View south across Lot 302 DP1124543.

ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

SUBDIVISION OF LOT 2 DP1189190 AND LOTS 301 AND 302 DP1124543 ON WILLIAMS ROAD, TABLE TOP, NSW

ALBURY CITY LOCAL GOVERNMENT AREA

OCTOBER 2022

Report prepared by

OzArk Environment & Heritage

for Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga

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Heritage NSW

ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT COVER SHEET

Report Title	Aboriginal Cultural Heritage Assessment Report: Subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543 on Williams Road, Table Top, NSW.
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Stephanie Rusden, OzArk Environment & Heritage Senior Archaeologist

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DOCUMENT CONTROLS

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Acknowledgement

OzArk acknowledge the traditional custodians of the area on which this assessment took place and pay respect to their beliefs, cultural heritage, and continuing connection with the land. We also acknowledge and pay respect to the post-contact experiences of Aboriginal people with attachment to the area and to the Elders, past and present, as the next generation of role models and vessels for memories, traditions, culture and hopes of local Aboriginal people.

ABBREVIATIONS AND GLOSSARY

ACHAR	Aboriginal Cultural Heritage Assessment Report. As set out in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*, all developments where harm to Aboriginal objects is likely must be assessed in an ACHAR.
ACHCRs	*Aboriginal Cultural Heritage Consultation Requirements for Proponents.* Guidelines for conducting Aboriginal community consultation for developments where harm to Aboriginal objects is likely.
AHIMS	Aboriginal Heritage Information Management System. Administered by the DPE, AHIMS is the central register of all Aboriginal sites within NSW.
AHIP	Aboriginal Heritage Impact Permit. Issued by Heritage NSW to allow harm to Aboriginal objects.
Code of Practice	*Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* under Part 6 NPW Act. Issued by DECCW in 2010, the Code of Practice is a set of guidelines that allows limited test excavation without the need to apply for an AHIP. The test excavation program for this assessment was conducted under the Code of Practice.
DPE	NSW Department of Planning and Environment
GSE	Ground surface exposure. A measure of factors that may reveal surface artefacts such as erosion scalds.
GSV	Ground surface visibility. A measure of factors that may obscure the detection of surface artefacts such as leaf litter.
Heritage NSW	Government department tasked with ensuring compliance with the NPW Act. Heritage NSW is advised by the Aboriginal Cultural Heritage Advisory Committee (ACHAC).
NPW Act	*National Parks and Wildlife Act 1974*. Primary legislation governing Aboriginal cultural heritage within NSW.
PAD	Potential archaeological deposit. Indicates that a particular location has potential to contain subsurface archaeological deposits, although no Aboriginal objects are visible.
RAP	Registered Aboriginal Party. An individual or group who have indicated through the ACHCR process that they wish to be consulted regarding the project.

EXECUTIVE SUMMARY

OzArk Environment & Heritage (OzArk) has been engaged by Blueprint Planning on behalf of the Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga (the Proponent) to complete an *Aboriginal Cultural Heritage Assessment Report* (ACHAR) for the proposed subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543 on Williams Road, Table Top, New South Wales (NSW) (the Proposal).

The Proposal is located nine kilometres northeast of Albury in southern NSW and is in the Albury City Council Local Government Area. The study area covers approximately 80 hectares of land which is zoned as R1 'General Residential' under the *Albury Local Environmental Plan 2010.*

This ACHAR has been undertaken in accordance with the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*, and the *Code of Practice for the Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). The Aboriginal cultural heritage assessment of the project has followed the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (the ACHCRs).

By the closing date for registration concerning this Proposal, two groups or individuals registered to be consulted as RAPs:

- Albury Local Aboriginal Land Council (LALC)
- Yalmambirra.

Desktop database searches completed prior to the field survey showed that no sites listed on the Aboriginal Heritage Information Management System (AHIMS) database are located within the study area.

The survey of the study area was completed by OzArk on 16 June 2022. No Aboriginal sites were recorded during the survey, though three landforms (Areas 1–3) with the potential to contain archaeological deposits were identified based on landform features and the location of previously recorded sites in the local area, particularly along Eight Mile Creek.

The test excavation program was completed on 9 and 10 August 2022 with the representatives from the Albury LALC. A total of 20 test units (TUs; 0.5 x 0.5 m) were excavated at three separate localities: a total of five square metres. Only one artefact was recovered from Area 1 (61-1-0291; Eight Mile Creek-IF1) confirming that the landforms within the study area adjacent to Eight Mile Creek are unlikely to be associated with subsurface deposits and that further subsurface investigations are not warranted.

