

Grantham Park Holdings Pty Limited

ACN: 140 626 099

Bungendore Sands Extension Project

Heritage Assessment Report

Prepared by

Dr. Amy Way

18 March 2020

Amended 20 July 2020

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Grantham Park Holdings Pty Limited

ACN: 140 626 099

Bungendore Sands Extension Project Heritage Assessment Report

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COMMONLY USED ACRONYMS

ACHAR	Aboriginal Cultural Heritage Assessment Report
AHD	Australian Height Datum
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
BCD	Biodiversity Conservation Division
BCH	Bullock Camp Hill
BCJ	Bridge Creek Junction
CGI	Corrugated Galvanised Iron
CHMA	Cultural Heritage Management Australia
DECCW	Department of Environment, Climate Change and Water
DP	Deposited Plan
EIS	Environmental Impact Statement
ELG	East Lake George
FGS	Fine grained stone
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
LGM	Last Glacial Maximum
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NPWS	National Parks and Wildlife Service
NSW	New South Wales
OEH	Office of Environment and Heritage
PAD	Potential Archaeological Deposit
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
RAP	Registered Aboriginal Party
RWC	R.W. Corkery & Co. Pty Limited
Study Area	589 Tarago Road, Lake George
QPRC	Queanbeyan-Palerang Regional Council
WCL	Wright's Creek Lagoon

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EXECUTIVE SUMMARY

This Heritage Assessment Report has been commissioned to support an Environmental Impact Statement and development application in association with a proposed development at Lot 31 DP 634213 and part of Lots 1 and 2 DP 1167699, Lake George in the Queanbeyan-Palerang Local Government Area. This Heritage Assessment Report details the consultation process with the Aboriginal community relevant to the proposal and supports the AHIP application required for the proposed development works.

The proposed development works consist of the Bungendore Sands Extension Project. The proposed archaeological works consist of two salvage excavations and the establishment of a Conservation Area to preserve the known Wood Duck Aboriginal Site.

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1 INTRODUCTION

1.1 SCOPE AND BACKGROUND

Dr. Amy Way has been engaged by RW Corkery & Co. Pty Limited (RWC) on behalf of Grantham Park Holdings Pty Limited (the Applicant) to complete a Heritage Assessment Report, incorporating an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the extension of existing Bungendore Sands Quarry (the Proposal), located at 589 Tarago Road, Lake George (the Study Area). The Study Area is located within the Queanbeyan Palerang Local Government Area (LGA) (see **Figure 1**).

The objective of the ACHAR is to inform NSW Department of Planning, Industry and Environment and other relevant stakeholders of the nature of the works associated with the Proposal and its potential impacts on items of Aboriginal cultural heritage significance. This report forms the Aboriginal Cultural Heritage Assessment component of the Environmental Impact Statement compiled to support the development application. This report describes the recommended mitigation strategies including a proposed program of archaeological salvage and establishment of a Conservation Area. It describes the Study Area, documents the consultation process undertaken with Aboriginal stakeholders, describes the field surveys and details the cultural, historical, scientific and archaeological significance of the Study Area.

The Proposal consists of an extension to the existing Bungendore Sands Quarry that is located on part of Lots 1 and 2 DP 1167699 and Lot 31, DP 634213. Tobaway Crushing Pty Limited ("Tobaway"), trading as Bungendore Sands, has been conducting a sand extraction and processing operation (the "Quarry") on Lot 31 DP 634213 and part of Lot 1 DP 1167699 since November 2001, under approval DA52/74. The Applicant is seeking development consent from Queanbeyan – Palerang Regional Council (QPRC) to extend the sand extraction area on a section of Lot 1 DP1167699, in order to increase the recoverable sand resource and extend the operational life of the "the Quarry". The material extracted under the Proposal would be processed using the existing infrastructure situated on Lot 31 DP634213.

The Proposal would comprise the following (see **Figure 2**).

- Ongoing extraction of sand and limited volumes of overburden and interburden (clay and silt) within the remainder of the Approved Extraction Area and a 77ha proposed Extraction Area, to a maximum depth of 10m, producing up to 400,000t of sand products per year for a period of 20 years.
- Continued on-site screening, classifying and stockpiling of extracted material to produce a range of sand products using the existing Sand Classification Plant.
- Continued transportation of sand products to the Operator's customers using a combination of rigid vehicles and truck and dog combinations and existing Quarry Access Road and public transportation routes.
- Continued management and settlement of fines and process water using the existing and proposed Fines Settling Cells and Process Water Ponds.
- Establishment of ancillary infrastructure, including bunds and water management structures.
- Construction and rehabilitation of a final landform that would be safe, stable, non-polluting, and suitable for a future land use of nature conservation and agriculture.

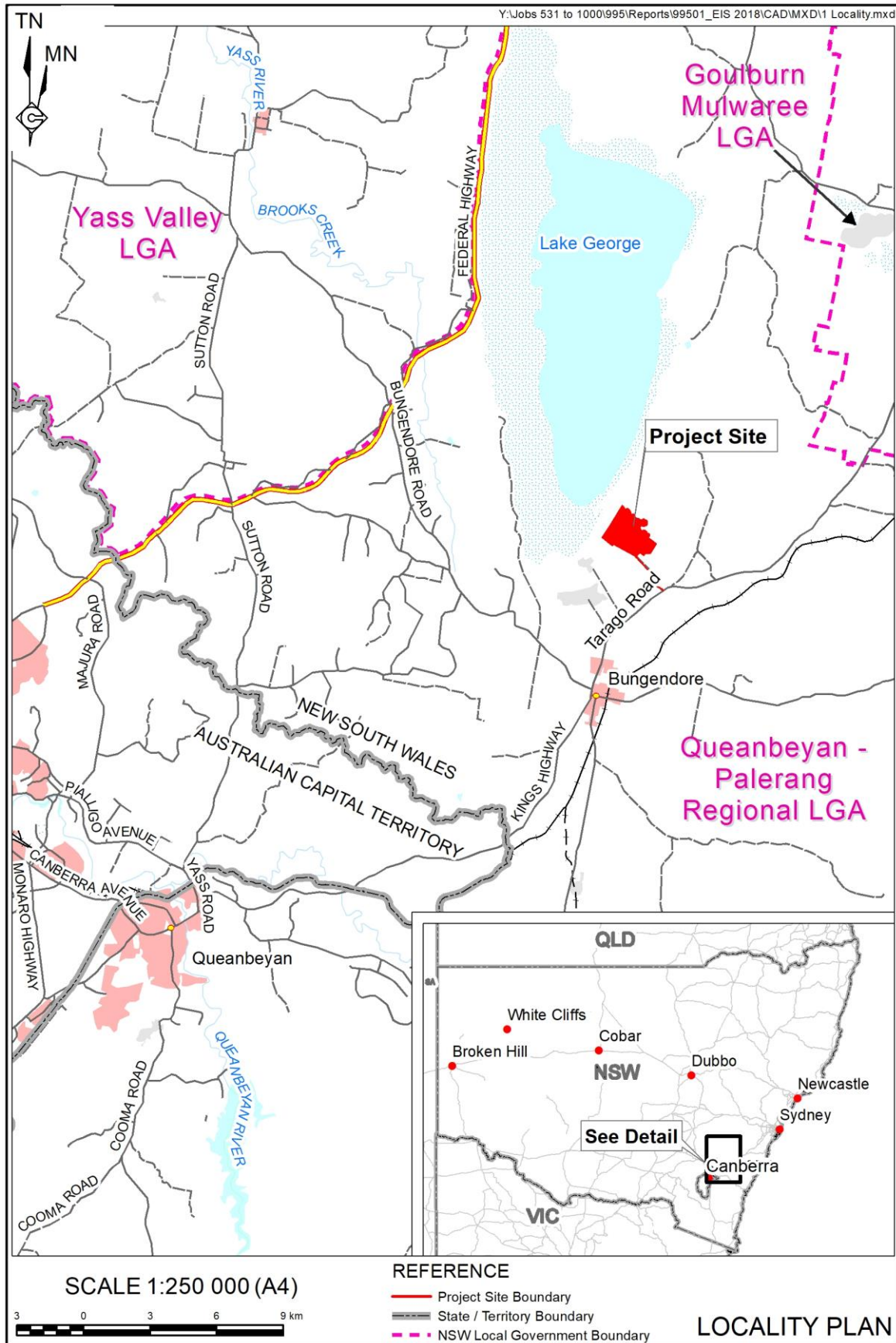


Figure 1 Locality Plan

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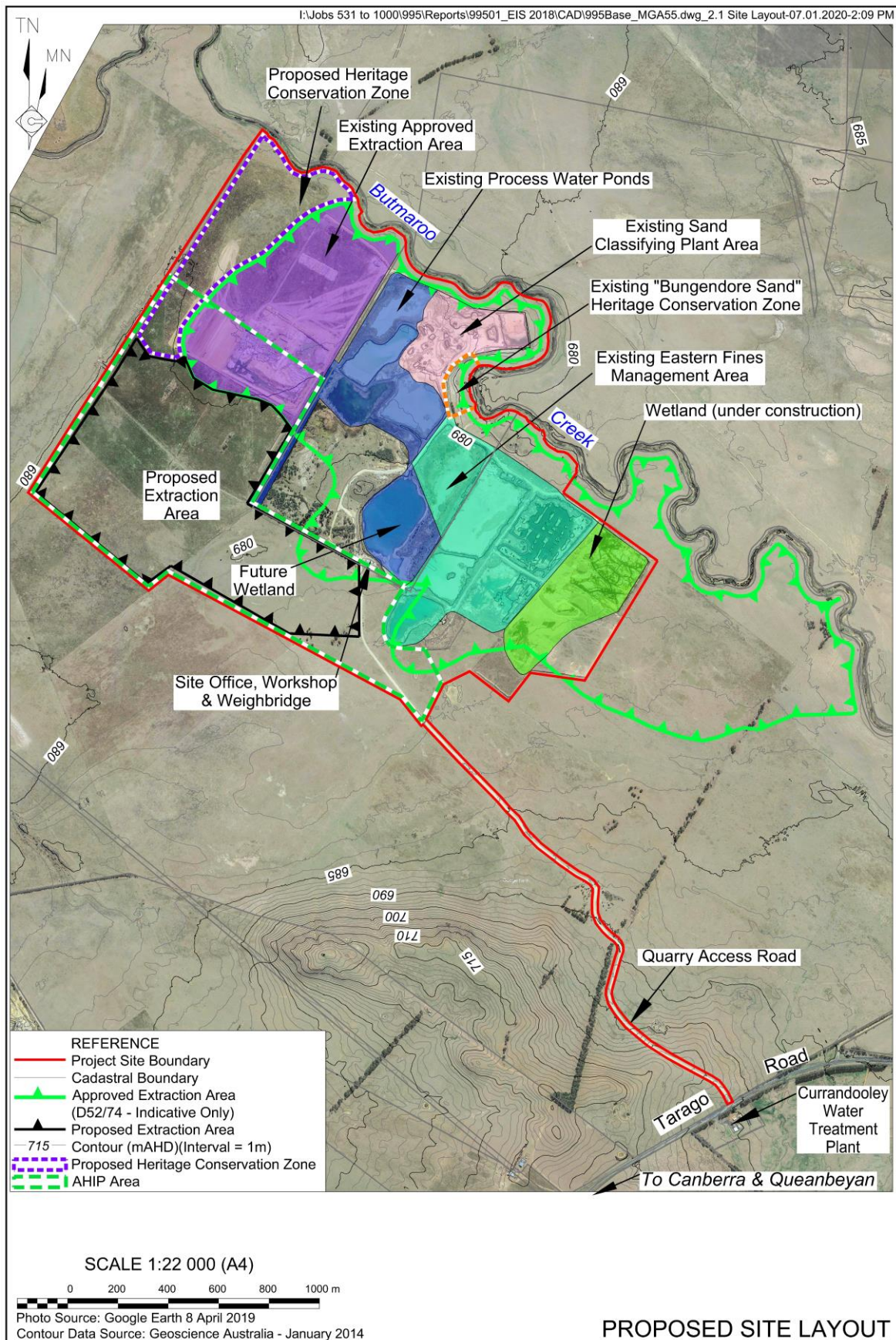


Figure 2 Proposed Site Layout

The proposed archaeological works consist of two salvage excavations and the establishment of a Conservation Area around the known Aboriginal site 'Wood Duck'. This report outlines the immediate actions to be taken to conserve this site as well as planned measures for the establishment of a Conservation Area in perpetuity. The 'Bungendore Sands' site is currently managed through a conservation deed held between Tobinway Crushing Pty Ltd and The Minister administering the National Parks and Wildlife Act 1974. The purpose of this Deed is to conserve the Aboriginal cultural heritage of the Bungendore Sands Conservation Area in perpetuity. It is recommended that the Wood Duck Conservation Area be secured in a manner similar to the Bungendore Sands Conservation Area. The proposed Conservation Area is detailed in Section 8.1.

1.2 THE AHIP AREA AND STUDY AREA

The AHIP Area and Study Area are shown in **Figure 2**.

The AHIP Area consists of part Lot 1 DP 1167699. The AHIP Area comprises land to the south and west of the Approved Extraction Area (D52/74) in the Project Site Area. The Study Area consists of the Project Site Area.

The nearest watercourse to the Quarry is Butmaroo Creek which runs along the north-eastern boundary of the Study Area and drains into Lake George. Lake George is located approximately 1km from the north-western boundary of the Project Site.

The land within the Study Area has undergone significant historical clearing to facilitate agricultural activities and is now predominantly pasture. There are some isolated stands of trees, and a row of planted trees adjacent to a narrow settling pond.

Aboriginal artefacts are known to occur in the Study Area. Four archaeological sites have been excavated within the Study Area: Bungendore Sands (AHIMS 57-2-0121), Wood Duck (AHIMS 57-2-0791), GP1 (57-2-0587) and GP2 (57-2-0588). One of these, Wood Duck is within the AHIP Area. These sites are described in detail below.

1.3 THE INVESTIGATOR

The investigator, Dr. Amy Mosig Way, holds a PhD in the archaeology of Lake George. She has also worked as a consultant archaeologist in multiple regions in NSW, SA and WA on Aboriginal heritage sites and in 2017 and 2018 was employed as an archaeologist for the then Office of Environment and Heritage.

2 LEGISLATIVE SETTING

2.1 NATIONAL PARKS AND WILDLIFE ACT 1974 (NSW)

The objects of the NPW Act include the conservation of objects, places or features of cultural value within the landscape. This includes places, objects and features of significance to Aboriginal people, places of social value to the people of New South Wales, and places of historic, architectural or scientific significance.

Under the NPW Act, it is an offence to harm an Aboriginal object or place.

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An Aboriginal object means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains. An Aboriginal place means any place declared to be an Aboriginal place under section 84 of the NPW Act. An Aboriginal place may or may not contain physical Aboriginal objects.

An AHIP can be issued by the Chief Executive of the Department under Part 6 of the *National Parks and Wildlife Act 1974* (NPW Act) where harm to an Aboriginal object or Aboriginal Place cannot be avoided. An AHIP provides a defence if the harm was authorised by the AHIP and the conditions of that AHIP were not contravened. Section 90 of the NPW Act relates specifically to AHIPs.

2.2 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999 (COMMONWEALTH)

Matters of National Environmental Significance listed under this Act include the National Heritage List and the Commonwealth Heritage List, both administered by the Commonwealth Department of the Environment and Energy. Ministerial approval is required under the EPBC Act for proposals involving significant impacts to National/Commonwealth heritage places.

2.3 APPLICABILITY TO THE PROPOSAL

The current project will be assessed under Part 4 of the EP&A Act. Any Aboriginal sites within the Project Area are afforded legislative protection under the NPW Act.

It is noted there are no Commonwealth or National heritage listed places within the Project Area, and as such, the heritage provisions of the EPBC Act do not apply.

3 CONSULTATION PROCESS AND ABORIGINAL COMMUNITY PARTICIPATION

Aboriginal cultural heritage consultation has followed the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010). This requires four stages of consultation. Each stage is detailed below.

3.1 STAGE 1: IDENTIFICATION OF ABORIGINAL COMMUNITY GROUPS AND INDIVIDUALS

This stage involves notification of the Proposal and a request for contact details from interested Aboriginal stakeholders. During this stage enquiries via an advertisement in the Bungendore Weekly, letters to the Eurobodalla, Goulburn Mulwaree, Queanbeyan-Palerang, Shoalhaven and Yass Valley local councils, Local Aboriginal Land Councils, Office of Environment and Heritage, Queanbeyan, Native Title organisations and other bodies listed at 4.1.2 of the

Aboriginal cultural heritage consultation requirements for proponents 2010 were conducted. A copy of Notification letter 4.1.2 is provided in Annexure 1, a copy of Notification letter 4.1.3 at Annexure 2, and a copy of the Newspaper advertisement placed in the Bungendore Weekly at Annexure 3.

Twelve Aboriginal Parties registered an interest in the Proposal. These groups are detailed in **Table 1**. The RAPs record and 4.1.3 notice were provided to OEH and the Onerwal Local Aboriginal Land Council on 13 December 2018. The Ngambri LALC were contacted in March 2020 to register an interest after it was identified during the final review of the ACHAR that initial correspondence with them had not been received. Ngambri registered an interest via phone on 18/3/2020.

Table 1
List of Registered Aboriginal Parties

Registered Aboriginal Parties (RAPs)	Registration Date
Ngambri LALC	March 2020
Onerwal Local Aboriginal Land Council (LALC)	December 2018
Didgengunawal (DNC)	December 2018
Corroboree Aboriginal Corporation	December 2018
Merrigarn Indigenous Corporation	December 2018
Janine Thompson	December 2018
Murra Bidgee Mullangari	December 2018
Bungarabung/Koomurri Ngunawal Aboriginal Corporation	December 2018
Thunderstone (Ngunawal)	December 2018
Buru Ngunawal (BNACC)	December 2018
Muragadi	December 2018
Gooba	December 2018

Stage 1 Consultation Timeline (Opened 13 Nov 2018, closed 12 Dec 2018)

- Stage 1 Notification letter 4.1.2 sent 13 November 2018 (see Annexure 1)
- Stage 1 Notification letter 4.1.3 sent on 22 & 23 Nov 2018 (closing date 12 Dec 2018) (see Annexure 2)
- Newspaper advertisement placed in the Bungendore Weekly on 28 Nov (Closing date on 12 December 2018) (see Annexure 3).
- Copy of RAPs record and 4.1.3 notice provided to OEH and Onerwal LALC via on 13 December 2018.

3.2 STAGES 2 AND 3: PRESENTATION AND GATHERING OF INFORMATION

Stages 2 and 3 of the consultation requirements were combined. These stages require information about the Proposal to be presented to the RAPs and information about cultural significance to be gathered. During Stages 2 and 3 of the consultation processes, an information package was sent to the RAPs which outlined the proposed methodology and sought information

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about places and objects of cultural value to Aboriginal people in the Lake George area. In addition, a site meeting was scheduled at Lake George on 18 December 2018 to discuss the Proposal and seek cultural information, however no RAPs were able to attend. The information package supplied to RAPs is attached at Annexure 4.

Stages 2 and 3 Consultation Timeline (Opened 13 Dec 2018, closed 28 January 2019)

- Information package sent via email on 13 December 2018
- On-site meeting scheduled for 18 December 2018
- Three responses were received from:
 - Marilyn Carroll-Johnson (Corroboree Aboriginal Corporation) (13/12/18)
 - Glen Freeman (Koomurri Ngunnawal Aboriginal Corporation) (20/12/18)
 - Ryan Johnson (Murra Bidgee Mullangari) (23/12/18)

A transcript of the responses is supplied in Annexure 6. In summary, these responses indicated:

- Disappointment that sites are lost to development and endorsement for the establishment of a Conservation Area;
- Support for the project; and
- That the groups would like to be involved in the project, including salvage excavation.

Corroboree Aboriginal Corporation also expressed an interest in attending the site meeting, however in the end were unable to send a representative and offered instead to send through any comments that should arise by email. No further comments have been received.

Sustained Consultation: Project Update 15 July 2019

The *Aboriginal cultural heritage consultation requirements for proponents 2010* require consultation with Aboriginal people to be sustained throughout the heritage assessment process to ensure cultural perspectives, views and concerns are taken into account. In line with this requirement, a Project Update was provided on 15 July 2019 to the RAPs. One acknowledgment letter was received, which is provided in Annexure 5. No further comments were received in response to this update. The update can be found at:

- Annexure 5: Project Update July 2019, sent via email on 15 July 2019
- One acknowledgment received from:
 - Ryan Johnson (Murra Bidgee Mullangari) (23/7/19)

Proposed site visit Feb 2020

Another opportunity was created for the RAPs to visit the Project Site and conduct an additional project information session to ensure that all necessary information about the Proposal was provided and enable registered Aboriginal parties to provide information about the cultural significance of Aboriginal object(s) and/or place(s) that may be present within the Project Site.

However, this additional site visit didn't proceed as only one party (Marilyn Carroll-Johnson, Corroboree) expressed an interest, and in the end preferred to discuss the project over the phone on 5/3/2020. These comments are documented below under Stage 4.

3.3 STAGE 4: REVIEW OF ACHAR (OPENED 1 FEBRUARY 2020, CLOSED 6 MARCH 2020)

Stage 4 involved the review of the draft cultural heritage assessment report by the RAPs. This allowed the registered Aboriginal parties to provide input into the ACHAR and confirm that they are satisfied that the consultation requirements have been met. An additional site visit was proposed in February 2020 as no RAPs were able to attend the December 2018 survey to ensure that sufficient opportunities were created to discuss the project, including project methodology on-site. However, this proposed second site visit didn't proceed as the interested RAPs preferred to provide comment via email or phone instead.

Stage 4 was achieved by emailing the draft cultural heritage assessment report to the Registered Aboriginal Parties and the Ngambri LALC on 1 February 2020, and requesting their input. Ngambri LALC subsequently registered their interest and made recommendations regarding the excavated artefacts (see Annexure 6: RAP responses Stage 4). A period of 35 days was initially provided for comment, however this was extended to 46 days.

Consultation Timeline

- 1 Feb 2020 - draft ACHAR sent to RAPs
- 17 March 2020 - closing date for RAP submissions on draft ACHAR (46 days later). This closure date was extended from 6 to 17 March 2020 to allow the Ngambri LALC to register an interest after it was identified during the final review of the ACHAR that initial correspondence with them had not been received.
- 7 March 2020 – RAP submissions incorporated and ACHAR finalised.
 - Four responses were received.
 - 3 Feb 2020: Marilyn Carroll-Johnson – would like to attend site visit, but unable to do so without compensation. I suggested I could visit them at Rouse Hill to discuss the project. I followed up on 28/2/20 with phone call and email, but Marilyn was away for work. Phoned again on 5/3/20 and spoke with Marilyn, who said that the project all seems OK – with the conservation its good on their end. They would like to see a recommendation that a proper secure fence goes up straight away, with photos taken by the archaeologist and sent to the RAPs.
 - 6 Feb 2020: Jesse Johnson – Murugadi, who endorsed the recommendations made in the ACHAR
 - 25 Feb 2020: Ryan Johnson, who endorsed the recommendations made in the ACHAR:

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- 18/3/2020: Ngambri LALC registered an interest and recommended that instead of deposition in the Australian Museum, the artefact management be changed to requirement 26 of the Code of Practice to allow community input into the management of the artefacts.
- March 2020 - submit AHIP application and ACHAR to BCD and provide copies of AHIP and ACHAR to RAPs and Onerwal and Ngambri LALCs.

4 DESCRIPTION OF THE AREA

4.1 INTRODUCTION

Lake George is a large inland lake system located in the Southern Tablelands of NSW. The topography surrounding Lake George is undulating to hilly country, with rolling hills on the eastern side and a prominent fault scarp along the western shore. The Great Dividing Range lies approximately 10km to the east of the lake.

Two of the most significant archaeological landforms around the Lake are relict shorelines and aeolian sand sheets (see **Figure 3**). The relict shorelines are features from past episodes of higher lake levels. These relict shorelines consist of elevated areas within large, flat sand and gravel deposits which make up part of the extensive Quaternary deposits found in the Lake George basin. Two relict shorelines traverse the Study Area. These are shown in **Figure 3** along with the four Aboriginal sites excavated within the Study Area, and five sites excavated nearby by Way.

4.2 GEOLOGY

The geology of the area is shown in **Figure 4**. Geologically the Lake George basin is within the Central and Southern Highlands Fold Belt and contains a mixture of sedimentary, metamorphic and igneous rocks. In the south-eastern area of Lake George the dominant bedrock types are Ordovician sedimentary rocks, Silurian intrusive quartzite, Devonian granite, and Quaternary sediments.

4.3 ENVIRONMENT AND VEGETATION

Before European occupation the vegetation consisted of open forest and woodland with areas of grassland surrounding the creeks. Most of the aeolian and alluvial sand deposits beside the lake would have been covered by dense forest (Lance 2000). **Figure 5** is a painting of the Butmaroo Creek area during the early 1800s.

The Lake George basin is known for its long and detailed sedimentary record which represents millions of years of climate and vegetation changes. Several studies published in the 1970s and 1980s (Coventry 1973; Coventry 1976; Coventry and Walker 1977; Singh and Geissler 1985; Singh et al. 1981) documented the changes in lake levels, precipitation, temperature and environment which have taken place during the Pleistocene and Holocene.

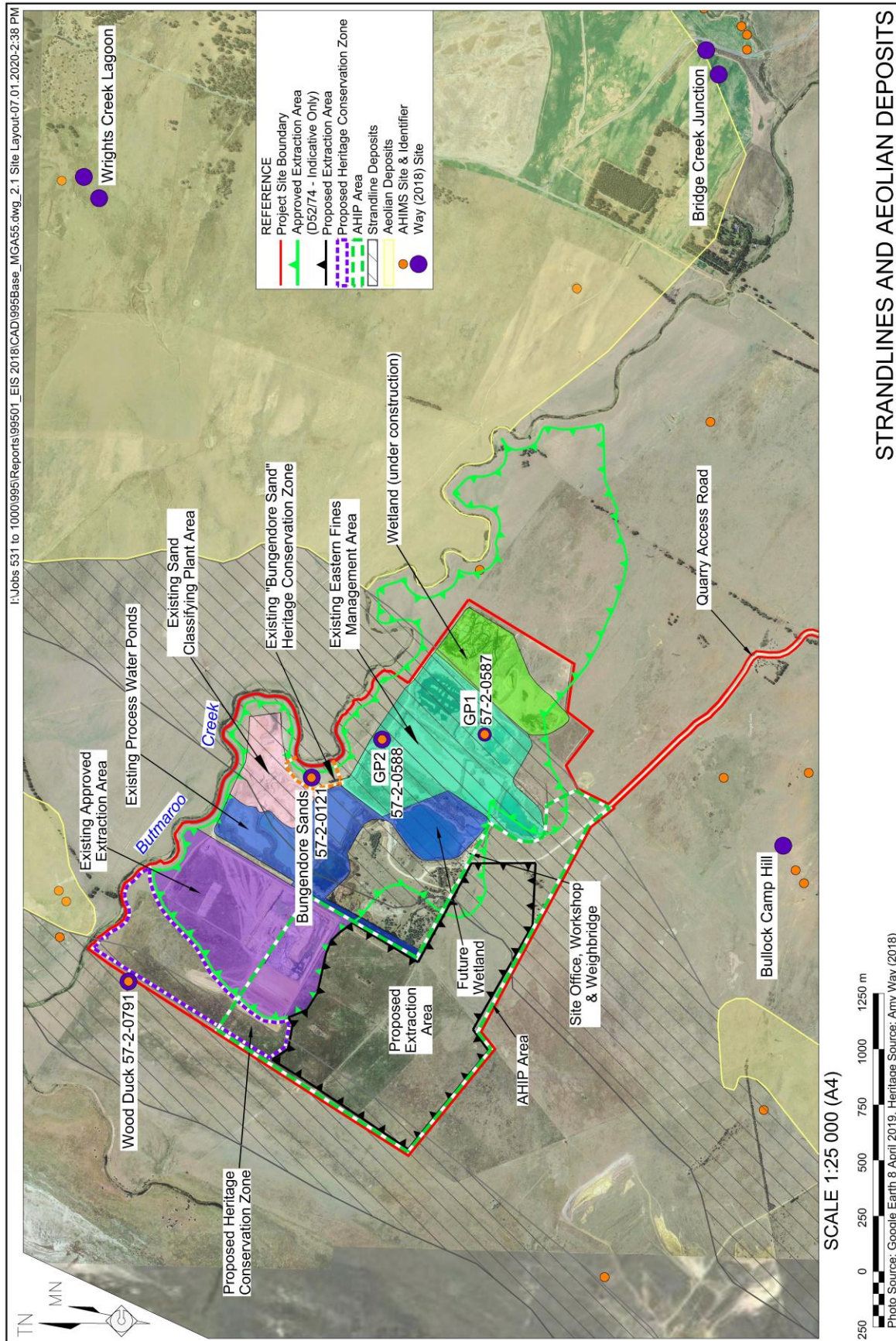


Figure 3 Strandlines and Aeolian Deposits

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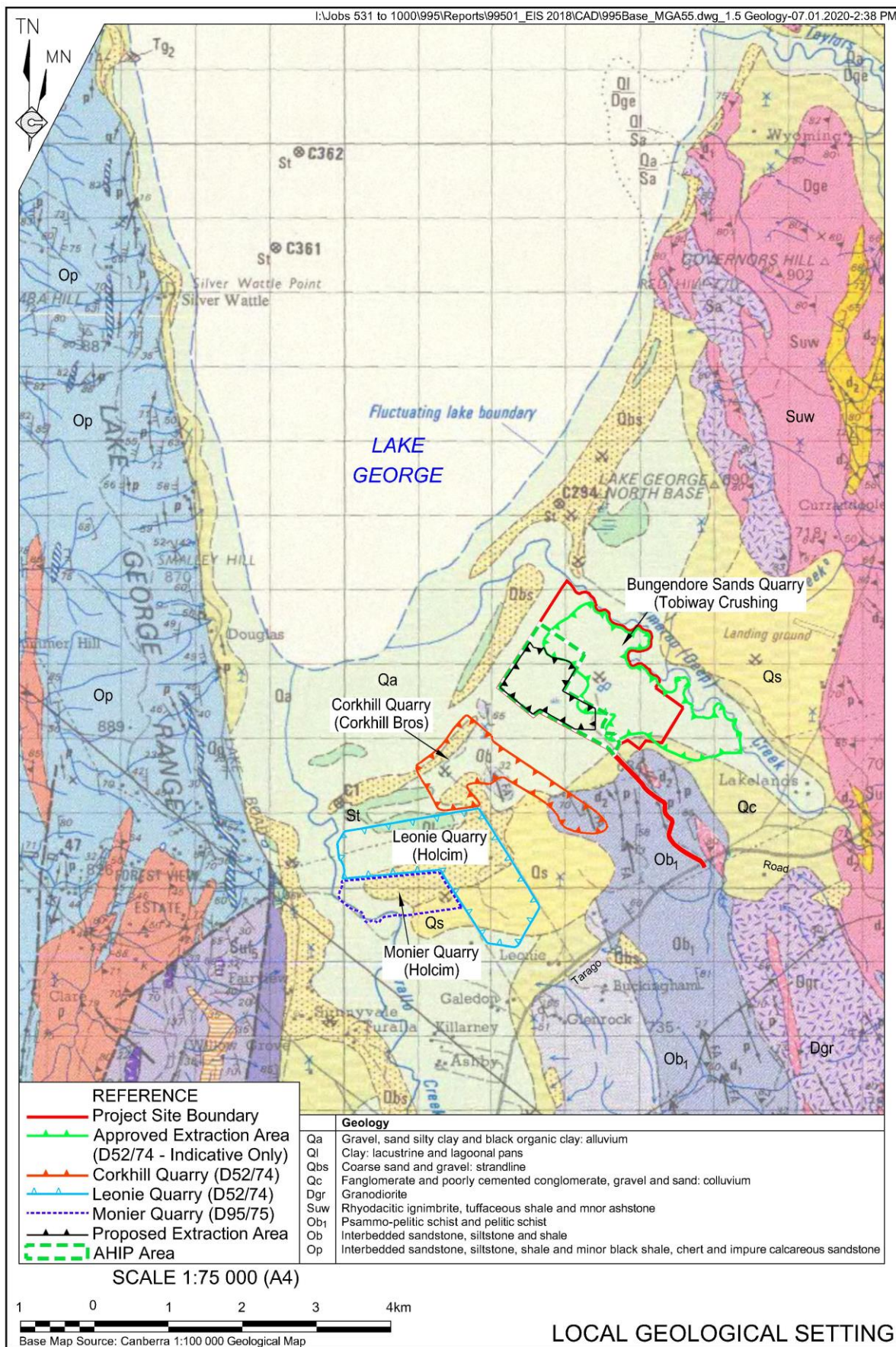


Figure 4 Local Geological Setting



Figure 5 Lance 2009 Fig 4: View from 'Sand Hill' sketched by Abraham Lincolne dating from the period 1838-44. This sketch shows Butmaroo Creek surrounded by forest. Source State Library of NSW.

