



# 1 Sirius Road, Lane Cove: Aboriginal cultural heritage assessment report

FINAL REPORT

Prepared for Greenbox Architecture

17 April 2019

## Biosis offices

### NEW SOUTH WALES

#### Newcastle

Phone: (02) 4911 4040

Email: [newcastle@biosis.com.au](mailto:newcastle@biosis.com.au)

#### Sydney

Phone: (02) 9101 8700

Email: [sydney@biosis.com.au](mailto:sydney@biosis.com.au)

#### Wollongong

Phone: (02) 4201 1090

Email: [wollongong@biosis.com.au](mailto:wollongong@biosis.com.au)

#### Albury

Phone: (02) 6069 9200

Email: [albury@biosis.com.au](mailto:albury@biosis.com.au)

### VICTORIA

#### Melbourne

Phone: (03) 8686 4800

Email: [melbourne@biosis.com.au](mailto:melbourne@biosis.com.au)

#### Ballarat

Phone: (03) 5304 4250

Email: [ballarat@biosis.com.au](mailto:ballarat@biosis.com.au)

#### Wangaratta

Phone: (03) 5718 6900

Email: [wangaratta@biosis.com.au](mailto:wangaratta@biosis.com.au)

## Document information

**Report to:** Greenbox Architecture

**Prepared by:** Samantha Keats  
Anthea Vella

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## Glossary

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|                     |                                                               |
|---------------------|---------------------------------------------------------------|
| <b>ACHA</b>         | Aboriginal Cultural Heritage Assessment                       |
| <b>AHIMS</b>        | Aboriginal Heritage Information Management System             |
| <b>CBD</b>          | Central Business District                                     |
| <b>DA</b>           | Determining Authority                                         |
| <b>DECCW</b>        | Department of Environment, Climate Change and Water (now OEH) |
| <b>DP</b>           | Deposited Plan                                                |
| <b>EP&amp;A Act</b> | <i>Environmental Planning and Assessment Act 1979</i>         |
| <b>ICOMOS</b>       | International Council on Monuments and Sites                  |
| <b>LEP</b>          | Local Environmental Plan                                      |
| <b>LGA</b>          | Local Government Area                                         |
| <b>MLALC</b>        | Metropolitan Local Aboriginal Land Council                    |
| <b>NNTT</b>         | National Native Title Tribunal                                |
| <b>NPW Act</b>      | <i>National Parks and Wildlife Act 1974</i>                   |
| <b>NPWS</b>         | National Parks and Wildlife Service                           |
| <b>NSW</b>          | New South Wales                                               |
| <b>NTSCORP</b>      | Native Title Services Corporation                             |
| <b>OEH</b>          | NSW Office of Environment and Heritage                        |
| <b>Project area</b> | Defined as Lot 1 DP 1151370                                   |
| <b>RAPs</b>         | Registered Aboriginal Parties                                 |
| <b>SSD</b>          | State Significant Development                                 |

## Summary

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Biosis Pty Ltd (Biosis) was commissioned by Greenbox Architecture to undertake an Aboriginal cultural heritage assessment (ACHA) for the proposed development at Lane Cove, New South Wales (NSW) (the study area). The study area is located within Lot 1 DP 1151370 and is approximately 3.5 kilometres west of Lane Cove and approximately 8.5 kilometres north west of the Sydney central business district (CBD).

There are 115 Aboriginal cultural heritage sites registered with the Aboriginal Heritage Information Management System (AHIMS) register within the vicinity of the study area. No sites are located within the study area.

A field investigation of the study area consisting of an archaeological survey was conducted on 20 November 2018. The overall effectiveness of the survey for examining the ground for Aboriginal sites was deemed low. This was attributed to vegetation cover restricting ground surface visibility (GSV) combined with a low amount of exposures.

No previously unrecorded Aboriginal cultural heritage sites were identified during the field survey and no areas of (archaeological) sensitivity identified. Owing to the significant disturbances across the study area, there is no potential for development activities to impact Aboriginal sites or areas of (archaeological) sensitivity.

The project is a State Significant Development (SSD 9741), which will consist of a data storage building, electrical substation, ancillary office area, loading docks, associated infrastructure, car parking, and landscaping.

### Consultation

The Aboriginal community was consulted regarding the heritage management of the project throughout its lifespan. Consultation has been undertaken as per the process outlined in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a) (consultation requirements). The appropriate government bodies were notified and advertisements placed in the *Daily Telegraph* newspaper (30 January 2019), which resulted in 43 Aboriginal organisations registering their interest (see section 4.1.3).

A search conducted by the Office of the Registrar, *Aboriginal Land Rights Act 1983* listed no Aboriginal Owners with land within the study area. A search conducted by the National Native Title Tribunal (NNTT) listed no Registered Native Title Claims, Unregistered Claimant Applications or Registered Indigenous Land Use Agreements within the study area.

Upon registration, the Aboriginal parties were invited to provide their knowledge on the study area and on the proposal provided in the project information and methodology pack. The responses identify the study area as an area of low significance. Responses from the Registered Aboriginal Parties (RAPs) are included in Appendix 3.

Site officers from elected RAPs participated in the field inspection and provided comment on the study area with regard to the proposal. The Metropolitan Local Aboriginal Land Council (MLALC) attended the archaeological survey of the study area. Based on the background assessment, field inspection and discussions held on site with the LALC's Site Officer, the LALC and Biosis have assessed the study area as holding low potential to contain intact Aboriginal sites. A letter was provided by MLALC and is provided in Appendix 4.

The outcome of the consultation process was that the RAPs considered the study area to be highly disturbed and have a low to moderate level of cultural significance, which was associated with the landscape of the Lane Cove River. The results of the consultation process are included in this document.

The recommendations that resulted from the consultation process are provided below.

## **Results**

Key considerations arising from the Aboriginal community consultation process include:

- As described by MLALC, Aboriginal people have used the Lane Cove area in the past as an important place of trade or gatherings.
- The indication of Aboriginal occupations within the vicinity is obvious with the surrounding landscape usage and the significance for Aboriginal people past and present still remains.
- The study area is situated in a landscape known to be utilised by Aboriginal people as is evidenced by the large number of Aboriginal sites recorded in the vicinity. While the study area has been highly disturbed, the cultural landscape remains significant.
- All parts of Sydney hold significance to Aboriginal people and the preservation and conservation of some sites are of high importance for our connection to Country.

Biosis undertook a field survey which identified no Aboriginal heritage sites within the study area.

## **Management recommendations**

Prior to any development impacts occurring within the study area, the following is recommended:

### **Recommendation 1: No further archaeological assessment is required**

No further archaeological work is required in the study area due to the entire study area being assessed as having low archaeological potential.

### **Recommendation 2: Landscape design to include Indigenous plants**

After the completion of the construction of the proposed development, it is suggested that landscapes of native vegetation be planted and Gammerraygal names be used in any visual interpretation or signage within the gardens. This will ensure the visual amenity of the area is retained and the acknowledgement of Aboriginal people as the original custodians of the area are recognised.

### **Recommendation 3: Discovery of Unanticipated Aboriginal Objects**

All Aboriginal objects and Places are protected under the NPW Act. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the OEH. Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

### **Recommendation 4: Discovery of Aboriginal Ancestral Remains**

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

1. Immediately cease all work at that location and not further move or disturb the remains.

2. Notify the NSW Police and OEH's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location.
3. Not recommence work at that location unless authorised in writing by OEH.

# 1 Introduction

## 1.1 Project background

Biosis has been commissioned by Greenbox Architecture to undertake an ACHA for the proposed development at Lane Cove, New South Wales (NSW) (Figure 1). The project is a State Significant Development (SSD 9741), which will consist of a data storage building, electrical substation, ancillary office area, loading docks, associated infrastructure, car parking, and landscaping.

This report details the investigation, consultation and assessment of Aboriginal cultural heritage undertaken for the study area.

## 1.2 Study area

The study area is located within Lane Cove NSW (Lot 1 DP 1151370) and is approximately 3.5 kilometres west of Lane Cove and approximately 8.5 kilometres north west of the Sydney CBD (Figure 1). It encompasses approximately 4.5 hectares of private land.

The study area is within the:

- Lane Cove Local Government Area (LGA)
- Parish of Willoughby
- County of Cumberland

The study area is bounded by the Lane Cove River to the west, Stringybark Creek to the north, Apollo Place to the south, and Sirius Road to the east Cumberland (Figure 2).

## 1.3 Proposed development

The project is a State Significant Development (SSD 9741), which will consist of a data storage building, electrical substation, ancillary office area, loading docks, associated infrastructure, car parking and landscaping (Figure 3). The requirements for the SSD are outlined below:

### SSD 9741 SEARS for heritage

| Key issues                                                                                                                                                   | Requirement (specific assessment requirements in addition to the general requirement above)                                                                                                                                                                                                                                                                                                                                         | Where addressed in the report                                                      | Current guidelines                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Heritage – including an assessment of Aboriginal and non-Aboriginal cultural heritage items and values of the site and surrounding area in accordance</b> | The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological | <ul style="list-style-type: none"> <li>• Section 3</li> <li>• Section 5</li> </ul> | <ul style="list-style-type: none"> <li>• Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011)</li> <li>• Code of practice for archaeological investigation of Aboriginal objects in NSW (DECCW, 2010)</li> </ul> |

| Key issues                                                              | Requirement (specific assessment requirements in addition to the general requirement above)                                                                                                                                                                                                                                                                                                                  | Where addressed in the report                                                                                                            | Current guidelines                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>with the relevant Office of Environment and Heritage guidelines.</b> | Investigations of Aboriginal Objects in NSW (DECC 2010), and guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011).                                                                                                                                                                                                                               |                                                                                                                                          |                                                                                                                                                                                                                                               |
|                                                                         | Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.                                                                           | <ul style="list-style-type: none"> <li>Section 4</li> <li>Appendix 1 - Aboriginal Cultural Heritage Assessment Report (ACHAR)</li> </ul> | <ul style="list-style-type: none"> <li>Aboriginal Cultural Heritage Consultation requirements for proponents (DECCW, 2010)</li> </ul>                                                                                                         |
|                                                                         | Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH. | <ul style="list-style-type: none"> <li>Section 6</li> </ul>                                                                              | <ul style="list-style-type: none"> <li>The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance (Australia ICOMOS, 2013)</li> </ul>                                                                                |
|                                                                         | The ACHAR must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the development/project to formulate appropriate measures to manage unforeseen impacts.                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>Section 7</li> </ul>                                                                              | <ul style="list-style-type: none"> <li>NSW Skeletal Remains: Guidelines for Management of Human Remains (Heritage Office, 1998)</li> <li>Aboriginal site recording form</li> <li>Aboriginal Heritage Information Management System</li> </ul> |

## 1.4 Planning approvals

The proposed development will be assessed against Part 5 of the *Environmental Planning and Assessment Act 1979* NSW (EP&A Act). Other relevant legislation and planning instruments that will inform this assessment include:

- NPW Act
- *National Parks and Wildlife Amendment Act 2010*

- Lane Cove Local Environmental Plan 2009 (LEP)
- Lane Cove Development Control Plan 2010

## **1.5 Restricted and confidential information**

Appendix 1 in the Archaeological Report contains AHIMS information which is confidential and not to be made public. This is clearly marked on the title page for the Attachment.