Site 61-1-0291 has been reburied close to the find location and the relocation site has been registered as 61-1-0292.

As site Eight Mile Creek-IF1 has been removed from its find location by the test excavation program and will not be harmed by the Proposal, there will be no harm to heritage values in the study area.

The results of the field survey and test excavation program concluded that the proposed works can proceed without an Aboriginal Heritage Impact Permit (AHIP) or any further archaeological investigation.

Recommendations concerning Aboriginal cultural values within the study area are as follows:

1. All land-disturbing activities must be confined to the assessed study area. Should the parameters of the proposed work extend beyond the assessed area, then further archaeological assessment may be required.
2. This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage items or sites. However, during works, if Aboriginal objects are noted, all work should cease and the procedures in the *Unanticipated Finds Protocol* (**Appendix 5**) must be followed.
3. Work crews should undergo cultural heritage induction to ensure they recognise Aboriginal artefacts (**Appendix 7**) and are aware of the legislative protection of Aboriginal objects under the *National Parks and Wildlife Act 1974* and the contents of the *Unanticipated Finds Protocol* (**Appendix 5**).
4. Should skeletal material be encountered that is suspected to be of Aboriginal origin, all work will cease in the area and the procedures in *Unanticipated Skeletal Remains Protocol* (**Appendix 6**) must be followed.

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1 INTRODUCTION

1.1 DESCRIPTION OF THE PROPOSAL

OzArk Environment & Heritage (OzArk) has been engaged by Blueprint Planning on behalf of the Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga (the Proponent) to complete an *Aboriginal Cultural Heritage Assessment Report* (ACHAR) for the proposed subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543 on Williams Road, Table Top, New South Wales (NSW) (the Proposal).

The Proposal is located nine kilometres (km) northeast of Albury in southern NSW and is in the Albury City Council Local Government Area (LGA) (**Figure 1-1**).

1.2 PROPOSAL OVERVIEW

The Proponent is progressing a Development Application (DA) as an integrated development under Section 4.46 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The intent of the DA is to allow for the staged subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543 at Table Top (**Figure 1-2**).

It is proposed that the above land be subdivided for residential development purposes under the *Albury Local Environmental Plan 2010* (LEP). The land has been identified for residential development since 2007 when the *Albury Land Use Strategy* was adopted by the Albury City Council following extensive community consultation.