During the Pleistocene, around 25,000 years ago, when the lake was at its highest, temperatures were at least 3°C lower than present. At the height of the Last Glacial Maximum (LGM), 18,000 to 20,000 years ago the mean annual temperature had dropped by a further 3-6°C, some 6-10°C cooler than modern temperatures (Coventry and Walker 1977).

Following the drier conditions of the Last Glacial Maximum and thinning/removal of the eucalyptus and casuarina dominated forests there was a period of climate stability, during which vegetative cover returned between 18,000 and 14,000 years ago. There was then another period of deforestation and increased aeolian deposition from 14,000 to 6,000 years ago. The forests were not well established again until approximately 5,500 years ago (Nott and Price 1991: 176).

Lake levels have risen and fallen through time in response to climatic and environmental changes. The highest lake level occurred approximately 25,000 years ago, when the lake reached a peak of 37m above lake bottom (710m AHD) (Coventry 1976). The lake experienced another maximum level of approximately 30m above lake bottom (703m AHD) around 7,000 years ago. Subsequently, lake levels have fluctuated within a downward trend (**Figure 6**). The two strandlines within the Study Area were probably formed during the two most recent high-stands within the last 5,000 years.

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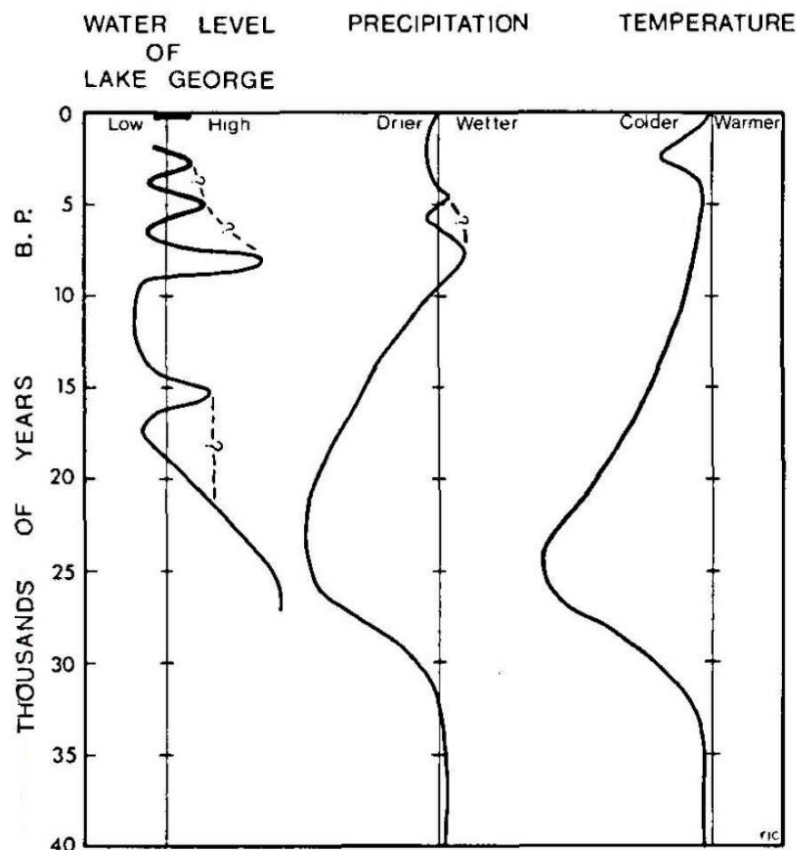


Figure 6 Probable climatic fluctuations over the NSW southern highlands for the period 0 - 40 000 BP

5 ABORIGINAL CULTURAL HERITAGE CONTEXT

5.1 LITERATURE REVIEW

The Lake George area has been occupied for many thousands of years by Aboriginal people. Tindale's (1974) map (**Figure 13**) shows this area as lying within the Ngunawal group's area. Today, the Lake George area is important for many Aboriginal groups and people. Ethnographic reports from the time of first European contact describe the area as abundant in bird and animal life, with many camp fires seen on the hills around the lake. It is likely that the lake supported large groups of people at times, as the area has fresh water and abundant food resources (Cambage 1921:260).

Current archaeological knowledge provides additional evidence for the widespread prehistoric use of the Lake George basin. The archaeology of the Lake George region includes several archaeological studies into the prehistoric occupation and land use patterns of the area, including a PhD thesis (Way 2018b), and many development-driven archaeological investigations by the consulting sector.

Close to 150 Aboriginal sites have been recorded within the Lake George basin, the vast majority of which are open sites. The exposure level of these surface sites is usually limited, although Koettig's (1981) survey recorded several larger, richer surface scatters including C-AB2 (see **Figure 7**), which was later excavated, and C-AB8 Geary's Gap, which was reinvestigated by Kinhill Engineers (1993b). At C-AB8 Geary's Gap two erosional features were observed with higher than average artefact densities of 20 artefacts /m² and 18 artefacts /m². At both sites, the majority of artefacts were chert and silcrete, approximately half of which had been retouched. This is unusual in the Lake George basin, where most surface artefact scatters are dominated by unretouched quartz flakes.

Packard (1986a), in his review of archaeological sites in sand deposits, notes that most sites lie on elevated, flat to gently sloping features close to permanent water (1986a). Packard also notes that aspect and protection from prevailing winds informed site selection. Very few artefacts have been found in flood prone areas, such as the Turallo Creek floodplains (Saunders 2007a, 2007b), waterlogged/low lying areas adjacent to creeks (CHMA 2008) and rocky slopes far from permanent water (Paton 1998).

One rare site type consisting of a dolerite axe quarry was recorded on the Willaroo property, which lies on the eastern side of Lake George, to the north of the Study Area. This was recorded by Isabel McBryde. However, its exact location has not been verified (McBryde and Watchman 1989).

The sites around Lake George which have been excavated and reported are tabulated in **Table 2** below. Three additional Lake Bathurst sites, which lie outside the Lake George basin have been included for comparative purposes. **Table 2** also includes the maximum artefact densities found at these sites as well as the results of radiocarbon dating or estimated dates for the sites. Most of these sites are thought to date to within the last 4,000 years. The oldest site, Butmaroo 1, has been dated to around 6,000 years.

The proliferation of sites in the mid to late Holocene accords with wider regional data, which shows that while evidence of Pleistocene occupation exists in south eastern NSW (Boot 1993, 1994; Flood 1973b; Huys and O'Sullivan 2013; Navin Officer 2003) at all sites in eastern NSW 'the most dramatic increase in artefact accumulation rates occurred in the latter half of the Holocene, usually after 4000 B.P.' (Attenbrow 2004:174).

The artefact densities vary both across sites and within each site, with all sites being characterised by a patchy density distribution. Areas of very high density are often termed 'workshop areas', which are separated by areas of low density or sterility (Koettig 1982; Packard 1992:10).

Four of the sites (BCJ, WCL, BCH and Bungendore Sands/Currandooley) have very high maximum densities, i.e. greater than 200 artefacts/m². These high density sites are located on relict strandlines or aeolian sand deposits. BCJ, WCL and BCH are within 4km of the Study Area and Currandooley/Bungendore Sands is situated within the Study Area. Their location can be seen in **Figure 3**.

The excavated assemblages are all dominated by unretouched quartz flakes, with varying percentages of silcrete, chert and other raw materials present. The average percentage of quartz in the assemblages is approximately 80%, with the range extending from 100% as seen at Buckingham Estate to 58% at Nardoo (for location of sites, see **Figure 7**).

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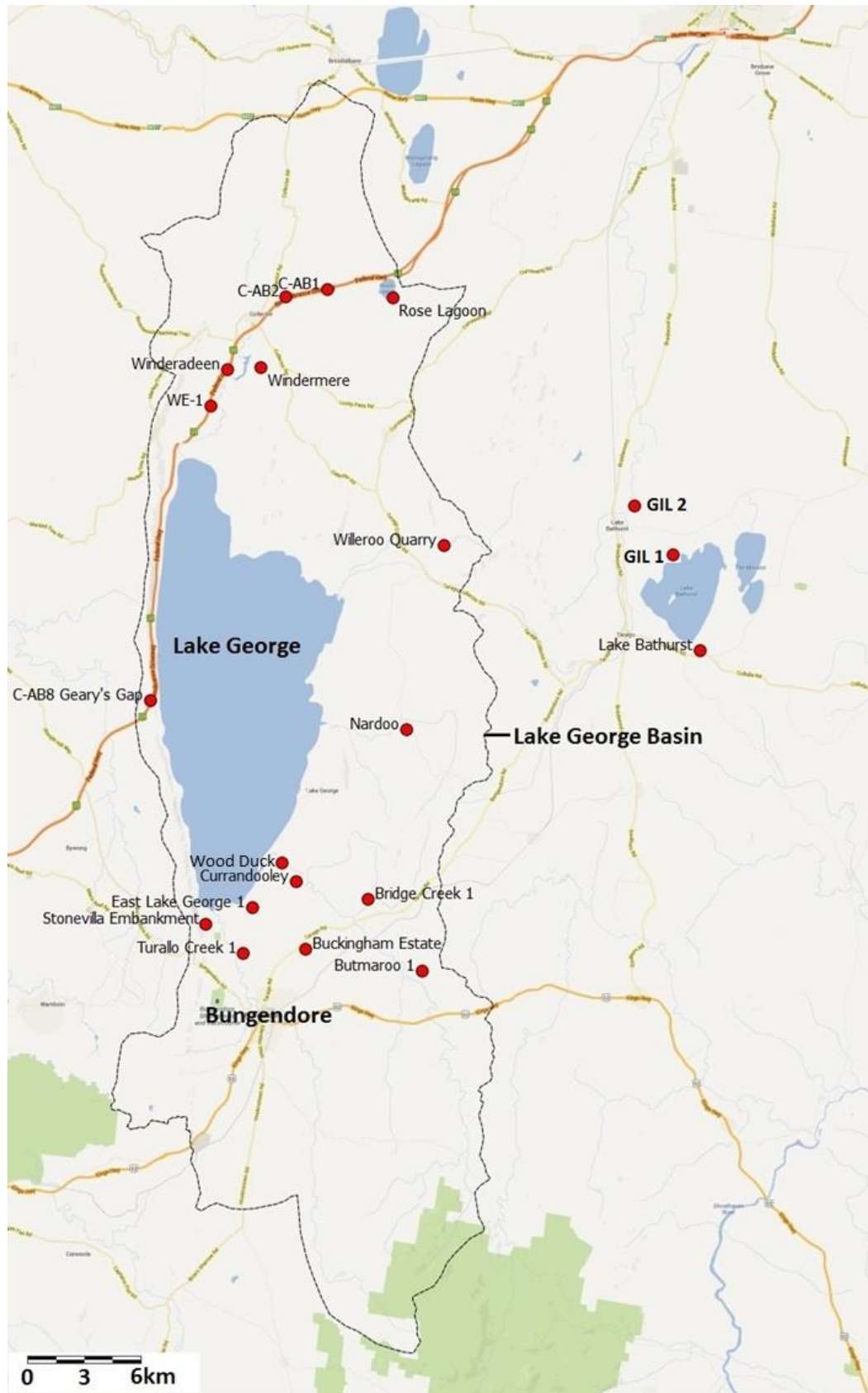


Figure 7 Location of sites discussed in the text

Table 2
Excavated ages and assemblages densities for reported sites near the Study Area

Site Name	Radiocarbon years B.P.	Estimated Age	Comments by Researcher	Max. Assemblage density/m ²	Reference
Bridge Creek Junction (BCJ)	5090±30	5000 years	Highly concentrated, discrete knapping events	2332	(Way 2017, 2018a)
Wright's Creek Lagoon (WCL)	4575±29	5000 years	Many overlapping knapping events through the sequence	1144	(Way 2017, 2018a)
Bullock Camp Hill (BCH)	5480±20	6000 years	Density comes from intensity quartz reduction. Other raw materials lower densities.	3538	(Way 2017, 2018a)
Wood Duck	584±24	3000 years. Hearth dated in upper part of sequence.	Smaller knapping events, many overlapping.	81	Way; (Way 2018a)
Butmaroo 1	Ca. 6000BP			100	(Packard 1986b:9)
Rose Lagoon	1310± 110		Possible hearth feature at 16-25cm depth	416	(ANU-5801) (Packard 1988:12)
Nardoo	760±110		9cm above backed blade	8	(ANU -1060) (Flood 1973a:3)
Bungendore Sands (Curraudooley)	242 ± 38		Spit 6, 24-30cm below surface. Associated with possible hearth	456	(Wk 16051) (Lance 2009a:23)
WE-1		Mid-late Holocene		244	(Kinhill Engineers 1996)
Windermere		less than 1,000 years		132	(Baker and Feary 1984)
SE Site, Lake Bathurst		Holocene		326	(Baker et al. 1984:2; McBryde 1975)
GIL1, Lake Bathurst		Less than 1,000 years	Site badly disturbed	Very low	(Baker et al. 1984)
GIL2, Lake Bathurst			Site badly disturbed	Very low	(Baker et al. 1984)
Turallo Creek		Unable to determine		18	(Stone 1988)
East Lake George 1 (ELG1)		less than 1,000 years		na	(Hughes et al. 1984)
Bridge Creek 1		1,000 - 4,000		300	(Lance 1985) (Packard 1986a, 1992:10).
Buckingham		Less than 1,000 years		90	(Kinhill Engineers 1993a)
C-AB2		Holocene	Small Tool Tradition	700	(Koettig 1982)
C-AB1		Holocene	Small Tool Tradition	16	(Koettig 1982)

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Review of archaeological sites within the Lake George basin suggests that large sites with densities greater than 200 artefacts/m² will be found on well-drained elevated areas close to creeks, wetlands and lake shores. Relict strandlines, alluvial terraces and elevated aeolian sand deposits are the most likely landforms in which these sites will be found.

Two strandlines exist within the Study Area and are known to contain Aboriginal objects. Additional Aboriginal objects are likely to be found on these relict strandlines, with the highest densities predicted to occur nearest to Butmaroo Creek. These objects are most likely to date to within the last 4000 years.

5.2 REGISTERED ABORIGINAL SITES

5.2.1 Regional Sites

A search of the Office of Environment and Heritage Aboriginal Heritage Information Management System (AHIMS) web service shows that 104 Aboriginal sites are recorded in the south-eastern area of Lake George (see **Figure 8**). All of these sites consist of concentrations of stone artefacts. The vast majority of these sites have been documented in response to development applications. As such, they provide a map of where investigations have taken place, rather than a comprehensive map of all sites in the region. In addition, sites are usually only visible in areas of erosion, where the top layer of post-settlement alluvium has been removed by wind or water action. As such, there is potential for many more Aboriginal objects within the Lake George landscape.

5.2.2 Study Area Sites

5.2.2.1 Introduction

An AHIMS search of the Study Area on 6 December 2018 identified 4 sites within the Study Area (see **Figure 8**). These are listed in Error! Reference source not found..

Table 3
AHIMS sites within the Study Area

AHIMS	Easting ¹	Northing ¹
57-2-0791 – Wood Duck PAD 1 (recorded by Amy Way)	723000	6104200
57-2-0121 – Bungendore Sands (recorded by Paul Packard, excavated by Allan Lance)	723800	6103400
57-2-0587 – Grantham Park 1 (Recorded by Robert Paton, CHMA)	724110	6102598
57-2-0588 – Grantham Park 2 (Recorded by Robert Paton CHMA)	724088	6103059
Note 1: GDA94, MGA zone 55		

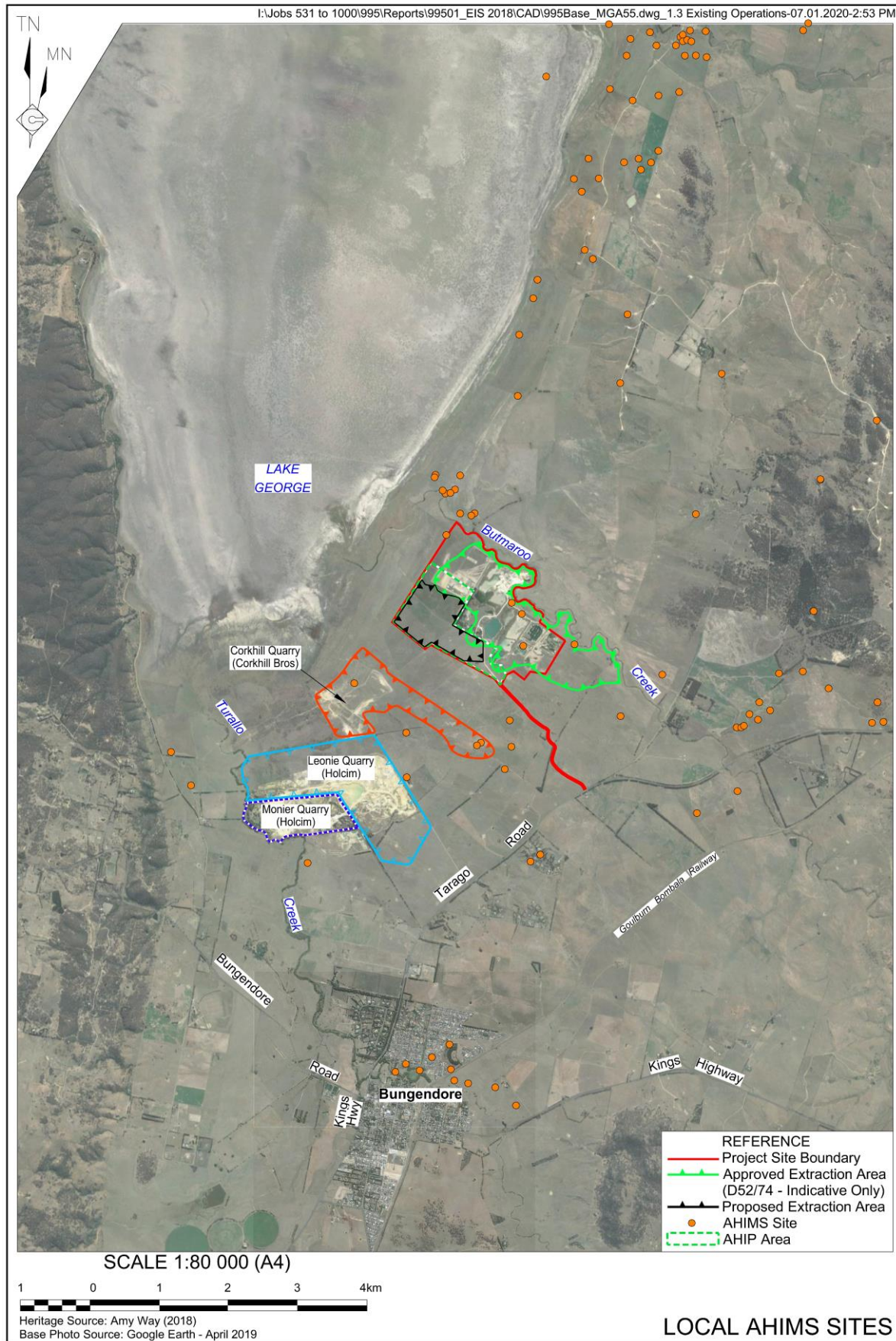


Figure 8

Local AHIMS Sites

5.2.2.2 Site 57-2-0791 – Wood Duck PAD 1

This site was excavated by Way over two seasons (2015 and 2018) and consists of a concentration of sub-surface stone artefacts located on the Wood Duck strandline (shown in **Figure 3**). This strandline is separated by a low-lying flood prone area from the Bungendore Sands strandline approximately 1km to the east.

Two open-air excavations (Pit 61 and M22) were conducted after a season of test-pitting. The three points of Site 57-2-0791 shown in **Figure 3** consist of the central point of the test-pits and the two open-air excavations. The archaeological deposit was excavated by hand in 5cm spits and all material was screened through a 3mm sieve. The Pit 61 excavation measured 12.75m². A total of 789 artefacts were recovered. The artefacts included an axe blank, two grinding stone fragments, 3 hammerstones and multiple backed artefacts. Excavation M22 measured 15.5m² and recovered 1,463 artefacts. This excavation uncovered a rich concentration of chert artefacts, including evidence for the on-site manufacture of backed artefacts.

The stratigraphy of the sites was similar at both, sharing an upper layer of charcoal rich soil within the first 200 mm, thought to be caused by European burning and land clearing. The site mainly consisted of fine fluvial aeolian sand from 350 mm depth, which continued until a depth of 550 – 600 mm. At this depth, the sand became very compact, iron stained and clay like. The excavations reached a depth of 650 – 700 mm.

5.2.2.3 Site 57-2-0121 – Bungendore Sands

This site is located in Lot 31, DP 634213. The Bungendore Sands Conservation Area preserves part of this site (see **Figure 3**). The site was first excavated in 1992 by Paul Packard who dug 11 mechanical test-pits. The location of Packard and Lance's investigations are shown in **Figure 9**. Allan Lance then conducted an extensive investigation yielding more than 5,000 artefacts, centred on Packard's densest pit (Lance 2009a).

The highest artefact densities were found on the slightly elevated sandy ground near Butmaroo Creek. The lowest densities were in the areas furthest from the creek where the sand body was shallowest (Packard 1992). All of the artefacts were found in the upper aeolian sand deposit to the depth of 100cm, although most of the artefacts came from 20-45cm below the surface. The artefact bearing sands overlay sandy clay and gravels originating from aeolian, lacustrine and riverine deposition. A small number of artefacts were found at the junction of the aeolian unit and the underlying clay unit. The lower clay unit was examined for artefacts, but none were found (Lance 2009a:23)

Lance hand excavated two trenches (T1 and T2) in 50cm x 50cm squares in 5cm spits, which began at Packard's densest pit, Test-pit 1. The end of Trench 2 was opened up to a 3 x 4m excavation (T2e) (Lance 2009a, 2009b). A third trench was later excavated mechanically to the northwest of trenches 1 and 2. This archaeological deposit was removed in bulk and wet sieved.

There was a shortage of datable material (Lance 2009a:15) at the site, and only two dates were obtained. These came from the southern end of T2, where charcoal was found in Spit 2 (5-10cm below surface) and spit 6 (24-30cm). This charcoal dated to 126±32BP and 242±38BP respectively (Lance 2009a:23-24). The charcoal in spit 6 was associated with burnt heat retainers, which Lance suggests may signify that the charcoal originated in an Aboriginal hearth (Lance 2009a:24).

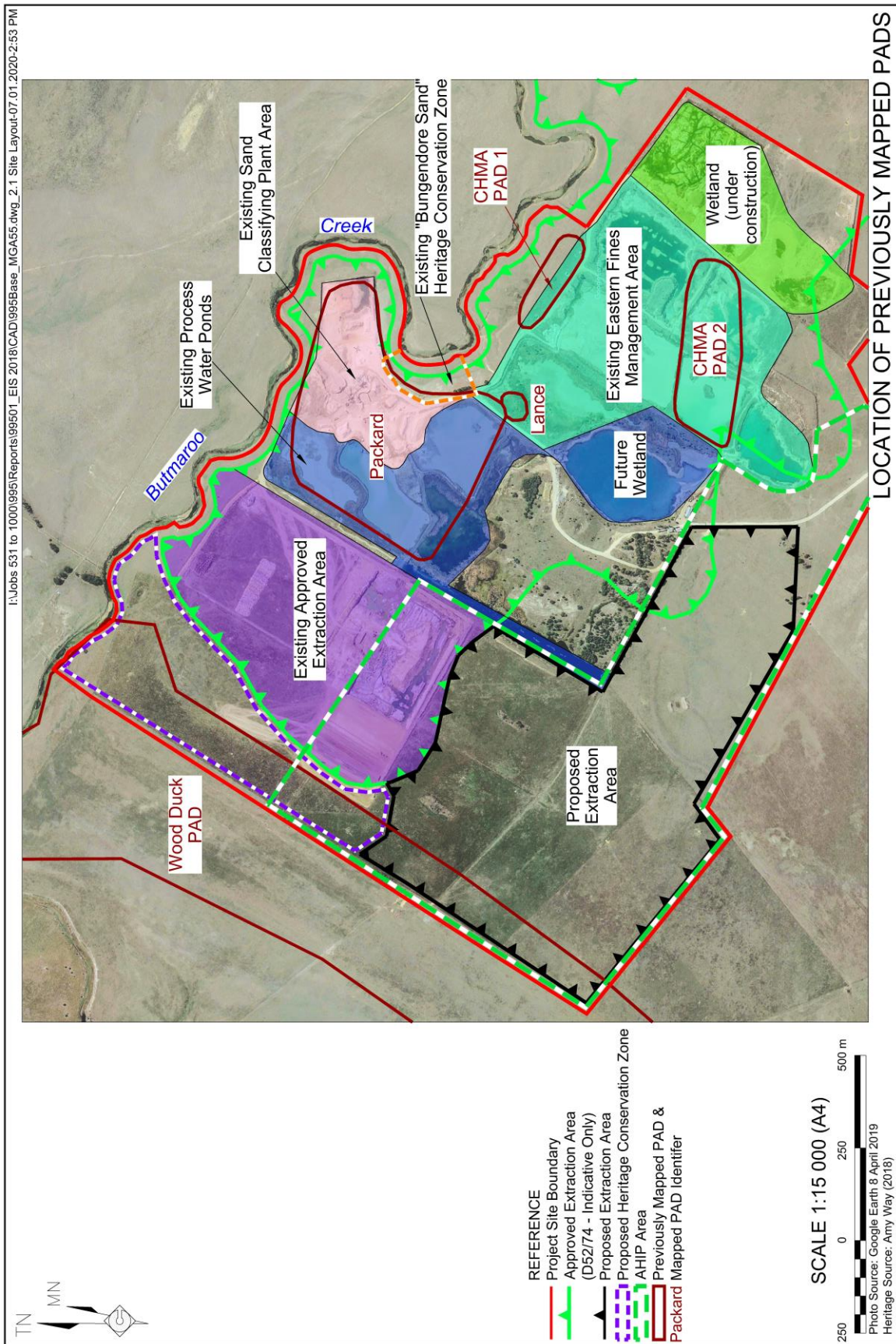


Figure 9

Location of Previously Mapped PADS

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Over 5000 artefacts were found. Quartz was the dominant raw material, followed by silcrete (13.2% - 749 pieces). Other materials included FGS (fine grained stone) and quartzite. Fifty-four backed artefacts were found on a range of raw materials, but predominantly on silcrete. Several 'workshops' were discernible from the clustering of artefacts made from the same raw material. Possible hearth stones were also discovered, as well as five grinding stones (Lance 2009a:53).

In addition, Way excavated four pits at this site in 2015 to recover datable material. This was achieved, with an in-situ hearth located at a depth of 30-35cm. The charcoal was sent to Waikato (Wk# 45286) and returned a date of 378 +/- 15 BP. A full summary of this work can be found in (Way 2015).