## **1.6 Aboriginal cultural heritage**

### **1.6.1 General description**

According to Allen and O'Connell (2003), Aboriginal people have inhabited the Australian continent for the last 50,000 years. New evidence out of the Northern Territory has pushed this date back to around 60,000 years with the Malakanunja II rock shelter dated at 61,000 ±9000/-13,000 BP (Clarkson et al. 2015). In NSW, according to Bowler et al. (2003), Aboriginal people have occupied the land for over 42,000 years.

Without being part of the Aboriginal culture and the productions of this culture, it is not possible for non-Aboriginal people to fully understand the meaning of site, objects and places to Aboriginal people – only to move closer towards understanding this meaning with the help of the Aboriginal community. Similarly, definitions of Aboriginal culture and cultural heritage without this involvement constitute outsider interpretations.

With this preface Aboriginal cultural heritage broadly refers to things that relate to Aboriginal culture and hold cultural meaning and significance to Aboriginal people (DECCW 2010a, p.3). There is an understanding in Aboriginal culture that everything is interconnected. In essence Aboriginal cultural heritage can be viewed as potentially encompassing any part of the physical and/or mental landscape, that is, 'Country' (DECCW 2010a, p.iii).

Aboriginal people's interpretation of cultural value is based on their 'traditions, observance, lore, customs, beliefs and history' (DECCW 2010a, p.3). The things associated with Aboriginal cultural heritage are continually and actively being defined by Aboriginal people (DECCW 2010a, p.3). These things can be associated with traditional, historical or contemporary Aboriginal culture (DECCW 2010a, p.3).

### **1.6.2 Tangible Aboriginal cultural heritage**

Three categories of tangible Aboriginal cultural heritage may be defined:

- Things that have been observably modified by Aboriginal people.
- Things that may have been modified by Aboriginal people but no discernible traces of that activity remain.
- Things never physically modified by Aboriginal people (but associated with Dreamtime Ancestors who shaped those things).

### **1.6.3 Intangible Aboriginal cultural heritage**

Examples of intangible Aboriginal cultural heritage would include memories of stories and 'ways of doing', which would include language and ceremonies (DECCW 2010a, p.3).

### **1.6.4 Statutory**

Currently Aboriginal cultural heritage, as statutorily defined by the NPW Act, consists of objects and places which are protected under Part 6 of the Act.

Aboriginal objects are defined as:

*any deposit, object or material evidence...relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains*

Aboriginal places are defined as a place that is or was of special Aboriginal cultural significance. Places are declared under section 84 of the NPW Act.

### **1.6.5 Values**

Aboriginal cultural heritage is valued by Aboriginal people as it is used to define their identity as both individuals and as part of a group (DECCW 2010a, p.iii). More specifically it is used:

- To provide a:
  - ‘connection and sense of belonging to Country’ (DECCW 2010a, p.iii)
  - link between the present and the past (DECCW 2010a, p.iii)
- As a learning tool to teach Aboriginal culture to younger Aboriginal generations and the general public (DECCW 2010a, p.3)
- As further evidence of Aboriginal occupation prior to European settlement for people who do not understand the magnitude to which Aboriginal people occupied the continent (DECCW 2010a, p.3).

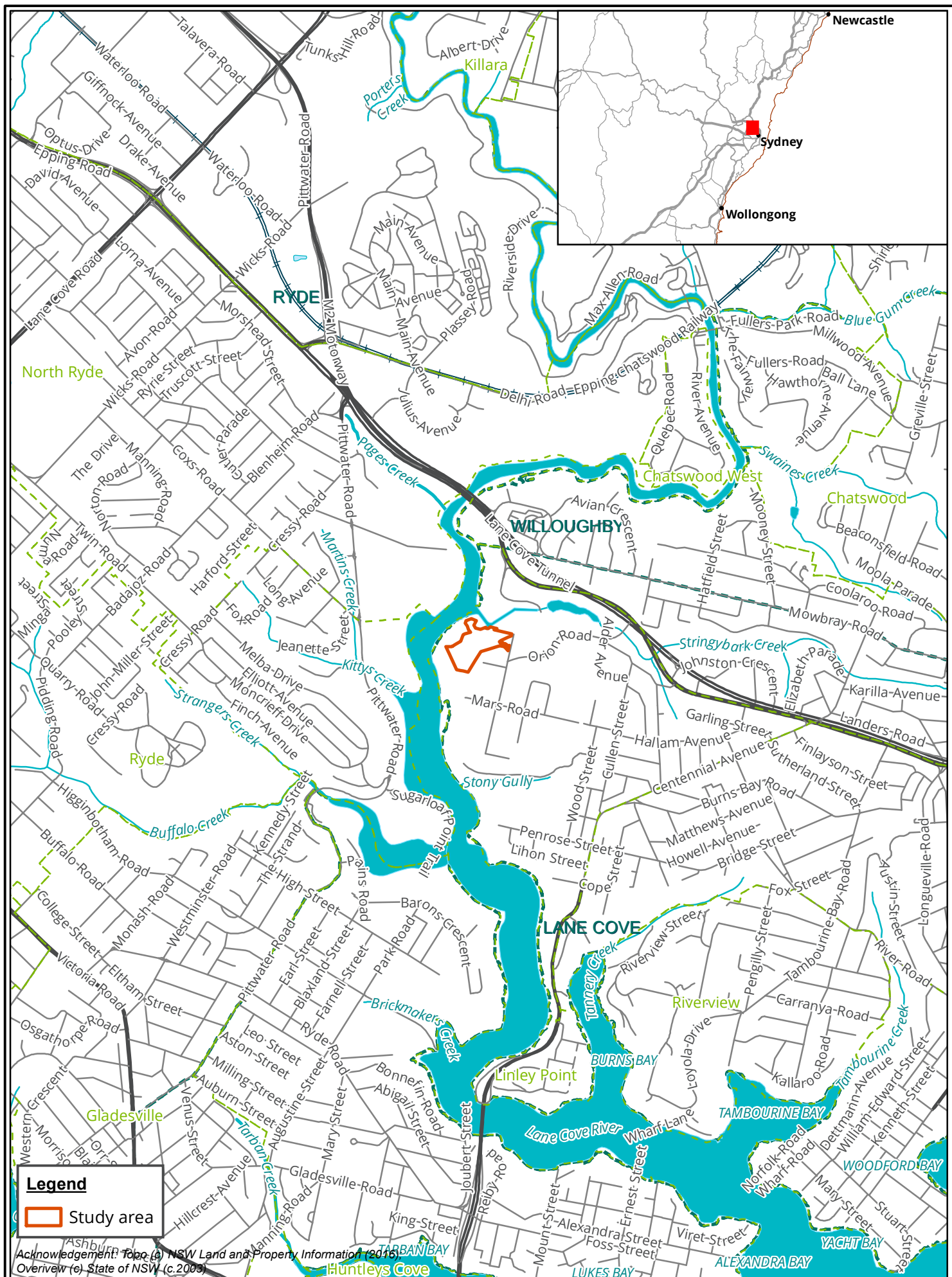
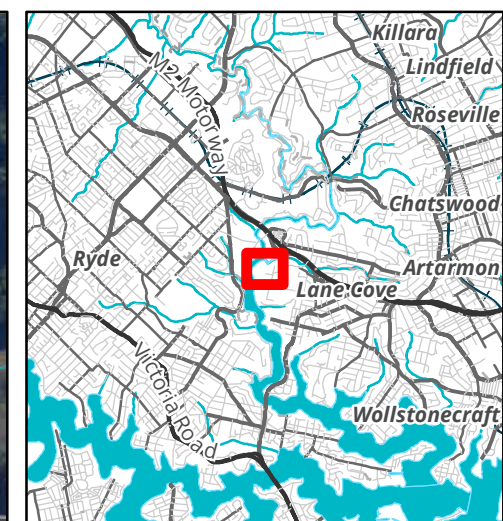


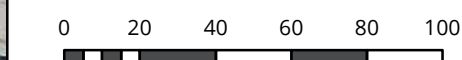
Figure 1 Location of the study area



**Legend**

 Study area

**Figure 2: Study area detail**

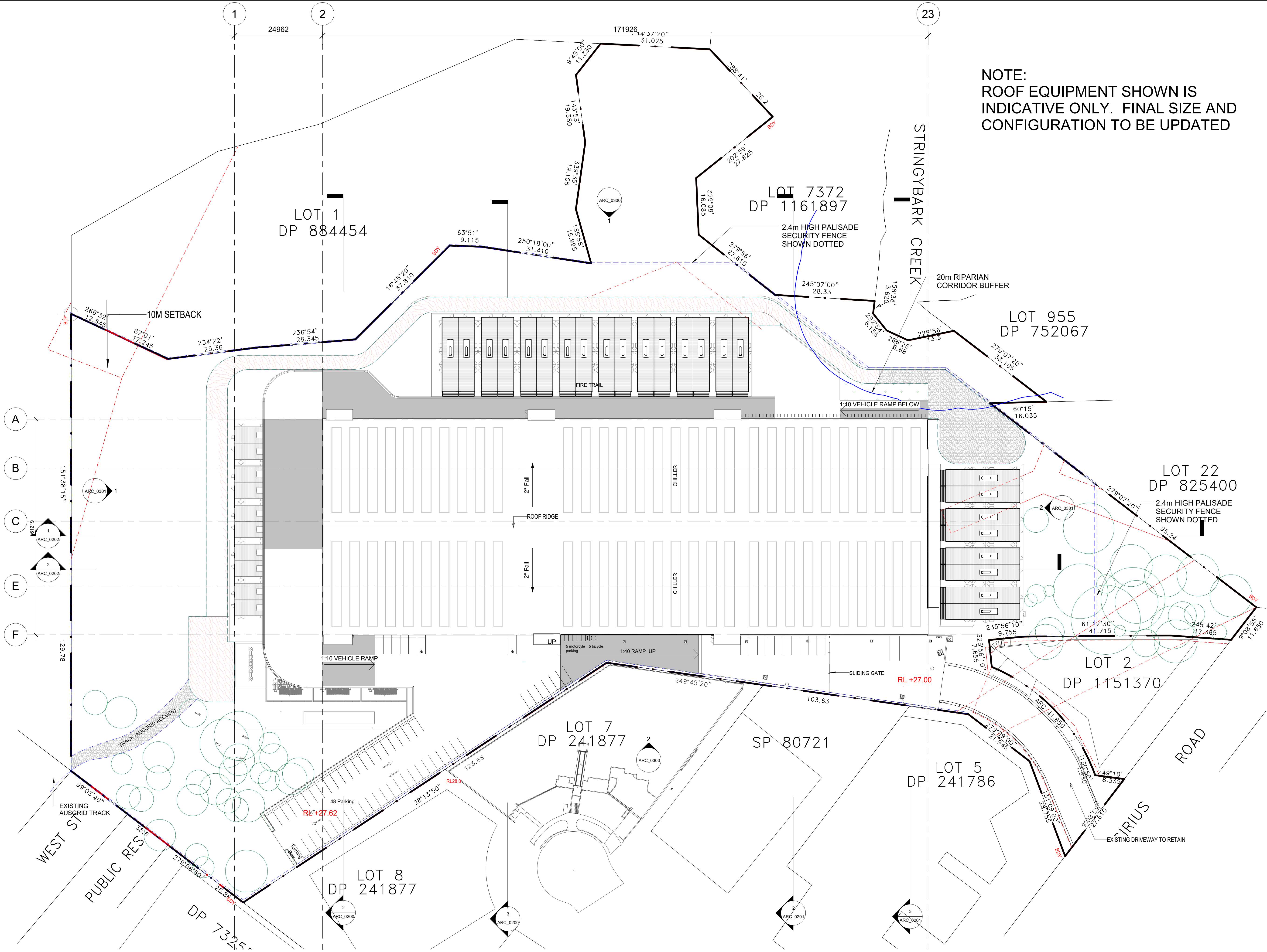


Scale: 1:2,000 @ A3  
Coordinate System: GDA 1994 NSW Lambert

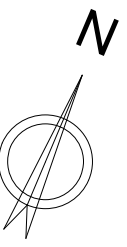


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Newcastle, Sydney, Wangaratta & Wollongong