1.3 STUDY AREA

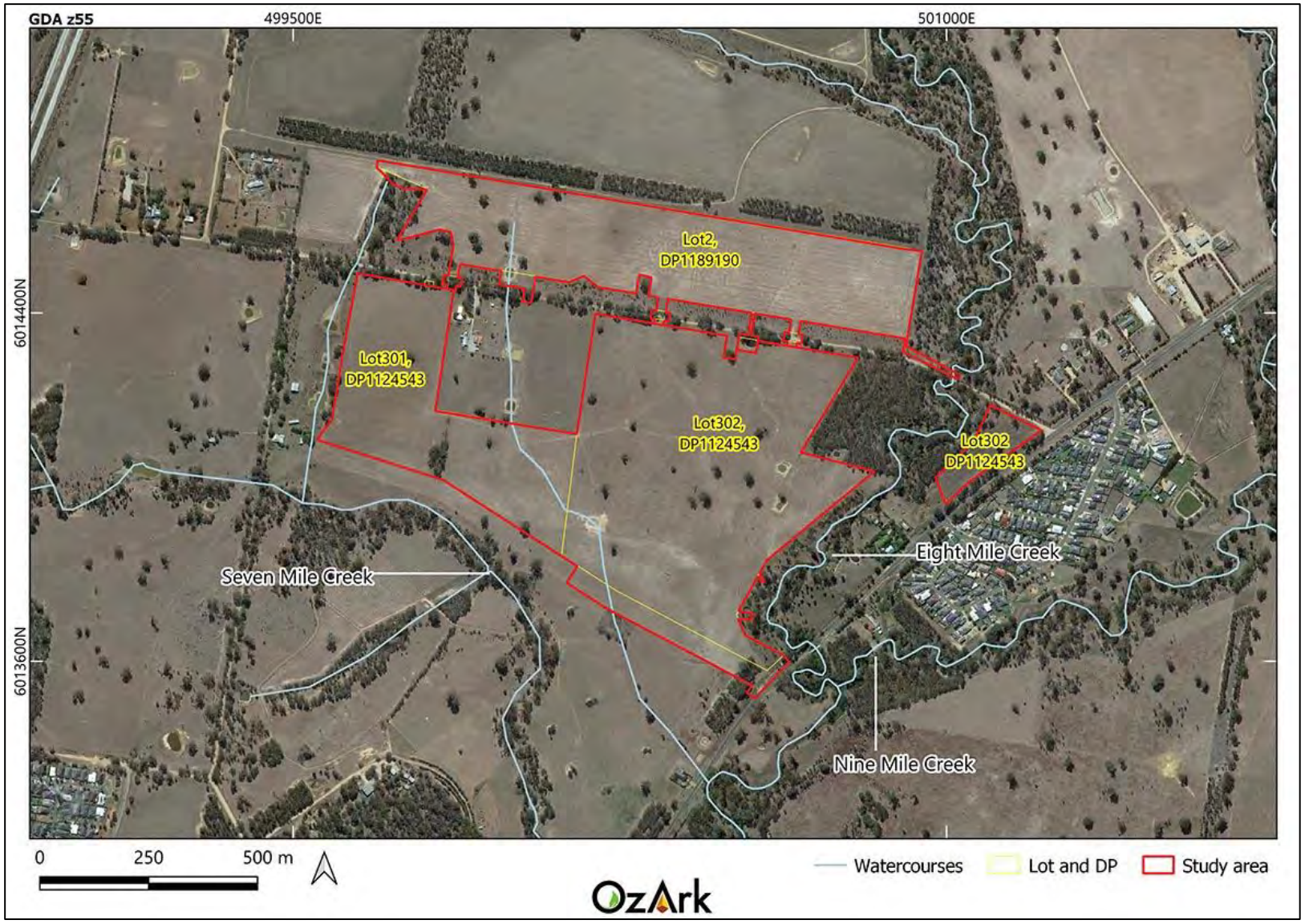
The study area covers approximately 80 hectares (ha) across Lot 2 DP1189190 and Lots 301 and 302 DP1124543 which are zoned as R1 'General Residential' under the Albury LEP (**Figure 1-3**). The study area is accessed via Williams Road which connects to Table Top Road in the east.

The study area consists of gently undulating to flat land located either side of Williams Road and is bordered to the east by Eight Mile Creek and to the south by Seven Mile Creek.

Figure 1-1: Map showing the location of the Proposal.

Figure 1-2: Proposed subdivision plan.

Figure 1-3: Aerial showing the study area.



2 THE ABORIGINAL CULTURAL HERITAGE ASSESSMENT

2.1 RELEVANT LEGISLATION

Cultural heritage is managed by several state and national Acts. Baseline principles for the conservation of heritage places and relics can be found in the *Burra Charter* (Burra Charter 2013). The *Burra Charter* has become the standard of best practice in the conservation of heritage places in Australia, and heritage organisations and local government authorities have incorporated the inherent principles and logic into guidelines and other conservation planning documents. The *Burra Charter* generally advocates a cautious approach to changing places of heritage significance. This conservative notion embodies the basic premise behind legislation designed to protect our heritage, which operates primarily at a state level.

Several Acts of parliament provide for the protection of heritage at various levels of government.

2.1.1 Commonwealth legislation

2.1.1.1 Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The EPBC Act, administered by the Commonwealth Department of Climate Change, Energy, the Environment and Water, provides a framework to protect nationally significant flora, fauna, ecological communities, and heritage places. The EPBC Act establishes both a National Heritage List and Commonwealth Heritage List of protected places. These lists may include Aboriginal cultural sites or sites in which Aboriginal people have interests. The assessment and permitting processes of the EPBC Act are triggered when a proposed activity or development could potentially have an impact on one of the matters of national environment significance listed by the Act. Ministerial approval is required under the EPBC Act for proposals involving significant impacts to national/commonwealth heritage places.

2.1.1.2 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* is aimed at the protection from injury and desecration of areas and objects that are of significance to Aboriginal Australians. This legislation has usually been invoked in emergency and conflicted situations.