Table 4
Summary of investigations at AHIMS Site 57-2-0121 Bungendore Sands

Investigator	No. of Pits	Site Type	Maximum Density of Artefacts /m ²
Packard	8	Stone artefacts	65
Lance	Open-air excavation (39m ²)	Stone artefacts and hearth material	456
Way (2015)	4	Stone artefacts and hearth material	416

5.2.2.4 Sites 57-2-0587 and 57-2-0588 – Grantham Park 1 and Grantham Park 2

The area containing AHIMS sites 57-2-0587 and 57-2-0588 was investigated by CHMA in 2008. CHMA recoded two PADs, Grantham Park 1 and Grantham Park 2. PAD2 has been destroyed, but the creek-side margin of PAD 1 remains (see **Figure 9**). Both PADs consisted of slightly elevated areas on the Bungendore Sands Strandline. CHMA investigated the PADs as well as the low-lying areas around the PADs, recovering 95 artefacts from 6 of the 23 test pits. All the artefacts were located at GP1 (AHIMS 57-2-0587) (10 artefacts) or GP2 (AHIMS 57-2-0588) (84 artefacts), except for one artefact located on the banks of Butmaroo Creek (GP3). No artefacts were found in the low-lying flood prone areas.

CHMA assessed AHIMS 57-2-0587 as having low significance and AHIMS 57-2-0588 as having moderate significance (CHMA 2008:36). However Way (2017) has demonstrated that widely spaced test-pits, such as those used by CHMA which were spaced at 20-40m intervals, have a very low probability of detecting artefact concentrations in this landscape (<2%). CHMA test-pits therefore probably failed to detect c.98% of the artefactual material in the Study Area. As such, this significance assessment cannot be considered accurate. This is demonstrated by the quality of the assemblage recovered by Lance in the same sand body using a thorough method of investigation.

6 SURVEY RESULTS

Survey was conducted in accordance with Requirements 9 and 10 of the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (OEH 2010).

The Code specifies that the purpose of the archaeological survey (sometimes called a field survey) is to record all (or a representative sample of all) the material traces and evidence of Aboriginal land use that are:

- visible at or on the ground surface, or
- exposed in sections or visible as features (e.g. rock shelters, rock art, scar trees)

and to identify those areas where it can be inferred that, although not visible, material traces or evidence of Aboriginal land use have a likelihood of being present under the ground surface (potential archaeological deposits).

The site survey for the Proposal was undertaken in December 2018. The purpose of the survey phase was to locate and map any additional PADs within the AHIP Area, identify prospective sites for salvage excavation and identify any surface artefacts. The RAPs were invited to attend the survey, however no RAPs attended, and the survey was completed by Amy Way.

The survey area (shown in Error! Reference source not found.) consists of the area consulted on for archaeological salvage. The elevated areas and non-vegetated areas within the survey area were inspected on foot. In the elevated areas, ten metre transects were walked. The rest of the area was driven over to locate non-vegetated areas. Several non-vegetated areas were located, which predominantly consisted of tracks and small areas of disturbance. These were closely inspected on foot. The areas inspected on foot are shown in hatch in Error! Reference source not found..

No artefacts were seen on the surface, which is considered normal in this landscape which has a deposition of up to 200mm of post-settlement sand.

Two PADs were recorded during the survey (see Error! Reference source not found.). PAD 1: Wood Duck South consists of the south-eastern end of the Wood Duck site and is a continuation of the same strandline. This feature is not as pronounced as in the northern, Butmaroo Creek end of the strandline (see **Figure 11**). Salvage excavation in this area would provide a good comparative study for the Wood Duck site and explore occupational patterns further from the creek.

The second PAD: Currandooley South (**Figure 12**) consists of an elevated area near the entrance to the existing quarry. This area is marked by the growth of several trees, which have survived past floods through their slightly elevated position. This area is approximately 1km south of the excavation conducted by Allan Lance. Excavation in this area could provide an excellent comparative assemblage for the Lance collection.

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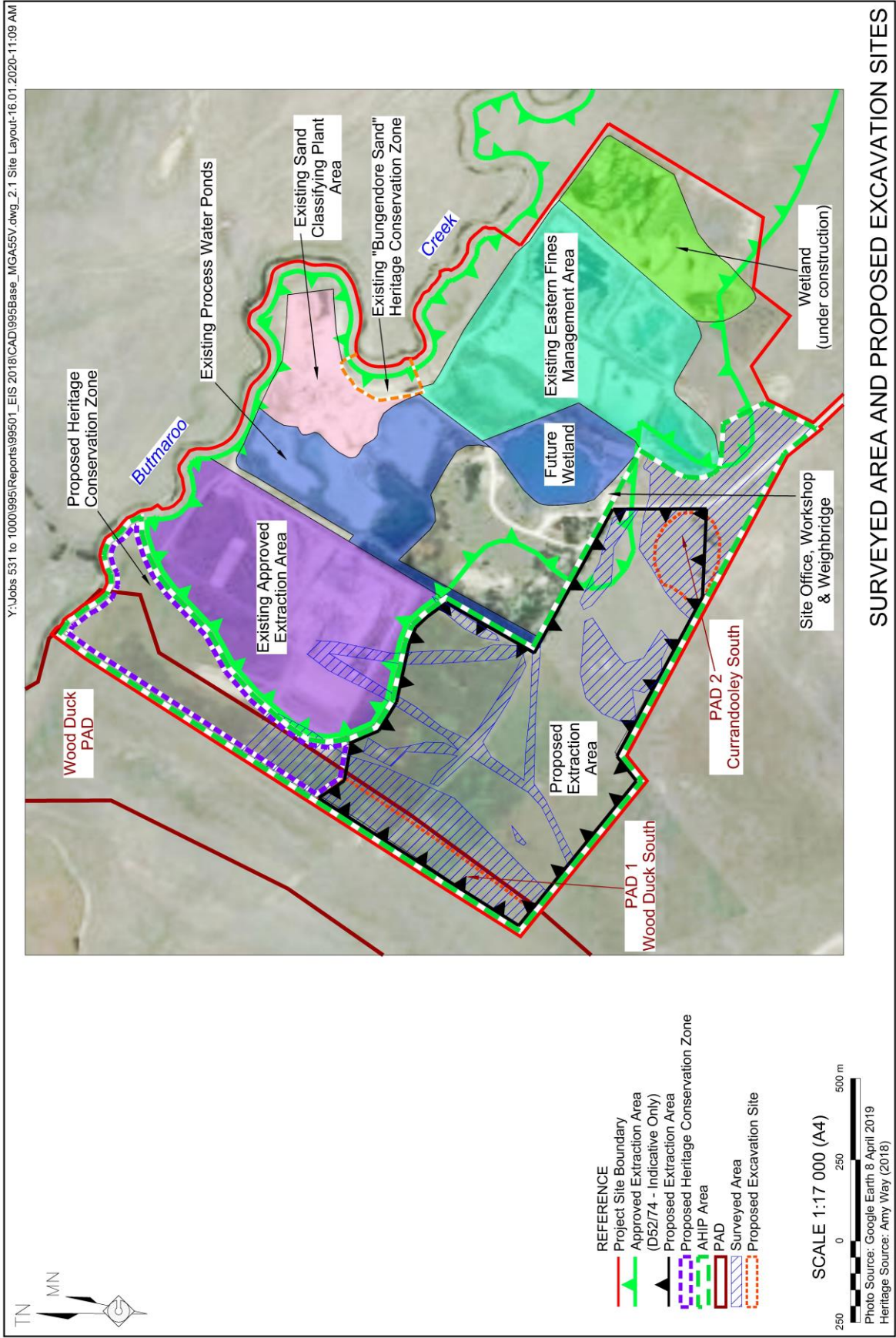




Figure 11 PAD 1 - Wood Duck strandline, looking south across the PAD



Figure 12 PAD 2 - CUR South. Looking south-east across the PAD towards the remnant trees. The dust shows the location of the road.

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The record and analysis of survey coverage are presented in **Tables 5** and **6** below. **Table 5** documents the conditions present during the survey to assess the effectiveness of the survey, with an independent description of visibility and exposure described for each survey unit. This includes an estimate of the effectiveness of the survey. **Table 6** provides a summary of the effectiveness of the survey within each landform. The effective coverage area is the percentage of bare ground in the survey unit, which in this landscape is principally produced by the removal of vegetation through cattle and vehicle movement. This should not be considered to provide visibility in this landscape which is covered in up to 200mm of post-settlement sand/soil which has been shown to obscure archaeological material even when the vegetation has been removed.

Table 5
Survey Coverage

Survey Unit	Landform	Survey unit	Visibility %	Exposure %	Effective coverage area	Effective coverage %
PAD 1: Wood Duck South	Strandline	4 ha	<1%	0%	100m ²	<1%
PAD 2: Currandooley South	Strandline	3 ha	<1%	0%	50m ²	<1%
Low lying area	Low lying area between strandlines	0.2ha	<1%	0%	50m ²	<1%

Table 6
Landform summary – sampled areas

Landform	Landform area	Area effectively surveyed	% of landform effectively surveyed	Number of sites	Number of artefacts or features
Strandlines	7 ha	100%	<1%	0	0
Low lying areas	45 ha	10%	<1%	0	0

6.1 CULTURAL HERITAGE VALUES AND STATEMENT OF SIGNIFICANCE

The Lake George area is the traditional country of several Aboriginal groups (**Figure 13**). This region holds high cultural significance for these groups who continue to have cultural connections to the Lake George region. No known Aboriginal places have been registered within the Study Area or identified during the community consultation process. However, Aboriginal objects of cultural value are known to exist in the Wood Duck archaeological site and an assessment will be made regarding the likelihood that these values will be affected by the Proposal.

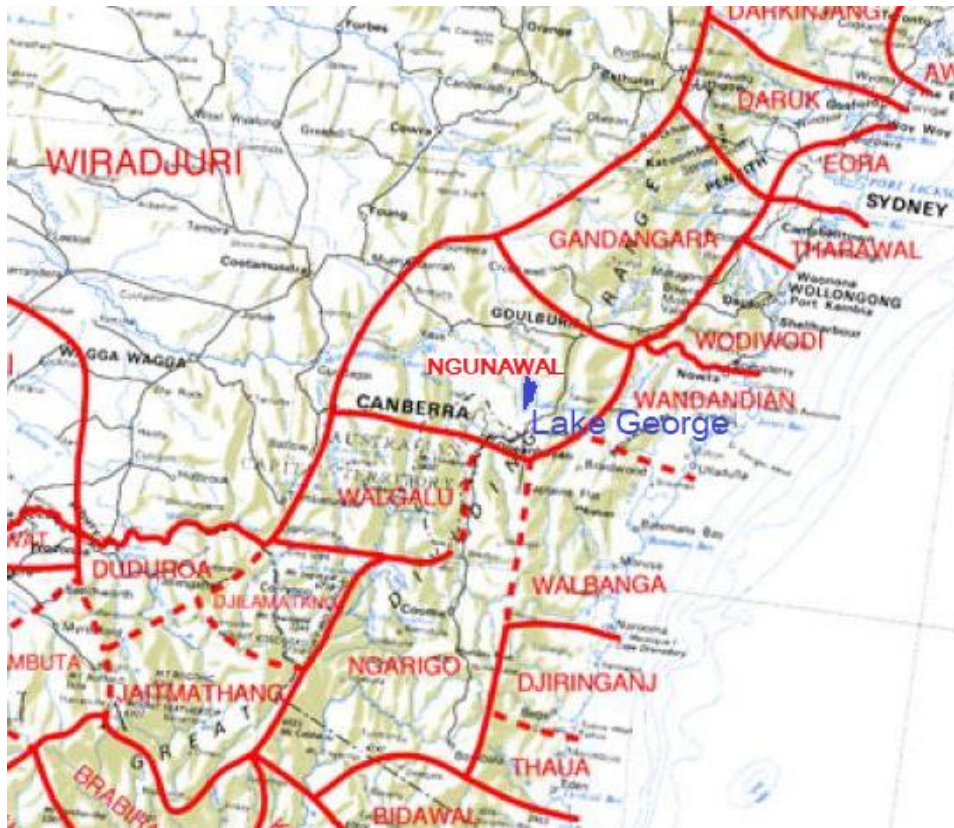


Figure 13 Excerpt from Tindale's 1974 map of tribal boundaries in Australia, showing Lake George within the Ngunawal boundary

Aboriginal people have lived in the Lake George area for many thousands of years. Tindale's 1974 map of the tribal boundaries of Australia shows Lake George within the Ngunawal group's boundaries, and the Ngunawal people today continue to identify with this area. Early European explorations into the Lake George in the early 1800s document the lake by its Aboriginal name of 'Wee-ree-waa'. Charles Throsby and his party in 1820 note numerous fires from 'the natives' on the hills around the lake. The lake was then full of water, and the explorers report seen abundant bird and animal life. The Aboriginal practice of burning was also noted (Cambage 1921:260).

Lake George is important socially as a meeting place for Aboriginal people (Barrow 2012). Arnold Williams, of the Ngunnawal Land Council, is quoted in Barrows (2012:10) as saying that they'd like to claim the land around Lake George back 'as a sacred site. We don't know much about it but we know from the old people that it used to be a significant place'. Personal stories about mission and reserve life for many Ngunnawal members can be found in *Stories of the Ngunnawal* (Brown 2007).

During the consultation period it was confirmed that the cultural importance of Lake George area remains very high. At the site meeting conducted for Way's PhD research on 12 Sep 2014, the RAPs present said that the whole of the Lake George basin and surrounding area is very important to them. They said that the sand bodies likely contain many artefacts, which are of high cultural significance to them, and the possibility of human burials. This significance was re-affirmed during Stages 2 and 3 of the consultation process conducted for this project.

6.2 ARCHAEOLOGICAL AND SCIENTIFIC SIGNIFICANCE

Lake George is an archaeologically significant area. The extensive aeolian sand sheets and strandline deposits are some of the few landforms in the region which contain rich, dense and stratified archaeological deposits (Attenbrow 1984; Packard 1986a).

Lake George is also a significant area for climate science. 'The site contains the longest relatively continuous Pleistocene and Holocene continental sequence of pollen, spore, algal and charcoal particles known in Australia. These fossils provide crucial information on vegetation changes (particularly plant migrations and extinctions) and climate changes during glacial-interglacial cycles. This information enables reconstruction of the Pleistocene-Holocene biogeographic, environmental and climate history of the wider region' (Australian Heritage Fossil Sites, in press).

Tobiway Pty Ltd have been funding and assisting climate scientists and archaeologists on the ARC linkage project LP140100911 (2014-2017) to study the climatic evolution and human occupation history of Lake George. It is envisioned that the proposed sand extraction extension works will further facilitate the study of climate records by providing additional deep sections.

6.2.1 Sites Condition Report: Wood Duck (57-2-0791)

The site within the AHIP boundary, Wood Duck, is in very good condition. The post-settlement layer of sand, which is approximately 20 cm deep has served to protect this site from contemporary activities such as clearing, ploughing and other pastoral activities. Across the Study Area the upper layer of the deposit is expected to consist of a continuation of this post-European cap of sand. This serves to protect the Aboriginal archaeological sites. Modern farming practices rarely penetrate below the cap and so have had little effect on the integrity of the deposit.

During the Wood Duck excavation, Way (2018a, 2018b) reported excellent preservation in terms of lateral positioning of artefacts. Lateral integrity was demonstrated through piece plotting and refitting (Way 2018a). However, some low levels of vertical disturbance, as evidenced by small European artefacts such as plastic, nails and glass within the top 15cm of the excavation, as well as the vertical dispersal of artefacts through the sand body over time were noted. In addition, bioturbation attributed to small animals, such as ants, white curl grubs, beetles and worms as well as rootlets was also noted (Way 2018b). This does not reduce the significance of the site; however, it does influence the resolution of the dating. This pattern of excellent lateral integrity combined with vertical artefact migration is expected to continue across the Study Area.

The biggest natural threat to the condition of the site comes from burrowing animals, principally wombats and rabbits. In addition, there are small areas which have been eroded, primarily along tracks and where sand mining scrapes have occurred. As such, it is recommended that future excavations avoid areas where burrowing activity/erosional activities are present. Outside these isolated pockets of disturbance, the two strandlines within the Study Area are in good condition and hold a high probability of containing Aboriginal archaeological material.

The two PADs identified during the survey phase of this assessment (see Error! Reference source not found.) are considered to be in very good condition with a very high probability of containing Aboriginal objects. It is expected that this material will retain good lateral integrity and poor vertical integrity as seen in the other Lake George sites.

7 HISTORIC HERITAGE

Six European heritage sites have been recorded in the Lake George district (Plowman 2009). These are listed in **Table 7** and **Figure 14**. In addition, the former Currandooley homestead, which is a stone ruin, lies on the southern side of Butmaroo Creek (725300E, 6102500N) at a distance of approximately 1km from the Study Area.

All these sites are outside the Study Area and no archaeological investigations or development works are planned that would infringe on any of these historical sites.

Table 7
European Historical Sites in the Lake George district

Historical site	Address	Historical significance
Ashby	175 Tarago Road, Bungendore	State
Currandooley	Currandooley Road, Bungendore	State
Turalla	Bungendore	State
Winderadeen	5178 Federal Highway, Collector	State
Werriwa	660 Tarago Road, Bungendore	Local
Douglas	565 Lake Road, Bungendore	Local

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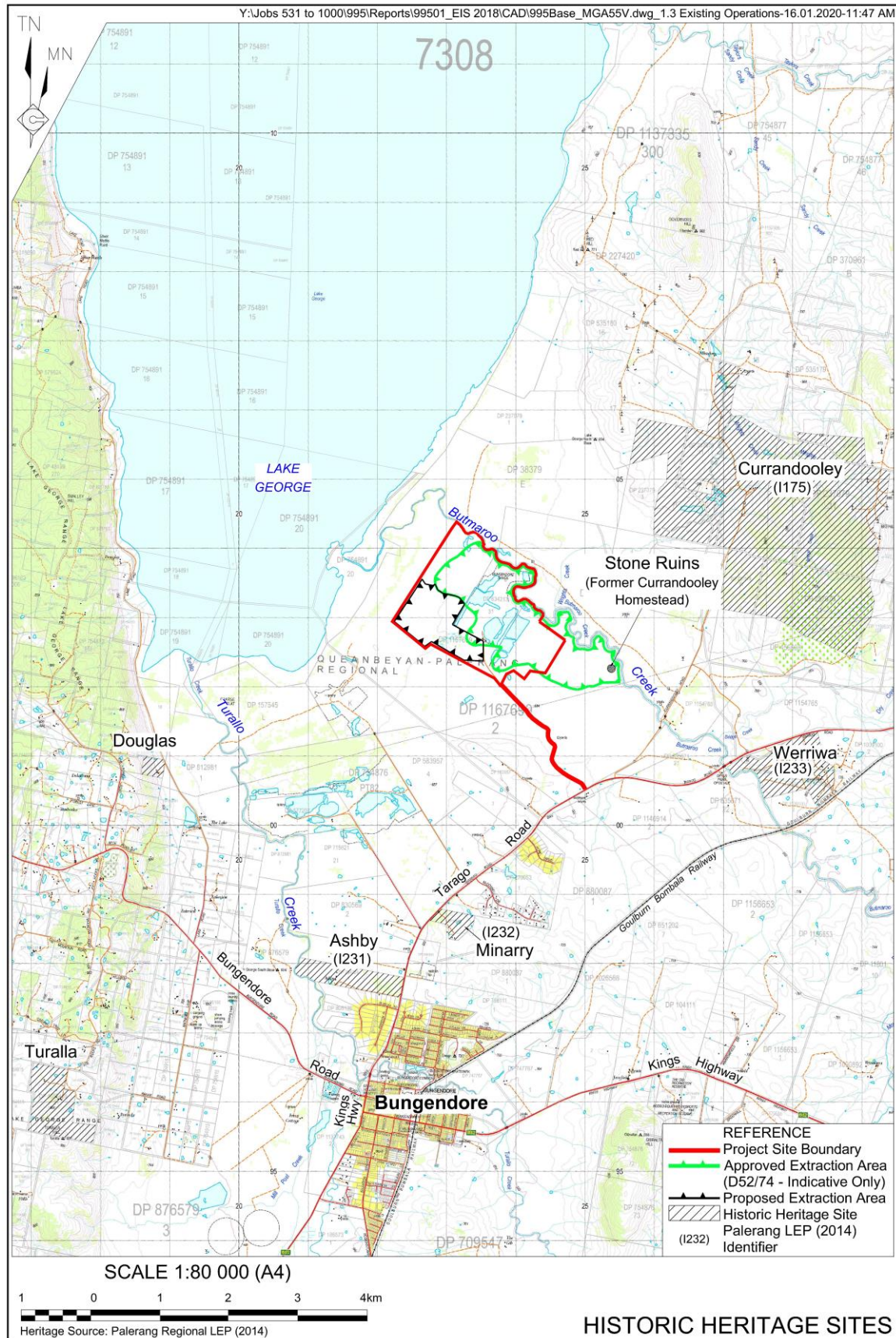


Figure 14 Historic Heritage Sites

8 MITIGATION MEASURES

As the Proposal involves the removal of the sand and archaeological resource within the AHIP Area, three forms of mitigation are recommended:

1. Establishment of a Conservation Area encompassing the known Aboriginal site “Wood Duck” and the northern end of the associated strandline,
2. Conservation by record (salvage excavation) in the area where sand extraction is expected to occur. Two areas within the proposed extraction zone are proposed for archaeological salvage.
3. Community collection of artefacts during sand stripping.

8.1 CONSERVATION AREA

The establishment of a Conservation Area encompassing the known Aboriginal site “Wood Duck” and the associated strandline (see Error! Reference source not found. for location of potential Conservation Area) will occur in two stages:

Stage 1: Immediate fencing of the Conservation Area

The perimeter of the Conservation Area, as indicated in **Figure 10**, should be fenced. The fence should be signposted to indicate that it is a Heritage Conservation Area and that ground disturbing activities should not occur within the Conservation Area.

Normal non-invasive farming practices such as grazing, weed-spraying and seed casting can continue within the Conservation Area.

Stage 2: Legal protection in perpetuity

Ensure that the Wood Duck Conservation Area is protected in perpetuity through a suitable arrangement such as Deed or similar.

8.2 SALVAGE

The methodology for this mitigation measure is divided into three stages:

1. survey (completed December 2018)
2. salvage excavation (to be completed after the AHIP is issued), and
3. RAP salvage of artefacts during sand stripping for development works (see Section 8.3).

Due to the clustered distribution of Aboriginal objects in this landscape, it is recommended that the salvage excavation be staged to maximise the recovery of Aboriginal objects.

8.2.1 Salvage Stage 1: Initiation

The method for the salvage program consists of a staged approach designed to maximize the recovery of Aboriginal objects and features. Artefacts are not visible on the surface of this landscape due to post-depositional processes, however they are known to occur subsurface in a clustered distribution. Staging of the salvage program permits the salvage to be best positioned within each PAD. Stage 1 consists of grids of up to 50 exploratory pits to identify the location of subsurface materials and thus best position the salvage within each PAD. These positioning pits, which are envisaged to be completed within two days, will cease to be dug when a suitable feature is found, thus triggering the shift to Stage 2 of the salvage program.

Suitable features include:

- Knapping floor debitage
- Tool discard
- Variety of raw materials
- Artefacts at multiple depths
- Grinding stone or axe fragments
- Hearth material – this is considered the most significant feature

The location of the exploratory pits will be determined by the archaeologist on site, but will only fall within the two identified PAD areas. In order to maximise their effectiveness, the exploratory pits will be positioned in a hexagonally offset grid at a spacing of 5m. They will measure 50cm x 50cm and be dug with shovels and trowels in 5cm spits as this has been identified as the most effective of the various subsurface sampling strategies for 'seeing' beneath the surface (Burke et al. 2009:140). The sub-surface stratigraphic profile will then be inspected. The archaeological deposit will be sieved on site, using 3mm sieves.

8.2.2 Salvage stage 2: Expansion

The second stage of the staged salvage program consists of an expansion of the salvage. During Stage 2, the two initiation pits identified in Stage 1 as containing the highest number of features, with in-situ hearth material forming the most significant feature will be expanded. The aim of the Stage 2 expansion is to collect sufficient material to examine foraging strategies, as well as spatial and temporal changes in technologies.

The proposed salvage excavation will employ current best practices in excavation (Burke et al. 2009). Excavation will consist of the digging of 50cmx50cm pits in 5cm spits using trowel and shovel. All material will be sieved through a 3mm screen, with the option to add a 1mm screen. The archaeological excavation director will determine the direction of the excavation, with the aim being to recover entire features as well as sterile areas between features. A minimum of 50m² should be excavated at each PAD.

Following the completion of the salvage:

- A report will be submitted to BCD which summarises the results of the excavation

8.2.3 Artefact Storage

Long term management of certain Aboriginal objects will comply with 'Requirement 26 – Stone artefact disposition and storage' of the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales.

Temporary Storage: The temporary storage location is as follows:

Location Name:	The University of Sydney or the Australian Museum
Address:	The Archaeology Lab, The University of Sydney, Camperdown Campus, Sydney NSW 2006; 1 William St Sydney NSW 2010
Storage particulars:	In a locked room.

8.3 RAP ARTEFACT COLLECTION DURING SAND STRIPPING

The proposed development works will initially involve the stripping of the vegetation. This has the potential to reveal sub-surface artefacts. The RAPs will be provided with the opportunity to attend the vegetation stripping and should they wish, to collect any Aboriginal objects which are found. Should objects be found, these will then be permanently housed with the LALC or added to the excavated assemblage for long term management.

9 UNANTICIPATED FINDS PROTOCOL

The following presents the unanticipated finds protocol to be implemented in the event that an object of suspected Aboriginal origin is observed during sand mining operations. This protocol targets large Aboriginal objects such as axe heads and grinding stones. Chipped stone artefacts are difficult to identify, particularly from the height of an excavator, and are not expected to be identified. Their destruction will be allowed for in the AHIP application. Human remains are covered separately in the Recommendations.

Should a large Aboriginal object be uncovered **during excavation operations**:

1. All ground surface disturbance in the area of the find(s) will cease immediately and the site supervisor will be informed.
2. The following authorities or personnel will be immediately notified of the discovery:
 - a) Relevant Aboriginal Community Representatives
 - b) The archaeological director
3. The following measures will be facilitated, in co-operation with the RAPs and/or archaeological director:
 - a) The recording and assessment of the finds;
 - b) The salvage of the object(s) and repatriation of the object(s) to the lake George archaeological collection or an alternative site identified as appropriate by the RAPs and archaeological director.

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Bungendore Sands Extension Project

4. Re-commencement of ground disturbing works may only resume after the opportunity for in-situ observation and collection has been provided to the RAPs or archaeological director.

Should a large or small Aboriginal object be identified **out of context**:

1. Should any Aboriginal object (this includes all Aboriginal objects such as small stone artefacts as well as large finds) be identified post-excavation and outside the original context, the following authorities or personnel will be notified of the discovery:
 - a) Relevant Aboriginal Community Representatives
 - b) The archaeological director
2. The following measures will be facilitated, in co-operation with the RAPs and/or archaeological director:
 - a) The recording and assessment of the finds;
 - b) The salvage of the object(s) and repatriation of the object(s) to the lake George archaeological collection or an alternative site identified as appropriate by the RAPs and archaeological director.

10 SUMMARY OF PROPOSED ACTIVITIES

10.1 DEVELOPMENT WORKS – SAND EXTRACTION

The Proposal consists of an extension to the existing Bungendore Sands Quarry. The Applicant is seeking development consent from Queanbeyan – Palerang Regional Council (QPRC) to extend the sand extraction area on a section of Lot 1 DP1167699.

10.2 ARCHAEOLOGICAL WORKS

- Staged salvage excavation program in each in the two identified PADS
Two salvage excavations will be conducted, one in each PAD. These will be conducted in a staged program to ensure the recovery of Aboriginal objects and the highest number of features, with in-situ hearth material forming the most significant feature, recovered and recorded. A minimum of 50m² should be excavated at each PAD.
- RAP collection of artefacts during sand stripping
During initial vegetation clearance and sand-stripping for the commencement of quarrying activities, the RAPs will be provided with the opportunity to collect any artefacts which are exposed. These will become the property of, and be housed with the LALC or added to the excavated assemblage for long term management.

10.3 ESTABLISHMENT OF A CONSERVATION AREA

A Conservation Area encompassing the known Aboriginal site “Wood Duck” and the associated northern section of the strandline will be created. This will involve immediate fencing and signposting of the Conservation Area, followed by the creation of a legal framework to protect it in perpetuity.

10.4 CONSULTATION SUMMARY

- **Stage 1 Consultation Timeline, Nov 2018**
 - Stage 1 Notification letter 4.1.2 sent 13 November 2018 (see Annexure 1)
 - Stage 1 Notification letter 4.1.3 sent on 22 & 23 Nov 2018 (closing date 12 Dec 2018) (see Annexure 2)
 - Newspaper advertisement placed in the Bungendore Weekly on 28 Nov (Closing date on 12 December 2018) (see Annexure 3).
 - Copy of RAPs record and 4.1.3 notice provided to OEH and Onerwal LALC via on 13 December 2018.
 - Eleven Aboriginal Parties registered an interest in December 2018 (see Table 1)
- **Stages 2 and 3 Consultation Timeline, Dec 2018**
 - Information package sent via email on 13 December 2018
 - On-site meeting and survey scheduled for 18 December 2018
 - Three responses were received from:
 - Marilyn Carroll-Johnson (Corroboree Aboriginal Corporation) (13/12/18)
 - Glen Freeman (Koomurri Ngunnawal Aboriginal Corporation) (20/12/18)
 - Ryan Johnson (Murra Bidgee Mullangari) (23/12/18)
- **Sustained Consultation Timeline, July 2019**
 - Project Update July 2019, sent via email on 15 July 2019 (see Annexure 5)
 - One acknowledgment received from:
 - Ryan Johnson (Murra Bidgee Mullangari) (23/7/19)
- **Second site visit proposed, February 2020**
 - Proposed second site visit in February 2020, date to be decided in consultation with RAPs. This site visit didn't proceed as only one group Marilyn Carroll-Johnson (Corroboree Aboriginal Corporation) expressed an interest but couldn't attend without compensation. Instead we discussed the project over the phone - see Stage 4 Consultation notes.
- **Stage 4 Consultation Timeline**
 - 1 Feb 2020 - send draft ACHAR to RAPs
 - Four responses were received from:
 - 5 March 2020: Marilyn Carroll-Johnson (Corroboree Aboriginal Corporation) – the project all seems OK – with the conservation its good on our end. They would like to see a proper secure fence go up straight away, with photos taken by the archaeologist and sent to the RAPs.
 - 6 Feb 2020: Jesse Johnson (Murugadi) - who endorsed the recommendations made in the ACHAR

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project

- 25 Feb 2020: Ryan Johnson, who endorsed the recommendations made in the ACHAR
- 18/3/2020: Ngambri LALC registered their interest, provided their support and added recommendations regarding artefact storage.
- 6 March 2020 - closing date for RAP submissions on draft ACHAR (more than 28 days later). Note this was extended to 18/3/2020 to allow Ngambri LALC to register an interest.
- 18 March 2020 - incorporate submissions and finalise ACHAR
- YTBD - submit AHIP application and ACHAR to BCD and provide copies of AHIP and ACHAR to RAPs and Onerwal and Ngambri LALCs.