Matter: 29387  
Date: 05 February 2019,  
Checked by: AV, Drawn by: AEDM, Last edited by: amurray  
Location: P:\29300s\29387\Mapping\29387\_F2\_StudyArea



NOTE:  
ROOF EQUIPMENT SHOWN IS  
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CONFIGURATION TO BE UPDATED



| Issue | Date     | Description              |
|-------|----------|--------------------------|
| 1     | 12.12.18 | ISSUE FOR APPROVAL       |
| 2     | 13.12.18 | ISSUE FOR APPROVAL       |
| 3     | 14.12.18 | ISSUE FOR SSD SUBMISSION |
| 4     | 24.06.19 | FOR REVIEW               |
| 5     | 28.06.19 | ISSUED FOR RESUBMISSION  |
| 6     | 07.08.19 | REVISED SSD              |
| 7     | 16.08.19 | REVISED SSD SUBMISSION   |
| 8     | 20.08.19 | FOR REVIEW               |

Sc. 1:500 0 5 10 15 25m

Project Manager

Services Design



+61 2 8069 8930  
LEVEL 25  
25 BLIGH STREET  
SYDNEY NSW 2000 AUSTRALIA  
GREENBOX ARCHITECTURE PTY LTD  
ABN: 79 139 779 098  
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Project  
ATSYD2  
1 SIRIUS ROAD LANE COVE WEST

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PLWG  
Scale  
1:500 @ A1

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DW  
Approved By  
AO

Date  
20.08.19  
Job Number  
180095

Project Status  
SSD

Drawing Title  
ROOF PLAN

Drawing Number  
ATSYD2\_SSD\_DRG\_ARC\_0105  
Issue  
8

1  
ROOF PLANT LAYOUT  
1:500

## 2 Study area context

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This section discusses the study area in regards to its landscape, environmental and Aboriginal cultural heritage context. This section should be read in conjunction with the archaeological report attached in Appendix 6. The background research has been undertaken in accordance with the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010b).

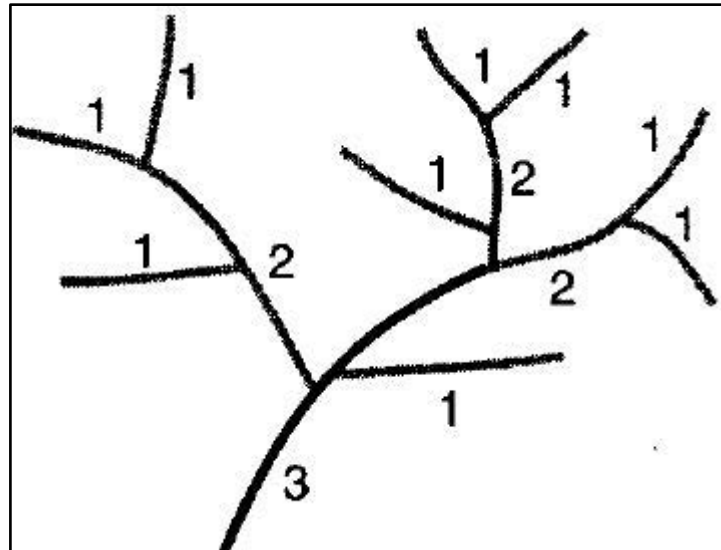
Lane Cove is a leafy suburb in Northern Sydney, located near the Lane Cove River and Port Jackson. The topography is characterised by undulating to rolling rises and low hills on Hawkesbury Sandstone with broad convex crests, moderately inclined side slopes and wide benches. The landscape has been extensively cleared (Chapman & Murphy 1989, p.64).

### 2.1 Topography and hydrology

The study area is located within the Hawkesbury Sandstone formation and consists of friable medium to coarse grained quartz sandstone with some shale and laminate lenses. It weathers cavernously to form overhangs, which occur in a range of topographic locations. It also occurs as flat topped outcrops (platforms of varying sizes) and boulders, mainly on ridge tops but also along the sides of gullies and in valley bottoms (JMCHM 2008). The presence of sandstone cropping in areas of the Hawkesbury Sandstone formation gives rise to the potential for site types such as rock shelters and engraving sites. The topography consists of undulating to rolling low hills with a local relief of 20 to 80 metres and slopes of between 10% and 20%. Side slopes occur with narrow to wide outcropping of sandstone rock benches of 10 to 20 metres, often forming broken scarps of less than 5 metres (Chapman & Murphy 1989, p.64).

Stream order is recognised as a factor which assists the development of predictive modelling in Sydney Basin Aboriginal archaeology, and has seen extensive use in the Sydney region, most notably by Jo McDonald Cultural Heritage Management (JMCHM 2000, JMCHM 2005a, JMCHM 2005b, JMCHM 2006, JMCHM 2008). Predictive models which have been developed for the region have a tendency to favour higher order streams as the locations of campsites, as they would have been more likely to provide a stable source of water, and by extension other resources which would have been used by Aboriginal groups.

The stream order system used for this assessment was originally developed by Strahler (Strahler 1964). It functions by adding two streams of equal order at their confluence to form a higher order stream, as shown in Plate 1. As stream order increases, so does the likelihood that the stream would be a perennial source of water.



**Plate 1** Diagram showing Strahler stream order (Ritter et al 1995, p. 151).

The nearest watercourse to the study area is Lane Cove River, a perennial watercourse located 31 metres away at its closest point. The river encompasses the western side of the study area. Stringybark Creek is also located adjacent to the study area along the northern boundary and is also a perennial watercourse but has been heavily modified where it meets the Lane Cove River. These watercourses would have provided excellent resources for Aboriginal people.

## 2.2 Soil landscapes

Soil landscapes have distinct morphological and topological characteristics that result in specific archaeological potential. They are defined by a combination of soils, topography, vegetation and weathering conditions. Soil landscapes are essentially terrain units that provide a useful way to summarise archaeological potential and exposure.

Two soil landscapes are present within the study area; the GyMEA Soil Landscape and Disturbed Terrain. The GyMEA soil landscape is characterised as an erosional soil landscape and consists of shallow uniform sands and earthy sands on ridges, and deeper sands, loamy sands and organic sands on wet benches. In hanging swamps, grey or yellow texture-contrast soils are present on shale benches. Accumulations of deeper sand and occasional podzols in depositional sites and along streams. As the soil landscape is characterised as highly erosional, the soil can be shallow and highly permeable, as well as producing low soil fertility. This would indicate that the presence of Aboriginal sites and objects is unlikely.

Disturbed terrain is present within the northern portion of the study area. It is characterised as landscapes extensively disturbed by human activity and development, including, but not limited to; complete disturbance, removal of top soil or burial of soil. The landscape includes soil, rock and building materials and usually occurs throughout areas near watercourses or within areas of previous swamps, estuaries or wetlands. Local relief is usually greater than 2 metres, up to 10 metres. Most areas have heavily disturbed ground and are often landscaped and artificially drained.

The soil landscapes associated with the study area are identified within Table 3, Table 4 and Figure 6.

**Table 1 Gymea soil landscape characteristics (Chapman & Murphy 1989, p.65–66)**

| Soil material        | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gymea 1 (gy1)</b> | Loamy sand to sandy loam with loose, apedal single-grained structure and porous sandy fabric. It generally occurs as topsoil (A1 horizon). The colour often becomes lighter with depth, ranging from brownish-black 10YR 2/2) to bleached dull yellow-orange (10YR 7/2). It is often water repellent under native vegetation. The pH ranges from strongly acidic to slightly acidic. Small sandstone and platy ironstone fragments, charcoal fragments and roots are common in this soil level.                                                                                                                                                                                                                                                            |
| <b>Gymea 2 (gy2)</b> | Consists of earthy, yellowish-brown clayey sand, with apedal massive structure and porous earthy fabric. It commonly occurs as subsoil over sandstone bedrock (B horizon). Exposure at the surface creates a hard setting topsoil. Potential to increase gradually to a light sandy clay loam with depth. Colour is commonly yellowish-brown (10YR 6/8), with orange mottles occasionally present with depth. The pH ranges from strongly acidic to slightly acidic. Sandstone and ironstone fragments are common and are often concentrated in stone lines in the upper parts of this material. Charcoal fragments are common, whilst roots are rare.                                                                                                     |
| <b>Gymea 3 (gy3)</b> | Consists of earthy to weakly pedal, yellowish-brown sandy clay loam. Commonly a yellowish-brown sandy clay loam to sandy clay with an apedal massive structure and an earthy porous fabric. It usually occurs as subsoil (B or C horizon) on coarse sandstone. Texture may increase gradually with depth to sandy clay. Occasionally sub-angular blocky shaped peds are present. Peds are commonly rough-faced and porous and range in size from 5-20 millimetres. Colour is commonly yellowish brown (10YR 5/8, 6/6, 6/8; 2.5Y5/6, 5/4). Orange mottles may occur with depth. The pH ranges from strongly acidic to slightly acidic. Strongly weathered sandstone fragments are common, with roots and charcoal fragments being rare.                     |
| <b>Gymea 4 (gy4)</b> | Moderately to strongly pedal, yellowish-brown clay. This is commonly a yellowish-brown sandy clay or light clay with a moderately to strongly pedal structure and either a smooth or rough-faced ped fabric. This material occurs as subsoil on shale bedrock (Band C horizons). Peds ranging in size from 5-50 millimetres, are either smooth or rough-faced and are polyhedral to sub-angular blocky. Colour is commonly yellow-brown (10YR 6/6), but can vary from dark reddish brown (2.5YR3/6) to light grey (7.5YR8/1). Red, orange and grey mottles are occasionally present at depth. The pH ranges from strongly acidic to slightly acidic. Shale and ironstone fragments are often present but charcoal fragments are absent and roots are rare. |

