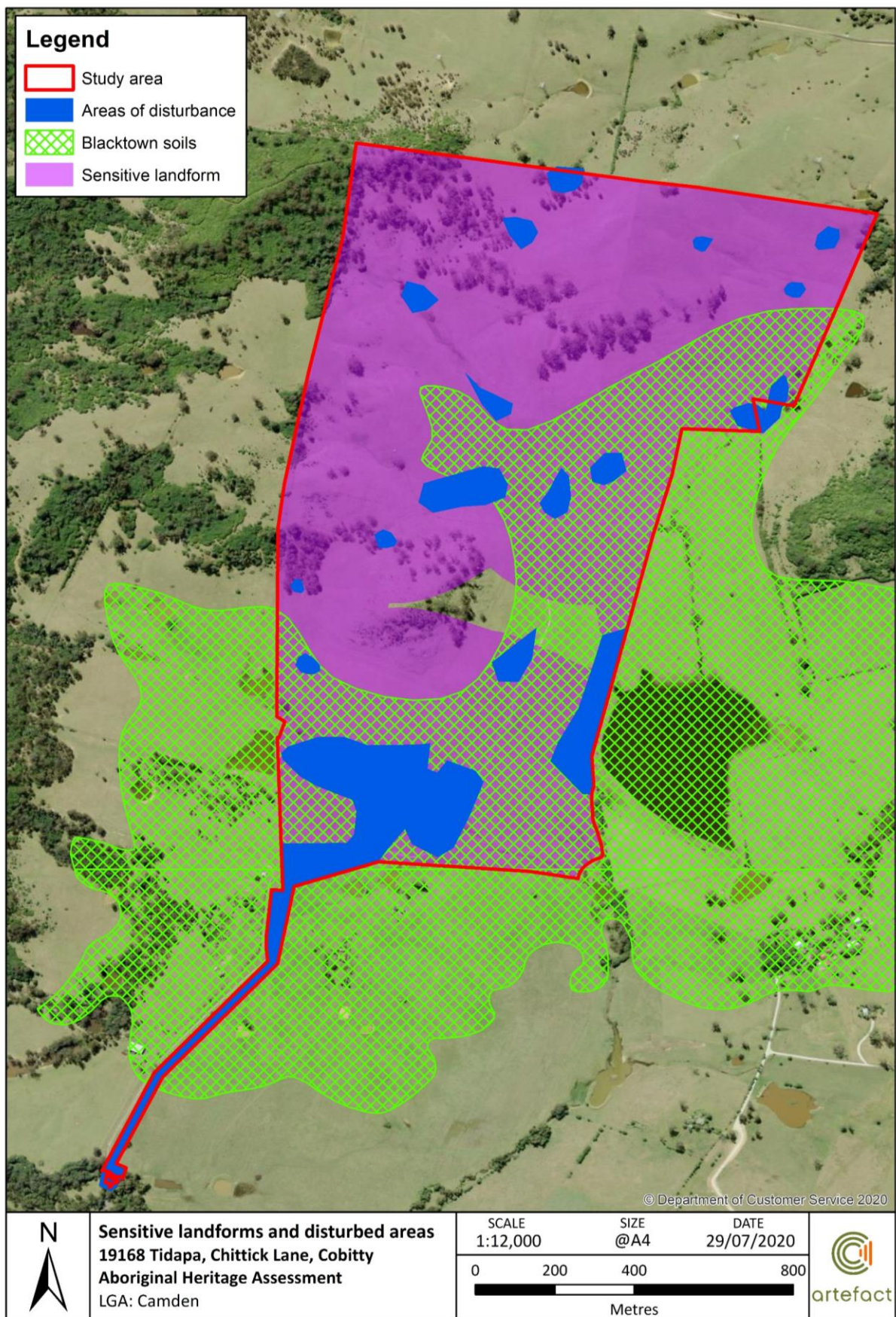
This assessment has identified that the majority of the study area is located within 200m of a water source and this land is considered to be archaeologically sensitive (Figure 15). However, several artificial dams have been established across the study area, in addition to the construction of roads and buildings. The identified area of archaeological sensitivity is comprised of land within 200m of water which has not been subject to past disturbance that would have removed any Aboriginal objects. The predictive model indicates that artefacts are most likely to be present at the base of slopes. Therefore, areas of high, medium and low archaeological sensitivity have been defined based on overlays of contour mapping (Figure 16).