11 RECOMMENDATIONS

It is recommended that development approval be granted as the consultation process has not returned any opposition to the Proposal. The concern raised by the RAPs regarding the loss of cultural material through the proposed development works has been addressed through mitigation measures, which include the establishment of a Conservation Area, archaeological salvage and community collection.

It is recommended that:

- the Wood Duck Conservation Area be immediately fenced with a strong secure fence and signposted (see Error! Reference source not found.). Photos of the fence are to be sent to the RAPs.
- legal advice be sought to conserve the Aboriginal cultural heritage in the Wood Duck Conservation Area in perpetuity

The RAPs have previously voiced concern that burials may be found in the sand deposits. The following recommendations regarding the discovery of human remains should be followed:

If any human remains (other than any human remains described in Schedule B4) are discovered and/or harmed in, on or under the land, the AHIP holder must:

- a) not further harm these remains
- b) immediately cease all work at the particular location
- c) secure the area so as to avoid further harm to the remains
- d) notify the local police and OEH's Environment Line on 131 555 as soon as practicable and provide any available details of the remains and their location, and
- e) not recommence any work at the particular location unless authorised in writing by OEH.
- f) If the remains are found to be human, contact the RAPs

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Annexures

(Total No. of pages including blank pages = 96)

Annexure 1	Stage 1 Notification letter 4.1.2 sent 13 November 2018 (2 pages)
Annexure 2	Stage 1 Notification letter 4.1.3 sent on 22 & 23 November 2018 (2 pages)
Annexure 3	Stage 1 Newspaper advertisement placed in the Bungendore Weekly on 28 November 2018 (2 pages)
Annexure 4	Stages 2 and 3: Grantham Park presentation of information about the proposed project and gathering information about cultural significance (8 pages)
Annexure 5	Sustained Consultation: Project Update 15 July 2019 (2 pages)
Annexure 6	Stages 2 and 3: RAP responses (6 pages)
Annexure 7	Palerang Council Heritage Study Inventory Data Sheets for Currandooley and Werriwa (4 pages)
Annexure 8	Land conservation deed for the Bungendore Sands Area of Archaeological Interest (68 pages)

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Annexure 1

Stage 1 Notification letter 4.1.2 sent 13 November 2018

(Total No. of pages including blank pages = 2)

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project

Amy Way

PO Box 164

Newtown

NSW 2402

E: amyway1000@gmail.com

T: 0407 970 440

13 November 2018

Notification of proposed project and request for contact details of Aboriginal owners:

Grantham Park, Weereewaa (Lake George), NSW

Grantham Park Holdings Pty Ltd are proposing to expand the existing sand extraction area of the Bungendore Sands Quarry. They have engaged me to undertake the Aboriginal cultural heritage assessment at Grantham Park. This land is on the south-eastern side of Weereewaa (Lake George).

I am contacting you to request a list of Aboriginal owners of the proposed project area.

If you would like more information, please email me at amyway1000@gmail.com.

I look forward to hearing from you.



Amy Way

Annexure 2

Stage 1 Notification letter 4.1.3 sent on 22 & 23 November 2018

(Total No. of pages including blank pages = 2)

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project

Amy Way

PO Box 164

Newtown

NSW 2402

E: amyway1000@gmail.com

T: 0407 970 440

22 November 2018

Notification of proposed project and invitation to register an interest

Grantham Park, Weereewaa (Lake George), NSW

Dear officer:

Would you like to register an interest in a process of community consultation regarding a proposed sand quarry expansion at Grantham Park, Weereewaa (Lake George)?

The proponent, Grantham Park Holdings Pty Ltd are proposing to expand the existing sand extraction area of the Bungendore Sands Quarry. This land lies between Weereewaa (Lake George) and Bungendore. They have engaged me to prepare the Aboriginal cultural heritage assessment.

The community consultation process will be designed to allow registered Aboriginal parties to contribute information about the cultural significance of the area, and to contribute to the research methodology. It will also provide an opportunity for registered Aboriginal parties to have an input into the development of any cultural heritage management options.

The purpose of the community consultation is to assist the proposed Applicant in the preparation of an application for an AHIP and to assist the Director General of Office of Environment and Heritage (OEH) in his or her consideration and determination of the application or to support an Environmental Impact Statement (EIS) in support of an application to the Department of Planning and Environment for state significant development consent.

If you hold cultural knowledge for this area and are interested in participating in the community consultation process, please register your expression of interest by emailing me (amyway1000@gmail.com), phoning me (0407 970 440) or posting a reply to the address above, by **12 December 2018**. Please also contact me or the proponent Harry Osborne (Grantham Park Holdings Pty Ltd) on 0428 488 448 if you would like any more information.

If you do register an interest your details will be forwarded to the Office of Environment and Heritage (OEH) and the relevant Local Aboriginal Land Councils (LALC) unless you specify that you do not want your details released. LALCs or Aboriginal organisations who wish to register an interest to be involved in consultation must register their interest as an Aboriginal organisation rather than as individuals. If this is the case, please nominate a contact person.

I look forward to hearing from you.



Amy Way

Annexure 3

Stage 1 Newspaper advertisement placed in the Bungendore Weekly on 28 November 2018

(Total No. of pages including blank pages = 2)

BUNGENDORE WEEKLY

Classifieds

Local Markets

Wamboin Home Produce and Craft Market

9am-12noon, third Saturday of the month (except July and Aug).
Community Hall, Bendley Way,
Wamboin. Enquiries to Lance and
Meriel Schultz: 02 62383309

Captains Flat Country Markets

First Saturday every month,
9.30am-1.30pm, in the Community
Hall, Farlow Street, Captains Flat.
Enquiries to Maggie: 0473 113
358

the market @ bungendore

9am-2pm, Bungendore Memorial
Hall. Note: **Now every second
SUNDAY of the month.**

www.themarketsbungendore.com

Southern Harvest Farmers Market

EVERY Saturday 9 till noon.

Bungendore Anglican Hall,

Bumaroo Street, Bungendore.

www.southernharvest.org.au

Queensberry Farmers Market

EVERY Thursday 3pm-7pm in the

lifestyle precinct of Crawford Street

In Queanbeyan

www.southernharvest.org.au

Braidwood Markets

Fourth Saturday of every month, at
the park in Braidwood. Contact
Gerradine: (02) 4847 5051.

Tarago Markets

Craft, Art, Produce Seasonal

(CAPS) Market in Tarago Town

Hall. 9am to 2pm. Next date:

Saturday 29 December

Contact: 0429 200 456 or

CAPSmarketinTarago@gmail.com

www.bungendoreweekly.com

26 November 2018

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Business Classifieds

BUNGENDORE WAR MEMORIAL HALL HIRE INFO

Community events involving children
\$25/hr

Community events for adults \$40/hr.

Community events all day \$100 (with
\$100 deposit for key and cleaning).

Private parties \$150 (with \$150
deposit for key and cleaning).

Commercial events involving children
\$40/hr. Commercial events for adults
\$80/hr. Commercial events all day
\$200 (with \$200 deposit for key and
cleaning).

To hire the Hall please phone Jill on
6238 1470.

www.bungendoreweekly.com

PICTURE FRAMING

Picture Framing at Wamboin
Studio. Custom framing of
artwork, photographs, needle-
work, if it can go in a frame then
I can frame it! Quality work,
reasonable rates, obligation free
quotes.

By appointment, please ring Lyn
on: 6238 3591 (ph)

CLAIRVOYANT

A Christmas
Reading Voucher
goes well with
chocolate!

Pick your design
on

www.theshaghehazard.com.au

Individual prints. Order by web-
mail or text 0419 433 160.

GUINEA FOWL

Guinea Fowl for sale. Great for
alerting re posky intruders.

Yummy eggs.

Ph Deb: 0427 280 769



CWA Hall for hire

The Bungendore CWA Rooms
are available for casual or long-
term hire for individuals and
community groups. Reasonable
rates. Enquiries to 62381679 or
bungendore.secretary@gmail.com

C&B BOBCATS

Bobcat with attachments & truck
for hire: 4 in 1 bucket, Hole
Augers - 450mm, 300mm,
150mm. Ditch Witch - trencher,
150mm wide. Pallet Forks, Road
base and Clean Fill available.
Phone Cameron: 0423 513 238
or 6238 0102.

GARDENER WANTED

1 or 2 persons needed for
general help in beautiful garden,
six or three hours per week,
flexible, weeding, mowing,
raking, fertilising etc general
care and maintenance.

Experience great but not
essential, can work hours with
holidays and appointments.
Close to Bungendore ring
Lindsay 0403 449 944.

BUNGENDORE WEEKLY CHRISTMAS CLOSURE

The Bungendore Weekly will be
closed from December 21 until
January 9, 2019. The first
edition for 2019 will be
Wednesday January 16.

KING SINGLE ENSEMBLE



Seely Posturepedic King Single
ensemble. Near new. Have up-
sized so need to sell. \$500 only.
Phone 0419 025 533

PUBLIC NOTICE

ABORIGINAL CULTURAL HERI-
TAGE ASSESSMENT AT
(WEEPEENAA) LAKE GEORGE

Aboriginal people holding cultural
knowledge about the south-east-
ern side of Weereweenaa (Lake
George) are invited to register an
interest in a community consulta-
tion process to assist in an Ab-
original Cultural Heritage

Assessment. The assessment is
in relation to a proposed expan-
sion of Bungendore Sands Quar-
ry by Grantham Park Holdings.
Registration of interest closes
12/1/2018.

Contact: Amy Way (archaeolo-
gist), PO Box 164, Newtown
NSW, ph: 0407 970 440 or Harry
Osborne (proponent), PO Box 46
Bungendore NSW, ph: 0428 488
443.

CULLING SERVICES



KANGAROO & DEER CULLING

Free commercial game harvesting
or professional shooting of pests.

Licensed and accredited.

Contact Matt 0409 075 816 for
more info.

<https://highlandcitysolutions.com.au>

POSITION VACANT

Bar Attendant for Capra's Flat
RSL & Citizens Club. Must be
available for weekend shifts &
have current RSA & RCG.
For more information please
phone Lynda Hudson on: 02 6236
5284 or 0429 430 376.

Annexure 4

**Stages 2 and 3: Grantham
Park presentation of
information about the
proposed project and
gathering information about
cultural significance**

(Total No. of pages including blank pages = 8)

Grantham Park, consultation stages 2 and 3

13 December 2018

Dear [insert RAP name],

The attached document presents information about the scope of the proposed project at Grantham Park and the proposed cultural heritage assessment process and seeks cultural information on the project area.

Please notify me of any cultural information that you wish to have incorporated into the management options for this project.

Please also provide comment on the proposed management options presented in the document, specifically the establishment of a proposed Conservation Area and two stage salvage excavation in the areas outside the proposed Conservation Area, which will be lost to the development works.

Please also consider how the management options could be developed to allow Aboriginal people to continue their association with any identified Aboriginal heritage values.

Your contribution is important. Please provide this to me by 28 January 2019. Please also let me know if you'd like to attend a site meeting on Tuesday 18 December to discuss the project or contribute cultural information or if you'd like to participate in the salvage excavation.

Kind regards,



Amy

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project

**Grantham Park presentation of information about the proposed project
and gathering information about cultural significance**

Stages 2 and 3 of the Aboriginal cultural heritage consultation requirements for proponents
2010

Report presented to the Registered Aboriginal Parties

13 December 2018

Report prepared by:

Amy Way

PO Box 164

Newtown

NSW 2402

E: amyway1000@gmail.com

T: 0407 970 440

Document aim:

To provide registered Aboriginal parties with information about the scope of the proposed project and the proposed cultural heritage assessment process.

To facilitate a process whereby registered Aboriginal parties can:

- a) contribute to culturally appropriate information gathering and the research methodology
- b) provide information that will enable the cultural significance of Aboriginal objects and/or places on the proposed project area to be determined
- c) have input into the development of any cultural heritage management options.

Project details: development proposal works

Grantham Park Holdings Pty Ltd are proposing to expand the existing sand extraction area of the Bungendore Sands Quarry. This land is on the south-eastern side of Weereewaa (Lake George) and is shown in red in **Figure 15**.



Figure 15 The proposed development area shown in red, with existing quarry operations visible in centre

Tobiway Crushing Pty Limited trading as Bungendore Sands has been operating a sand extraction activity from Lot 31 DP 634213 and part of Lot 1 DP 1167699 since November 2001. Tobiway Crushing Pty Limited holds Licence No: 9 under section 55 of the Protection of the

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project

Environment Operations Act 1997. Since commencement of activities, the operator has met all reporting requirements under the POEO Act and have not been cited for any noncompliance issues. The current sand extraction is carried out under development consent D52/74 issued by the then Yarrowlumla Shire Council on 1 November 1974.

The proposed development consists of the expansion of the sand extraction into Lot 1 DP 1167699. Tobitway Crushing Pty Ltd has advised that the existing extraction occurs to a depth of up to 18 metres, with an average depth of 10-12 metres. The proposed excavation will be for an average depth of 10 metres. It is anticipated that the proposed activity will be a scheduled activity pursuant to Schedule 1 (19) of the Protection of the Environment Operations Act 1997 (POEO Act) as it is a land based extractive activity that will involve the extraction, processing or storage of more than 30,000 tonnes per year of extractive materials.

Project details: archaeology

As the proposed development works would involve the removal of the sand body within the proposed development area and destruction of all Aboriginal objects present, two forms of mitigation are proposed:

1. Establishment of a Conservation Area encompassing the known Aboriginal site "Wood Duck" and the associated strandline (see **Figure 16** for location of potential Conservation Area)
2. archaeological salvage in the remaining area (shown in yellow in **Figure 16**), which will be subject to quarrying



Figure 16 Potential Conservation Area shown in blue. The two salvage excavations will be located somewhere within the yellow outline.

The location of the prospective salvage excavations will be identified by Amy Way on 19 December 2018. This will involve mapping and registering potential archaeological deposits. These maps will show the prospective salvage excavation sites and will be provided to the RAPs in a draft ACHAR in February 2019.

The methods for the salvage excavation will then be designed by Amy Way in consultation with the RAPs. The excavation will be conducted by a new archaeological contractor and the RAPs in mid-late 2019. A draft methodology for your comment is provided below:

Salvage methodology

Salvage excavation will be conducted in two stages. RAPs will be present at both stages.

1. The first stage will identify the location of the salvage excavation in each of the two PADs
 - a) Salvage excavation positioning will proceed until an excavation site is located
 - b) Exploratory pits to position the salvage excavation will measure 0.5m x 0.5m and will be excavated by hand in 5cm spits
 - c) all material will be screened through a 3mm sieve
 - d) Exploratory pits will be spaced at a distance of 5m within a hexagonally offset grid
2. Expansion of salvage excavation at two sites
 - e) a minimum area of 50m² will be excavated at each site
 - f) excavation will be by hand
 - g) each excavation unit will measure 0.5m x 0.5m
 - h) spits will be 5cm deep
 - i) all material will be screened through a 3mm sieve

Proposed cultural heritage assessment process

The cultural heritage assessment process will be conducted in-line with the DECCW (2010) Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010, and in accordance with subclause 80C of the National Parks and Wildlife Regulation 2009.

Consultation will be completed in 3 stages:

Stage 1: Notification of project proposal and registration of interest (COMPLETED November 2018)

- This will identify, notify and register Aboriginal people who hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects and places in the area of the proposed project.

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project

- Stage 1 will be achieved by placing an advertisement in The Bungendore Weekly and by writing to OEH and other statutory bodies as listed in the Consultation Requirements to form a register of interest Aboriginal parties

Stage 2/3: Presentation of information about the proposed project and gathering information about cultural significance (THIS DOCUMENT, 14 December 2018)

- This will provide the proposed methodology for the cultural heritage assessment to the registered Aboriginal parties to allow them to review it and provide feedback. This consultation stage will also provide an opportunity for the registered Aboriginal parties to contribute cultural information.
- This document provides information about the proposed project and the draft archaeological methodology to the Registered Aboriginal Parties
- This document invites RAPs to attend a meeting on-site to gather cultural information and discuss the project (Tuesday 18 December)

Stage 4: Review of draft cultural heritage assessment report (February 2019)

- This will allow the registered Aboriginal parties to provide input into the Aboriginal cultural heritage assessment report (ACHAR), including the archaeological methodology.
- Stage 4 will be achieved by emailing the draft cultural heritage assessment report to the Registered Aboriginal Parties and requesting their input.
- A consultation record will be produced which documents each stage of the consultation and the comments/input provided by the Registered Aboriginal Parties.

Roles, functions and responsibilities of the proponent and registered Aboriginal parties

Proponent

- To provide an opportunity for RAPs to identify, raise and discuss their cultural concerns, perspectives and assessment requirements (this document serves that purpose)
- To present to the RAPs information about the proposed development project (this document serves that purpose)
- To present to the RAPs information about the proposed archaeological works (this document and the draft ACHAR will serve that purpose)

The registered Aboriginal parties

- Identify, raise and discuss their cultural concerns, perspectives and assessment requirements.
- To contribute information about the cultural significance of the area

- To comment on the draft archaeological methods including the development of a Conservation Area (presented in this document and the ACHAR, which will be provided in February 2019).
- To notify if they are interested in participating in the salvage excavation
- To notify of any protocols that they wish to be adopted into the information gathering process and assessment methodology and any matters such as issues/areas of cultural significance that might affect, inform or refine the assessment methodology
- To notify of any Aboriginal objects of cultural value to Aboriginal people in the area of the proposed project, or whether there are any places of cultural value to Aboriginal people in the area of the proposed project (whether they are Aboriginal places declared under s.84 of the NPW Act or not). This will include places of social, spiritual and cultural
- value, historic places with cultural significance, and potential places/areas of historic, social, spiritual and/or cultural significance.

Gathering information about cultural significance (response due by 28 January 2019)

The aim of this document is to facilitate a process whereby registered Aboriginal parties can:

- a) contribute to culturally appropriate information gathering and the research methodology
- b) provide information that will enable the cultural significance of Aboriginal objects and/or places on the proposed project area to be determined
- c) have input into the development of any cultural heritage management options.

Please notify me of any cultural information that you wish to have incorporated into the management options for this project.

Please also provide comment on the proposed management options presented above, specifically the establishment of a proposed Conservation Area and two stage salvage excavation in the areas outside the proposed Conservation Area, which will be lost to the development works.

Please also consider how the management options could be developed to allow Aboriginal people to continue their association with any identified Aboriginal heritage values.

Your contribution is important. Please provide this to me by 28 January 2019. Please also let me know if you'd like to attend a site meeting on Tuesday 18 December to discuss the project or contribute cultural information or if you'd like to participate in the salvage excavation.

Annexure 5

Sustained Consultation: Project Update 15 July 2019

(Total No. of pages including blank pages = 2)

15 July 2019

Project update, July 2019

Grantham Park, Weereewaa (Lake George), NSW

Dear Registered Aboriginal Party,

This letter provides you with an update on the Grantham Park, Weereewaa (Lake George) project. No action is required.

Project background

The proponent, Grantham Park Holdings Pty Ltd are proposing to expand the existing sand extraction area of the Bungendore Sands Quarry. This land lies between Weereewaa (Lake George) and Bungendore. They have engaged me to prepare the Aboriginal cultural heritage assessment.

Community Consultation

- Stage 1: Notification of project proposal and request for contact details, completed November 2018
- Stages 2 and 3: Presentation of information about the proposed project and Gathering information about cultural significance, completed January 2019
- Stage 4: Review of draft cultural heritage assessment report, yet to be completed

Results to date from community consultation

- Several parties have registered an interest in undertaking the fieldwork
- Concern has been raised about the loss of Aboriginal sites to development projects

To address this concern, the ACHAR will recommend the establishment of a conservation area around the existing site, Wood Duck, which lies within the development footprint. I have discussed this with the proponent and OEH. They are both supportive of the conservation area and so I am hopeful that this will be established.

Next step

The Aboriginal consultation and AHIP application are part of a larger EIS application, which takes a long time to prepare. As soon as the EIS is ready to proceed to the next step, I will email you the draft ACHAR for comment.

Please don't hesitate to email me on amyway1000@gmail.com if you have any questions or comments,

Yours sincerely,

Amy

Annexure 6

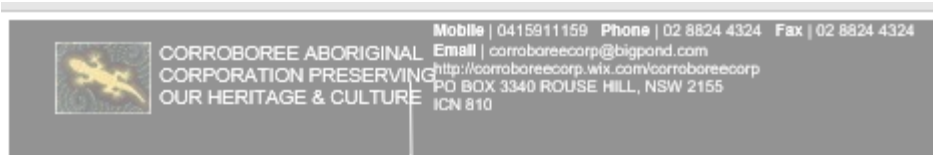
Stages 2/3 and 4 RAP responses

(Total No. of pages including blank pages = 6)

Stages 2 and 3: RAP responses

- No RAPs attended the on-site meeting on 18 December 2018
- The following responses were received:

1. Marilyn Carroll-Johnson (Corroboree Aboriginal Corporation) (22/11/18)



22 November 2018

Attention: Amy Way
PO Box 164 Newtown NSW 2402
E: amyway1000@gmail.com T: 0407 970 440

Dear Amy

RE:Expression of interest all aspects for Grantham Park, Weereewaa (Lake George), NSW

We are pleased to be considered to consult in Grantham Park, Weereewaa (Lake George), NSW. Our members are qualified Cultural Heritage Site Officers, due to previous knowledge passed down by our Elders Phillip Edward Carroll, Donald Carroll Bell, Dot Carroll, Phyllis (Carroll) Phillips and our Elder Phillip James Carroll. We have consulted in and around the surrounding areas. As our father was Ngunawal Elder Phillip Edward Carroll he was born on Yass Mission. They used to call it 'Hollywood Mission.' Being a nomadic black fella he travelled all over Australia and passed on his stories to us of his travels and those of his ancestry, our ancestry. He was the best story teller. He often said, "I travelled all over the landscape. When I die I'll die a happy man." My father Phillip Carroll our Ngunawal Elder was only a young boy, when he hit the road as a drover and later a boxer with Jimmy Sharman 'Boxing Tent' to support his family. He's mother had no one to support her and his siblings when his father James Lesley Carroll died as a result of a knife wound obtained on the Hollywood Mission. The incident made the local paper, the 'Yass Tribune.' My fathers name is also mentioned in the article. Travelling around to support his mother and siblings suited my dad well, as he was a black fella and therefore liked to go walk about. As is documented of aboriginal people, my father fitted this description to a tee. As such when he had his own family, we his children moved our home many, many, times a year too.

Therefore as well as working on site with archaeologists Navin Officer, AECOM, Niche, Kayandel, to name some. Our experience has been sufficient to find and collect/protect our aboriginal culture and heritage as passed down from our father and other elders. Our corporation Corroboree Aboriginal Corporation also has archaeological fieldwork experience with many archaeologists.

* As a Culture and Heritage Site Officer we have taken directions from project archaeologists. I or one of our members have attended numerous project sites we have consulted with:

Ozark
RMS
BIOSIS
Kayandel
Navin Officer
AECOM
Niche
Ben Streat
Dom Steele
Crystal Mines

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project**CORROBOREE ABORIGINAL
CORPORATION PRESERVING
OUR HERITAGE & CULTURE****Mobile | 0415911159 Phone | 02 8824 4324 Fax | 02 8824 4324**
Email | corroboreecorp@bigpond.com
<http://corroboreecorp.wix.com/corroboreecorp>
PO BOX 3340 ROUSE HILL, NSW 2155
ICN 810**Environment & Heritage****ECM**

- I and my members have under taken manual labour over extended periods of time. With the archaeologists listed above. Some of the projects sites to name: Rouse Hill, Pitt Town, Marulan, Queanbeyan, Yass, Burrinjuck, Goulburn, Harden, Googong Riverstone, Mt Pleasant, etc.
- The use of archaeological field tools such as mattocks, shovels, trowels, wheelbarrows, buckets and wet & dry sieving stations have been standard provision on project sites for the preservation of aboriginal artefacts and culture.
- We have worked in a range of climates, consisting of heat, cold and wet weather. To which we have all worn the correct protective clothing as per OH&S guidelines. Wear long trousers, closed steel-cap footwear (lace up preferably in case of ankle breakage), long sleeve shirt, hat, sunblock, flouro vests and take water, plus lunch if isolated site.
- We have always worked well in teams with a broad range of people. We are able to identify a broad range of aboriginal objects across the landscape:

We have a WorkCover NSW General Induction for Construction Work in NSW card (sometimes referred to as a green card). White card No: 1733337. We have public liability insurance, workers compensation insurance..

We request our details not be given to the local aboriginal land council (LALC) or OEH. Or for our correspondence to be posted/published as it's personal family history. We look forward to your earliest response.

Yours faithfully

Marilyn Carroll-Johnson
Corroboree Aboriginal Corporation
Director
Mob: 0415911159

2. Marilyn Carroll-Johnson (Corroboree Aboriginal Corporation) (13/12/18)

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project

Marilyn Carroll-Johnson <corroboreecorp@bigpond.com>
to me ▾

Thu, Dec 13, 2018, 5:23 AM ☆ ↩

Hi Amy

We would like to attend a site meeting on Tuesday 18 December to discuss the project & contribute cultural information if we have a RAP available. And we'd like to participate in the salvage excavation. We see no issues with the project outlay. Thanks.

Kind regards
Marilyn Carroll-Johnson
Director CAC

<Stage 2 & 3 Grantham Park consultation.docx>

3. Marilyn Carroll-Johnson (Corroboree Aboriginal Corporation) (13/12/18)

Marilyn Carroll-Johnson <corroboreecorp@bigpond.com>
to me ▾

Dec 17, 2018, 2:48 AM ☆ ↩

Hi Amy

Sorry I was hoping I'd have my brother available but he went away earlier than expected. I'll email if I have anything to add. Thanks so much.

4. Glen Freeman (Koomurri Ngunnawal Aboriginal Corporation) (20/12/18)

Koomurri Ngunnawal Aboriginal Corporation <koomurrinac@hotmail.com>
to me ▾

Thu, Dec 20, 2018, 3:05 AM ☆ ↩

Dear Amy,

I have no issues with the proposed mitigation and methodologies for this project.

In saying this however, as in all instances of the many projects be they, Wind Farms or extraction industries that have been allowed on or any where near this Sacred Site, I disagree in principle once again to the further destruction planned by this proponent, in the name of [progress].

I could of course, share my knowledge,passed down through the generations, as could those RAP's of my Ngunawal blood group,Buru Consultancy,P D Consultancy,Janine Thompson Consultancy and Thunderstone Management.

But as has happened since the very first project on this Site nobody has the intestinal fortitude to listen and then agree not to desecrate the Sacred Site and environs of ours and our Ancestors.

Unfortunately I will not be sharing any of my Cultural Knowledge except in the case of the Landscape and expect to be a part of the team for the next phase of this project,RE; excavation and salvage.

Kind regards,

Glen

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project

5. Glen Freeman (Koomurri Ngunnawal Aboriginal Corporation) (10/9/19)

Koomurri Ngunawal Aboriginal Corporation <koomurrinac@hotmail.com>
to me ▾

Tue, Sep 10, 3:17 AM



Dear Amy,

I have registered for this project under my now not so newly created Gulgunya Ngunawal Heritage Aboriginal Consultancy and as KoomurriNAC is an unregistered entity I cannot respond to notices sent to that address.

So could you make sure that all future correspondence in regards to this or any other project are sent to my Gulgunya Ngunawal Heritage Aboriginal Consultancy
Email: gulgunyanhac@hotmail.com
Ph: 0451 790 215.

Regards,
Glen Freeman

6. Ryan Johnson (Murra Bidgee Mullangari) (23/12/18)

Ryan Johnson <murrabidgeemullangari@yahoo.com.au>
to me ▾

Sun, Dec 23, 2018, 2:51 AM



Dear Amy

I have read the project information and ACHA for the above project, I endorse the recommendations made. I would like to be involved in all aspects of this project if possible.