**Table 2 Disturbed Terrain soil landscape characteristics (Chapman & Murphy 1989, pp.132–134)**

| Soil material                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disturbed Terrain 1 (xx1)</b> | Loose black sandy loam. A black loamy sand to loam-fine-sandy with a loose apedal single-grained structure and sandy fabric. It is used for topsoiling turf and often corresponds to the lowland Nepean River alluvium or Elderslie soil series. Local sands have also been used for topdressing. This material occurs as topsoil (A1 horizon). The material is brittle when dry and crumbly when moist. The colour ranges from a dark brown to black (10YR 3/3–10YR 2/1) or brown (10YR 4/6). It is often water repellent and a surface crust may be present. The pH ranges from moderately acidic to neutral. Roots are common to abundant when turfed and ironstone nodules are occasionally present. |

| Soil material                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disturbed Terrain 2 (xx2)</b> | This is a mottled, compacted sandy clay loam to medium clay with an apedal massive to moderately pedal structure. It generally has been compacted to form an impermeable isolating cap over hazardous buried materials. Peds when present are often platy and smooth-faced. The pH and colour of the soil is highly variable, ranging from extremely acidic to slightly alkaline. Ironstones are occasionally present and roots are absent.                                                                                   |
| <b>Disturbed Terrain 3 (xx3)</b> | This material is commonly referred to as fill and may consist of any type of soil or regolith material. It often includes demolition rubble and industrial and household wastes. Identifiable features such as colour, pH, and structure vary markedly.                                                                                                                                                                                                                                                                       |
| <b>Disturbed Terrain 4 (xx4)</b> | This material consists of dark dredged sands, sandy loams to silty clay loams and sandy clays with apedal single-grained to massive structure and sandy fabric. This material occurs as subsoil. Colour varies from black (10YR 2/1) to a yellowish-brown (2.5Y 5/2). Charcoal, shells or shell fragments are commonly present. This material swells, is highly saline and neutral to moderately alkaline when first dredged, but with drainage and oxidation the salinity levels drop and acidity may increase dramatically. |

## 2.3 Climate and rainfall

The Sydney (Observatory Hill) (site number: 066062) weather station is located approximately 5.5 kilometres from the study area and provides climate and rainfall data. During summer the mean maximum temperature reaches 26°C, with a mean minimum temperature of 17.6 °C (BOM 2018). In winter the mean maximum temperature is 16.4 °C, with a mean minimum temperature of 8.1 °C (BOM 2018). The highest rainfall is recorded during June with 133.2 millimetres, and the lowest rainfall recorded occurs during September with 67.8 millimetres (BOM 2018).

## 2.4 Landscape resources

The Sydney Basin would have generally provided a number of resources utilised by Aboriginal people. The wider region possesses distinct ecological zones, including open forest and open woodland, with riparian vegetation extending along many of the watercourses. Each ecological zone hosts a different array of floral and faunal species, many of which would have been utilised according to seasonal availability. Aboriginal inhabitants of the region would have had access to a wide range of avian, terrestrial and aquatic fauna and repeated firing of the vegetation would have opened up the foliage allowing ease of access through and between different resource zones.

Many of the plants found within the Sydney Basin were important to Aboriginal people and could be used for numerous purposes. These include using the wood to make implements, berries, leaves and tubers for food and medicines as well as bark for shelters. One of the plants exploited may have been the eucalypt, whose leaves can be crushed and used for medicinal purposes, while the sap can be used as a sweet sugary food source and the bark could be used to make bowls and shelters (Rhodes & Dunnett 1985).

Within the study area, the landscape would have supported a dry sclerophyll woodland with an open forest, however this original landscape has been extensively cleared by European colonization and development throughout the years. The plants most typically found throughout the area include red bloodwood *Eucalyptus gummifera*, yellow blood wood *E. eximia*, scribbly gum *E. haemastoma*, brown stringybark *E. capitellata* and old man banksia *Banksia serrata*. Native fauna would have included the noisy minor *Manorina (Myzantha) melanocephala*, kookaburra *Dacelo (Dacelo) novaeguineae*, Australian brushtail possum *Trichosurus vulpecula*,

grey-headed flying-fox *Pteropus poliocephalus*, eastern blue-tongue *Tiliqua scincoides*, water dragon *Intellagama lesueurii*, red-bellied black snake *Pseudechis porphyriacus* and red rockcod *Scorpaena cardinalis*.

The various fauna species historically present within the study area would have provided a range of resources for Aboriginal people. Terrestrial and avian resources were not only used for food, but also provided a significant contribution to the social and ceremonial aspects of Aboriginal life through their use as ritual implements or even simply through fashioning as personal adornments (Attenbrow 2010, pp.107–110). Mammals such as kangaroos and wallabies and arboreal mammals such as possums were used as a food source, and for tool making. Bones and teeth were also used as points or barbs for hunting spears and fishing spears. Tail sinews are known to have been used as a fastening cord, whilst 'bone points' frequently occur in rock shelters (Attenbrow 2010, p.109). Animal skin, fur and sinews were also used for personal adornment and in making cloaks. Animals such as Brush-tailed Possums were highly prized for their fur, with possum skin cloaks recorded by the first settlers in the area. The cloaks were worn fastened over one shoulder and under the other. Kangaroo teeth were incorporated into decorative items such as head bands and beads were made from reeds and teeth. Aquatic species such as freshwater crayfish, fish and eels would have been easily accessible in larger waterways, such as the Lane Cove River (Rosen 1995).

## 2.5 European land use history

The first written use of the name Lane Cove occurred on 2 February 1788, soon after the arrival of the First Fleet in Port Jackson. Several possibilities for the name have been suggested, although none have been supported by written evidence. One suggestion was that it was named after Lieutenant Michael Lane, a respected cartographer, who worked with Captain James Cook in Canadian waters. The other possibility is that the name was bestowed in honour of John Lane, son of the Lord Mayor of London, and a good friend of Governor Arthur Phillip.

The study area is split over three original land grants. While part of the surrounding area was granted to privates and non-commissioned officers of the New South Wales Corp in 1794, the study area land was not purchased until later. The three original grants belonged to Thomas Moore (40 acres purchased in April 1832), Henry O'Brien (10 acres purchased in April 1834) and William Hamey (11 acres purchased in April 1855). These allotments can be seen on crown plans and parish maps (Plate 2, Plate 3, Plate 4). At this time the land was dense with vegetation.





**Plate 4 Parish Map of Willoughby showing original grants (Source: NSW Land Registry Services, County of Cumberland Parish of Willoughby (sheet 1A))**

The land use of the study area didn't change for many years, however the immediate surrounds did. The Chicago Cornflour Factory opened in 1894, followed by the Cumberland Paper Mill in 1912, both located to the north, out of the study area. These are both locally listed items (the Chicago Mills a listed archaeological site whereas the Cumberland Paper Mill is still standing). The area surrounding Mars Road to the south of the study area was also developed by being heavily subdivided in the 20th century. The study area can be seen in a subdivision plan from 1920, still in the configuration of the original land grant. No structures appear and it had not been subdivided at this point (Plate 5). The Cumberland Mill can also be seen in this subdivision plan, outside of the study area. It appears that the grants that made up the study area were not used extensively for farming or development, as historical aerals illustrate much of the area was still heavily vegetated.



**Plate 5 Subdivision plan from 1920 showing no development on the study area (Source: Lane Cove Library Local History LHM994.4139/1920/VIC)**

A 1943 historical aerial (Plate 6) illustrates that majority of the study area had not yet been cleared or developed. In the northern portion of the study area, a large water tank, 85 metres in circumference, is present, with the land extending 80 metres to the south-east providing a small clearing with a track running throughout. As the tank is in the northern portion of the study area with no buildings directly adjacent to it, it is possible it could relate to the Cumberland Paper Mills. In the western portion of the study area, there is evidence of a building 14 metres in length. It is not known what the building was used for, however it is not present in current aerials, postulating that it has since been demolished. It is evident that the intensive clearing and industrial development of recent times had not yet occurred in 1943.



**Plate 6     1943 aerial showing dense vegetation in the majority of the study area and two structures (Source: Land and Property Information)**

Current aerals (Plate 7) illustrate that the study area has undergone massive vegetative clearing and industrial development, with majority of the area being highly disturbed. The structures present in the 1943 aerals are no longer present, with sparse vegetation surrounding the edges of the study area. Within the study area, there are large piles of rubble and fill objects, heavily concentrated towards the western side of the area. Graded dirt roads appear throughout the study area, particularly towards the western side. In the southern portion there is an incised channel bank 20 metres east of the southern boundary. The eastern portion of the area backs onto to a highly developed light industrial area.



**Plate 7** Current aerial showing cleared land with no structures (Source: Land and Property Information)

## 3 Aboriginal cultural heritage context

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### 3.1 Ethnohistory

The Sydney area has been home to Aboriginal people for over 30,000 years with the earliest known radiocarbon date for the Aboriginal occupation of the Cumberland Plains being associated with an archaeological deposit at Parramatta approximately 13 kilometres to the west of the study area, which was dated to 30,735 ± 407 BP (Jo McDonald Cultural Heritage Management Pty Ltd 2005a). The study area falls within the country of the Guringai and Darug language groups (Tindale 1974), which stretched from what is now known as Newcastle through to the southernmost part of present day Sydney (Lane Cove Council 2018a). The study area was originally occupied by the Cam-mer-ray-gal Group of the Ku-ring-gai Aboriginal tribe, until 1788, when the first recorded landing in Lane Cove of a European occurred (Lane Cove Council 2018b). Lieutenant Henry Lidgbird Ball crossed the Greenwich Peninsula on return from a trip to Middle Harbour (Lane Cove Council 2018b). Ball was a naval officer who commanded the H.M.S *Supply* in the First Fleet and was a member of numerous exploring parties around the Port Jackson area between 1788 and 1790 (Parsons 1966).

After the arrival of European settlers in the area, the movement of Aboriginal people became increasingly restricted. European expansion along the Cumberland Plain was swift and soon there had been considerable loss of land to agriculture. This led to violence and conflict between Europeans and Aboriginal people as both groups sought to compete for the same resources (Brookes & Associates et al. 2003, p.16). At the same time diseases such as small pox were having a devastating effect on the Aboriginal population. Death, starvation and disease were some of the disrupting factors that led to a reorganisation of the social practices of Aboriginal communities after European contact. The formation of new social groups and alliances were made as Aboriginal people sought to retain some semblance of their previous lifestyle.

### 3.2 Aboriginal heritage located in the study area

A search of the AHIMS database (Client Service ID: 396636) identified 115 Aboriginal archaeological sites within a 2 by 2 kilometre search area, centred on the proposed study area. None of these registered sites are located within the study area (Figure 4).

Owing to the levels of disturbance, there were no locations identified within the study area which were considered to have the potential to retain intact archaeological deposits of artefacts or shell. The majority of the study area has been subject to cut and fill actions, with much of the original ground surface having been visibly altered. Within the study area, disturbed included the removal of topsoil, construction of buildings within the study area, and the dumping and removal of contaminated fill. Based on this archaeological survey, the study area has been assessed as holding low archaeological potential to contain intact Aboriginal sites.