Following the completion of the site inspection, the GPS tracks were overlaid with the mapped soil profile of the study area. It was found that the occurrences of the C horizon correlated with the mapped extent of the Blacktown soil profile. As the C horizon is considered to be archaeologically sterile, the mapped extent of the Blacktown soil profile is considered to be archaeologically sterile.

Further assessment of the study area should be completed in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010b). Further assessment would include a full coverage survey of the study area to further refine areas of

archaeological potential by mapping the portions of the study area which have been eroded down to an archaeologically sterile layer. An Archaeological Report should be completed to detail the results of the full coverage survey. The Archaeological Report will also include a significance assessment, impact assessment and recommendations for management and mitigation measures.

Figure 15: Map of sensitive landforms and ground disturbance



Document Path: D:\GIS\GIS_Mapping\19168 Tidapa, Chittick Lane, Cobbitty\MXD\19168_disturbance_sensitivity_200729_v2.mxd

Figure 16: Identified areas of archaeological sensitivity



7.0 RECOMMENDATIONS

The following recommendations are based on consideration of:

- Statutory requirements under the National Parks and Wildlife Act 1974.
- The results of the background research, site survey and assessment.
- The likely impacts of the proposed development.

It was found that:

- No previously registered AHIMS sites were identified within the study area
- No previously unrecorded Aboriginal sites were identified within the study area during the site inspection
- Areas of high, medium and low Aboriginal archaeological sensitivity were identified within the study area.

The following recommendations are made:

- In accordance with the NSW Heritage, DPC due diligence guidelines, this assessment has identified that Aboriginal objects are likely to occur beneath the ground surface within the study area
- In accordance with the NSW Heritage, DPC due diligence guidelines, further archaeological assessment of the study area is required. The first stage of further archaeological investigation would consist of preparation of an Archaeological Report in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010b). The Archaeological Report would define the boundaries of any areas of archaeological potential and provide a detailed assessment of archaeological potential
- The results of the Archaeological Report would inform recommendations on whether additional archaeological investigation, such as test excavation and comprehensive Aboriginal consultation, would be required
- Where test excavation is recommended in the Archaeological Report, further reporting would be required, including preparation of a test excavation methodology, Aboriginal consultation and a test excavation report. Where Aboriginal objects are identified during further archaeological investigation and an AHIP may be required prior to impacts.
- If changes are made to the development proposal that may result in impacts to areas not covered by this assessment, further archaeological assessment will be required
- Unexpected Aboriginal objects remain protected by the *NPW Act*. If any such objects, or potential objects, are uncovered in the course of the activity, all work in the vicinity should cease immediately. A qualified archaeologist should be contacted to assess the find and NSW Heritage, DPC and Tharawal LALC must be notified

- If human remains, or suspected human remains, are found in the course of the activity, all work in the vicinity should cease, the site should be secured and the NSW Police and the NSW Heritage, DPC should be notified.

8.0 REFERENCES

- AECOM 2010 *Oran Park West Sewer Infrastructure Aboriginal Heritage Impact Assessment*. Report to South West Growth Centre.
- AECOM 2015 *WestConnex New M5 Technical Working Paper: Aboriginal Heritage*. Report to Roads and Maritime Services.
- AHMS, 2015 SIMTA *Intermodal Terminal Facility – Stage 1: Aboriginal Heritage Impact Assessment*, Report to Hyder Consulting Pty Ltd.
- AMBS (Australian Museum Business Services) 2006, Harrington Park 2 and Mater Dei Rezoning Project Phase 2 *Indigenous Heritage Assessment and Conservation Strategy*. Unpublished report to APP Corporation on behalf of Camden Council.
- Artefact Heritage, 2016 *719 & 729 Camden Valley Way, Catherine Field: Aboriginal Cultural Heritage Assessment*. Report to Craig and Rhodes.
- Atkinson, A. 1988 *Camden*. Oxford University Press, Melbourne.
- Australian Museum Business Services 2003. *Report on the Salvage Excavation of a Portion of the Kendrick Park Midden, Tempe, NSW*. Unpublished report to Marrickville Council
- Attenbrow V, 1984 *St Peters Brick Pit, Sydney NSW - Investigation of Shell Material*. Report to Sydney City Council: Sydney
- Attenbrow, V. 2010 *Sydney's Aboriginal Past: Investigating the archaeological and historical records*. UNSW Press.
- Backhouse, J 1834, *A Narrative of a Visit to the Australian Colonies*. Hamilton, Adams and Co, London.
- Biosis 2008 *The Northern Road upgrade: Preliminary Aboriginal archaeological assessment*. Report to RTA.
- Bodkin F n.d, *D'harawal dreaming stories*, available from <https://dharawalstories.com/stories/>, accessed 20 November 2018
- Bryan, J.H 1966. *Sydney 1:250 000 Geological Sheet SI/56-05*. 3rd edition. Geological Survey of New South Wales. Sydney
- Clark, NR & Jones DC (eds). 1991, *Penrith 1:100,000 Geological Sheet 9030*. New South Wales Geological Survey, Sydney.
- Collins, D. 1798. (1975). *An Account of the English Colony of New South Wales*, Volume 1, edited by B.H. Fletcher, A.H. & A.W. Reed in association with the Royal Australian Historical Society, Terry Hills, NSW.
- Etheridge R, Edgeworth TW, David & Grimshaw JM, On the Occurrence of a Submerged Forest, with Remains of the Dugong, at Shea's Creek, near Sydney. *Journal and Proceedings of the Royal Society of New South Wales*, vol 30, 1896, pp 158–185.
- Hiscock, P. and Attenbrow, V. 2005. Australia's Eastern Regional Sequence Revisited: Technology and Change at Capertee 3. *Oxford: BAR Monograph Series 1397* Archaeopress.
- Irish P 2017, *Hidden in plain view - The Aboriginal people of coastal Sydney*, New South Publishing