Applicability to the Proposal

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

2.1.2 State legislation

2.1.2.1 Environmental Planning and Assessment Act 1979 (EP&A Act)

This Act established requirements relating to land use and planning. The main parts of the EP&A Act that relate to development assessment and approval are Part 4 (development assessment) and Part 5 (environmental assessment). The Minister responsible for the Act is the Minister for Planning.

The EP&A Act currently provides the primary legislative basis for planning and environmental assessment in NSW. The objects of the EP&A Act include encouragement of:

- The proper management, development, and conservation of natural resources
- The provision and coordination of the orderly and economic use and development of land
- Protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats
- Ecologically sustainable development.

The objects also provide for increased opportunity for public involvement and participation in environmental planning and assessment.

The EP&A Act includes provisions to ensure that the potential environmental impacts of a development or activity are rigorously assessed and considered in the decision-making process.

The framework governing environmental and heritage assessment in NSW is contained within the following parts of the EP&A Act:

- Part 4: Local government development assessments, including heritage. May include schedules of heritage items.

Applicability to the Proposal

The current Proposal will be assessed as an integrated development under Part 4.46 of the EP&A Act.

Some development proposals need other kinds of approvals (e.g. licences, permits) and a proposal is classified as an integrated development if the development needs development consent or approvals from another government body, such as a permit issued by the NSW Rural Fire Service.

2.1.2.2 National Parks and Wildlife Act 1974 (NPW Act)

The NPW Act provides for the protection of Aboriginal objects (sites, objects, and cultural material) and Aboriginal places. Under the Act (Part 6), an Aboriginal object is defined as: any deposit, object, or material evidence (not being a handicraft for sale) relating to indigenous and

non-European habitation of the area that comprises NSW, being habitation both prior to and concurrent with the occupation of that area by persons of European extraction and includes Aboriginal remains.

An Aboriginal place is defined under the NPW Act as an area which has been declared by the Minister administering the Act as a place of special significance for Aboriginal culture. It may or may not contain physical Aboriginal objects.

It is an offence under Section 86 of the NPW Act to 'harm or desecrate an object the person knows is an Aboriginal object'. It is also a strict liability offence to 'harm an Aboriginal object' or to 'harm or desecrate an Aboriginal place', whether knowingly or unknowingly. Section 87 of the Act provides a series of defences against the offences listed in Section 86, such as:

- The harm was authorised by and conducted in accordance with the requirements of an *Aboriginal Heritage Impact Permit* (AHIP) under Section 90 of the Act
- The defendant exercised 'due diligence' to determine whether the action would harm an Aboriginal object
- The harm to the Aboriginal object occurred during the undertaking of a 'low impact activity' (as defined in the regulations).

Under Section 89A of the Act, it is a requirement to notify the Secretary of the Department of Planning and Environment (DPE) of the location of an Aboriginal object. Identified Aboriginal items and sites are registered on Aboriginal Heritage Information Management System (AHIMS) that is administered by Heritage NSW.

Applicability to the Proposal

Any Aboriginal sites within the study area are afforded legislative protection under the NPW Act.

The Secretary of DPE will be notified of the location of any recorded Aboriginal object by sending appropriate details to the AHIMS register.

2.2 ASSESSMENT APPROACH

The archaeological assessment followed the *Code of Practice for the Investigation of Aboriginal Objects in New South Wales* (Code of Practice; DECCW 2010).

The Aboriginal cultural heritage assessment followed the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (the Guide; OEH 2011) and the *Aboriginal cultural heritage consultation requirements for proponents* (ACHCRs) (DECCW 2010b).

2.3 PURPOSE AND OBJECTIVES

The purpose of this study is to identify and assess heritage constraints relevant to the proposed works.

The study will apply the Code of Practice, the Guide, and the ACHCRs in the completion of the Aboriginal cultural heritage assessment to meet the following objectives:

Objective One: Undertake background research on the study area to formulate a predicative model for site location within the study area

Objective Two: Identify and record Aboriginal cultural heritage values within the survey areas. This includes intangible cultural values, Aboriginal objects, and any landforms likely to contain further archaeological deposits

Objective Three: To assess the significance of any recorded Aboriginal cultural values, Aboriginal objects, or sites in consultation with Registered Aboriginal Parties (RAPs)

Objective Four: Assess the likely impacts of the proposed work to Aboriginal cultural heritage values and provide management recommendations.