### 3.3 Interpretation of past Aboriginal land use

The AHIMS site data demonstrates that there is a concentration of sites along the Lane Cove River and Stringybark Creek. Both water sources are perennial sources, which would provide access to flowing water, and to aquatic species such as freshwater crayfish, fish and eels (Rosen 1995). As demonstrated by White and McDonald (2010) water supply was a significant factor influencing Aboriginal land use and habitation in the area. The close access to water and resources suggests that Aboriginal people would have used the area;

however, the landforms within the study area are not favourable for long term occupation and subsequent high levels of disturbances would have destroyed any Aboriginal sites present.

As noted above the study area likely provided a vast array of resources for the Cam-mer-ray-gal to exploit. The earliest known radiocarbon date for the Aboriginal occupation of the Cumberland Plains is associated with a cultural / archaeological deposit at Parramatta approximately 13 kilometres to the west of the current study area, which was dated to  $30,735 \pm 407$  BP (Jo McDonald Cultural Heritage Management Pty Ltd (JMCHM) 2005a, Jo McDonald Cultural Heritage Management Pty Ltd 2005b) Archaeological evidence of Aboriginal occupation of the Cumberland Plains indicates that the area was intensively occupied from approximately 4000 years BP (Dallas 1982, p.7).

**Figure 4 Aboriginal sites located in the vicinity of the study area**

**THIS FIGURE IS NOT TO BE MADE PUBLIC AND HAS BEEN REMOVED**

## 4 Aboriginal community consultation

Consultation with the Aboriginal community has been undertaken in compliance with the consultation requirements as detailed below. A consultation log of all communications with RAPs is provided in Appendix 1.

### 4.1 Stage 1: Notification of project proposal and registration of interest

#### 4.1.1 Identification of relevant Aboriginal stakeholders

In accordance with the consultation guidelines, Biosis notified the following bodies regarding the proposed works:

- Lane Cove Council
- OEH
- NSW Native Title Services Corporation Limited (NTSCORP Limited)
- Office of the Registrar, Aboriginal Land Rights Act 1983 of Aboriginal Owners
- National Native Title Tribunal (NNTT)
- Greater Sydney Local Land Services
- Metropolitan Local Aboriginal Land Council (MLALC).

A list of known Aboriginal stakeholders in the Lane Cove area was provided by OEH (a copy of this response is provided in Appendix 2 and includes:

- |                                   |                                                  |
|-----------------------------------|--------------------------------------------------|
| • Darug Land Observations         | • Bilinga Cultural Heritage Technical Services   |
| • A1 Indigenous Services          | • Gunyuu Cultural Heritage Technical Services    |
| • Eric Keidge                     | • Munyunga Cultural Heritage Technical Services  |
| • Tocomwall                       | • Murrumbul Cultural Heritage Technical Services |
| • Amanda Hickey Cultural Services | • Wingikara Cultural Heritage Technical Services |
| • Gunyuu                          | • Gulaga                                         |
| • Walbunja                        | • Biamanga                                       |
| • Badu                            | • Callendulla                                    |
| • Goobah Developments             | • Murramarang                                    |
| • Wullung                         | • DJMD Consultancy                               |
| • Yerramurra                      | • Butucarbin Aboriginal Corporation              |
| • Nundagurri                      | • Didge Ngunawal Clan                            |

- Murrumbul
- Jerringong
- Pemulwuy CHTS
- Bilinga
- Munyunga
- Wingikara
- Minnamunnung
- Walgalu
- Thauaira
- Dharug
- Ginninderra Aboriginal Corporation
- Nerrigundah
- Wailwan Aboriginal Group
- Barking Owl Aboriginal Corporation
- Thoorga Nura
- Darug Boorooberongal Elders Aboriginal Corporation
- B. H. Heritage Consultants
- Ngambaa Cultural Connections

A search conducted by the Office of the Registrar, *Aboriginal Land Rights Act 1983* (NSW) listed no Aboriginal Owners with land within the study area. A search conducted by the NNTT listed no Registered Native Title Claims, Unregistered Claimant Applications or Registered Indigenous Land Use Agreements within the study area.

#### 4.1.2 Public notice

In accordance with the consultation guidelines, a public notification was placed in the following newspapers:

- *Daily Telegraph* (30 January 2019)

The advertisement invited Aboriginal people who hold cultural knowledge to register their interest in a process of community consultation to provide assistance in determining the significance of Aboriginal object(s) and/or places in the vicinity of the study area. A copy of the public notice is provided in Appendix 2.

#### 4.1.3 Registration of Aboriginal parties

Aboriginal groups identified in Section 4.1.1 were sent a letter inviting them to register their interest in a process of community consultation to provide assistance in determining the significance of Aboriginal object(s) and/or places in the vicinity of the study area. In response to the letters and public notice, a total of 40 groups registered their interest in the project. Responses to registration from Aboriginal parties are provided in Appendix 3. A full list of Aboriginal parties who registered for consultation is provided below:

- Yurrandaali Cultural Services
- Yulay Cultural Services
- Barraby Cultural Services
- Darug Land Observations
- A1 Indigenous Services
- Tocomwall
- Amanda Hickey Cultural Services
- B. H. Heritage Consultants
- Bilinga
- Gangangarra
- Kuringgai
- Munyunga
- Murrin
- Murrumbul
- Ngarigo
- Ngunawal

- Darug Boorooberongal Elders Aboriginal Corporation
- Bullawaya
- Gunyuu
- Badu
- Walbunja
- Eora
- Elouera
- Djiringanj
- Dharug
- Curwur Murre
- Bidawal
- Tharawal
- Nundagurri
- Goobah
- Walbunja Elders
- Gulla Gunar
- Golangaya
- Gadung
- Bulling Gang
- Yerramurra
- Wingikara
- Wandandian
- Walgalu
- Thauaira

## **4.2 Stage 2: Presentation of information about the proposed project**

On 19 February 2019, Biosis provided RAPs with details about the proposed development works (project information pack). A copy of the project information pack is provided in Appendix 3.

## **4.3 Stage 3: Gathering information about cultural significance**

### **4.3.1 Archaeological assessment methodology information pack**

On 19 February 2019, Biosis provided each RAP with a copy of the project methodology pack outlining the proposed Aboriginal cultural heritage assessment process and methodology for this project. RAPs were given 28 days to review and prepare feedback on the proposed methodology. A copy of the project methodology pack is provided in Appendix 4.

Yurrandaali, Darug Land Observations, A1 Indigenous Services, Darug Boorooberongal Elders Aboriginal Corporation, Barraby, and Yulay all support the methodology for this project.

### **4.3.2 Information gathered during fieldwork**

The MLALC was invited to attend the archaeological survey of the study area. Based on discussions held on site between Biosis and the MLALC's Site Officer, it is understood that both the LALC and Biosis have assessed the study area as holding low potential to contain intact Aboriginal sites; however, the landscape of the Lane Cove River is considered significant. A letter was provided by MLALC and is provided in Appendix 4.

## **4.4 Stage 4: Review of draft Aboriginal cultural heritage assessment report**

Following completion of the DRAFT ACHA, it was provided to RAPs on 10 November 2018 for review and comment. RAPs were given 28 days to provide comments and one responses were received as detailed below. Comments on the draft report are provided in Appendix 5.

A1 Indigenous Services, Darug Land Observations, Barraby, Goobah, and manda Hickey Cultural Services all supported the ACHA and had no further comments. Scott Franks of Tocomwall did not support the ACHA or the recommendations and Tocomwall's full comments can be found in in Appendix 5. Biosis responded to his comments; however, Tocomwall still did not support the assessment.

## 5 Aboriginal cultural significance assessment

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The two main values addressed when assessing the significance of Aboriginal sites are cultural values to the Aboriginal community and archaeological (scientific) values. This report will assess the cultural values of Aboriginal sites in the study area. Details of the scientific significance assessment of Aboriginal sites in the study area are provided in Appendix 6.

### 5.1 Introduction to the assessment process

Heritage assessment criteria in NSW fall broadly within the significance values outlined in the Australia International Council on Monuments and Sites (ICOMOS) *Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance* (Australia ICOMOS 2013) (the Burra Charter). This approach to heritage has been adopted by cultural heritage managers and government agencies as the set of guidelines for best practice heritage management in Australia. These values are provided as background and include:

- **Historical significance** (evolution and association) refers to historic values and encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this section. A place may have historic value because it has influenced, or has been influenced by, a historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives *in situ*, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.
- **Aesthetic significance** (Scenic/architectural qualities, creative accomplishment) refers to the sensory, scenic, architectural and creative aspects of the place. It is often closely linked with social values and may include consideration of form, scale, colour, texture, and material of the fabric or landscape, and the smell and sounds associated with the place and its use.
- **Social significance** (contemporary community esteem) refers to the spiritual, traditional, historical or contemporary associations and attachment that the place or area has for the present-day community. Places of social significance have associations with contemporary community identity. These places can have associations with tragic or warmly remembered experiences, periods or events. Communities can experience a sense of loss should a place of social significance be damaged or destroyed. These aspects of heritage significance can only be determined through consultative processes with local communities.
- **Scientific significance** (Archaeological, industrial, educational, research potential and scientific significance values) refers to the importance of a landscape, area, place or object because of its archaeological and/or other technical aspects. Assessment of scientific value is often based on the likely research potential of the area, place or object and will consider the importance of the data involved, its rarity, quality or representativeness, and the degree to which it may contribute further substantial information.

The cultural and archaeological significance of Aboriginal and historic sites and places is assessed on the basis of the significance values outlined above. As well as the Burra Charter significance values guidelines, various government agencies have developed formal criteria and guidelines that have application when assessing the significance of heritage places within NSW. Of primary interest are guidelines prepared by the Australian

Government, OEH and the Heritage Branch, and Department of Planning and Environment. The relevant sections of these guidelines are presented below.

These guidelines state that an area may contain evidence and associations which demonstrate one or any combination of the Burra Charter significance values outlined above in reference to Aboriginal heritage. Reference to each of the values should be made when evaluating archaeological and cultural significance for Aboriginal sites and places.

In addition to the previously outlined heritage values, the OEH *Guidelines to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011) also specify the importance of considering cultural landscapes when determining and assessing Aboriginal heritage values. The principle behind a cultural landscape is that 'the significance of individual features is derived from their inter-relatedness within the cultural landscape'. This means that sites or places cannot be 'assessed in isolation' but must be considered as parts of the wider cultural landscape. Hence the site or place will possibly have values derived from its association with other sites and places. By investigating the associations between sites, places, and (for example) natural resources in the cultural landscape the stories behind the features can be told. The context of the cultural landscape can unlock 'better understanding of the cultural meaning and importance' of sites and places.

Although other values may be considered – such as educational or tourism values – the two principal values that are likely to be addressed in consideration of Aboriginal sites and places are the cultural/social significance to Aboriginal people and their archaeological or scientific significance to archaeologists and the Aboriginal community. The determinations of archaeological and cultural significance for sites and places should then be expressed as statements of significance that preface a concise discussion of the contributing factors to Aboriginal cultural heritage significance.