Kind regards

Ryan Johnson | **Murra Bidgee Mullangari**

7. Ryan Johnson (23/7/19)

Ryan Johnson <murrabidgeemullangari@yahoo.com.au>
to me ▾

Tue, Jul 23, 4:40 AM





Thanks for the update

Ryan Johnson | Murra Bidgee Mullangari

Aboriginal Corporation Cultural Heritage

A: PO Box 246, Seven Hills, NSW, 2147
E: murrabidgeemullangari@yahoo.com.au
ICN: 8112

Stage 4: RAP responses

 Corroboree Aboriginal Corporation to me ▾	Tue, Feb 11, 12:28 PM ☆ ↩
Hi Amy Yes that's ok. I'll check the calendar and we can meet at coffee shop at Rouse Hill Town Centre if that's suitable? Thanks Kind regards Marilyn Carroll-Johnson Director Corroboree Aboriginal Corporation Mob: 0415911159 Ph: 0288244324 E: corroboreecorp@bigpond.com Address: PO Box 3340 ROUSE HILL NSW 2155 ***	
 Amy Way <amyway1000@gmail.com> to Corroboree ▾	Feb 11, 2020, 12:30 PM ☆ ↩
Thanks Marilyn, coffee shop at Rouse Hill sounds great. Look forward to hearing from you soon. Kind regards, Amy ***	
Amy Way <amyway1000@gmail.com> to Corroboree ▾	Fri, Feb 28, 9:46 AM (6 days ago) ☆ ↩ ⋮
Hi Marilyn, Just following up about coming out to Rouse Hill. Is there a time that suits you next week? The consultation period closes on 6 March, so it would be good to chat before then. Cheers, Amy 0407970440 ***	
Corroboree Aboriginal Corporation to me ▾	Wed, Mar 4, 2:35 AM (1 day ago) ☆ ↩ ⋮
Hi Amy Sorry I've been away. Are you ok with a phone consult due to the time constraint? Thanks Kind regards Marilyn Carroll-Johnson Director Corroboree Aboriginal Corporation Mob: 0415911159 Ph: 0288244324 E: corroboreecorp@bigpond.com Address: PO Box 3340 ROUSE HILL NSW 2155	

5 March 2020: Conversation by phone between Marilyn and Amy. Marilyn said that the project all seems OK – with the conservation its good on our end. They would like to see a proper secure fence go up straight away, with photos taken by Amy and sent to the RAPs.

Response: This was added to the recommendations

Grantham Park Holdings Pty Limited
*Bungendore Sands Extension Project***Muragadi**

to me ▾

Thu, Feb 6, 11:58 AM



Hi Amy

I have read the draft heritage assessment report for the above project, I agree with the recommendations made.

Thanks

Jesse Johnson

From: Amy Way [mailto:amyway1000@gmail.com]**Sent:** Saturday, 1 February 2020 8:23 AM**To:** Amy Way <amyway1000@gmail.com>**Cc:** Jim Osborne <jim@material.com.au>; Jack@rwcorkery.com; Mitchell Bland <mitchell@rwcorkery.com>**Subject:** Review of draft Heritage Assessment Report, Grantham Park, Weereewaa (Lake George), NSW

Dear Registered Aboriginal Party,

This email provides you with the draft cultural heritage assessment report for the Grantham Park, Weereewaa (Lake George) project. Please review the report and provide comment by 6 March 2020.

Please provide input into the ACHAR and confirm that you are satisfied that the consultation requirements have been met. Please also acknowledge that you are satisfied with the survey methodology. An additional site visit will be held in February 2020 to ensure that sufficient opportunities have been created to discuss the project, including project methodology on-site.

If you are interested in discussing the project on-site, please email me at amyway1000@gmail.com to coordinate a suitable time.

Kind regards,

Amy

**Ryan Johnson**

to me ▾

Tue, Feb 25, 4:51 PM (17 hours ago)

I have read the project information and ACHAR for the above project, I endorse the recommendations made

Kind regards

Ryan Johnson

On 1 Feb 2020, at 8:24 am, Amy Way <amyway1000@gmail.com> wrote:

Dear Registered Aboriginal Party,

<Stage 4 ACHAR RAP mail out letter.docx>

18/3/2020: conversation by phone between Trisha Williams, CEO Ngambri LALC and Amy Way. Trisha registered Ngambri's interest in the project and said that Ngambri LALC is supportive of the project. Ngambri recommends that the artefact management be changed to requirement 26 of the Code of Practice to allow community input into the management of the artefacts.

Response: the ACHAR was changed on 18/3/20 to incorporate this recommendation – see artefact storage.

Annexure 7

Palerang Council Heritage Study Inventory Data Sheets for Currandooley and Werriwa

(Total No. of pages including blank pages = 4)

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project

Copied from Victoria Design & Management Pty Ltd, 2009, and updated by Harry Osborne

Item No: LG2

Name of Item: *Currandooley*

Previous/Other Names:

Owner/s: Harry Osborne and Currandooley Pty Ltd

Address: Currandooley Road, Bungendore

Type of Item/s: Homestead, barn, stables, outbuildings, cottage, shearing shed, plantings, cemetery

Area/Group/Complex: Currandooley Farm Complex

Curtilage/Boundary: Property boundaries

Assessed Significance: State – recommended LEP

Statement of Significance: Currandooley has belonged to the same family for more than 140 years. It represents a time of prosperity and development in NSW's rural areas and the aspirations at the time of successful landholders. Designed by renowned Sydney architect Ferdinand Reuss, the French style architecture and the extent of stonework for all major outbuildings are unusual and rare features for rural Australia. The impressive two storey homestead is set amongst old plantings of elms and pines and the whole complex presents a particularly attractive image on arrival in the forecourt. Despite the previous fire there is a high degree of intactness and integrity especially architecturally. Overall a high degree of original intactness and integrity. Historic (a), associational (b), aesthetic (c), research (e) and rare (f) heritage significance .

Historical Notes: The property was originally taken up by William Lithgow in 1825 and after his death in 1864 it was sold to Pat Hill Osborne who lived with his family in a house on Deep Creek. The rubble stone walls of the original house are still standing. After several storms and floods Osborne sent his wife and children to England while he arranged construction of a 25 room homestead in the style of a French chateau. The house and the stables and bachelor quarters were completed in 1873 and all were built of granitic gneiss from the property and had shingled

roofs. The stone cottage was completed about 1920 as was the butchers shop and dairy. All stonework was carried out by William Follet and his son. All roofs were replaced with Marseilles tiles after a fire in the stables in 1890. The property has remained in the ownership of the Osborne family being handed down through successive generations. About 1994 a fire gutted the homestead burning out the second storey which had to be partially rebuilt although the stone walls remained standing. There is a small private cemetery on the property, the earliest burial 1902, consecrated about 1910 by Bishop Barlow, and the last burial 2012. The woolshed was built in 1878 and a Wolseley shearing machine installed in 1888, the same year Wolseley installed machines at Toganmain and the first year shearing was done mechanically.

Designer/Maker/Builder: Ferdinand Reuss, Prussian architect. OW (?) Chisholm designed sunroom 1930s. Prof. Leslie Wilkinson remodelled front veranda 1950s and swimming pool 1920s. William Follet, stonemason. Laid Corby remodelled the shearing shed in 1950s.

Year Started: 1872 Year Completed: 1873. Additions 1890, 1920, 1930

Physical Description: Substantial two storey homestead, large barn, stables, cottage and other outbuildings all constructed of granitic gneiss with Marseilles tile roofs. There are 11 headstones in the cemetery, mostly members of the Osborne family. Corrugated iron shearing shed and concrete dam built in 1930s.

Physical Condition 20013: Very Good

Item No: LG5

Name of Item: *Werriwa*

Previous/Other Names:

Owner/s: Steve & Debbie Conroy

Address: 660 Tarago Road, Bungendore

Type of Item/s: Homestead, garden, cottages, & outbuildings

Area/Group/Complex:

Curtilage/Boundary: Lot boundaries

Assessed Significance: Local – recommended LEP

Grantham Park Holdings Pty Limited
Bungendore Sands Extension Project

Statement of Significance: An interesting example of the evolution of a homestead from the 1880s to the late 20th century. Association with some of the main 19th century pastoral families of the district. The buildings demonstrate architectural trends over a century as well as stonemasonry skills and joinery craftsmanship. Historic (a), associational (b), aesthetic (c) and research (e) heritage significance.

Historical Notes: In 1880 when Nathaniel Osborne married Catherine Gordon, from Manar near Braidwood, Pat Hill Osborne of Currandooley offered to sell the couple a piece of his land and it was there they built the Werriwa homestead in about 1882. It was a four room house with wide main hall and a kitchen at the back, constructed of stone from the property. In 1906 their son, Deuchar Gordon, contracted architect MB Halligan, Sydney, to add two main rooms and a front hallway. This was followed by further additions in 1918, consisting of storerooms, dairy, staff quarters, and 1927 further rooms and a large timber veranda. The house was all constructed of stone which came from a rocky outcrop in the paddock a few kilometres from the house. During the 1990s parts of the large 1927 veranda were enclosed and a sunroom built off the kitchen.

Designer/Maker/Builder: MB Halligan, architect

Year Started: 1882, 1906, 1918, 1927 Year Completed: 1990s Circa:

Physical Description: Substantial single storey homestead built of limestone with brick detailing, in some cases rendered. Enclosed verandas, CGI roof, attached staff quarters. House set in attractive gardens with mature trees and stone walls. Interior features quality cedar joinery, wide hallway and spacious rooms. Stone stables and farm cottage. Weatherboard staff cottage.

Physical Condition 2009: Good

Annexure 8

Land conservation deed for the Bungendore Sands Area of Archaeological Interest

(Total No. of pages including blank pages = 68)

Land conservation deed

Tobiway Crushing Pty Limited
Landholder

The Minister administering the National Parks and Wildlife Act 1974 (NSW)
The Minister

Grantham Park Pty Limited
Option holder

Clayton Utz
Lawyers
Level 8 Canberra House 40 Marcus Clarke Street Canberra ACT 2601 Australia
GPO Box 1940 Canberra ACT 2601
T +61 2 6279 4000 F +61 2 6279 4099

www.claytonutz.com

Our reference 11032/80076410

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Land Conservation Deed

Date

Parties **Tobiway Crushing Pty Limited ACN 008 579 397** of Tennant Street Fyshwick ACT 2609
(Landholder)

The Minister administering the National Parks and Wildlife Act 1974 (NSW) c/-
Department of Environment, Climate Change and Water of Level 3, 11 Farrer Place
Queanbeyan NSW 2620 (the Minister)

Grantham Park Pty Limited ACN 008 390 618 c/- "Currandooley" Bungendore NSW
2621 (Option holder)

Background

- A. Landholder is the registered proprietor of the Land.
- B. The Landholder has granted to the Option holder the right purchase the Land on the terms of the Option Agreement.
- C. The Landholder is permitted to undertake sand extraction and processing of sand on the Land and under licence on adjoining land pursuant to certain approvals, including an AHIP.
- D. A significant example of Aboriginal cultural heritage has been identified on the Land within that part of the Land identified as the Conservation Area.
- E. To undertake further sand extraction and processing of sand on the Land and adjoining land, the Landholder will need to apply for additional AHIPs.
- F. In assessing applications by the Landholder for additional AHIPs, the Minister is required to assess the implications of any proposed destruction of Aboriginal objects against the principles of ecologically sustainable development. One of those principles is that appropriate examples of Aboriginal cultural heritage be retained for the benefit of future generations.
- G. There is presently no example of Aboriginal cultural heritage on the Lake George sand bodies which has been permanently preserved for the benefit of future generations.
- H. The Minister has determined that permanent conservation of the Conservation Area will achieve the aims of ecologically sustainable development of the Lake George sand bodies.
- I. The Landholder agrees to covenant in favour of the Minister to permanently preserve the Conservation Area on the terms of this Deed.
- J. The Option holder consents to the Landholder entering into this Deed with the Minister and agrees that if it becomes the registered proprietor of the Land or an interest in the Land, it will enter into a conservation covenant in favour of the Minister to permanently preserve the Conservation Area on the terms of this Deed.

Operative provisions

1. Definitions and Interpretation

1.1 Definitions

Act means the *National Parks and Wildlife Act 1974* (NSW) together with all amendments and changes which may be made to the Act from time to time and any Regulations in force from time to time.

AHIP means an Aboriginal heritage impact permit under section 90 of the Act.

Conservation Area means part of the cultural heritage site No. 57-2-0121 being that part of the Land shown by hatching on the diagram annexed to this Deed as Annexure A.

Consultant's Report means the report titled "Aboriginal Cultural Heritage Site Protection of Site 57-2-121, Currandooley Lease Bungendore, New South Wales - a Report to Canberra Sand and Gravel" prepared by Lucia Clayton Martinez and Allan Lance, Heritage Consulting Australia Pty Ltd (August 2010), a copy of which is Annexure B.

cultural heritage means places, objects and features of cultural value in the landscape, including (but not limited to) places, objects and features of significance to Aboriginal people.

Deed means this deed of covenant to conserve the cultural heritage associated with the Land.

Land means the land hatched on the plan attached at Annexure A and described as "Area of Archaeological Interest", being part of the land described as Lot 31 in Deposited Plan 634213.

law includes any requirement of any Commonwealth or New South Wales statute, rule, regulation, proclamation, ordinance or by-law, present or future, or the common law or rule of equity.

Minister includes, where not repugnant to the context, the State of New South Wales and the agents, servants, employees and contractors of the Minister and the State of New South Wales.

Option Agreement means the agreement dated 27 July 1987 (as varied) between the Landholder and the Option holder granting a call option to the Option holder to purchase the Land.

Parties means the Landholder, the Minister and the Option holder and 'Party' means one of them.

Plan of Management means an environmental plan of management for the Land in accordance with the recommendations set out at paragraph 11.2.5 (Location 5) of the Consultant's Report, to be prepared by the Landholder and approved by Palerang Council.

reasonable in relation to carrying out an activity, means using the best methods available and carrying out the activity in such a way as to have minimal impact on the conservation of cultural heritage associated with the Conservation Area.

Regulations means any regulations made under the Act.

Term means in perpetuity.

1.2 Interpretation

Headings are for convenience only and do not affect interpretation. The following rules apply unless the context requires otherwise:

- (a) the singular includes the plural and conversely;
- (b) a gender includes all genders;
- (c) if a word or phrase is defined, its other grammatical forms have a corresponding meaning;
- (d) a reference to a person, corporation, trust, partnership, unincorporated body or other entity includes any of them;
- (e) a reference to a clause or schedule is a reference to a clause of, or a schedule to, this Deed;
- (f) a reference to a deed or document (including a reference to this Deed) is to the deed or document as amended, varied, supplemented, novated or replaced, except to the extent prohibited by this Deed or that other deed or document;
- (g) a reference to a Party includes the Party's successors, permitted substitutes and permitted assigns (and, where applicable, the parties' legal personal representatives);
- (h) a reference to conduct includes an omission, statement or undertaking, whether or not in writing;
- (i) a reference to a month is to a calendar month; and
- (j) if a Party consists of two or more persons this Deed binds each of them separately and any two or more of them jointly.

2. Purpose of Deed

The purpose of this Deed is to conserve the Aboriginal cultural heritage of the Conservation Area for the Term.

3. Landholder's obligations

3.1 Landholder's covenants

The Landholder covenants in favour of the Minister at all times to observe and perform and to procure that any person who is in lawful occupation or possession or who has lawful management or control of the Land (including any contractors, licensees, invitees or guests of the Landholder) observes and performs the following obligations and duties in relation to the Conservation Area to the extent that it is within the power of the Landholder to do so.

3.2 Landholder not to do any act or thing prejudicial to the conservation of the Conservation Area

The Landholder shall not do any act or thing upon the Conservation Area which is prejudicial to conservation of the Conservation Area.

3.3 Landholder not to permit

Except with the prior written consent of the Minister, which may be withheld in the Minister's absolute discretion, the Landholder shall not harm or permit harm to any aspect of cultural heritage in the Conservation Area

3.4 Protection of Conservation Area

At the cost of the Landholder, the Landholder covenants to:

- (a) within three (3) months of the date of this Deed, erect a fence in accordance with the specifications in the diagram attached at Annexure C, around the perimeter of the Conservation Area and post on such fence, warning signs adverting to the existence of the Conservation Area and thereafter maintain the fence and the warning signs; and
- (b) cover the haul road batter on the western edge of the Conservation Area with a protective membrane, backfill such batter and sow with grass in accordance with the Plan of Management.

3.5 Permitted actions within Conservation Area

Subject to clause 3.2, the Landholder:

- (a) must take such reasonable steps as are required to control noxious animals, insects and plants within the Conservation Area; and
- (b) may graze livestock on the Conservation Area and access such area for the purposes of mustering livestock, property maintenance and recreation,

PROVIDED THAT such activities do not harm or permit harm to occur to any aspect of cultural heritage within the Conservation Area.

4. Further covenants

- (a) The Landholder further covenants and agrees:
 - (i) to permit upon being given reasonable prior notice, the Minister to enter the Land in order to assess the condition of the Conservation Area;
 - (ii) upon leasing or licensing the whole or any portion of the Land, the Landholder must do so in writing and include an agreement by the lessee to perform and observe the duties and obligations assumed by the Landholder pursuant to this Deed. The Landholder shall promptly notify the Minister of any such lease or licence;
 - (iii) upon a change in ownership, control or management of the Land or any portion of the Land, to document such a change in writing and to include a covenant in that document by the new person or organisation who has ownership, control or management of the Land in favour of the Minister to perform and observe the duties and obligations of the Landholder pursuant to this Deed. The Landholder shall promptly notify the Minister of such a change; and
 - (iv) prior to entering into any lease or licence of a part or whole of the Land to deliver to any prospective lessee or licensee a copy of this Deed.

5. Option holder's consent and covenant

- (a) The Option holder consents to execution of this Deed by the Landholder and acknowledges and agrees that:
 - (i) the execution of this Deed; and
 - (ii) the grant of covenants in favour of the Minister with respect to the Land,

by the Landholder do not breach the obligations of the Landholder pursuant to the Option Agreement.

- (b) Notwithstanding the provisions of clause 4(a)(iii), the Option holder hereby covenants in favour of the Minister that if the Option holder is at any time the registered proprietor of the Land or registered proprietor of an interest in the Land, whether by exercise of its rights under the Option Agreement to purchase the Land or pursuant to any other agreement, the Option holder will perform and observe the duties and obligations of the Landholder pursuant to this Deed.

6. Duration of Deed

6.1 When Deed in force

This Deed:

- (a) takes effect from the date of the Deed; and
- (b) remains in force for the Term.

6.2 Termination of Deed

Despite clause 6.1, this Deed may be terminated by agreement of the Parties.

7. Variation of Deed

No variation, modification or waiver of any provision of this Deed, nor consent to any departure by a Party from any provision, shall be effective unless it is made by a subsequent deed signed by the Parties or (in the case of a waiver) by the Party giving it. Any such variation, modification, waiver or consent shall be effective only to the extent to, or for which it may be made or given.

8. Breach by Landholder

8.1 Notice requesting rectification

Where the Landholder is in breach of the terms of this Deed the Minister may give notice to the Landholder requesting rectification of the breach.

8.2 Rectification works

The Parties agree that the Plan of Management shall be used to determine the extent to which the condition of the Conservation Area has been altered by the Landholder since the date of this Deed and the condition that the Conservation Area must be returned to by rectification works required by notice given in accordance with clause 8.1 to be carried out by the Landholder. All rectification works are to be carried out at the Landholder's expense.

8.3 Right of the Minister to enter the Land

- (a) Where the Minister believes (acting reasonably) that there has been inadequate response within thirty days from the issuing of a notice in accordance with clause 8.1, the Minister may enter the Land in order to undertake the required rectification works.
- (b) The Landholder must, within thirty days of receiving notice of the cost of the rectification works from the Minister, reimburse the Minister for the costs incurred by the Minister in carrying out rectification works in accordance with clause 8.3(a).

9. Dispute Resolution

9.1 Dispute to be heard by mediator/arbitrator

If a dispute arises between the Parties regarding any aspect or requirement of this Deed, the Parties agree to have the dispute heard by a suitably qualified mediator/arbitrator to be appointed by agreement of the Parties.

9.2 Appointment of mediator/arbitrator

In the event that the Parties cannot agree as to the mediator/arbitrator to be appointed, the mediator / arbitrator must be appointed by the President or his or her nominee of the Institute of Arbitrators and Mediators Australia (NSW Chapter).

9.3 Decision of mediator/arbitrator final

The Parties agree that the decision of the mediator / arbitrator will be binding and final.

9.4 Enforcement of Deed

Notwithstanding the above clauses, the Minister may institute proceedings to enforce this Deed without first entering into the dispute resolution procedure set out in clauses 9.1-9.3 inclusive.

10. Costs and expenses

Each Party must pay their own costs and expenses for negotiating, preparing, executing and performing this Deed.

11. General

11.1 Notices

Each communication (including each notice, consent, approval, request and demand) under or in connection with this Deed:

- (a) must be in writing;
- (b) must be addressed as follows (or as otherwise notified by a Party to each other Party from time to time):

Landholder

Name: Tobiway Crushing Pty Limited

Address: PO Box 110
Fyshwick ACT 2609

Fax: (02) 6280 5752

For the attention of: Mr Wayne Gregory / Mr Tom Trevillian

The Minister

Name: The Minister administering the National Parks and Wildlife Act 1974 (NSW)

Address: c/- The Department of Environment, Climate Change and Water
PO Box 773
Queanbeyan NSW 2620

Fax: (02) 6229 7001

For the attention of: The Manager, Landscape and Aboriginal Heritage Protection

Option holder

Name: Grantham Park Pty Limited

Address: PO Box 46
Bungendore NSW 2621

Fax: (02) 6238 1163

For the attention of: Mr Harry Osborne

- (c) must be signed by the Party making it or (on that Party's behalf) by the solicitor for, or any attorney, director, secretary, or authorised agent of, that Party;
- (d) must be delivered by hand or posted by prepaid post to the address, or sent by fax to the number, of the addressee, in accordance with clause 11.1(b); and
- (e) is taken to be received by the addressee:
 - (i) (in the case of prepaid post sent to an address in the same country) on the third day after the date of posting;
 - (ii) (in the case of prepaid post sent to an address in another country) on the fifth day after the date of posting by airmail;
 - (iii) (in the case of fax) at the time in the place to which it is sent equivalent to the time shown on the transmission confirmation report produced by the fax machine from which it was sent; and
 - (iv) (in the case of delivery by hand) on delivery,

but if the communication is taken to be received on a day that is not a working day or after 5.00 pm, it is taken to be received at 9.00 am on the next working day (**working day** meaning a day that is not a Saturday, Sunday or public holiday and on which banks are open for business generally, in the place to which the communication is posted, sent or delivered).

11.2 Governing law

This Deed is governed by and will be construed according to the law applying in New South Wales.

11.3 Jurisdiction

Each Party irrevocably:

- (a) submits to the non-exclusive jurisdiction of the courts of New South Wales, and the courts competent to determine appeals from those courts, with respect to any proceedings which may be brought at any time relating in any way to this Deed; and
- (b) waives any objection it may now or in the future have to the venue of any proceedings, and any claim it may now or in the future have that any proceedings have been brought in an inconvenient forum, if that venue falls within clause 11.3(a).

11.4 Indemnities

- (a) Any indemnity in this Deed is a continuing obligation separate and independent from the other obligations of the Parties, and survives termination or completion of this Deed.
- (b) It is not necessary for a Party to incur expense or to make a payment before enforcing a right of indemnity conferred by this Deed.
- (c) A Party must pay on demand any amount it must pay under an indemnity in this Deed.

11.5 Further acts and documents

The Parties must promptly do all further acts and execute and deliver all further documents required by law or to give effect to this Deed.

11.6 Consent

Unless this Deed expressly provides otherwise, a Party must act reasonably in giving or withholding consent or approval under this Deed.

11.7 Severance

If at any time any provision of this Deed is or becomes illegal, invalid or unenforceable in any respect under the law of any jurisdiction, that will not affect or impair:

- (a) the legality, validity or enforceability in that jurisdiction of any other provision of this Deed; or
- (b) the legality, validity or enforceability under the law of any other jurisdiction of that or any other provision of this Deed.

11.8 Waiver

- (a) Failure to exercise or enforce, or a delay in exercising or enforcing, or the partial exercise or enforcement of, a right, power or remedy provided by law or under this Deed by a Party does not preclude, or operate as a waiver of, the exercise or enforcement, or further exercise or enforcement, of that or any other right, power or remedy provided by law or under this Deed.
- (b) A waiver or consent given by a Party under this Deed is only effective and binding on that Party if it is given or confirmed in writing by that Party.
- (c) No waiver of a breach of a term of this Deed operates as a waiver of another breach of that term or of a breach of any other term of this Deed.

11.9 Counterparts

This Deed may be executed in any number of counterparts and by the Parties on separate counterparts. Each counterpart constitutes the Deed of each Party who has executed and delivered that counterpart.

11.10 Amendments

This Deed may only be varied by a Deed executed by or on behalf of each Party.

12. GST

12.1 Definitions and interpretation

In this clause 12:

Recipient means a Party who provides or is liable to provide consideration under this Deed for a supply;

Supplier means a Party who makes a supply whether as agent or otherwise,

and unless the context indicates a contrary intention:

- (a) a reference to a supply is to a supply under or in connection with this Deed;
- (b) a reference to GST payable by a Supplier includes any GST payable by the representative member of any GST group of which the Supplier is a member; and
- (c) words and phrases used that are also used in A New Tax System (Goods and Services Tax) Act 1999 have the same meaning as in that Act.

12.2 GST payable

If GST becomes payable by a Supplier in respect of any supply:

- (a) the Recipient must pay to the Supplier on demand an amount equal to that GST;
- (b) the Supplier must give a tax invoice to the Recipient in respect of that supply at the same time as the Supplier receives payment of the GST under this clause 12; and
- (c) if the Recipient does not comply with its obligations under clause 12.2(a) and because of this the Supplier becomes subject to penalties or interest for late payment of GST, then the Recipient must pay to the Supplier on demand an amount equal to the amount of the penalty or interest.

Executed as a deed.

Executed by **Tobiway Crushing Pty Limited**
ACN 008 579 397 in accordance with section 127
of the Corporations Act 2001 (Cth):

Signature of director

Signature of company secretary/director

Full name of director

Full name of company secretary/director

Executed for and on behalf of **The Minister**
administering the National Parks and Wildlife
Act 1974 (NSW) by an authorised delegate:

Signature of witness

Signature of authorised delegate

Name of witness

Name of authorised delegate

Address of witness

Position of authorised delegate

Executed by **Grantham Park Pty Limited ACN**
008 390 618 in accordance with section 127 of
the Corporations Act 2001 (Cth):

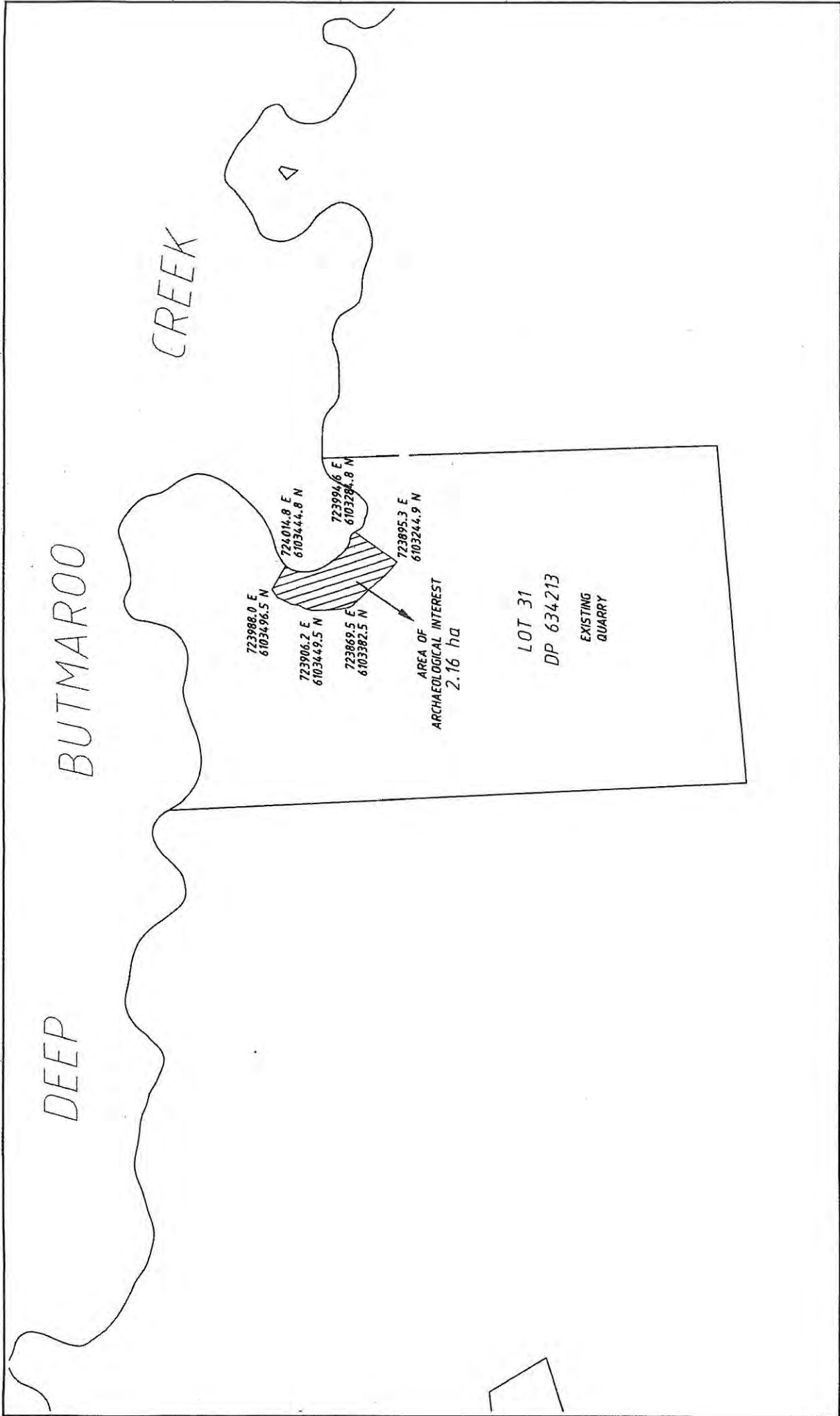
Signature of director

Signature of company secretary/director

Full name of director

Full name of company secretary/director

Annexure A - Conservation Area



CLIENT

CANBERRA SAND & GRAVEL

Contour Interval

Datum A.H.D

BM

RL

REVISION	DATE	ZONE

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Unit 3
151 Newcastle Street,
FISHWICK, ACT 2808

T 02 6239 3088 F 02 6239 3089

Surveyed I Stewart 06/07/2010
Drawn I Stewart 06/07/2010
Checked
Approved

"BUNGENDORE SAND"

ARCHAEOLOGICAL SITE

LOT 31 DP634213

ALONG DEEP BUTMAROO CREEK

TARAGO ROAD BUNGENDORE

Proj No.