- Jo McDonald Cultural Heritage Management 2005a. *Archaeological salvage excavation of site CG1 (NPWS #45-5-2648), at the corner of Charles and George Streets, Parramatta, NSW*. Report for Meriton Apartments Pty Ltd.
- Jo McDonald Cultural Heritage Management 2005b. Sydney University Campus 2010: *Test Excavations at the Law Building Site, Camperdown Campus; and at Maze Green, the Old Darlington School, Darlington Campus*. Report for Capital Insight.
- Jo McDonald CHM Pty Ltd. 2006. *Archaeological Salvage Excavation of the Colebee Release Area, Schofields, NSW, Volume 1*. Report prepared for Medallist Golf Holdings Pty Ltd.
- Jo McDonald CHM Pty Ltd. 2007. *Archaeological investigation of the Oran Park Precinct in the South West Growth Centre, Camden, NSW*. Report to APP.
- Jo McDonald CHM Pty Ltd. 2009. *Archaeological subsurface excavations at the Caddens Release Area, Kingswood*. Report to Landcom.
- Jo McDonald CHM Pty Ltd. 2010. *Archaeological Assessment of the proposed sewer and water mains associated with the Marsden Park Industrial Precinct, Stage 1*. Report to APP.
- KNC 2008 Oran Park and Turner Road Precincts: *Aboriginal Heritage Investigation for Proposed Infrastructure Service Routes and Site Options*. Report to Landcom.
- KNC 2009. *Archaeological Salvage Excavations of Site HPK9 Harrington Park, Sydney*, Report to Harpak Development
- KNC 2010a *Bringelly Road upgrade: Camden Valley Way to The Northern Road Aboriginal cultural heritage Cultural Heritage Assessment*. Report Prepared for the Roads and Traffic Authority.
- KNC 2010b *Camden Valley Way upgrade, Cobbitty Road to Cowpasture Road: Aboriginal archaeological survey report*. Report for the Roads and Traffic Authority.
- Kohen, J.L., 1985 *Aborigines in the West: Prehistory to Present*. Power, J. and West, P. (eds), Western Sydney Project 1985, Seven Hills, Sydney.
- Kohen, J.L., 1986 *Prehistoric Settlement in the Western Cumberland Plain: Resources, Environment and Technology*. PhD Thesis, School of Earth Sciences, Macquarie University, Sydney.
- Matthews, R.H. and Everitt, M.M. 1900. The organisation, language and initiation ceremonies of the Aborigines of the south-east coast of N.S. Wales. *Journal and Proceedings of the Royal Society of NSW* 34: 262-281.
- McCarthy, F. D., Brammell, E., and Noone, H. V. V. 1948. The stone implements of Australia. *Memoirs of the Australian Museum* 9, 1-94
- Muir, L 2013 *Aboriginal People of the Cooks River Valley, Dictionary of Sydney*, available at <http://dictionaryofsydney.org/entry/aboriginal_people_of_the_cooks_river_valley> accessed 21 November 2018
- Mylrea P. J., 2002 *Camden District: A History to the 1840s*. Camden Historical Society, Camden, N.S.W.
- Pickett JW and Alder JD 1997. *Layers of Time: The Blue Mountains and their Geology*. New South Wales Department of Mineral Resources, Sydney.
- Tench, Watkin 1789. *Sydney's First Four Years: Being a reprint of 'A narrative of the expedition to Botany Bay' and 'A complete account of the Settlement at Port Jackson'*, Angus & Robertson.