## 5.2 Cultural (social significance) values

Cultural or social significance refers to the spiritual, traditional, historical and/or contemporary associations and values attached to a place or objects by Aboriginal people. Aboriginal cultural heritage is broadly valued by Aboriginal people as it is used to define their identity as both individuals and as part of a group (DECCW 2010a, p.iii). More specifically it provides:

- A 'connection and sense of belonging to Country' (DECCW 2010a, p.iii).
- A link between the present and the past (DECCW 2010a, p.3).
- A learning tool to teach Aboriginal culture to younger Aboriginal generations and the general public (DECCW 2010a, p.3).
- Further evidence of Aboriginal occupation prior to European settlement for people who do not understand the magnitude to which Aboriginal people occupied the continent (DECCW 2010a, p.3).

It is acknowledged that Aboriginal people are the primary determiners of the cultural significance of Aboriginal cultural heritage. During consultation the following information was provided by RAPs in regards to the cultural values of the study area. The MLALC provided the following information regarding the study area:

- *"Aboriginal people have used the area in the past as an important place of trade or gatherings".*
- *"The indication of Aboriginal occupations within the vicinity is obvious with the surrounding landscape usage and the significance for Aboriginal people past and present still remains".*
- *"All parts of Sydney hold significance to Aboriginal people and the preservation and conservation of some sites are of high importance for our connection to Country".*

### 5.3 Historic values

Historic significance refers to associations a place or object may have with a historically important person, event, phase or activity to the Aboriginal and other communities. The study area is not known to have any historic associations.

### 5.4 Archaeological (scientific significance) values

An archaeological scientific assessment was undertaken for the study area and is presented in detail as part of the attached Archaeological Report (Appendix 6).

### 5.5 Aesthetic values

The aesthetic value of the study area is considered low due to the extensive disturbance, with both cut and fill actions identified during the survey, large amounts of illegal dumping of material, and the construction of both tracks and drainage features throughout. However, the association of the landscape with the Lane Cove River is considered significant and is closely linked with Aboriginal cultural values and provides a context for Aboriginal sites that gives a strong sense of place.

### 5.6 Statement of significance

The significance the study area was assessed in accordance with the following criteria:

- Requirements of the code.
- The Burra Charter.
- *Guide to investigating and reporting on Aboriginal heritage.*

The combined use of these guidelines is widely considered to represent the best practice for assessments of Aboriginal cultural heritage. The identification and assessment of cultural heritage values includes the four values of the Burra Charter: social, historical, scientific and aesthetic values. The resultant statement of significance has been constructed for the study area based on the significance ranking criteria assessed in Table 3.

#### 5.6.1 Statement of significance for the study area

The study area has been subject to cut and fill actions, with much of the original ground surface having been visibly altered. Within the study area, disturbed included the removal of topsoil, construction of buildings within the study area, and the dumping and removal of contaminated fill. No Aboriginal sites are located within the study area and due to the high levels of previous ground disturbance, no areas of Aboriginal archaeological potential were identified. The entire study area has therefore been assessed as having low Aboriginal archaeological potential. The Aboriginal community has indicated during consultation that the general area around the Lane Cove River has significance to the community. The study area does not have any direct historical associations and the scientific significance of this site has been assessed as low.

**Table 3 Significance assessment criteria**

| Site name        | Criteria                                                                                                   | Ranking  |
|------------------|------------------------------------------------------------------------------------------------------------|----------|
| Lot 1 DP 1151370 | Cultural – discussions with the local Aboriginal communities reflect that the general area is significant. | Moderate |

| Site name | Criteria                                                                                                                                                                                       | Ranking |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|           | Historical – the site is not connected to any historical event or personage.                                                                                                                   | Low     |
|           | Scientific – the site possesses low archaeological values.                                                                                                                                     | Low     |
|           | Aesthetic – the site is located adjacent to the Lane Cover River. It has been impacted by multiple cut and fill actions, with much of the original ground surface being significantly altered. | Low     |

## 6 Development limitations and mitigation measures

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Within the study area, there are no recorded Aboriginal sites that may be subject to harm. The proposed works will therefore not impact on any Aboriginal archaeological sites. The Aboriginal community have indicated that the landscape of the Lane Cove River is culturally significant and has intangible values. Strategies to avoid or minimise harm to Aboriginal cultural heritage values in the study area are discussed below.

### 6.1 Predicted physical impacts

The proposed works will consist of bulk earthworks and site infrastructure, followed by the construction of a road ways and landscaping. All of these activities will have the potential to impact Aboriginal sites. However, the study area has been subject to cut and fill actions, with much of the original ground surface having been visibly altered. Within the study area, disturbances included the removal of topsoil, construction of buildings within the study area, and the dumping and removal of contaminated fill.

As there are no Aboriginal sites within the study area and the area is highly disturbed the proposed works will not impact on Aboriginal heritage values

### 6.2 Management and mitigation measures

Ideally, heritage management involves conservation of sites through the preservation and conservation of fabric and context within a framework of 'doing as much as necessary, as little as possible' (Australia ICOMOS 2013). In cases where conservation is not practical, several options for management are available. For sites, management often involves the salvage of features or artefacts, retrieval of information through excavation or collection (especially where impact cannot be avoided) and interpretation.

Avoidance of impact to archaeological and cultural heritage sites through design of the development is the primary mitigation and management strategy, and should be implemented where practicable. However, due to the levels of disturbance, there are no specific management and mitigation measures required. The MLALC identified intangible values in the area, which were associated with the landscape of the Lane Cove River. Therefore, the following mitigation measures are recommended in order to ensure that the proposed works do not further impact on the cultural values of the Lane Cove area. This is in line with the principles of ecologically sustainable development (ESD) and intergenerational equity in their design.

After the completion of the construction of the proposed development, MLALC suggests that landscapes of native vegetation be planted and Gammerraygal names be used in any visual interpretation or signage within the gardens. This will ensure the visual amenity of the area is retained and the acknowledgement of Aboriginal people as the original custodians of the area are recognised.

## 7 Recommendations

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The recommendations below respond specifically to the wishes of the RAPs. Recommendations regarding the archaeological value of the site, and the subsequent management of Aboriginal cultural heritage is provided in the archaeological report (Appendix 6).

### **Recommendation 1: No further archaeological assessment is required**

No further archaeological work is required in the study area due to the entire study area assessed as having low archaeological potential.

### **Recommendation 2: Landscape design to include Indigenous plants**

After the completion of the construction of the proposed development, it is suggested that landscapes of native vegetation be planted and Gammerraygal names be used in any visual interpretation or signage within the gardens. This will ensure the visual amenity of the area is retained and the acknowledgement of Aboriginal people as the original custodians of the area are recognised.

### **Recommendation 3: Discovery of Unanticipated Aboriginal Objects**

All Aboriginal objects and Places are protected under the NPW Act. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the OEH. Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

### **Recommendation 4: Discovery of Aboriginal Ancestral Remains**

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

4. Immediately cease all work at that location and not further move or disturb the remains.
5. Notify the NSW Police and OEH's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location.
6. Not recommence work at that location unless authorised in writing by OEH.

## References

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- Allen, J & O'Connell, J 2003, 'The long and the short of it: archaeological approaches to determining when humans first colonised Australia and New Guinea.', *Australian Archaeology*, vol. 57, pp. 5–19.
- Attenbrow, V 2010, *Sydney's Aboriginal Past. Investigating the Archaeological and Historical Records*, University of New South Wales Press Ltd, Sydney NSW.
- Australia ICOMOS 2013, *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance*, Australia ICOMOS, Burwood, VIC.
- BOM 2018, *Climate statistics for Australian locations*, viewed 24 October 2018, <[http://www.bom.gov.au/climate/averages/tables/cw\\_072150.shtml](http://www.bom.gov.au/climate/averages/tables/cw_072150.shtml)>.
- Bowler, JM et al. 2003, 'New ages for human occupation and climatic change at Lake Mungo, Australia', *Nature*, vol. 421, no. 6925, pp. 837–840.
- Brookes & Associates, Taylor Barner Landscape Architects, & Mary Dallas Consulting Archaeologists 2003, *Mamre St Marys – Conservation Management Plan*.
- Chapman, G & Murphy, C 1989, *Soil Landscapes of the Sydney 1:100,000 sheet*, Soil Conservation Service of NSW, Sydney.
- Clarkson, C et al. 2015, 'The archaeology, chronology and stratigraphy of Madjedbebe (Malakunanja II): A site in northern Australia with early occupation', *Journal of Human Evolution*, vol. 83, no. 0, pp. 46–64.
- Dallas, M 1982, *An Archaeological Survey at Riverstone, Schofields and Quakers Hill, NSW*, Report to the Land Commission of NSW.
- DECCW 2010a, *Aboriginal Cultural Heritage Consultation Requirements for Proponents*, Department of Environment and Climate Change, Sydney NSW.
- DECCW 2010b, *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*, Department of Environment and Climate Change, Sydney NSW.
- Jo McDonald Cultural Heritage Management Pty Ltd 2000, *Archaeological Survey for Aboriginal Sites: Proposed Light Industrial Subdivision, 'Austral Site', Mamre Road, Erskine Park, NSW. Report to Gunninah Environmental Consultants for Austral Brick Company*.
- Jo McDonald Cultural Heritage Management Pty Ltd 2005a, *Archaeological Salvage Excavation of Site CG1 (NPWS #45-5-2648), at the corner of Charles and George Streets, Parramatta, NSW*, Report to Meriton Apartments Pty Ltd.
- Jo McDonald Cultural Heritage Management Pty Ltd 2005b, *Archaeological Salvage Excavation of Site RTA-G1 109-113 George Street Parramatta, NSW*, Report to Landcom.
- Jo McDonald Cultural Heritage Management Pty Ltd 2006, *Archaeological Salvage Excavation of the Colebee release Area, Schofields, NSW. Draft report prepared for Medallist Developments*.

Jo McDonald Cultural Heritage Management Pty Ltd 2008, *Austral Land Mamre Road , Erskine Park Archaeological Salvage Excavations, Report to Macquarie Goodman*.

Lane Cove Council 2018a, *Aboriginal Heritage*, viewed 25 October 2018, <<http://www.lanecove.nsw.gov.au/Community/AboutLaneCove/Pages/AboriginalHeritage.aspx>>.

Lane Cove Council 2018b, *A Brief History of Lane Cove*, viewed 25 October 2018, <<http://www.lanecove.nsw.gov.au/Community/AboutLaneCove/Pages/History.aspx>>.

OEH 2011, *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*, Office of Environment and Heritage.

Parsons, V 1966, *Ball, Henry Lidgbird (1756–1818)*, *Australian Dictionary of Biography*.

Rhodes, J & Dunnett, G 1985, *Aboriginal Resources Planning Study: City of Penrith*, National Parks & Wildlife Service, Sydney. NSW.

Rosen, S 1995, *Heritage Assessment for Nepean Tunnel Amplification Project*, Sydney Water.

Strahler, A 1964, 'Quantitative geomorphology of drainage basins and channel networks', in V Chow (ed.), *Handbook of Applied Hydrology*, McGraw-Hill, New York.

Tindale, N 1974, *Aboriginal Tribes of Australia*, University of California Press, Berkeley.

White, B & McDonald, J 2010, 'Lithic Artefact Distribution in the Rouse Hill Development Area', *Australian Archaeology*, vol. 70, pp. 29–38.