Sheet No. 1 of 1

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Annexure B - Consultant's Report

Aboriginal Cultural Heritage site protection of Site 57-2-121, Currandooly Lease, Bungendore, New South Wales

**Report commissioned by Canberra Sand and Gravel
and prepared by
Lucia Clayton Martinez and Allan Lance**

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Executive summary

The Bungendore Sands quarry operated by Canberra Sand and Gravel is located in Lot 31 DP 634213.

The Aboriginal cultural heritage recorded in Lot 31 is situated in the general archaeological context of the Lake George basin. The archaeological sites comprises low density surface scatters containing quartz and silcrete stone artefacts, with small numbers made from quartzite and other exotic raw materials. These surface sites are the obvious physical expressions of much denser stratified occupation deposits found in sand bodies on the eastern (windward) side of the lake. Lake George sites mostly date from the mid-late Holocene, in a period when settlement intensity increased following a long period of seemingly sporadic occupation. The late Holocene settlement phase was characterised by sustained exploitation of the regions food resources, especially around the lake.

Heritage studies at Lot 31 were carried out as part of the initial assessment of heritage sites prior to sand quarrying that commenced in the early 1990s. As part of that investigation, significant traces of Aboriginal occupation were found by Paul Packard (1992), identified as NPWS Site 57-2-121, across the sand body on which quarrying operations have taken place. This earlier investigation led to a subsequent detailed investigation carried out by Lance (2009a), which saw the excavation of test trenches and pits and comprehensive investigation of the site under NPWS Consent to Destroy and Permit to Salvage No. 683. Subsequent quarrying has removed most of these deposits, with the exception of an area at the eastern side of the lease, which was reserved as part of the agreement to permit sand extraction. This area, fringing Butmaroo Creek, remains undisturbed by sand extraction, and it is now necessary to ensure that measures are implemented to ensure its protection. These have included an agreement with the Department of Environment, Climate Change and Water (DECCW) to reserve the remaining sand deposits along Butmaroo Creek. To aid in the protection of the highly significant occupation deposits in this area and the other surviving sand deposits around the edge of the quarry, DECCW now requires the quarry operator (Canberra Sand and Gravel Pty Ltd) to implement site protection works.

The present report follows a recent investigation of the surviving archaeological traces around the fringes of the quarry (Lance 2009b), which identified five areas where occupation deposits occur. This report investigates the necessary measures to be implemented to ensure the survival of these significant heritage deposits.

The five locations on Lot 31 are:

- Location 1, an isolated artefact recorded on the slope adjacent to the property fenceline in the southwestern corner of Lot 31. Low density, but *in situ* occupation deposits are likely to occur in this area;
- Location 2, a Potential Archaeological Deposit (PAD) situated approximately 190m northeast of Location 2;
- Location 3, a PAD located in a pit wall in the northern section of the lease;
- Location 4, a disturbed surface stone artefact scatter situated on a 3m layer of dumped spoil in the north-eastern section of Lot 31, on a wall overlooking a completed quarry pit. The artefacts were displaced from the original sandy occupation layer, removed from the quarry. This stockpiled material was to be used in restoration of the lease.

- Location 5, a remnant aeolian sand ridge located between Butmaroo Creek and a sand haul road on the eastern side of Lot 31. This is the reserved portion of the site, left following agreement with the then National Parks and Wildlife Service (NPWS) as a condition on quarry use. Several stone artefacts are found on the surface, uncovered by animal burrowing, and eroding from the wall next to the sand haul road. There is a 50cm levee of fill (clay and gravel) dumped on the surface beside the haul road.

All Aboriginal cultural heritage sites are important to Aboriginal people and they are also significant for the scientific values they possess.

Cultural heritage is protected by state and federal legislation. Before any sites can be impacted, even in the process of protecting those sites, the appropriate permits are necessary. In the context of Lot 31, the necessary permit is an Aboriginal Heritage Impact Permit (AHIP) under AHIP of the *National Parks and Wildlife Act, 1974*. Under this permit, the activities to be carried out will be those of protecting the remnants of Site 57-2-121 in Lot 31. Measures recommended in this report will ensure that none of the remaining portions of this site are damaged; the measures to be undertaken are solely those of conservation. Quarrying will continue in areas previously approved, and will not extend into the five locations identified in this report.

The aim of the site protection strategy is that these surviving archaeological traces survive in perpetuity. Some of the recommendations, therefore, are of a long-term nature, requiring the protection of the known archaeological deposits during the infilling of the quarry pits. The measures being recommended are designed to ensure that this protection regime extends into the future, even after all economic sand deposits have been extracted, the surrounds rehabilitated to the satisfaction of Palerang Council, and the quarry abandoned. A permit that reflects this ongoing quarry use and rehabilitation, is being sought from DECCW.

The recommendations for site protection contained here, have been developed in accordance with the characteristics of each site and the wishes of the Traditional Owners.

Recommendations

General recommendations

In addition to specific actions, it will be necessary for the proponent to implement a program of cultural heritage awareness training, in consultation with the registered stakeholders, to ensure that all employees and contractors are informed of the importance of cultural heritage items that are present and know how to respond should unexpected items be encountered during site restoration work.

Site specific recommendations

Location 1

Geotextile will be placed on the small slope between the property fenceline and the water-filled, rehabilitated quarry pit, separating the ground surface from the fill to be dumped on top. The geotextile will cover exposed portions of the deposit where the stepped edge may be subject to erosion. It will be secured in place and will include Location 2.

Fill and topsoil will be placed on top of the geotextile and will be compacted and seeded to stabilise the soil.

No machinery will access undisturbed parts of the site (located on the western side of the boundary fence) during implementation of site protection measures.

There is to be no further quarrying activities, no vehicle access, and no other activity not related to site protection covered by the AHIP permit in this location that may impact cultural heritage deposits.

Location 2

Geotextile will be placed on the small slope between the property fenceline and the water-filled, rehabilitated quarry pit, separating the ground surface from the fill to be dumped on top. It will be secured in place.

Fill and topsoil will be placed on top of the geotextile and will be compacted and seeded to stabilise the soil.

No machinery will access undisturbed parts of the site (located on the western side of the boundary fence) during implementation of site protection measures.

There is to be no further quarrying activities, no vehicle access, and no other activity not related to site protection covered by the AHIP permit in this location that may impact cultural heritage deposits.

Location 3

Geotextile will be placed along the top of the pit wall overlooking the quarry, and will hang down, separating the uppermost fine-sand cultural layer and original ground surfaces exposed in profile in the pit wall. The geotextile will separate the cultural deposits from the gravel and fine sand left as a by-product of sand extraction, which will be dumped in the quarry pit. The geotextile will be placed along the edge and will be secured in place.

The quarry pit will be gradually filled with this quarry by-product. This fill will be pressed against the pit wall, protecting the archaeological deposits and stabilising the pit walls. This infilling of the pit will be a gradual process and will take years to complete.

No machinery or other vehicles will access this portion of the site during implementation of site protection measures.

There are to be no further quarrying activities, no vehicle access, no other activity not related to site protection in this location covered by the AHIP permit that may impact cultural heritage deposits.

Location 4

Geotextile will be placed along the top of the pit wall overlooking the quarry, and will hang down, separating cultural layer and original ground surfaces visible in the pit wall from the sand and gravel quarrying by-product to be deposited in the pit. The geotextile will be placed along the edge

1 Introduction

Canberra Sand and Gravel operates the Bungendore Sands quarry situated on Lot 31 DP 62413, on the southern side of Butmaroo Creek, east of Lake George and north of Bungendore, in the Parish of Curandooly (See Maps 1 and 3).

Heritage studies were carried out at Lot 31 as part of an initial assessment of heritage sites prior to sand quarrying that commenced in the early 1990s. As part of that investigation, significant traces of Aboriginal occupation were found by Paul Packard (1992) identified as NPWS Site 57-2-121, across the sand body on which quarrying operations have taken place. This earlier investigation led to a subsequent detailed study carried out by Lance (2009a), which saw the excavation of test trenches and test pits and comprehensive investigation of the site under NPWS Consent to Destroy and Permit to Salvage No. 683. Subsequent quarrying has removed most of these deposits, with the exception of an area at the eastern side of the lease, which was reserved as part of the permit issued by NPWS to allow sand extraction. This area, fringing Butmaroo Creek, remains undisturbed by sand extraction, and it is now necessary to ensure that measures are implemented to ensure its protection. These have included an agreement with NPWS, now the Department of Environment, Climate Change and Water (DECCW), to reserve the remaining sand deposits along Butmaroo Creek. To aid in the protection of the highly significant occupation deposits in this area and the other surviving sand deposits around the edge of the quarry, DECCW now requires the quarry operator (Canberra Sand and Gravel Pty Ltd) to implement site protection works.

The present report follows an earlier review of the surviving archaeological traces around the fringes of the quarry (Lance 2009b), which identified five areas where occupation deposits occur. This report investigates the necessary measures to be implemented to ensure the survival of these significant heritage deposits.

An Aboriginal Heritage Impact Permit (AHIP) is required in accordance with the *National Parks and Wildlife Act, 1974*, to undertake these site protection measures under authorisation of the Department of Environment Climate Change and Water of New South Wales (DECCW). The AHIP necessary to allow this work will need to remain current for a number of years, as filling of the existing quarry pits will take some time.

2 NSW Aboriginal cultural heritage legislation

Representatives of the Ngambri Land Council and the Buru Ngunawal Corporation participated in the fieldwork as part of the community consultation process. The Traditional Owners' representatives were informed of the project and were consulted on the necessary protection measures for Aboriginal cultural heritage in Lot 31. They stressed the significance of the sites and the spiritual connection there is between the artefacts and the land. The removal of the artefacts breaks this spiritual connection, hence the importance of reducing impacts to Aboriginal sites.

Consultation with Aboriginal communities is an important element of cultural heritage management covered by the *National Parks and Wildlife Act, 1974* and the *Environmental Planning and Assessment Act, 1979* in New South Wales. These two acts are administered by DECCW.

National Parks and Wildlife Act, 1974

The *National Parks and Wildlife Act, 1974* (NPW Act) provides protection for Aboriginal "objects,

places and features of significance to Aboriginal people in New South Wales", and declares it an offence to harm them.

An Aboriginal object is defined under the Act as:

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

An Aboriginal place is defined under the Act as:

"...a place that is or was of special significance with respect to Aboriginal culture".

An area can have spiritual, natural resource usage, historical, social, educational or other types of significance, and as such can be declared by the Minister for the Environment as an Aboriginal place.

Part 6 of the NPW Act provides specific protection for Aboriginal places and objects, making it an offence to harm them. It is an offence to knowingly destroy, deface, damage, or knowingly permit land to be disturbed or excavated, for the purpose of discovering an Aboriginal object. It is also an offence to take possession, disturb, move and/or remove an Aboriginal object without the appropriate Aboriginal Heritage Impact Permit (AHIP).

An AHIP is the statutory instrument that DECCW issues under sections 87 and/or 90 of the NPW Act to manage impacts to Aboriginal cultural heritage objects and places, and it is issued by the Director-General.

Penalties exist for breach of the NPW Act in relation to cultural heritage. The maximum penalty for an individual is \$5,500 or imprisonment for 6 months, or both, and \$22,000 in the case of a corporation.

If an action is, or about to be, undertaken, that may cause harm to Aboriginal cultural heritage and is not covered by an AHIP, or a license granted under the NPW Act or the EP&A Act, the Director-General may issue a stop work order. In this situation the action must cease for a period of 40 days, while the threats to cultural heritage is assessed.

In the case of contravention of a stop work order there is a maximum penalty of \$1,100,000 in the case of a corporation, with a further \$110,000 for each day the offence continues, or in the case of an individual, \$110,000 and a further \$11,000 for each day the offence continues.

Environmental Planning and Assessment Act, 1979

The main objective of the EP&A Act, 1979 is:

"the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment".

The EP&A Act, 1979 requires that all development and planning occurs in accordance with state, regional and local environmental plans. Local environmental plans (LEPs) require for the conservation and management of Aboriginal Heritage, and for the consultation with local Aborigi-

nal people and the Local Aboriginal Land Council. Integrated development under Environmental Plans under the EP&A Act that will impact Aboriginal cultural heritage require approvals under the NPW Act, 1974.

The two acts work together to provide a basic framework for the protection of Aboriginal cultural heritage in New South Wales.

3 Description of study area and proposed activity/development

The Bungendore Sands quarry is located in the South Eastern Highlands, where landforms are mountainous with dissected plateaus (tablelands), hills and ridges, and plains.

The Lake George Fault (see Map 2) runs along the western shore of Lake George, forming a prominent ridge of Upper Ordovician age rocks. The landform on the eastern lake shore presents rolling hills of Palaeozoic to Cainozoic age. Ten kilometres further east is the Great Dividing Range, where the landform is steep, hilly country.

The Lake George Range is characterised by Upper Ordovician sediments of greywacke, sandstone, slate, chert, limestone and quartzite. The eastern shore of the Lake towards the Great Dividing Range is characterised by Palaeozoic and Cainozoic sediments of pink granite, clay, silt, sand and gravel.

The project area is located on a raised sand and gravel deposit, part of the extensive Cainozoic deposits of clay, silt, sand and gravel found in the Lake George Basin. Localized outcrops of Ordovician quartz-rich greywackes, shales and slates are found to the east of this area.

The original vegetation present during Aboriginal occupation of the area around Butmaroo Creek would have been open forest and woodland with areas of grassland within several hundred metres of the watercourse. Today there are small numbers of cold-tolerant *Eucalyptus pauciflora* and *E. stellulata*. These are typical of frost hollows, which are common in low-lying areas on the tablelands (Lance 2009a:7). Surveyor General John Oxley's 1822 map of the area refers to the forested area on the eastern lake shore as the Argyle Forest (Lance 2009a:9).

European settlement resulted in intensive forest clearing of the Lake George basin, as timber was felled for the Currawang copper mine. This mine, which operated in the periods 1865-1882 and 1897-1907, consumed up to 1,500 tons of wood during each month of operation. Little native woodland survives in the district, although there has been regrowth since the mining operation ceased early in the 20th century. There are no native trees in the vicinity of the quarry, and the dominant vegetation is improved pasture, with numerous introduced grasses and weeds (Lance 2009a:7).

3.1 Description of impact

The quarry is located on a large sand and gravel deposit. Sand and gravel is excavated from a deep pit at the eastern side of the quarry. It is transported several hundred metres via trucks along a haul road to a processing plant, which uses recycling water to operate. Various grades of sand and gravel are separated for use in the building industry. The gravel and fine sand by-product is set aside for purposes such as infilling of the disused quarry pits.

The impacts to Aboriginal cultural heritage that occur on the quarry are:

- Erosion of vertical banks;
- Heavy vehicular traffic;
- Spoil heaps;
- Rubbish dumps; and
- Rabbit burrowing.

Locations 3 and 4 (Map 4) are particularly susceptible to vertical bank erosion. These two locations are situated in the vertical bank overlooking water filled disused quarries. Extracted clay, sand and gravel by-product has been dumped along the edge of the vertical banks, covering the artefact-bearing deposits.

Locations 1 and 2 (Map 4) are in a more protected area. Quarrying activities are no longer undertaken in the southwestern section of the quarry area, it is in the process of regeneration. Impacts here are more limited: passing of stock and water erosion of the step where the PADs were identified.

Location 5 (Map 4) is susceptible to a wider variety of impacts: erosion of the vertical bank along the edge of the site, next to which there is a haul road. There is also abandoned machinery deposited along the top area of said bank, rabbits, and a dirt track that crosses the site from the haul road towards Butmaroo Creek. Overburden has been dumped in large mounds in the northern section of this lease, and along a levee next to the haul road.

Mitigation of these impacts is necessary to protect the significant Aboriginal cultural heritage in the area surrounding the quarry. The protection measures proposed are:

- Placing of geotextile on vertical banks to prevent further erosion in locations 1-5;
- Placing of clay on top of the geotextile, which will be compacted, then covered with topsoil, and seeded with native plants to stabilise the vertical banks in locations 1-2, and 5;
- Gradual infilling of disused quarry pits with placement of by-product against vertical banks in locations 3 and 4, to protect cultural heritage under the geotextile. This will be a long-term process, as the by-product is a result of quarrying activities and will accumulate over time;
- Placement of infill to proceed from outside of the sites, with no vehicle access along the tops of vertical banks, in those areas where Aboriginal cultural heritage and/or PADs are located, during undertaking of protection measures;
- Removal of disused machinery and other rubbish from the sand body is to be done with a crane from below, which will not access the site at any point;
- No vehicle or machinery should access Locations 1-5 during implementation of protection measures;
- No vehicle should access locations 1-5 after protection measures have been put in place;
- Removal of old fenceline and gate near Butmaroo Creek in Location 5;
- Consolidation of the present fenceline along the haul road beside Location 5, with reinforcement of orange para-webbing; and
- No further ground disturbance or quarrying activities to occur in Locations 1-5.

The measures described are designed to prevent further impacts to Aboriginal cultural heritage sites in Lot 31. There will be no excavation or other disturbance of surface and subsurface cultural

heritage deposits, as the intention of the protection measures under the s.90 requested are to preserve these sites and not disturb them.

4 Community consultation

Following DECCW consultation requirements (DECCW 2009), the proponent consulted with the Aboriginal community about the significance of the Aboriginal places and objects in the study area.

In accordance with the NPW Act and community consultation guidelines, a application for a permit under the *NPW Act* requires the following steps: the proponent initiates a proposal; seeks the views of the Aboriginal community about methodologies; gathers cultural and archaeological information; uses this information to assess significance; undertakes assessment of potential impact; gathers the view of the Aboriginal community about potential impacts and the mitigation of these; and provides the results to DECCW in a report to accompany applications for approval. It is the proponent's obligation to provide DECCW with the views of and information from interested parties.

Members of the Aboriginal community are the primary determinants of the significance of their heritage. They may participate in the process through comment on the assessment methodology, contributing cultural knowledge and commenting on cultural significance of potential impacts and/or mitigation measures.

The Director-General of DECCW is the decision-maker in regards to AHIP applications under Part 6 of the *NPW Act*. The Director-General will review the information provided by proponents to assess potential or actual harm to Aboriginal places and/or objects.

The DECCW community consultation process requires that Aboriginal communities participate in the assessment process by:

- Influencing the design of the assessment of scientific and cultural significance;
- Providing relevant information regarding the cultural significance values of the objects/places;
- Contributing to the development of cultural heritage management recommendations;
- Providing comment on draft assessment reports prior to their submission.

The first stage of consultation with the Aboriginal people required notification of the project proposal and registration of interest. Stakeholder groups were identified via DECCW and were invited to register their interest via written notification (see 13.3.3. below¹). An advertisement was placed in the Koori Mail setting out details of the proposal and inviting registration from interested groups or individuals. This was published on the 5th May 2010 in edition 475.

Written notification to register expressions of interest in community consultation were also provided to the:

- Local Aboriginal Land Council;
- Registrar of Aboriginal Owners;

¹ The Turallo Creek Quarry mentioned in the written notification for expressions of interest is not included in this application; it will be subject to a separate AHIP permit application.

- Native Title Services;
- The local council; and
- The Department of Environment and Conservation.

The following parties registered their interest:

- Buru Ngunawal Aboriginal Corporation;
- King Brown's Tribal Group Pty Ltd;
- Konanggo Aboriginal Cultural Heritage Services
- Ngambri Local Aboriginal Land Council;
- Ngunawal Heritage Aboriginal Corporation; and
- Yukembruk Merung Ngarigo Consultancy Pty Ltd.

The next stage was preparation of the cultural and scientific/archaeological assessment to be integrated into the present Cultural Heritage Assessment Report. The opportunity was created for representatives of the Ngambri Aboriginal Land Council and the Buru Ngunawal Aboriginal Corporation to examine the site and discuss appropriate measures for site conservation. Discussions were held on the management options to avoid harm and conserve known Aboriginal places and objects, and also to consider how Aboriginal people can continue their association with identified Aboriginal heritage values. The concerns of these representatives have been reflected in the present assessment report.

The Traditional Owners' representatives who participated in the survey stressed the significance of the Aboriginal cultural heritage to them and the spiritual connection they have with the artefacts and the land. The removal of Aboriginal artefacts breaks the spiritual connection, hence the importance of reducing site impacts.

A first draft of this assessment was presented to all bodies and stakeholder parties listed above for them to review it and provide feedback. Two groups responded, endorsing the recommendations contained in this report (See Appendix 13.3.6).

5 Researcher experience/ qualifications

Lucia Clayton Martinez has a BA (History) from the Universidad Autónoma of Madrid (UAM), and has participated in archaeological excavations in Spain and Australia. Ms. Clayton Martinez has practiced cultural heritage management in Victoria, Queensland and New South Wales, and has experience working with different cultural heritage legislations and Indigenous communities.

Allan Lance has a BA (Hons) in archaeology and anthropology from the Australian National University and conducted the earlier studies into the Bungendore Sands Quarry archaeological heritage. He has worked in New South Wales, ACT, South Australia and Queensland for more than 20 years, working with Aboriginal communities, managing and protecting Aboriginal cultural heritage, as well as managing European cultural heritage.

6 Aboriginal background

The study area is situated in Ngunawal country. The Ngunawal were also known as the Five Islands tribe, Gurungada, Lake George, Molonglo tribe, Ngaonawal, Ngennigenwurro, Ngoonawal, Ngunawal, Nungawal, Woonawal, Yarr, Yass tribe and Yillima (Wafer and Lissarague 2008:117).

There is dated Aboriginal occupation in the ACT of at least 21,000 years (Birrigai Rockshelter), in an area which has held great importance for Aboriginal people. This area is where the Bogong moths aestivate, and it was a centre point for seasonal Aboriginal activity.

The Ngunawal are thought to have used the Brindabella foothills to the west of Canberra as a base for forays into the high country for more than 10,000 years. There are three documented moth hunting routes that depart from Ngunawal country into that of their neighbours (Kabaila 2005, Map 6). The three moth hunting routes ended in the Kosciuszko National Park, in Walgalu country. Moth hunting routes are not the only pathways in these regions; there were also ceremonial pathways criss-crossing the land.

Lake George is situated in the Southern Tablelands, also in Ngunawal country. Archaeological research of the area has shown that occupation was sporadic before the mid-Holocene, intensifying in the mid- to late-Holocene. Lake George would have been a generally stable food resource area, seasonally visited. Aboriginal people who lived at the Hollywood Mission in Yass recounted stories of having visited Lake George when leading traditional, nomadic lives (Brown *et al.* 2007:62).

The image of past land use and occupation that emerges is one of high mobility with specialised resource areas that were seasonally visited. These visits could be purely for food gathering (for example, hunting waterfowl at Lake George) or of a wider scale, such as the gatherings allowed to collect and feast upon the Bogong moth. These later gatherings could number as many as 500 people from different friendly tribes for initiation ceremonies (the ascent of the mountains was closely linked to ceremonial activities, such as male initiation), arrangements of marriages, corroborees and exchange of goods (Flood 1996:17).

Ethnoarchaeology

Lake George was a rich food source. Even though the water level of the lake could fall dramatically, it was still a region of reliable resources, which could explain why occupation of the area intensified in the Holocene, a period of climatic fluctuation and suspected population growth (Lance 2009a, Lourandos and Ross 1994).

Food resources in the Lake George area would have consisted of possums (also sought for their skins), wallabies, kangaroos, wombats, koalas, ducks, brolgas, swans, wild turkeys, emu, young platypus, fish, tortoise, crayfish and shellfish. Black ducks, ibis and egrets still floated about the shallows of Lake George in 1978 (Donaldson and Donaldson 1985:205), despite there being sheep, bullocks, horses and black swans at that time (the swans were also hunted as recalled in Brown *et al.* 2007)

Possums were hunted by climbing the tree, using a stone axe to cut toe-holds in the bark at intervals of about one metre. To find the possum, one could:

“...put something around the light of the flame, and poke a stick in the hole, and if it came out with hair you knew there was a possum in there. So we’d pull it out, and my father would take it home and cook it in the ground. He would dig a hole in the ground and put the hot coals in. Then they’d go swimming, and then they’d come back and just take the ash off and pull it out, no fur or anything on it, just meat”.

L.B.Halloran in Brown *et al.* 2007:39.

Birds were hit on the wing by a boomerang or stone, captured with slip-nooses attached to triangles of bent reeds or long rods, caught in pits dug at the edge of lagoons and covered with grass, or grabbed by an underwater swimmer breathing through a reed tube (Flood 1996:10). Young platypuses were hunted by digging out the riverside burrows in the summer, and adult platypuses were speared from the bank with small wooden spears (Flood 1996:10).

From October to April, large fish such as the Murray cod (4-30kg), trout cod (1-16kg) and silver perch (1-8kg) were fished in areas such as the Molonglo River; Murray perch were found in creeks and rivers of higher areas (Flood 1996:10). The fish would be speared from a canoe or the bank, or were obtained by damming a small river or creek and putting hickory or tea-tree branches or leaves in the water. The narcotic effects of the leaves would stupefy the fish, which floated to the surface. Fish were also caught in co-operative fish drives (Flood 1996:11).

Women gathered fruits and vegetables of all sorts, nectar and manna, bird's eggs, grubs, ants, lizards, native cats and shellfish. Both men and women collected honey from the trees, bandicoots, snakes, echidnas, crayfish, yabbies, platypus and turtles (Flood 1996:12).

Vegetable foods consumed were yam daisy tubers (*Microseris scapigera*), which were eaten raw or roasted. Fern and bulrush roots were other food staples, along with orchid tubers, of which the first tubers in August and September were roasted. The starchy pith of tree-fern trunks, young shoots of grass trees, berries (native cherry, currant and mistletoe) that were picked in summer and autumn, wattle seed pods, grass seeds that were ground into flour were other vegetable staples (Flood 1996:10). Other sweet foods were native honey, nectar sucked out of bottlebrush and other flowers, and the white, crumbly gum exuded from the bark of the manna gum (Flood 1996:11).

Habitation observed by Europeans (Flood 1996) consisted of strong, weatherproof huts built from large sheets of stringy bark during the cold and simple bough shelters for the summer.

Personal belongings observed (Flood 1996:25) were, for a man, 2-6 spears, a spear-thrower, stone axe, knobbed club, a boomerang or two and two types of shield, shells for scraping, bone points or awls for piercing and stone knives for cutting the hides. Several varieties of spears were used, the shafts made from the seed stalks of the grass tree (*Xanthorrhoea* sp.), boxtree, iron-bark, or long hardwood (Flood 1996:25).

A woman's main equipment was carrying dishes, a net dilly bag around the shoulders, and a digging stick, which was more than a metre long and doubled as a club (it was hardened by fire at one end) (Flood 1996:26).

European settlement

The process of colonisation of the Canberra region began in 1820 when the first Europeans reached the Limestone Plains. An Aboriginal guide, Taree, from the Goulburn plains told Charles Throsby of a large lake, Wee-raa-waa (Lake George) and a large river, the Murrumbidgee, which reached the sea (Flood 1996:37). Charles Throsby-Smith reached the Limestone Plains and the Molonglo and Queanbeyan Rivers in 1821, encountering "extensive meadows of rich land on either side of the rivers", a description that quickly encouraged the establishment of pastoral outstations in the 1820s (Flood 1996:37).

A lot of the general bibliography available on the subject of white settlement of the Canberra region comments that it was a peaceful process, but it was not devoid of conflict. There are records in the Lake George area of abductions of Aboriginal women: in 1824 two teenage Aboriginal sisters were abducted to an outstation; in 1826 a stockman from Lake Bathurst was killed when he tried to carry off two Aboriginal girls, and another stockman was speared when he tried to abduct the wife of an Aboriginal man (Flood 1996:37).

Resistance was also felt in Yass in 1838, when a 1,400 strong group of Ngunawal held an all night Corroboree to protest against the building of the Yass Saint Augustine's church on Ngunawal land (Brown *et. al.* 2007:62). The Wallabalooa band is remembered in Brown *et.al.* (2007:62) as the last of the resistance fighters in Ngunawal country, who would spear the settler's sheep for food (Brown *et. al.* 2007:62). Some of the white settlers, however, did offer local Ngunawal tribal groups shelter on their properties (Brown *et.al.* 2007:62).

Martial law was declared in 1824 across the Blue Mountains in the Bathurst district, after some shepherds were speared, and there are recorded massacres in Mudgee and in the Hunter Valley. The Government was forced to garrison the road between Yass and Melbourne because Aboriginal attacks had made it unsafe (Parbury 1991:54).

Aboriginal resistance generally took the form of guerrilla warfare, which was very effective due to the knowledge of the land, the ability to merge into the landscape, and the isolation of farms and stations (Parbury 1991:53). As well as surprise raids on huts and stations, Aboriginal resistance attacked the settler's crops and stock, partly for food but also as a means of economic warfare. Aboriginal men would herd big mobs of sheep or cattle far into the hills, building bridges over creeks and gullies, keeping the animals in stockades, rounding them up with dingoes and stolen horses. Iron-tipped spears were introduced for killing cattle (Parbury 1991:54).

On the other hand, there are many stories of Aboriginals helping track bush-rangers or finding missing children. They became "very good and careful horsemen", and were employed as stockmen on many local properties (Flood 1996:41).

After the ACT was established in 1911, the Aboriginal Protection Board forced all its Aboriginal residents to move to Edgerton Mission Station, 16km east of Yass. This included families who had been granted land for farming. In 1916 Edgerton Mission was closed and its residents became fringe dwellers on the edge of Yass (Brown *et. al.* 2007:7).