2.4 REPORT COMPLIANCE WITH THE CODE OF PRACTICE

The Code of Practice establishes requirements that should be followed by all archaeological investigations where harm to Aboriginal objects may be possible. **Table 2-1** tabulates the compliance of this report with the requirements established by the Code of Practice.

Table 2-1: Report compliance with the Code of Practice.

Code of Practice Requirement	Context of the Requirement	Concordance in this report
Requirement 1a	Review previous archaeological work	**Section 5**
Requirement 1b	Review AHIMS searches	**Section 5.3.1**
Requirement 2	Review the landscape context	**Section 4**
Requirement 3	Summarise and discuss the local and regional character of Aboriginal land use and its material traces	**Section 5**
Requirement 4a	Develop predictive model	**Section 5.5**
Requirement 4b	Present predictive model results	**Section 5.5.3**
Requirement 5a	Archaeological survey sampling strategy	Section 6.1
Requirement 5b	Archaeological survey requirements	This Requirement was fulfilled during the undertaking of the survey
Requirement 5c	Archaeological survey units	**Section 6.2**
Requirement 6	Site definition	**Section 5.5.1**
Requirement 7a	Site recording information to be recorded	**Section 6.3**
Requirement 7b	Site recording: scales for photography	All artefact photographs employed a centimetre scale bar.
Requirement 8a	Geospatial information	All geospatial data was logged using a non-differential handheld GPS.
Requirement 8b	Datum and grid coordinates	All coordinates are provided in GDA zone 55.
Requirement 9	Record survey coverage data	**Section 6.1**
Requirement 10	Analyse survey coverage	**Section 6.2**

Code of Practice Requirement	Context of the Requirement	Concordance in this report
Requirement 11	Archaeological Report content and format	This report adheres to this Requirement.
Requirement 12	Records	OzArk undertakes to maintain all survey records for at least five years.
Requirement 13a	Notifying Heritage NSW of breaches	Not applicable
Requirement 13b	Providing Heritage NSW with information	Not applicable
Requirement 14	Test excavation which is not excluded from the definition of harm	The test excavation did not take place in any of the landforms identified in Requirement 14.
Requirement 15a	Consultation regarding test excavation	Consultation has included the ACHCRs, see **Section 3**.
Requirement 15b	Developing a test excavation sampling strategy	A test excavation methodology was produced (**Appendix 3**) and issued to Registered Aboriginal Parties for their information.
Requirement 15c	Providing Heritage NSW with notification of the test excavation	Heritage NSW was provided with a copy of the test excavation methodology via the heritage mailbox on 12 July 2022.
Requirement 16a	Test excavation that can be carried out in accordance with the Code of Practice	The test excavation program complied with this requirement; see **Section 7** and **Appendix 3**.
Requirement 16b	Objects recovered during test excavations	The test excavation methodology established that any artefacts recovered from the excavations would be temporarily stored at the OzArk office (145 Wingewarra Street, Dubbo, NSW).
Requirement 17	When to stop test excavations	The methodology of the test excavation adhered to this requirement; see **Appendix 3**.
Requirements 18_20	Artefact recording	The requirements for artefact recording were followed during the assessment.

2.5 DATE OF ARCHAEOLOGICAL ASSESSMENT

The field survey was undertaken by OzArk on the 16 June 2022.

The test excavation component of this assessment was undertaken by OzArk on 9 and 10 August 2022.

2.6 OZARK INVOLVEMENT

2.6.1 Field survey

The fieldwork survey was undertaken by:

- Fieldwork Director: Stephanie Rusden (OzArk Senior Archaeologist, BS University of Wollongong, BA University of New England)

The test excavation was undertaken by:

- Fieldwork Director: Stephanie Rusden
- Archaeologist: Brendan Fisher (OzArk Project Archaeologist, BA (Archaeology) University of Sydney)

- Archaeologist: Yekun Zhang ((OzArk Project Archaeologist, B Arts Archaeology & Anthropology, MSc Archaeological Science, PhD Archaeology).

2.6.2 Reporting

The reporting component of the heritage assessment was undertaken by:

- Report author: Stephanie Rusden
- Contributor: Dr Yekun Zhang (Sections 1 to 5)
- Reviewer: Ben Churcher (OzArk Principal Archaeologist, BA [Hons], University of Queensland; Dip Ed, University of Sydney).