## Appendices

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## Appendix 1 Consultation log

### Stage 1 – Notification of project proposal and registration of interest

#### Step 1- Identification of Aboriginal people/parties with an interest in the proposed study area.

| Organisation contacted                                    | Date and type of contact | Date and type of response | Response details                                                           |
|-----------------------------------------------------------|--------------------------|---------------------------|----------------------------------------------------------------------------|
| OEH Greater Sydney Office                                 | 29/1/2019 – email        | 1/2/2019 – email          | Provided a list of Aboriginal stakeholder groups for the Lane Cove region. |
| Native Title Services CORP Limited                        | 29/1/2019 – email        | –                         | –                                                                          |
| Office of the Registrar, Department of Aboriginal Affairs | 29/1/2019 – email        | 6/2/2019                  | The study area described does not have Registered Aboriginal Owners.       |
| Greater Sydney Local Land Services                        | 29/1/2019 – email        | –                         | –                                                                          |
| Metropolitan Local Aboriginal Land Council                | 29/1/2019 – email        | 5/2/2019 – email          | Wanted to be included in the project and registered an interest.           |
| Lane Cove Council                                         | 29/1/2019 – email        | –                         | –                                                                          |
| National Native Title Tribunal                            | 29/1/2019 – email        | 31/1/2019 – email         | No native title registered in the study area.                              |

#### Step 2- Public advertisement

The public notice was published in the *Daily Telegraph* on the 30 January 2019. A copy of the advertisement is provided in Appendix 2.

#### Step 3- Registration of interest.

The registration period ran from the 4 to 18 February 2019. Leeway was given to Aboriginal parties/groups who provided responses shortly after the close of this period and they have been registered as Aboriginal parties for consultation.

| Organisation contacted          | Date and type of contact | Date and type of response | Response details       |
|---------------------------------|--------------------------|---------------------------|------------------------|
| Darug Land Observations         | 4/2/2019 – email         | 5/2/2019 – email          | Registered an interest |
| A1 Indigenous Services          | 4/2/2019 – email         | 5/2/2019 – email          | Registered an interest |
| Eric Keidge                     | 4/2/2019 – email         | –                         | –                      |
| Tocomwall                       | 4/2/2019 – email         | 4/2/2019 – email          | Registered an interest |
| Amanda Hickey Cultural Services | 4/2/2019 – email         | 4/2/2019 – email          | Registered an interest |
| Gunyu                           | 4/2/2019 – email         | 11/2/2019 – email         | Registered an interest |

| Organisation contacted                                | Date and type of contact | Date and type of response | Response details       |
|-------------------------------------------------------|--------------------------|---------------------------|------------------------|
| <b>Walbunja</b>                                       | 4/2/2019 – email         | 11/2/2019 – email         | Registered an interest |
| <b>Badu</b>                                           | 4/2/2019 – email         | 11/2/2019 – email         | Registered an interest |
| <b>Goobah Developments</b>                            | 4/2/2019 – email         | 12/2/2019 – email         | Registered an interest |
| <b>Wullung</b>                                        | 4/2/2019 – email         | –                         | –                      |
| <b>Yerramurra</b>                                     | 4/2/2019 – email         | 12/2/2019 – email         | Registered an interest |
| <b>Nundagurri</b>                                     | 4/2/2019 – email         | 11/2/2019 – email         | Registered an interest |
| <b>Murrumbul</b>                                      | 4/2/2019 – email         | 11/2/2019 – email         | Registered an interest |
| <b>Jerringong</b>                                     | 4/2/2019 – email         | –                         | –                      |
| <b>Pemulwuy CHTS</b>                                  | 4/2/2019 – email         | –                         | –                      |
| <b>Bilinga</b>                                        | 4/2/2019 – email         | 11/2/2019 – email         | Registered an interest |
| <b>Munyunga</b>                                       | 4/2/2019 – email         | 11/2/2019 – email         | Registered an interest |
| <b>Wingikara</b>                                      | 4/2/2019 – email         | 12/2/2019 – email         | Registered an interest |
| <b>Minnamunning</b>                                   | 4/2/2019 – email         | –                         | –                      |
| <b>Walgalu</b>                                        | 4/2/2019 – email         | 12/2/2019 – email         | Registered an interest |
| <b>Thauaira</b>                                       | 4/2/2019 – email         | 12/2/2019 – email         | Registered an interest |
| <b>Dharug</b>                                         | 4/2/2019 – email         | 11/2/2019 – email         | Registered an interest |
| <b>Bilinga Cultural Heritage Technical Services</b>   | 4/2/2019 – email         | –                         | –                      |
| <b>Gunyu Cultural Heritage Technical Services</b>     | 4/2/2019 – email         | –                         | –                      |
| <b>Munyunga Cultural Heritage Technical Services</b>  | 4/2/2019 – email         | –                         | –                      |
| <b>Murrumbul Cultural Heritage Technical Services</b> | 4/2/2019 – email         | –                         | –                      |
| <b>Wingikara Cultural Heritage Technical Services</b> | 4/2/2019 – email         | –                         | –                      |
| <b>Gulaga</b>                                         | 4/2/2019 – email         | –                         | –                      |
| <b>Biamanga</b>                                       | 4/2/2019 – email         | –                         | –                      |
| <b>Callendulla</b>                                    | 4/2/2019 – email         | –                         | –                      |
| <b>Murramarang</b>                                    | 4/2/2019 – email         | –                         | –                      |
| <b>DJMD Consultancy</b>                               | 4/2/2019 – email         | –                         | –                      |

| Organisation contacted                                    | Date and type of contact | Date and type of response | Response details       |
|-----------------------------------------------------------|--------------------------|---------------------------|------------------------|
| <b>Butucarbin Aboriginal Corporation</b>                  | 4/2/2019 – email         | –                         | –                      |
| <b>Didge Ngunawal Clan</b>                                | 4/2/2019 – email         | –                         | –                      |
| <b>Ginninderra Aboriginal Corporation</b>                 | 4/2/2019 – email         | –                         | –                      |
| <b>Nerrigundah</b>                                        | 4/2/2019 – email         | –                         | –                      |
| <b>Wailwan Aboriginal Group</b>                           | 4/2/2019 – email         | –                         | –                      |
| <b>Barking Owl Aboriginal Corporation</b>                 | 4/2/2019 – email         | –                         | –                      |
| <b>Thoorga Nura</b>                                       | 4/2/2019 – email         | –                         | –                      |
| <b>Darug Boorooberongal Elders Aboriginal Corporation</b> | 4/2/2019 – email         | 5/2/2019 – email          | Registered an interest |
| <b>B. H. Heritage Consultants</b>                         | 4/2/2019 – email         | 5/2/2019 – email          | Registered an interest |
| <b>Ngambaa Cultural Connections</b>                       | 4/2/2019 – email         | –                         | –                      |
| <b>Barraby Cultural Services</b>                          | –                        | 31/1/2019 – email         | Registered an interest |
| <b>Yulay Cultural Services</b>                            | –                        | 31/1/2019 – email         | Registered an interest |
| <b>Yurrandaali Cultural Services</b>                      | –                        | 31/1/2019 – email         | Registered an interest |
| <b>Bullawaya</b>                                          | –                        | 11/2/2019 – email         | Registered an interest |
| <b>Eora</b>                                               | –                        | 11/2/2019 – email         | Registered an interest |
| <b>Elouera</b>                                            | –                        | 11/2/2019 – email         | Registered an interest |
| <b>Djiringanj</b>                                         | –                        | 11/2/2019 – email         | Registered an interest |
| <b>Curwur Murre</b>                                       | –                        | 11/2/2019 – email         | Registered an interest |
| <b>Bidawal</b>                                            | –                        | 11/2/2019 – email         | Registered an interest |
| <b>Tharawal</b>                                           | –                        | 11/2/2019 – email         | Registered an interest |
| <b>Gangangarra</b>                                        | –                        | 11/2/2019 – email         | Registered an interest |
| <b>Kuringgai</b>                                          | –                        | 12/2/2019 – email         | Registered an interest |
| <b>Murrin</b>                                             | –                        | 12/2/2019 – email         | Registered an interest |
| <b>Ngarigo</b>                                            | –                        | 12/2/2019 – email         | Registered an interest |
| <b>Walbunja Elders</b>                                    | –                        | 12/2/2019 – email         | Registered an interest |
| <b>Gulla Gunar</b>                                        | –                        | 12/2/2019 – email         | Registered an interest |
| <b>Golangaya</b>                                          | –                        | 12/2/2019 – email         | Registered an interest |

| Organisation contacted | Date and type of contact | Date and type of response | Response details       |
|------------------------|--------------------------|---------------------------|------------------------|
| <b>Gadung</b>          | –                        | 12/2/2019 – email         | Registered an interest |
| <b>Bulling Gang</b>    | –                        | 12/2/2019 – email         | Registered an interest |
| <b>Wandandia</b>       | –                        | 12/2/2019 – email         | Registered an interest |
| <b>Thauaira</b>        | –                        | 12/2/2019 – email         | Registered an interest |

## Stage 2 – Presentation of information about the proposed project

### Step 1- Provision of project information pack

A copy of the information pack is provided in Appendix 3 and a copy of the covering email is provided following.

| Organisation contacted                                    | Date and type of contact | Date and type of response | Response details |
|-----------------------------------------------------------|--------------------------|---------------------------|------------------|
| <b>Darug Land Observations</b>                            | 19/2/2019 – email        | –                         | –                |
| <b>A1 Indigenous Services</b>                             | 19/2/2019 – email        | –                         | –                |
| <b>Tocomwall</b>                                          | 19/2/2019 – email        | –                         | –                |
| <b>Amanda Hickey Cultural Services</b>                    | 19/2/2019 – email        | –                         | –                |
| <b>Gunyu</b>                                              | 19/2/2019 – email        | –                         | –                |
| <b>Walbunga</b>                                           | 19/2/2019 – email        | –                         | –                |
| <b>Badu</b>                                               | 19/2/2019 – email        | –                         | –                |
| <b>Goobah Developments</b>                                | 19/2/2019 – email        | –                         | –                |
| <b>Yerramurra</b>                                         | 19/2/2019 – email        | –                         | –                |
| <b>Nundagurri</b>                                         | 19/2/2019 – email        | –                         | –                |
| <b>Murrumbul</b>                                          | 19/2/2019 – email        | –                         | –                |
| <b>Bilinga</b>                                            | 19/2/2019 – email        | –                         | –                |
| <b>Munyunga</b>                                           | 19/2/2019 – email        | –                         | –                |
| <b>Wingikara</b>                                          | 19/2/2019 – email        | –                         | –                |
| <b>Walgau</b>                                             | 19/2/2019 – email        | –                         | –                |
| <b>Thauaira</b>                                           | 19/2/2019 – email        | –                         | –                |
| <b>Dharug</b>                                             | 19/2/2019 – email        | –                         | –                |
| <b>Darug Boorooberongal Elders Aboriginal Corporation</b> | 19/2/2019 – email        | –                         | –                |
| <b>B. H. Heritage Consultants</b>                         | 19/2/2019 – email        | –                         | –                |