By 1939 there were 180 reserves in New South Wales. Some were managed reserves or stations, usually with a manager, and with housing, rations and some kind of education provided. Others were unmanaged reserves under police control, with ration but no housing or education provided. There were only 10 missions (operated by churches) in NSW, and one of these was Warangesda in Griffith. Conditions on the reserves varied. But the common control was that Aboriginal people were not allowed to speak their language (or languages) or to practice culture, and permission was needed to travel or to marry. While it appears that all residents on the reserves were supposed to receive rations, some Yass families were excluded from the system (Brown *et.al.* 2007).

7 Archaeological background

The Lake George district has been subject to a number of archaeological investigations over the years. The artefact assemblages that have been recorded at numerous sites share fairly homogeneous characteristics in regards to raw material and artefact morphology. Nardoo (Flood 1980), ELG-I (Hughes *et al.* 1984), Butmaroo I (Hughes *et al.* 1984), Buckingham Estate (Hughes and Shawcross 1993), Woolshed Embankment-I (Hughes *et al.* 1996), and Curandooly I (Lance 2009a, 2009b) are investigated sites near Lot 31, most located in aeolian sand sheets.

The predominant raw material in these sites was quartz, with a smaller number of silcrete and quartzite artefacts, except for Woolshed Embankment, where there was a significantly higher proportion of silcrete artefacts in the middle levels of the deposit. Bipolar technology was present in all sites except for Nardoo, where there was instead a large number of backed artefacts, and there were very few at Butmaroo I. No backed artefacts were located at Butmaroo I, ELG-I or Buckingham Estate, and few were located at Woolshed Embankment I. The Curandooly I site had a small percentage of backed and bipolar artefacts. The majority of artefacts at all sites were flakes and flaked pieces.

The earliest dated site in the Lake George basin came from Butmaroo I, where the bottom level was a lag of volcanic pebbles and cobbles was estimated at 6,000 BP or older. There was one definite *in situ* artefact and several other possible *in situ* artefacts in this layer. On top of this level there was a Bondiaian assemblage of silcrete and quartz artefacts with a number of backed artefacts coming from levels dating from 3,000 to 4,000 BP, and a top layer of quartz artefacts dating from 1,000-500 BP. Dates from these sites are as follows:

- Nardoo, 700BP;
- ELG-I, less than 1,000 BP;
- Buckingham Estate, 1,000 BP;
- Woolshed Embankment I, 3-4,000 BP; and
- Curandooly I, 3,000 BP.

One of the significant aspects of these sites is in regards to bipolar technology. The orthodox view is that backed artefact production commenced (or intensified) around 3,500-4,000 years ago and declined around 1,000 years ago, to be replaced with a quartz industry characterised by the production of small lamellate flakes and segments produced by bipolar working (Lance 2009a: 60). This phenomenon has been interpreted as being the result of changes in availability of raw materials, or as an improved hunting technology designed to reduce risk in the face of environmental change. Backed artefact production is an abundance strategy (Hiscock 2006). Bipolar techniques increased the number of artefacts created (Hiscock 2008:239).

The cold uplands of eastern Australia may have been sporadically occupied during the earlier times but appear to have been intensively settled only in the Holocene (Hiscock 2006:86). Unfamiliarity with resources is a context in which technological strategies that reduced the chance of foraging failure would be highly advantageous (Hiscock 2006:86).

The Holocene palaeoenvironment of Lake George was a humid phase with reduced stresses in temperature, wind regimes and general hydrology, though colder conditions persisted, with evidence of cold tolerant species in the pollen record. There was a re-emergence of eucalypts and casuarina at approximately 10,000BP, indicating a commencement of climatic amelioration. Lake

levels began to rise and remain moderately high until at least 7-8,000 BP. Temperatures also rose until they were only 2-4° below present. By 7,000BP the lake was sporadically dry, though water levels of the lake at 4-3,000BP ranged from 13-26m above the present lake bed. However, while the lake may have periodically dried, the resources available at the site would have remained constant. This would have been valuable in a period of climatic fluctuation, and may be part of the reason for intensification of artefact deposition from 3,000BP onwards, an indication of a more intensive occupation compared to previous sporadic occupation. An area of reduced resource risk means less need for the adoption of more 'efficient' tool production strategies and the maintenance of a wide range of technologies dictated as much by the raw materials at hand as by the need to efficiently produce stone tools.

8 Methodology

8.1 Pre-fieldwork

Upon commencing the assessment of Lot 31, a search was requested of the AHIMS database for sites near the quarry. A total of 13 Aboriginal cultural heritage sites were found (AHIMS search #29781). However, the search results sent back by the NSW DECC were found to be incorrect, as they were only sites located to the west of Lake George. The location of some sites was difficult to determine, as some site cards were from 1980 and were lacking GPS coordinates and adequate maps for desktop site relocation.

Reports of previous Aboriginal cultural heritage studies in the area were also examined, and in Paton and Collins (2009), an additional 19 sites were found to have been recorded in the area. Of these, eight are situated within a 3km radius of Lot 31 (Paton and Collins 2009:30-31).

The predominant site type identified in reports and site cards accessed was the open surface artefact scatters, of low to medium density, and subsurface deposits, of low to medium density in most cases, with a predominance of quartz as raw material, with either backed artefacts or bipolar technology.

The aim of the present assessment is to determine the appropriate measures for conservation and conservation of previously documented sites. It is not a question of whether the sites are to be protected or not in regards to their significance in the regional context, the goal of the assessment is to determine which protection measures are appropriate for the sites in question. However, regional site context is an important factor in fully understanding the sites that compose it, and what is being protected for future generations.

Five previously identified locations (Lance 2009b) were surveyed:

- Location 1 consists of an isolated artefact recorded on the slope adjacent to the property fenceline in the southwestern corner of Lot 31;
- Location 2 is a Potential Archaeological Deposit (PAD) situated approximately 190m north-east of Location 2;
- Location 3 is a PAD located in a pit wall in the northern section of the lease;
- Location 4 consists of redeposited stone artefacts located in the north-eastern section of Lot 31, on a wall overlooking a completed quarry pit. The artefacts had been moved from the upper sandy deposits at the quarry site, and stockpiled for use in restoration of the lease.

- Location 5, a remnant aeolian sand ridge located between Butmaroo Creek and the haul road on the eastern side of Lot 31. There are artefacts uncovered by animal burrows, and a 50cm layer of by-product (clay and gravel) dumped to form a levee (originally placed to prevent flooding from Butmaroo Creek).

8.2 Field work

A survey was conducted on Monday 26th July.

Participants of the survey were:

- Walter Bell (Buru Ngunawal Aboriginal Corporation);
- Lucia Clayton Martinez (Heritage Consulting Australia Pty Ltd);
- Geoff Murray (Ngambri Land Council);
- Dr. Eva Papp (Geomorphologist, ANU);
- Tom Trevillian (Canberra Sand and Gravel manager).

The objective of the survey was to visit the Aboriginal cultural heritage sites situated on Lot 31 and assess the appropriate measures to be undertaken for their conservation. Five locations were assessed (see Map 4) (Lance 2009b).

8.2.1 Location 1

Location 1 (see Map 4, Plate 1) consists of an isolated meta-sedimentary flake recorded on the ground surface in the southwestern corner of Lot 31. The artefact was located on a small slope between the property fenceline and a disused sand-washing canal. The artefact was not relocated during the present survey.

This location is also a PAD, as the flake previously recorded (though displaced from its original setting) indicates the potential for further subsurface deposits that would extend into the neighbouring property located on the western side of the fenceline (outside of Lot 31).

Ground surface visibility was 30% due to ground cover of short grass thickets, and there were sections along the fenceline where there has been erosion of the step where the fence is located.

8.2.2 Location 2

The setting of Location 2 is similar to Location 1 (see Map 4, Plate 1), though here the aeolian sand level is visible along the fenceline. Ground surface visibility was similar to Location 1, but no artefacts were located during the survey. This site is considered a PAD due to the potential for the aeolian sand layer to contain subsurface deposits, as this stratigraphical level is where artefacts were previously recorded (see section 6, above). The PAD extends into the property west of the Lot 31 property boundary fenceline.

8.2.3 Location 3

Location 3 (see Map 4, Plate 2) is an aeolian sand layer visible in the wall overlooking a completed quarry pit in the northern section of Lot 31. The original ground surface is covered by a layer of sand and clay by-product from quarrying operations in other section of the quarry. It was not possible to examine the pit wall closely, and no artefacts were located along the top of the pit wall. This site is a PAD, as the aeolian sand layer is visible in the quarry pit wall, and this stratigraphical layer is where other occupation deposits were identified (see section 6, above).

8.2.4 Location 4

Location 4 (see Map 4, Plates 3 and 4) is situated on the top of a wall overlooking a completed quarry pit that is partially filled with water. The ground consists of topsoil stockpiled on top of the original ground surface. Ground surface visibility was 70%, ground cover consisted of short grass and weed. Artefacts were located on the ground surface (see map), one of them a hammerstone, but they are not *in situ*, having been redeposited.

8.2.5 Location 5

Location 5 (see Map 4, Plates 5-11) is the western edge of the site remnant preserved as a condition of the permit originally issued to permit extraction of sand from the quarry. The area was walked over by the survey participants. There is rubbish, old machinery, deposited on the ground surface of the western section near the sand haul road (see Plate 9), which is where there is also a 50cm layer of fill dumped on the surface. A track crosses the area, from the haul road towards the creek. Numerous burrows were observed in the ground surface, in the creek banks and along the section of exposed deposit beside the haul road. The burrow size varied, from large rabbit burrows to smaller kingfisher holes in the deposit wall. An old fenceline with a gate crosses the location, from the sand haul road to Butmaroo creek, in N-S direction (see Plates 6-8).

Ground surface visibility was approximately 5%; the ground surface covered by short grass, low-growing succulent and occasional thickets of thistle. The area where there was more ground surface visibility was the eroded track crossing the area. The grass and weed covered the ground up to the creek edge, where there was a fall of 1m to the present water level (which was low at the time of the survey). No artefacts were observed during the survey.

9 Results

9.1 Discussion

Five locations were visited where there were previously identified sites and PADs. Artefacts had been recorded in three of these locations (Locations 1, 4 and 5), but during the survey for the present report artefacts were found at only two of these locations (Locations 4 and 5). The other sites were PADs, and though inspected, no artefacts were located. This does not diminish their potential for subsurface deposits, as Locations (1, 2 and 3) almost certainly contain subsurface cultural heritage deposits in the aeolian sand layer below the original ground surface, the setting in which sites were recorded previously.

9.2 Site Significance

9.2.1 Aboriginal significance

The Aboriginal significance placed on archaeological sites cannot be quantified in scientific terms, instead reflecting elements of social, aesthetic and educational values. The Burra Charter defines social value as:

"...the qualities for which a place has become a focus of spiritual, political, national, of other cultural sentiment to a majority or minority group (Marquis-Kyle and Walker 1992: 73)."

Aesthetic value is defined as:

"...a certain quality of a place which provides a sensory experience to a person participating or viewing a landscape, of such strength that it has a positive impact on human thought (Marquis-Kyle and Walker 1992:73)".

Educational value reflects the potential for a site to assist in illustrating particular themes or concepts in education programs.

The Ngunawal Traditional Owners are qualified to comment on the Aboriginal cultural significance of sites. Nevertheless it can be stressed that all traces of prior Aboriginal habitation visited during the survey were of interest and were considered significant to the Ngunawal representatives. Aboriginal cultural heritage places and objects assist Aboriginal people to fully appreciate and demonstrate their connection to land. In particular, the sites allow community members to visualise and understand the traditional activities of their ancestors in the actual location they occurred.

Artefact scatters are significant in that, though the contents may not be of high scientific significance, they are indicators of prior Aboriginal occupation and use of the land, and of activities undertaken by the ancestors.

The significance assessment of sites visited during the survey is contained in Table 1. Measures to ensure the protection of these sites were formulated in the field, recognising their significance to the Traditional Owners and the scientific community.

9.2.2 Scientific significance

Scientific significance is assessed by examining the research potential and representativeness of archaeological sites recorded.

Research potential can be assessed by examining site content and site condition. Site contents include all cultural materials and organic remains associated with human activity at a site. Site contents also include its structure, its size, the patterning of cultural materials within the site and the presence of any stratified cultural heritage deposits. Site condition refers to the degree of disturbance to the contents of a site at the time it was recorded.

Representativeness refers to the regional distribution of a particular site type. It is assessed on whether the site is common, occasional or rare in a given region. Assessments of representativeness are subjectively biased by current knowledge of the distribution and numbers of archaeological sites in a region. This varies from place to place depending on the extent of previous archaeological research. Consequently, a site that is assigned low significance values for contents and condition, but a high significance value for representativeness, can only be regarded as significant in terms of current knowledge of the regional archaeology. Any such site should be subject to further re-assessment as additional archaeological research is carried out.

Assessment of representativeness also takes into account the contents and condition of sites. In any region there may only be a limited number of well-preserved sites of a particular type. Such sites are therefore of greater significance when considering their representativeness, although they may occur commonly within the region.

10 Conclusions

The survey of Aboriginal cultural heritage sites in Lot 31 revisited previously recorded Aboriginal cultural heritage sites and PADs. One previously recorded artefact was not relocated, but the exposures follow the general tendency for the Lake George area: low density scatters of flaked quartz and silcrete artefacts.

Location	Research Potential				Overall Significance (archaeological value)	Aboriginal Significance
	Integrity	Structure	Contents	Representativeness		
1	Low: area prone to erosion, artefact not relocated during survey	Moderate: possible concentrations of subsurface artefacts in the PAD in the aeolian sand	Low: isolated artefact, possible subsurface cultural heritage deposits	Low: similar, better preserved sites occur elsewhere through this sand body	Low	Moderate
2	Moderate-High: PAD is subsurface, possible <i>in situ</i> deposits	Moderate: possible concentrations of subsurface artefacts in the PAD in the aeolian sand	Low: possible subsurface cultural heritage deposits	Low: similar sites occur through the region	Moderate	Moderate
3	Moderate: PAD is subsurface, possible <i>in situ</i> deposits	Moderate: there has been quarrying next to the PAD, but aeolian sand in pit wall is <i>in situ</i>	Low: possible subsurface cultural heritage deposits	Low: similar site occur through the region	Low - Moderate	Moderate
4	Moderate: highly disturbed context from quarrying activities	Low: surface artefacts, possible subsurface artefacts	Moderate: flaked stone artefacts and a hammerstone	Low: similar, better preserved sites occur through the region	Low - Moderate	Moderate
5	High: artefacts exposed on the ground surface, <i>in situ</i> subsurface cultural heritage deposits	High: Stratified site near water-course	High: flaked artefacts	High: sections of undisturbed artefact scatter near a water-course	High	High

Table 1: Site significance of Locations 1-5.

11 Recommendations

These site protection measures and recommendations have been formulated during discussions with the Indigenous stakeholders.

11.1 General recommendations

In addition to specific actions described for specific portions of the quarry site, it will be necessary for the proponent to implement a program of cultural heritage awareness training, in consultation with the registered stakeholders, to ensure that all employees and contractors are informed of the importance of cultural heritage items that are present and know how to respond should unexpected items be encountered during site restoration work.

11.2 Site specific recommendations

Recommendations were considered in accordance with the characteristics of each exposure and

the wishes of the Traditional Owners.

11.2.1 Location 1

Geotextile will be placed on the small slope between the property fenceline and the water-filled, rehabilitated quarry pit, separating the ground surface from the fill to be dumped on top. The geotextile will cover exposed portions of the deposit where the stepped edge may be subject to erosion. It will be secured in place and will include Location 2.

Fill and topsoil will be placed on top of the geotextile and will be compacted and seeded to stabilise the soil.

No machinery will access undisturbed parts of the site (located on the western side of the boundary fence) during implementation of site protection measures.

There is to be no further quarrying activities, no vehicle access, and no other activity not related to site protection covered by the AHIP permit in this location that may impact cultural heritage deposits.

11.2.2 Location 2

Geotextile will be placed on the small slope between the property fenceline and the water-filled, rehabilitated quarry pit, separating the ground surface from the fill to be dumped on top. It will be secured in place.

Fill and topsoil will be placed on top of the geotextile and will be compacted and seeded to stabilise the soil.

No machinery will access undisturbed parts of the site (located on the western side of the boundary fence) during implementation of site protection measures.

There is to be no further quarrying activities, no vehicle access, and no other activity not related to site protection covered by the AHIP permit in this location that may impact cultural heritage deposits.

11.2.3 Location 3

Geotextile will be placed along the top of the pit wall overlooking the quarry, and will hang down, separating the uppermost fine-sand cultural layer and original ground surfaces exposed in profile in the pit wall. The geotextile will separate the cultural deposits from the gravel and fine sand left as a by-product of sand extraction, which will be dumped in the quarry pit. The geotextile will be placed along the edge and will be secured in place.

The quarry pit will be gradually filled with this quarry by-product. This fill will be pressed against the pit wall, protecting the archaeological deposits and stabilising the pit walls. This infilling of the pit will be a gradual process and will take years to complete.

No machinery or other vehicles will access this portion of the site during implementation of site protection measures.

There are to be no further quarrying activities, no vehicle access, no other activity not related to

site protection in this location covered by the AHIP permit that may impact cultural heritage deposits.

11.2.4 Location 4

Geotextile will be placed along the top of the pit wall overlooking the quarry, and will hang down, separating cultural layer and original ground surfaces visible in the pit wall from the sand and gravel quarrying by-product to be deposited in the pit. The geotextile will be placed along the edge and will be secured in place.

The quarry pit will be gradually filled. This fill will be pressed against the pit wall, protecting the PAD and stabilising the pit walls. This infilling will be a gradual process resulting from general quarrying activities, and will take years to complete. Archaeologically sterile fill will also be placed along the top of the wall to protect surface artefacts.

No machinery or other vehicles will access the site during implementation of site protection measures.

There are to be no further quarrying activities, no vehicle access, and no other activity not related to site protection in this location covered by the AHIP permit that may impact cultural heritage deposits.

11.2.5 Location 5

Geotextile will be used to protect the exposed bank located next to the haul road. This bank is the western edge of the significant remnant of Site 57-2-121 preserved beside Butmaroo Creek. The geotextile will be placed along the top of the bank next to the haul road and will hang down the face to separate the cultural layer from the clay fill. The geotextile will be placed for a distance of approximately 95m along the edge of the bank. The geotextile will be secured in place with overlying fill.

Fill and topsoil will be placed against the wall to provide protection to the cultural heritage deposits, and will be seeded with native plants to prevent erosion. This fill will stabilise the wall, and will be placed at such an angle as to avoid erosion and maximise stabilisation of the wall.

Existing fencing along the haul road will be replaced with yellow star pickets and new orange para-webbing. Appropriate signage will be placed along this fence.

The old machinery deposited in Location 5 will be removed. A track crossing this portion of the site will be closed off, the gate removed and alternative access will be provided.

No machinery and no vehicles will access the site during implementation of site protection measures.

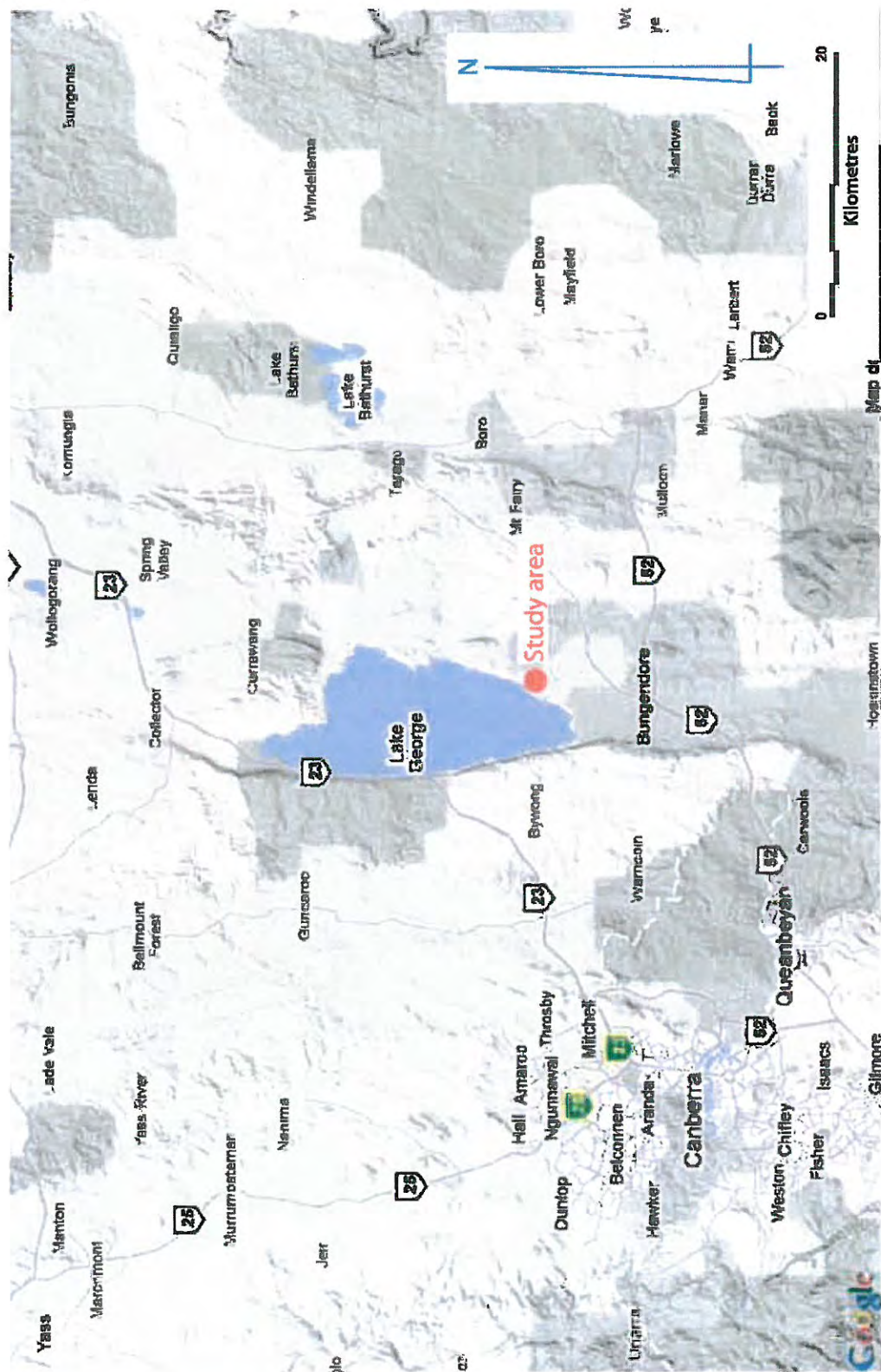
There are to be no further quarrying activities, no vehicle access, no other activity not related to site protection in this location covered by the AHIP permit that may impact upon cultural heritage deposits.

12 References

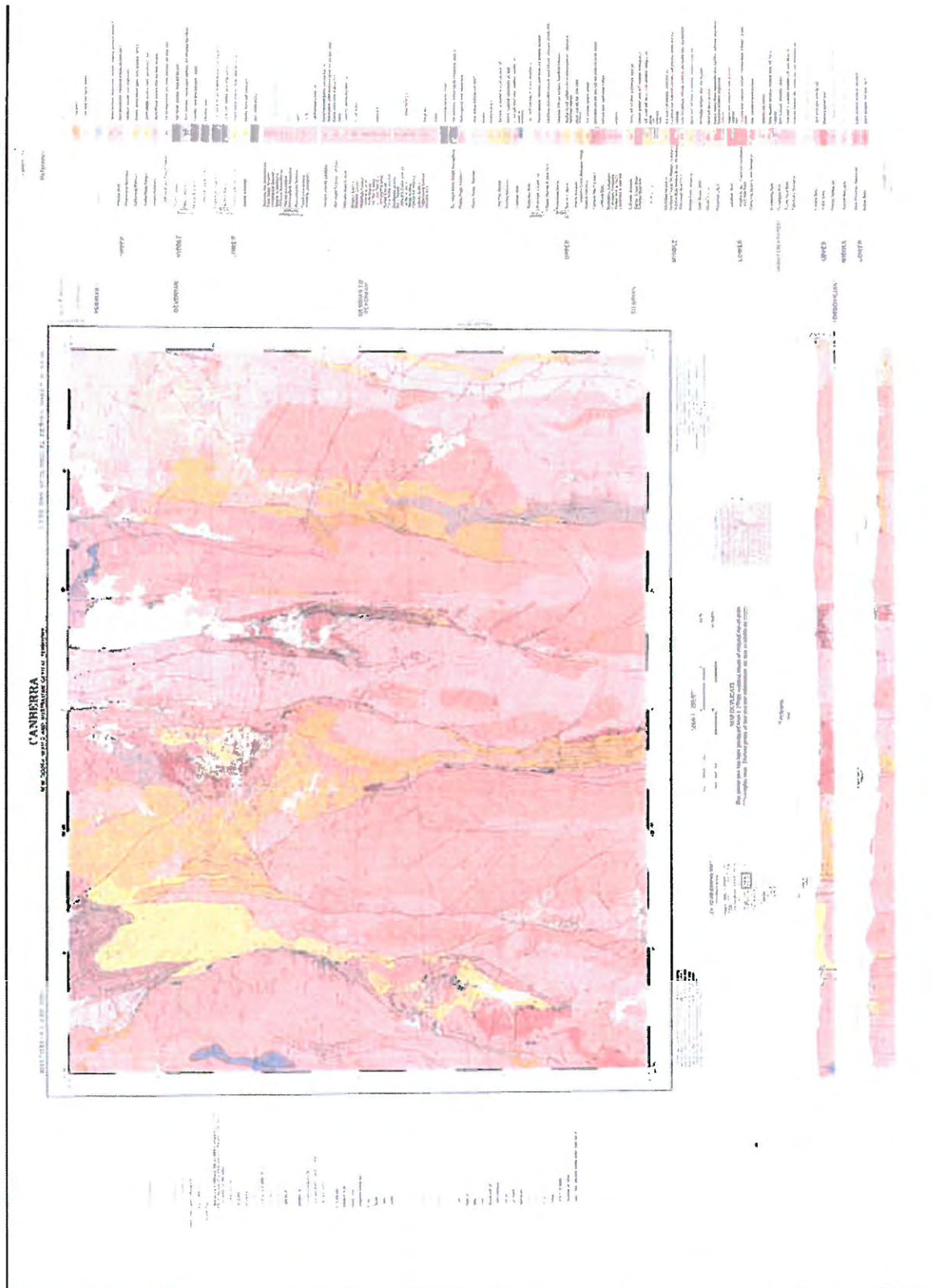
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13 Appendices

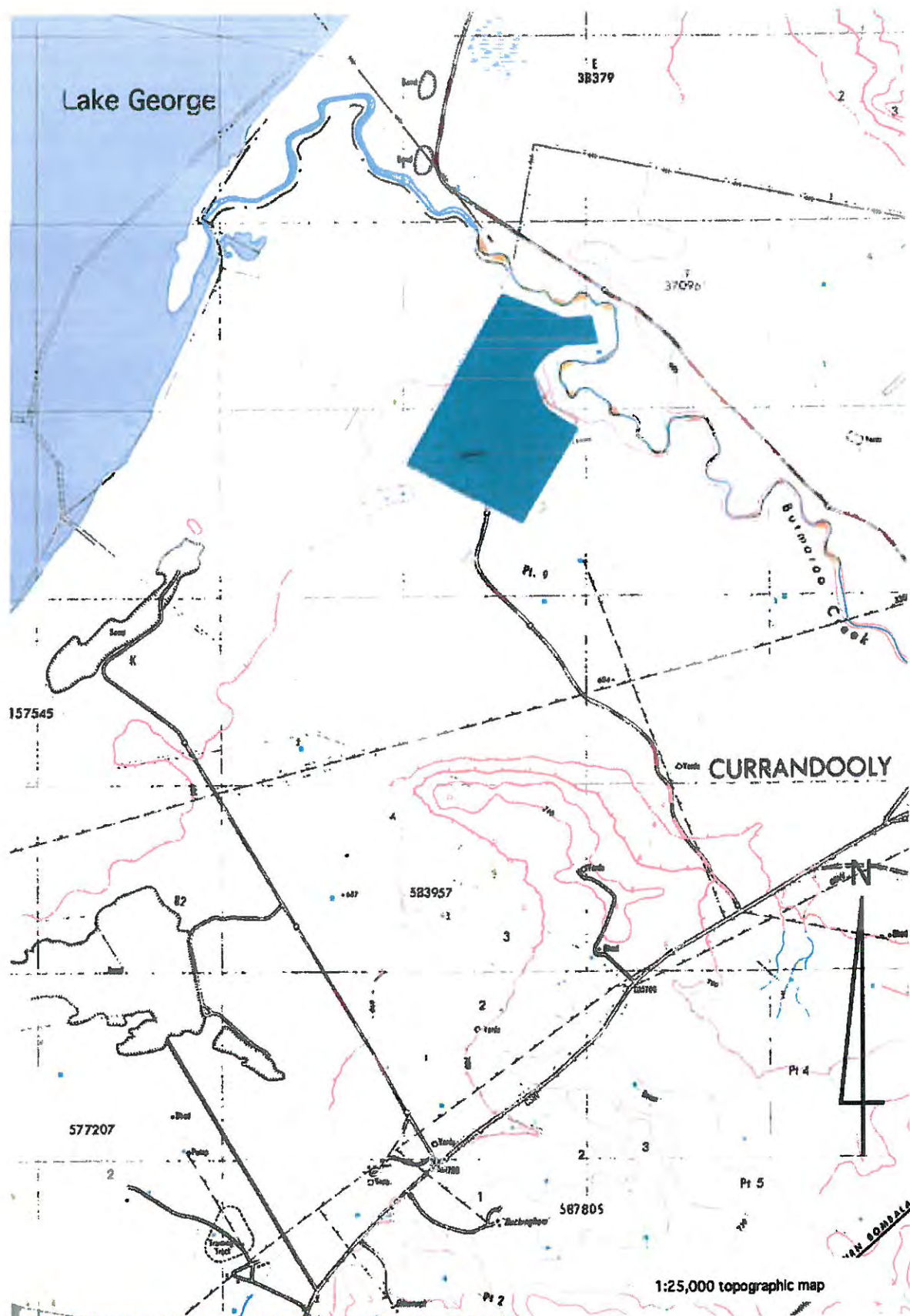
13.1 Maps



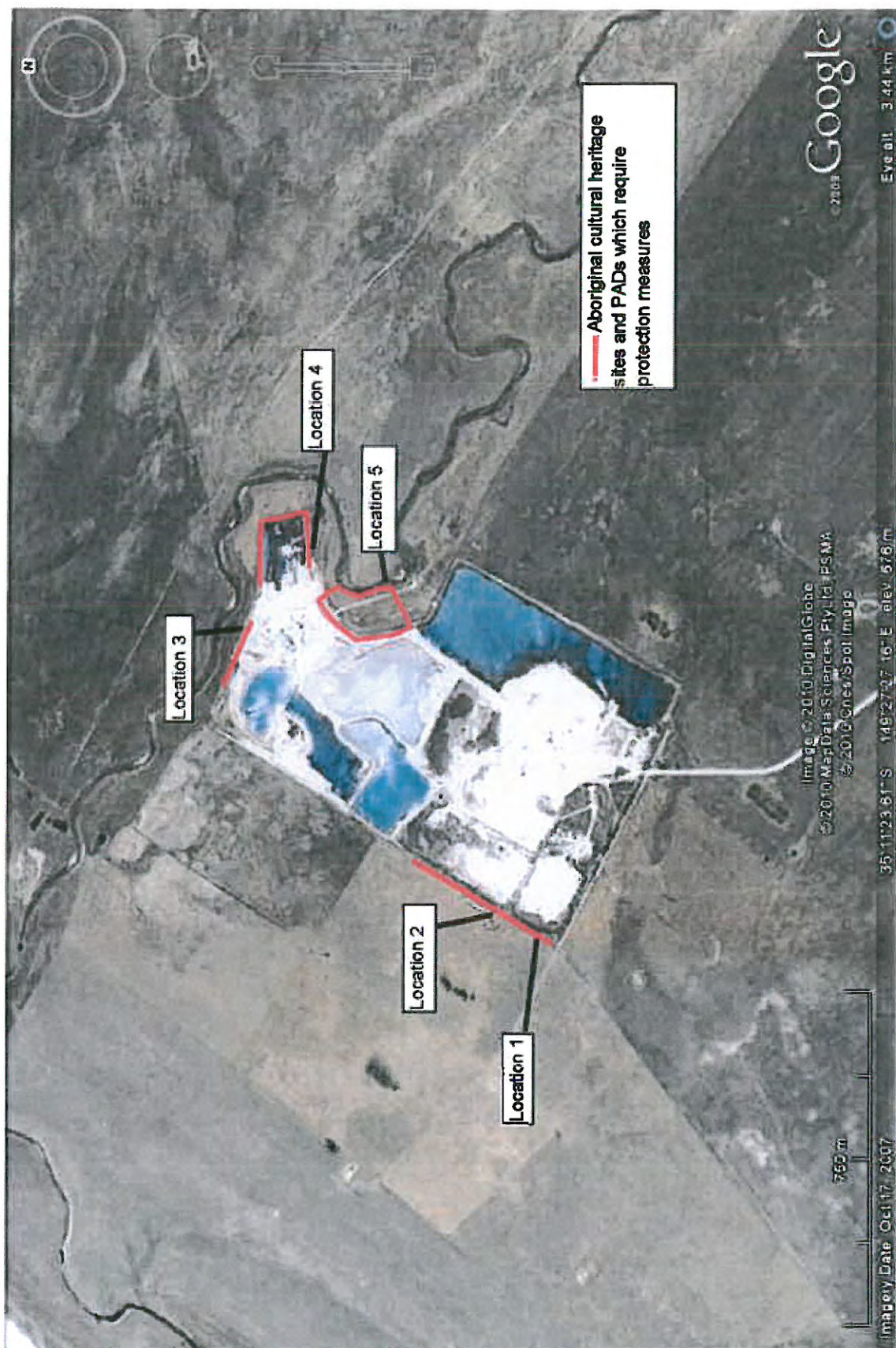
Map 1: General Area of Lot 31, Bungendore



Map 2: Geological Map.