3 ABORIGINAL COMMUNITY CONSULTATION

3.1 INTRODUCTION TO CULTURAL VALUES

> *No matter who you are, we all have culture. Each person's culture is important; it's part of what makes us who we are.*
>
> Australianstogether.org.au

Many Aboriginal people in Australia have a unique view of the world that's distinct from the mainstream. Land, family, law, ceremony, and language are five key interconnected elements of Aboriginal culture. For example, families are connected to the land through the kinship system, and this connection to land comes with specific roles and responsibilities which are enshrined in the law and observed through ceremony. In this way, the five elements combine to create a way of seeing and being in the world that is distinctly Aboriginal.

Aboriginal and Torres Strait Islander peoples are connected to Country through lines of descent (paternal and maternal), as well as clan and language groups. Territory is defined by spiritual as well as physical links. Landforms have deep meaning, recorded in art, stories, songs, and dance. Songlines or Dreaming Tracks as well as kinship structures link Aboriginal peoples to the territories of other groups. In the past, these links were also used for trade.

Living on this land for more than 50,000 years, Aboriginal and Torres Strait Islanders established effective ways to use and sustain resources. One important aspect is the right of certain people to control the use of resources in a particular area, as well as cultural and spiritual values like totemism that were fundamental in resource management. There was a wide range of traditional methods for gathering food including fish traps, subsistence agriculture, hunting and harvesting a wide range of natural fruits and vegetables. Some groups of people would stay in one place, while others moved around the land according to the seasons, to ensure sustainable and rich food supplies, and to fulfil their spiritual and cultural obligations.

In much of eastern Australia, Aboriginal communities live their lives like most Australians without resorting to tribal lore. However, in certain crucial areas, particularly associated with family, leadership roles and caring for Country, Aboriginal lore continues, even in the most urbanised communities.

3.2 ABORIGINAL COMMUNITY CONSULTATION

A major aim of this assessment is to identify any cultural values within the landscape in which the Proposal is located so that those values can be recognised and incorporated into the Proposal's management recommendations.

The Aboriginal cultural heritage assessment of the Proposal has followed the ACHCRs (DECCW 2010b). A log and copies of correspondence with Aboriginal community stakeholders is presented in **Appendix 1 Figure 1**.

The ACHCRs include four main stages, and these will be detailed in the following sections.

3.2.1 ACHCRs Stage 1

The aim of Stage 1 is to identify the RAPs who wish to be consulted about the Proposal.

An advertisement was placed in the *Border Mail-Albury* on 7 April 2022 to solicit expressions of interest (**Appendix 1 Figure 2**).

A letter seeking information from various agencies was sent on 5 April 2022 (**Appendix 1 Figure 3**). These agencies were: Office of the Registrar, *Aboriginal Land Rights Act 1983*; Heritage NSW; National Native Title Tribunal; National Native Title Services Corporation Ltd (NTSCORP); Albury and District Local Aboriginal Land Council (LALC), Albury City Council, and the Murray Local Land Services.

Letters were sent to individuals and groups whose contact details had been provided by the government agencies (**Appendix 1 Figure 4**).

By the closing date for registration concerning this Proposal, two groups or individuals registered to be consulted as RAPs:

- Albury and District LALC
- Yalmambirra.

3.2.2 ACHCRs Stages 2 and 3

The aim of Stages 2 and 3 is to provide information about the Proposal to the RAPs and to acquire information regarding Aboriginal cultural values associated with the Proposal either through consultation and/or field work. Often these two stages are run together, and the detailed project information is provided in the assessment methodology that is issued to all RAPs for their consideration.

3.2.2.1 Survey and assessment methodology

On 16 May 2022, all RAPs were sent information about the Proposal and a draft of the assessment methodology (**Appendix 1 Figure 5**).

RAPs were provided the stipulated 28 days in which to review and comment on these documents as per Stage 3 of the ACHCRs. The closing date for comment was 14 June 2022.

The following response was received from Yalmambirra on 19 May 2022 (**Appendix 1 Figure 6**).

> *I am happy with the methodology. I do have a few comments if I may...*
>
> *Section 2.1.2...The timeline of 50,000 is contentious. I have resources that suggest that the timeline could be 120,000 years. Perhaps just a small tweak of the wording would be needed here.*

Section 3.1...The Murray River was not a 'boarder' as such. I have resources that suggest that Wiradjuri peoples were living on both sides of the river. I can send you the info.