Thompson, J. From the Collection of the State Library of N.S.W [DL PXX 31, 2a]

Willis, I (n. d.) *Narellan*, online edition at <www.camdenhistory.org.au/Narellan.pdf>

Wrigley, J. W. 2001 *A History of Camden NSW*. Camden Historical Society, Camden, N.S.W

Guides

Department of Environment, Climate Change and Water [now NSW Heritage, DPC] 2010a. *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*.

Department of Environment, Climate Change and Water [now NSW Heritage, DPC] 2010b. *Aboriginal cultural heritage consultation requirements for proponents*.

Department of Environment, Climate Change and Water [now NSW Heritage, DPC] 2010c. *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*

Office of Environment and Heritage 2011 *Guide to Investigating, assessing and reporting on Aboriginal cultural heritage in NSW: Part 6 National Parks and Wildlife Act 1974*.

Online

ESpade, Blacktown Soil Landscape,
<http://www.environment.nsw.gov.au/Salisapp/resources/spade/reports/bty.pdf>, accessed 22 November 2018

APPENDIX 1 – CUBBITCH BARTA NATIVE TITLE CLAIMANTS REPORT

Cubbitch Barta Native Title Claimants
Aboriginal Corporation
55 Nightingale Road,
PHEASANTS NEST. N.S.W. 2574
9th June, 2020.

Artefact Heritage,
Suite 56, Jones Bay Wharf,
26-32 Pirramma Road,
PYRMONT. N.S.W. 2009

Dear Ryan,

CHITTICK LANE
COBBITTY.

Apologies for taking so long to respond, but today is the first day I have been able to sit and apply myself. Rebecca has written a response in her own words, which I will apply to this response.

On the 4th May, 2020 Rebecca writes that she had the pleasure of being invited to the Chittick Lane property owned by Edward and Isabelle O'Grady, for the purpose of an Aboriginal archaeological survey, as a Dharawal woman, representing my people and Country. On the day I was accompanied by Edward and Isabelle O'Grady, who were representing their family property and Ryan Taddeucci from Artefact Cultural Heritage Consultants.

The properties landscape was assessed for the potential of archaeological deposits and other Aboriginal heritage such as scarred trees, particularly in relation to the landscapes topography in the surrounding area. The landscape surrounding and within the immediate area of the property has areas of significant cultural heritage which have been previously identified and recorded. The surface visibility within the property was limited due to recent high rainfalls with dense ground coverage.

Limited visibility made the observation of potential archaeological deposits unlikely on the day. The thick ground cover also made access difficult by foot, which disadvantaged the survey. Access around the property was limited to vehicle tracks on the day. Ridgelines that had surface exposure due to intense grazing and erosion were surveyed for open artefact scatters and large trees were inspected for traditional scarring.

The ridgelines on the Chittick Lane property have a high potential for open artefact scatters, although none were visible on the day. A large box tree on the western boundary has two notable scars, one a recent scar, which has obvious machinery marks and a much older scar which is quite possible a traditional scar.

There are many areas within the property that were observed to have a potential for open camp artefact scatters. Although a general impression of the areas of potential for Aboriginal heritage is high, it would be highly recommended that the areas identified possibly be avoided in the planning stage, as they would require an intensive survey and possibly test excavations before any development.

It is important to note that the landholders of the property have taken the respectful initiative to engage and consult with the traditional owners in the initial planning stage. This has been a significant step for our participation, not only in relation to Aboriginal heritage, but also the participation in environmental landscape conservation within the property.

Urban developments, although quite different from environmental management have significant similarities in cultural context. Significant sites have been destroyed and displaced over the last 200 plus years to compensate in the name of development. The most prized real estate for development is usually the remains of a dismembered cultural landscape laying in the outskirts of urban areas, valued by Aboriginal communities for their small fragmented pieces of culture still remaining. Development pushed by developers displaying a superficial Aboriginal inclusion.

It is with high regard that the land owners have chosen to participate and involve our community through a bottom up planning approach, positively influencing the environment and cultural outcomes of any future development within the property.

Thank you for your patience in this regard

Yours faithfully,



Glenda Chalker

Phone/Fax 0246841129 0427218425

kgchalker@bigpond.com



artefact

Artefact Heritage

ABN 73 144 973 526

Level 4, Building B

35 Saunders Street

Pymont NSW 2009

Australia

+61 2 9518 8411

office@artefact.net.au

www.artefact.net.au