Map 3: Topographic map showing location of quarry in Lot 31.



Map 4: Aboriginal cultural heritage locations in Lot 31.

13.2 Plates



Plate 1: Locations 1 and 2 looking north. LCM. 26/07/2010.



Plate 2: Location 3 looking west. LCM. 26/07/2010.



Plate 3: Location 4 looking north. LCM. 26/07/2010.



Plate 4: Location 4 looking northeast. 26/07/2010.



Plate 5: Location 5 looking north. LCM. 26/07/2010.



Plate 6: Location 5 looking east. LCM. 26/07/2010.



Plate 7: Location 5 looking northeast. 26/07/2010.



Plate 8: Location 5 looking southeast. LCM. 26/07/2010.



Plate 9: Location 5 looking south. LCM. 26/07/2010.



Plate 10: Location 5, wall section along sand haul road looking south. LCM. 26/07/2010.



Plate 11: Location 5, wall section along sand haul road looking south. LCM. 26/07/2010.

13.3 Consultation Process

13.3.1 Consultation Log

01/04/2010	Formal Letter to Stephen Free (DECCW) requesting list of stakeholders
19/04/2010	Received email from Stephen Free (DECCW) with list of stakeholders
21/04/2010	Received formal letter from Stephen Free (DECCW) with list of stakeholders
28/04/2010	Newspaper advertisement sent to Koori Mail for proofing
29/04/2010	Letters inviting expressions of interest in community consultation sent to all parties listed in s. 7 (see above).
05/05/2010	Advertisement published in Koori Mail (ed. 475) inviting expressions of interest in community consultation.
16/06/2010	Retried contact with stakeholders that did not answer, via phone and email.
03/07/2010	Letter with stakeholders that registered interest in community consultation process sent to DECCW.
12/07/2010	Phoned Colin Williams (Ngambri Aboriginal Land Council) to organise a representative for the survey.
14/07/2010	Organised with Geoff Murray (Ngambri Aboriginal Land Council) a survey for 19/07/2010
16/07/2010	Phoned Walter Bell (Buru Ngunawal Aboriginal Corporation) to participate in the survey. The survey was changed to 26/07/2010. Geoff Murray was informed of the change.
26/07/2010	Survey of Lot 31 with Geoff Murray and Walter Bell.
07/10/2010	Posted copies of draft report to each of the registered stakeholders
09/11/2010	Phoned and emailed registered stakeholders who had not responded to request comments on draft report.
10/11/2010	Received final comments from interested stakeholders

13.3.2 Formal letter from DECCW with list of stakeholders

Our reference : Response letter to request of 1 April 2010
Contact : Stephen Free (02) 6229 7087

Ms Lucia Clayton Martinez
Heritage Consulting Australia
29/12 Waniassa Street
QUEANBEYAN NSW 2620

Dear Ms Martinez

**WRITTEN NOTIFICATION OF PROPOSAL AS REQUIRED UNDER DECC INTERIM
COMMUNITY CONSULTATION REQUIREMENTS FOR APPLICANTS RE: PROPOSED
SAND QUARRIES – CANBERRA SAND AND GRAVEL AND BUNGENDORE SANDS.
BUNGENDORE, NSW – CULTURAL HERITAGE ASSESSMENT**

I refer to your letter dated 1 April 2010 to the Department of Environment and Climate Change (DECC) regarding the above matter.

Attached is a list of known Aboriginal parties that DECC feels is likely to have an interest in the development. Please note this list is not necessarily an exhaustive list of all interested Aboriginal parties and receipt of this list does not remove the requirement of a proponent/ consultant to advertise in local print media and contact other bodies seeking interested Aboriginal parties, in accordance with the Interim Requirements.

If you wish to discuss any of the above matters further please contact me on (02) 6229 7087

Yours sincerely

STEPHEN FREE
Senior Aboriginal Heritage Officer/Archaeologist,
Aboriginal Heritage Regulation Unit
Environmental Protection and Regulation Group South
April 2010

PO Box 733, Queanbeyan, NSW 2620
6 Ruffledge Street, Queanbeyan, NSW 2620
Tel: (02) 6289 2828 Fax: (02) 6289 4261
ABN 30 841 387 271
www.environment.nsw.gov.au

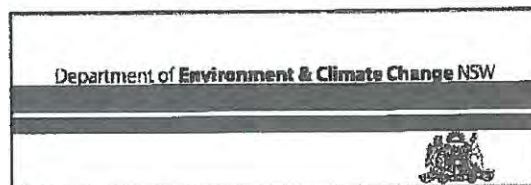


Figure 1: Formal letter from DECCW with list of stakeholders.

13.3.3 Written notification sent to invite expressions of interest

Thursday 29 April 2010

This letter is a public call for expressions of interest in cultural heritage work to be undertaken in two sand quarries in the vicinity of Lake George, Bungendore.

It is an invitation for Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) in the area of the proposed project to register an interest in a process of community consultation with the proposed applicant regarding the proposed activity.

Canberra Sand and Gravel operates two quarries in Bungendore: one adjacent to Butmaroo Creek, southeast of Lake George, and one adjacent to Turallo Creek, south of Lake George. Both quarries contain Aboriginal cultural heritage places within their boundaries.



The Butmaroo Creek quarry wishes to undertake the restoration and conservation of the Aboriginal cultural heritage on its property, to avoid further damage to it. This will entail a survey to determine the extent and conditions of Aboriginal cultural heritage present and the procedures necessary to protect it.

Extensions to the Butmaroo Creek quarry in the early 1990s were preceded by studies that determined that this was a residential campsite with numerous minor workshops spread across the site and where food was possibly prepared on site. Results from this investigation called into question conventional theories of regional stone tool industry chronologies.

The Canberra Sand and Gravel quarry adjacent to Turallo Creek was investigated in 1987 and was determined to be a low density, subsurface artefact scatter possibly dated between 5000-1000 years ago.

An AHIP was issued on 19/07/1988 for this site, but minimal work was carried out and some of the Aboriginal cultural heritage was not impacted. The quarry now wishes to carry out previously planned extensions, but the AHIP has now expired. Canberra Sand and Gravel now wishes to apply for a new permit. The area will have to be surveyed to determine the extent and conditions of the Aboriginal cultural heritage place previously identified.

The environmental history of Lake George tells the story of how the lake and its surroundings varied in accordance to climate changes since the late Pleistocene. The archaeological sites researched around Lake George tell stories of the different ways Indigenous Australians utilised the landscape and its resources. Both archaeological and paleo-environmental studies combined provide an overview of the region, and further studies can only help to better understand the history of the Lake George district.

The purpose of community consultation with Aboriginal people is to assist the proposed applicant in the preparation of an application for an AHIP (Aboriginal Heritage Impact Permit) and to assist the Director General of the Department of Environment, Climate Change and Water (DECCW) in his or her consideration and determination of the application.

All interested parties must register in writing by 19 May 2010 to:

Heritage Consulting Australia Pty Ltd
GPO Box 2677
Canberra ACT 2601

lucia@heritageconsulting.com.au
fax 02 62479110

People who register an interest must be advised that their details will be forwarded to DECCW and to the Local Aboriginal Land Council unless they specify that they do not want their details released.

Regards,

Lucia Clayton Martinez

Heritage Consulting Australia
Ph.0406996204
lucia@heritageconsulting.com.au

13.3.4 Expressions of Interest



ABN : 24 059 704 833

REGISTRATION OF INTEREST

Heritage Consulting Australia Pty Ltd
GPO Box 2677
Canberra ACT 2601

Attention: Lucia Clayton Martinez

We wish to lodge an expression of interest for:

Sand Quarries near Lake George, Bungendore

We offer the following information in support of our expression of interest in relation to Aboriginal Cultural Heritage:

Organisation: Buru Ngunawal Aboriginal Corporation (BNAC)
Name: Mr Walter R Bell
Contact Details: Postal Address: PO Box 6900, Charnwood ACT 2615
Phone: 02 6259 1672 Fax: 02 6258 1264
Mb: 0419 425 347 Email: walbell@bigpond.net.au

BNAC's members, the NGUNAWAL people, are the Traditional Carers for this area (see attached map) and all are of direct Ngunawal descent. BNAC is an incorporated organisation whose constitution and rules of governance state that we as an organisation will endeavour to protect our Aboriginal culture and heritage to the best of our collective abilities. Being part of the consultative/planning process will ensure that the proper protection and preservation of our culture and heritage continues. As the Traditional Carers we hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects or places in the proposed Study Area.

The qualifications and previous experience that we have in Aboriginal cultural heritage assessment work has come from over 35 years experience working on jobs such as the Eastern Gas pipeline, Gas pipeline and Water Sewerage pipeline at Goulburn NSW, Towrang NSW road widening, Yass NSW Bypass, Coolac NSW Bypass all for the RTA, Galong Lime Mine Bypass, Transgrid power easement regeneration at Tiddinbilla, Woodlawn Wind farm at Tarago NSW, Capital Wind Farm at Lake George, the proposed Yass Wind Farm, the Crookwell II Wind Farm, the Department of Defence HQJOC, Bungendore and the gas feeder main connecting HQJOC to Eastern Gas main pipeline, fibre optic cable from Canberra to DHQJOC and most recently the enlarged Cotter Dam project, ACT. We are engaged in survey work for residential development that takes place within the Ngunawal Tribal boundary in both urban and rural situations.

During our years of carrying out this Cultural heritage management type work we have come in contact with numerous archaeologists of whom the following three have indicated that they are more than please to support us in our endeavours to preserve our cultural heritage. They are Ms Megan Russell – 0427 753 322, Mr Doug Williams – 02 4474 5736, 0412 997 177 and Mr Wilfred Shawcross – 02 6248 7336.

PO Box 6900, CHARNWOOD ACT 2615

Ph: 02 62591672 Fax: 02 6258 1264 Email: walbell@bigpond.net.au

Figure 2: Letter of expression of interest from the Buru Ngunawal Aboriginal Corporation.

Archived: Sunday, 15 August 2010 3:39:47 PM

From: John Dixon

To: lucia@heritageconsulting.com.au

Subject: Expression of Interest

Importance: Normal

Hi Lucia,

Thank you so much for your letter in relation to the Butmaroo Creek and Turallo Creek sand quarries and the intentions of the Canberra Sand & Gravel company who intend to do some restoration and impacts to sites at both the quarries mentioned. We do have the experience to determine the significance of protected objects and places in the area, and more importantly on the land that is traditional to us. Our ancestors the Ngarigo people were heavily recorded and impacted around the Canberra region and around Queanbeyan and Bungendore. The sites are abundant in the area around Bungendore and we believe that they were left by our ancestors who's social make-up was recorded in the area when the Europeans first made contact there. We have worked extensively over the years around the area of Canberra, Queanbeyan and Bungendore on surveys to identify sites and participate in testing and salvage works and making recommendations for preservation and protection of such sites taking into account a balance that may suit all stakeholders. We have been involved in more recent times in the archaeological surveys and salvage works at the Defense facility Joint Headquarters on the Kings Highway near Bungendore and the Googong New Town proposal by CIC Australia Limited, we have also been involved in the Visionstream telecommunications line from Canberra to the Joint Headquarters of the Defense Department. We have been working on the Monaro and Limestone Plains for the past 15 years and we know all the groups and we work very well with them and we have never had any problems with our people who we understand are involved via expressions of interest under the community consultation guidelines attached to the NPW Act, 1974 as amended in regards to there connection to country. We formally pledge our expression of interest in the project and would dearly love to be involved. We represent the Ngarigo Elders and we report back to those Elders after the Ngarigo Sites Officer have been involved in the projects. I look forward to hearing from you in the near future.

Thank You,

John Dixon

Director

Yukembruk Merung Ngarigo Consultancy PTY LTD

PO BOX 413 Bega NSW 2550

Ph: 0488749193

Figure 3: Email of expression of interest from John Dixon.

Archived: Sunday, 15 August 2010 3:39:05 PM
From: tina brown
To: lucia@heritageconsulting.com.au
Subject: Lake George Quarry
Importance: Normal
Attachments: CGU.pdf; Insurance.pdf;

Dear Lucia,

On behalf of King Browns Tribal Group Pty Ltd I wish to put forward our expressions of interest in regards to: Aboriginal Heritage impact at Canberra Sand & Gravel, Bungendore. I would also like to bring it to your attention that we are Ngunnawal people and our families have lived in the Ngunnawal region for thousands of years.

Our company is currently involved with the Murrumbidgee water transfers to Googong and the Cotter Dam in the A.C.T. Our representatives all have over 20yrs experience in the field. Please find attached 2 insurance certificates.

If you require any further information, please contact me on 0450520057.

Kind Regards

Tina Brown

Figure 4: Email of expression of interest from King Brown Tribal Group.

**KONANGGO ABORIGINAL
CULTURAL HERITAGE SERVICES**
ABN 21143115147



ROBERT YOUNG
Principal Consultant
773 Princess Highway
TEMPE NSW 2044

Mobile: 0450 497 270
Home: 02 95595870
Email: konanggo_consultancy@hotmail.com

RE: Canberra Sand Quarry-Gravel Quarry Bungendore

I wish to register my Expression of Interest on the above two projects as a Ngunawal Traditional owner and knowledge holder and a registered Stakeholder of the Ngunawal people.

If you have any queries don't hesitate to contact me on my mobile or email, and will be looking forward to do any investigations on either project.

Kind Regards

Robert Young
Principal Consultant
10/5/10

Figure 5: Letter of expression of interest from Konanggo Aboriginal Cultural Heritage Services.



Ngambri Local Aboriginal Land Council
PO Box 150 Queanbeyan,
NSW 2620

ABN 95802355809

02 6297 4152
02 6289 3941
nlalc1@bigpond.net.au

3 May 2010

Heritage Consulting Australia Pty Ltd
GPO Box 2677
Canberra ACT 2601

RE: Burmann and Turallo Creek quarries, Canberra Sand and
Gravel surveys

Dear Lucia

Ngambri Local Aboriginal Land Council submit the following expression of interest for a proposed Aboriginal Heritage Survey, it is unclear to me if this is in the Palerang or Queanbeyan Council areas. your clarification would be appreciated.

Ngambri Local Aboriginal Land Council (NLALC) boundaries are within the specified area, we have been involved in providing cultural Heritage officers and advice since Land Council inception in 1983 within our boundaries.

All site officers are qualified and carry Green/White cards are covered by relevant Insurances under the NLALC, and have over 40 years experience between them, NLALC would nominate representatives to attend.

Ngambri Local Aboriginal Land Council has a vested interest under the NSW Aboriginal Land Rights Act 1983. should you require any more information please contact me on 6297 4152.

Yours Sincerely

A handwritten signature in black ink, appearing to read "Colin Williams".

Colin Williams
Chief Executive Officer
Ngambri Local Aboriginal Land Council

Figure 6: Letter of expression of Interest from Ngambri Aboriginal Land Council.



Ngunawal Heritage
Aboriginal Corporation

Lot 114 Ash Road
PRESTONS NSW 2170
Ph: 0412 176 081
Fx: 07 5630 8597
nhac@arindalinternet.com.au
ICN 4755
ABN 31494344309

16 May 2010

Lucia Clayton Martinez
Heritage Consulting Australia Pty Ltd
GPO Box 2677
Canberra ACT 2601

Canberra Sand and Gravel Quarry -Lake George Bungendore

Dear Lucia,

I refer to your letter dated 29th April 2010 asking if Ngunawal Heritage Aboriginal Corporation would like to register our interest for the cultural heritage Studies.

The Ngunawal Heritage Aboriginal Corporation would like to be consulted in relation to this project and would like to express its Interest to participate in any related fieldwork.

We are very passionate and feel strongly about preserving our cultural heritage in our traditional country.

I look forward to hearing from you in relation to this project.

Kind regards

Dorothy Carroll
Chairperson

Figure 7: Letter of expression of interest from Ngunawal Heritage Aboriginal Corporation.

13.3.5 Newspaper Advertisement

**CALL FOR PUBLIC INTEREST
COMMUNITY CONSULTATION FOR
ABORIGINAL CULTURAL HERITAGE IN
BUNGENDORE**

This is a public announcement inviting Aboriginal people to express cultural knowledge relevant to determining the significance of Aboriginal objects and/or places on the site of the Carrandooley Sand and Gravel Quarries, north of Bungendore. Parties of Countrywide are regular an interest in a process of community consultation regarding:

- Procedures for the conservation and preservation of Aboriginal cultural heritage places on Lot 31 DP6342*3, adjacent to Bulbarra Creek, prior to the extension of the quarry into the area.
- The investigation of Aboriginal cultural heritage places on Lot 21 DP710021, adjacent to Torralba Creek, prior to the extension of the quarry into this area.

All parties must register their interest by writing within 10 working days commencing 05-05-2010 to:

Lucas Clayton-Martin
Heritage Consulting Australia Pty Ltd
GPO Box 2077
Canberra ACT 2601
M 0400 999 204
Fax 02 6247 5119

The purpose of community consultation with Aboriginal people is to assist the proponent applicant in the preparation of an application for an AWP and to assist the Director General of DECCW in his or her consideration and determination of the application.

People who register an interest must be advised that their details will be forwarded to DECCW and to the Local Aboriginal Land Council unless they specify that they do not want their details released.




**Koori Mail
NEWSPAPER**
EDITION 475

**CLIENT'S
PROOF**
AD SIZE:
18X2

**TOTAL INCLUDING
10% GST:**

\$693

CLIENT: HERITAGE
CONS:

ATTENTION:
LUCIA

**PLEASE CHECK THIS AD
AND EMAIL OR FAX
BACK ANY CHANGES
WITH YOUR
CONFIRMATION TO
PROCEED ON**

FAX: 02 66 222 666

ASAP

REGARDS
CHRIS
ADVERTISING DEPARTMENT
Phone 02 66 222 666

PLEASE PRINT NAME AND ADDRESS OF CLIENT AND ADVERTISER IN FULL AND RETURN TO THE ADVERTISING DEPARTMENT WITHIN 10 WORKING DAYS OF THE DATE OF THE ADVERTISING COPY. IF YOU DO NOT RETURN THE ADVERTISING COPY WITHIN 10 WORKING DAYS OF THE DATE OF THE ADVERTISING COPY, THE ADVERTISING DEPARTMENT WILL BE RESPONSIBLE FOR THE ADVERTISING COPY.

REPEAT EDITIONS
YES NO

Please write below how many editions you would like this ad to appear in.

IF YOU DO NOT WANT TO REPEAT EDITIONS, PLEASE WRITE "NO" AND CHECK THE "NO" BOX.

THIS AD IS NOT TO APPEAR IN YOUR CURRENT EDITION

Figure 8: Koori Mail ed.475 advertisement inviting expressions of interest, published 05/05/2010.

13.3.6 Consultation Outcome

Only two of the six registered stakeholders responded to the draft report. These were the Buru Ngunawal and the Ngambri Local Aboriginal Land Council. Both endorsed the recommendations for site protection as documented in the report. The responses are reproduced below.



10 November 2010

Mr Allan Lance
Heritage Consulting Australia Pty Ltd
GPO Box 267
Canberra ACT 2601

Ngambri Local Aboriginal Land Council
PO Box 150 Quambayan,
NSW 2620

02 6297 4152
02 6299 3941
nalc1@bigpond.com

Site 67-2-121, Currandooley Lease, Bungendore.

Dear Allan

Ngambri Local Aboriginal Land Council (NLALC) participated in an Archaeological Survey and Assessment of Currandooley Lease, Bungendore Lot 21 Bungendore through our Senior Sites Officer.

NLALC concur with the conclusions and recommendations in the Report, and has no impact on Site 67-2-121

I confirm the report was provided to Ngambri Local Aboriginal Land Council on 8 October 2010

Should you have any questions relating to this matter please call me on 02 6297 4152 or 0402 623 097.

Yours sincerely

Col Williams
Chief Executive Officer
Ngambri Local Aboriginal Land Council

Figure 9: Response to draft report from the Ngambri Local Aboriginal Land Council.



Lot 114 Ash Road
PRESTONS NSW 2170
Ph: 0412 176 081
Fx: 07 5630 8597
ngunawalhac@gmail.com
ICN 4755
ABN 31494344309

24 October 2010

Allan Lance
Heritage Consulting Australia Pty Ltd
GPO Box 2677
Canberra ACT 2601

Re: Bungendore Sand Quarry Studies

Dear Allan,

Thank you for forwarding the Ngunawal Heritage Aboriginal Corporation a copy of the Archaeological Assessment Reports for Lot 21, Turallo Creek Quarry and Lot 31 Currandooly Quarry.

Upon review of the reports Ngunawal Heritage Aboriginal Corporation is in agreement with the recommendations based on the report.

The site protection measures and recommendations to protect Ngunawal Aboriginal sites are consistent with our views for this project.

Canberra Sand and Gravel should ensure that the erecting of a boundary fence to protect Ngunawal Heritage sites remains upright and intact for it to continue to act as a control measure in preserving the (in situ) artefactual materials from earthmoving machinery.

In consultation with the registered Aboriginal stakeholders they should also prepare and deliver Aboriginal cultural heritage awareness training to all site personnel and contractors who will be taking part in this project. This training should form part of the site induction process.

Developing and adhering to recommendations / strategies consistent with current protocols, guidelines, requirements and the wishes of the Aboriginal stakeholders to ensure duty of care to all Aboriginal Heritage will provide a positive outcome for all parties involved.

If you require any further information please do not hesitate to contact me.

Kind Regards

Dorothy Carroll
Dorothy Carroll
Chairperson

Avoidance of any Aboriginal Heritage Sites will always provide the best outcome

Figure 10: Response to draft report from the Ngunawal Heritage Aboriginal Corporation.

14 Glossary

In this report the following definitions and interpretations apply:

Aboriginal Cultural Heritage: the physical traces left behind by past Aboriginal inhabitants that are connected with the cultural life of the Aboriginal people. Cultural heritage is strongly tied to Aboriginal people's connection to land.

Aboriginal Object: an object or artefact that relates to the Aboriginal occupation of the land and is of Cultural Heritage significance to the Aboriginal people.

Aboriginal Place: means a site, landscape, and/or area of water that is of Cultural Heritage significance to Aboriginal people. It may contain components, contents and view.

Aboriginal site: a place that contains evidence of past human activity, in the form of artefacts, structures, remains of features such as hearths, burials, food debris or other material. Sites may typically be covered by soil or vegetation or they may be exposed on the ground surface.

Artefacts: items found in archaeological site that were manufactured by people for their use. These include both portable and non-portable things. Stone tools, bottles, sherds of glass or ceramic, wooden and bone implements, jewellery and metal implements are examples of artefacts that occur commonly within Australian archaeological contexts.

Artefact scatters: a concentration of stone artefacts found on the ground surface, exposed from a subsurface context where the ground has been disturbed, or identified during subsurface investigations or excavation. Artefact scatters indicate that Aboriginal people have been present at that location at least once or repeatedly over long periods of time in the past.

Bipolar flake: flake resulting from the bipolar reduction of a core. Identified by distal flake scars and impact shattering on either proximal or distal ends.

Bipolar technique: a flaking technique by which the core was placed on an anvil and force was applied directly onto the core. Commonly used on quartz cores and from small cores which lack sufficient inertia to be flaked using hand-held percussion.

Cultural Heritage Significance: the aesthetic, historic, scientific, social or spiritual values of past, present and future generations. Cultural heritage significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups.

Exposure: extent to which ground surface has been revealed by erosion or disturbance. Archaeological sites that are covered by sediments cannot be detected (without exposure or excavation).

Flakes: pieces of stone detached from cores, usually by percussion, during the manufacture of stone implements. Flakes manufactured in this way bear characteristic features which enables their identification as artefacts, rather than naturally occurring stone fragments. These features include bulbs of percussion, undulations on the flake surface, and a platform.

Ground surface visibility: extent to which the ground surface is concealed by grass, leaf litter,

gravel, etc. This condition can affect the ease with which artefacts can be detected.

Geotextile: a permeable fabric used as a marker between cultural and non-cultural layers, and to reduce slope erosion.

Hammerstone: a stone used for the removal of flakes from another stone, or to pound foodstuff.

In situ: archaeological material that is found in its original place in the ground.

Isolated find: an artefact found in isolation at an arbitrary distance from another artefact. These sites can represent random loss, intentional discard or may be the only visible remains of a disturbed artefact scatter. Occurring anywhere in the landscape, they are susceptible to the same damage as open sites.

Location: area with traces of prior Aboriginal habitation.

Open site/artefact scatter: surface scatters of stone artefacts that may be associated with hearths. These sites are found in a variety of landscape zones especially near creeks and waterways, hill slopes, open plains and crest ridges and saddles. Open sites are susceptible to disturbance and vegetation cover and thus can be difficult to locate.

Potential Archaeological Deposit (PAD): these are cultural heritage locations, generally associated with rock shelters and aggrading landforms. They do not show identifiable archaeological material, but may contain subsurface material. PADs are identified by their context, that is, an association with a landscape feature generally exploited in the past and found on the basis of experience to contain traces of prior Aboriginal habitation.

Quartzite: a hard, conchoidally-fracturing rock with a coarse-grained texture, comprising of sand grains cemented by silica. When the rock fractures, the fracture line follows the grain boundaries rather than passing through grains as occurs in the case of silcrete.

Raw Material: the stone used by Aboriginal people to manufacture flakes and formal tools. Some raw materials were commonly available, whilst others were procured from specific locations and may have been used in trade and exchange.

Reduction: the sequential process of removing flakes from a core.

Retouch: the removal of flakes from a stone artefact, typically a flake, to either sharpen a blunt edge or to deliberately blunt the handle of a stone tool.

Silcrete: stone type made up of silicified sandstones and conglomerates that fractures with a glassy fracture that made it suitable for the manufacture of stone tools.

Site: any location that contains evidence of past human activity.

Usewear: wear in the form of very fine flakes or polish on the working edge of a tool.

Annexure C - Netting Fence Diagram

Netting Fence