| Organisation contacted               | Date and type of contact | Date and type of response | Response details |
|--------------------------------------|--------------------------|---------------------------|------------------|
| <b>Barraby Cultural Services</b>     | 19/2/2019 – email        | –                         | –                |
| <b>Yulay Cultural Services</b>       | 19/2/2019 – email        | –                         | –                |
| <b>Yurrandaali Cultural Services</b> | 19/2/2019 – email        | –                         | –                |
| <b>Bullawaya</b>                     | 19/2/2019 – email        | –                         | –                |
| <b>Eora</b>                          | 19/2/2019 – email        | –                         | –                |
| <b>Elouera</b>                       | 19/2/2019 – email        | –                         | –                |
| <b>Djiringanj</b>                    | 19/2/2019 – email        | –                         | –                |
| <b>Curwur Murre</b>                  | 19/2/2019 – email        | –                         | –                |
| <b>Bidawal</b>                       | 19/2/2019 – email        | –                         | –                |
| <b>Tharawal</b>                      | 19/2/2019 – email        | –                         | –                |
| <b>Gangangarra</b>                   | 19/2/2019 – email        | –                         | –                |
| <b>Kuringgai</b>                     | 19/2/2019 – email        | –                         | –                |
| <b>Murrin</b>                        | 19/2/2019 – email        | –                         | –                |
| <b>Ngarigo</b>                       | 19/2/2019 – email        | –                         | –                |
| <b>Walbunja Elders</b>               | 19/2/2019 – email        | –                         | –                |
| <b>Gulla Gunar</b>                   | 19/2/2019 – email        | –                         | –                |
| <b>Golangaya</b>                     | 19/2/2019 – email        | –                         | –                |
| <b>Gadung</b>                        | 19/2/2019 – email        | –                         | –                |
| <b>Bulling Gang</b>                  | 19/2/2019 – email        | –                         | –                |
| <b>Wandandia</b>                     | 19/2/2019 – email        | –                         | –                |

## Stage 3 – Gathering information about cultural significance

### Step 1- Provision of project methodology pack and consultation meeting

A copy of the methodology pack is provided in Appendix 4 and a copy of the covering email is provided following.

| Organisation contacted                 | Date and type of contact | Date and type of response | Response details         |
|----------------------------------------|--------------------------|---------------------------|--------------------------|
| <b>Darug Land Observations</b>         | 19/2/2019 – email        | 6/3/2019 – email          | Supports the methodology |
| <b>A1 Indigenous Services</b>          | 19/2/2019 – email        | 23/2/2019 – email         | Supports the methodology |
| <b>Tocomwall</b>                       | 19/2/2019 – email        | –                         | –                        |
| <b>Amanda Hickey Cultural Services</b> | 19/2/2019 – email        | –                         | –                        |

| Organisation contacted                                    | Date and type of contact | Date and type of response | Response details         |
|-----------------------------------------------------------|--------------------------|---------------------------|--------------------------|
| <b>Gunyu</b>                                              | 19/2/2019 – email        | –                         | –                        |
| <b>Walbunja</b>                                           | 19/2/2019 – email        | –                         | –                        |
| <b>Badu</b>                                               | 19/2/2019 – email        | –                         | –                        |
| <b>Goobah Developments</b>                                | 19/2/2019 – email        | –                         | –                        |
| <b>Yerramurra</b>                                         | 19/2/2019 – email        | –                         | –                        |
| <b>Nundagurri</b>                                         | 19/2/2019 – email        | –                         | –                        |
| <b>Murrumbul</b>                                          | 19/2/2019 – email        | –                         | –                        |
| <b>Bilinga</b>                                            | 19/2/2019 – email        | –                         | –                        |
| <b>Munyunga</b>                                           | 19/2/2019 – email        | –                         | –                        |
| <b>Wingikara</b>                                          | 19/2/2019 – email        | –                         | –                        |
| <b>Walgalu</b>                                            | 19/2/2019 – email        | –                         | –                        |
| <b>Thauaira</b>                                           | 19/2/2019 – email        | –                         | –                        |
| <b>Dharug</b>                                             | 19/2/2019 – email        | –                         | –                        |
| <b>B. H. Heritage Consultants</b>                         | 19/2/2019 – email        | –                         | –                        |
| <b>Darug Boorooberongal Elders Aboriginal Corporation</b> | 19/2/2019 – email        | 19/2/2019 – email         | Supports the methodology |
| <b>Barraby Cultural Services</b>                          | 19/2/2019 – email        | 21/2/2019 – email         | Supports the methodology |
| <b>Yulay Cultural Services</b>                            | 19/2/2019 – email        | 21/2/2019 – email         | Supports the methodology |
| <b>Yurrandaali Cultural Services</b>                      | 19/2/2019 – email        | 21/2/2019 – email         | Supports the methodology |
| <b>Bullawaya</b>                                          | 19/2/2019 – email        | –                         | –                        |
| <b>Eora</b>                                               | 19/2/2019 – email        | –                         | –                        |
| <b>Elouera</b>                                            | 19/2/2019 – email        | –                         | –                        |
| <b>Djiringanj</b>                                         | 19/2/2019 – email        | –                         | –                        |
| <b>Curwur Murre</b>                                       | 19/2/2019 – email        | –                         | –                        |
| <b>Bidawal</b>                                            | 19/2/2019 – email        | –                         | –                        |
| <b>Tharawal</b>                                           | 19/2/2019 – email        | –                         | –                        |
| <b>Gangangarra</b>                                        | 19/2/2019 – email        | –                         | –                        |
| <b>Kuringgai</b>                                          | 19/2/2019 – email        | –                         | –                        |
| <b>Murrin</b>                                             | 19/2/2019 – email        | –                         | –                        |
| <b>Ngarigo</b>                                            | 19/2/2019 – email        | –                         | –                        |

| Organisation contacted | Date and type of contact | Date and type of response | Response details |
|------------------------|--------------------------|---------------------------|------------------|
| Walbunja Elders        | 19/2/2019 – email        | –                         | –                |
| Gulla Gunar            | 19/2/2019 – email        | –                         | –                |
| Golangaya              | 19/2/2019 – email        | –                         | –                |
| Gadung                 | 19/2/2019 – email        | –                         | –                |
| Bulling Gang           | 19/2/2019 – email        | –                         | –                |
| Wandandia              | 19/2/2019 – email        | –                         | –                |

## Step 2- Field survey

| Organisation contacted                     | Date and type of contact | Date and type of response | Response details                         |
|--------------------------------------------|--------------------------|---------------------------|------------------------------------------|
| Metropolitan Local Aboriginal Land Council | 20/11/2018 – email       | 20/11/2018 – email        | One representative from MLALC can attend |

## Stage 4 – Review of draft report

### Step 1- Provision of draft report for review

| Organisation contacted          | Date and type of contact | Date and type of response              | Response details                                                                                  |
|---------------------------------|--------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------|
| Darug Land Observations         | 20/3/2019 – email        | 9/4/2019 – email                       | Supports the ACHA                                                                                 |
| A1 Indigenous Services          | 20/3/2019 – email        | 24/3/2019 – email                      | Supports the ACHA                                                                                 |
| Tocomwall                       | 20/3/2019 – email        | 20/3/2019 – email<br>15/4/2019 – email | Did not support the ACHA or recommendations. A copy of their response can be found in Appendix 5. |
| Amanda Hickey Cultural Services | 20/3/2019 – email        | 2/4/2019 – email                       | Supports the ACHA                                                                                 |
| Gunyu                           | 20/3/2019 – email        | –                                      | –                                                                                                 |
| Walbunja                        | 20/3/2019 – email        | –                                      | –                                                                                                 |
| Badu                            | 20/3/2019 – email        | –                                      | –                                                                                                 |
| Goobah Developments             | 20/3/2019 – email        | 28/4/2019 – email                      | Supports the ACHA                                                                                 |
| Yerramurra                      | 20/3/2019 – email        | –                                      | –                                                                                                 |
| Nundagurri                      | 20/3/2019 – email        | –                                      | –                                                                                                 |
| Murrumbul                       | 20/3/2019 – email        | –                                      | –                                                                                                 |
| Bilinga                         | 20/3/2019 – email        | –                                      | –                                                                                                 |
| Munyunga                        | 20/3/2019 – email        | –                                      | –                                                                                                 |
| Wingikara                       | 20/3/2019 – email        | –                                      | –                                                                                                 |

| Organisation contacted                             | Date and type of contact | Date and type of response | Response details  |
|----------------------------------------------------|--------------------------|---------------------------|-------------------|
| Walgalu                                            | 20/3/2019 – email        | –                         | –                 |
| Thauaira                                           | 20/3/2019 – email        | –                         | –                 |
| Dharug                                             | 20/3/2019 – email        | –                         | –                 |
| B. H. Heritage Consultants                         | 20/3/2019 – email        | –                         | –                 |
| Darug Boorooberongal Elders Aboriginal Corporation | 20/3/2019 – email        | –                         | –                 |
| Barraby Cultural Services                          | 20/3/2019 – email        | 24/3/2019 – email         | Supports the ACHA |
| Yulay Cultural Services                            | 20/3/2019 – email        | –                         | –                 |
| Yurrandaali Cultural Services                      | 20/3/2019 – email        | –                         | –                 |
| Bullawaya                                          | 20/3/2019 – email        | –                         | –                 |
| Eora                                               | 20/3/2019 – email        | –                         | –                 |
| Elouera                                            | 20/3/2019 – email        | –                         | –                 |
| Djiringanj                                         | 20/3/2019 – email        | –                         | –                 |
| Curwur Murre                                       | 20/3/2019 – email        | –                         | –                 |
| Bidawal                                            | 20/3/2019 – email        | –                         | –                 |
| Tharawal                                           | 20/3/2019 – email        | –                         | –                 |
| Gangangarra                                        | 20/3/2019 – email        | –                         | –                 |
| Kuringgai                                          | 20/3/2019 – email        | –                         | –                 |
| Murrin                                             | 20/3/2019 – email        | –                         | –                 |
| Ngarigo                                            | 20/3/2019 – email        | –                         | –                 |
| Walbunja Elders                                    | 20/3/2019 – email        | –                         | –                 |
| Gulla Gunar                                        | 20/3/2019 – email        | –                         | –                 |
| Golangaya                                          | 20/3/2019 – email        | –                         | –                 |
| Gadung                                             | 20/3/2019 – email        | –                         | –                 |
| Bulling Gang                                       | 20/3/2019 – email        | –                         | –                 |
| Wandandia                                          | 20/3/2019 – email        | –                         | –                 |

## Appendix 2 Stage 1: Notification of project proposal and registration of interest

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**APPENDIX 2 CONTAINS PERSONAL INFORMATION AND HAS BEEN REMOVED**

## Appendix 3 Stage 2: Presentation of information about the proposed project

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**APPENDIX 3 CONTAINS PERSONAL INFORMATION AND HAS BEEN REMOVED**

## Appendix 4 Stage 3: Gathering information about cultural significance

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**APPENDIX 4 CONTAINS PERSONAL INFORMATION AND HAS BEEN REMOVED**

## Appendix 5 Stage 4: Review of draft cultural heritage assessment report

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**APPENDIX 5 CONTAINS PERSONAL INFORMATION AND HAS BEEN REMOVED**

## Appendix 6 Archaeological report

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