Section 3.4...The terminology 'debitage' suggests that 'left-over' material/s could be considered garbage. This would be incorrect as these 'left-overs' could have, and were, used by children as learning material/s. Feel free to use me as your resource.

OzArk replied on 27 May 2022 and has considered the points made by Yalmambirra when preparing the ACHAR. However, OzArk has used commonly accepted dates for firm evidence for human occupation in Australia (approximately 50,000 years before present [O'Connell et al. 2018]) and has followed the archaeological use of the term 'debitage' that is used to describe by-products of the knapping process; while acknowledging that these fragments may still have been used, potentially by children as stated by Yalmambirra). Yalmambirra's views on Wiradjuri territory extending south of the Murray River is not commonly accepted although it is noted in **Section 5.1**.

No other comments were received from the RAPs.

3.2.2.2 Test excavation methodology

Following the completion of the survey, three locations were identified across the study area which warranted text excavation. The test excavation methodology was distributed to all RAPs on 8 July 2022 (**Appendix 1 Figure 7** and **Appendix 3**). The closing date for comment was 5 August 2022.

No comments were received from the RAPs on the test excavation methodology.

3.2.3 ACHCRs Stage 4

Stage 4 involves the production of a draft ACHAR that is issued to all RAPs for their consideration. The ACHAR will document the results of the assessment, outline opportunities for the conservation of Aboriginal cultural values, and suggest recommendations for the management of Aboriginal objects should impacts to these objects be unavoidable.

A copy of the draft ACHAR was distributed to all RAPs for review on 27 September 2022 with a 28-day review period closing 26 October 2022 (**Appendix 1 Figure 8**).

A response was received from the Albury and District LALC on 28 October 2022 noting that they have no comment or objections to the ACHAR (**Appendix 1 Figure 9**).

No other responses were received.

3.3 ABORIGINAL COMMUNITY INVOLVEMENT IN THE ASSESSMENT

A site officer from Albury and District LALC was unavailable to participate in the survey.

Andom Rendell and Codey Sloane from the Albury and District LALC participated in the test excavation program.

3.4 CULTURAL VALUES IDENTIFIED THROUGHOUT THE ACHCR PROCESS

No specific cultural values were identified by the RAPs regarding the study area, however, the strong cultural values of the local Aboriginal community towards landscapes and cultural heritage sites across the Albury region are recognised.

The *Albury City-Wide Aboriginal Cultural Heritage Study* (Jacobs 2019) identifies the Mungabareena Aboriginal Place as an area with high cultural values in the Albury area. The Mungabareena Aboriginal Place is located between Eastern Hill and the Murray River, approximately 9 km south of the study area. The area is described as a 19th century campsite and ceremonial ground which was traditionally called Mungabareena, which was translated from Wiradjuri in 1845 as follows: mun--something very (or abnormally) large; gabba--very tall talk; reena--favourable surroundings (Jacobs 2019:33).

Wiradjuri from the surrounding areas traditionally met near Mungabareena prior to crossing the Murray River and travelling to the Alps to collect Bogong Moths in the summer.

Today the area is important as a place where Wiradjuri can practice and maintain cultures, conduct ceremonies, hold gatherings, and practice traditional art forms on country close to the city of Albury.

4 LANDSCAPE CONTEXT

An understanding of the environmental context of a study area is requisite in any Aboriginal archaeological investigation (DECCW 2010). It is a particularly important consideration in the development and implementation of survey strategies for the detection of archaeological sites. In addition, natural geomorphic processes of erosion and/or deposition, as well as human-activated landscape processes, influence the degree to which the remains of material culture are retained in the landscape as archaeological sites; and the degree to which they are preserved, revealed and/or conserved in present environmental settings.

4.1 TOPOGRAPHY

The study area is in the southern extent of the NSW South Western Slopes Bioregion. The South Western Slopes Bioregion is a large area of foothills and isolated ranges which comprises the lower inland slopes of the Great Dividing Range and extends from north of Cowra down through southern NSW into western Victoria (NPWS 2003).

The topography of the study area comprises an undulating plain with gentle slopes and minor crests in the central and north-western portions (**Figure 4-1**). The south-eastern portions of the study area are flat and include landforms adjacent to Seven and Eight Mile Creeks. The highest point of the study area are minor crests in the north and the west at 210 m above sea level (ASL), while the lowest point is in the south near Eight Mile Creek at 190 m ASL.

4.1.1 Landforms

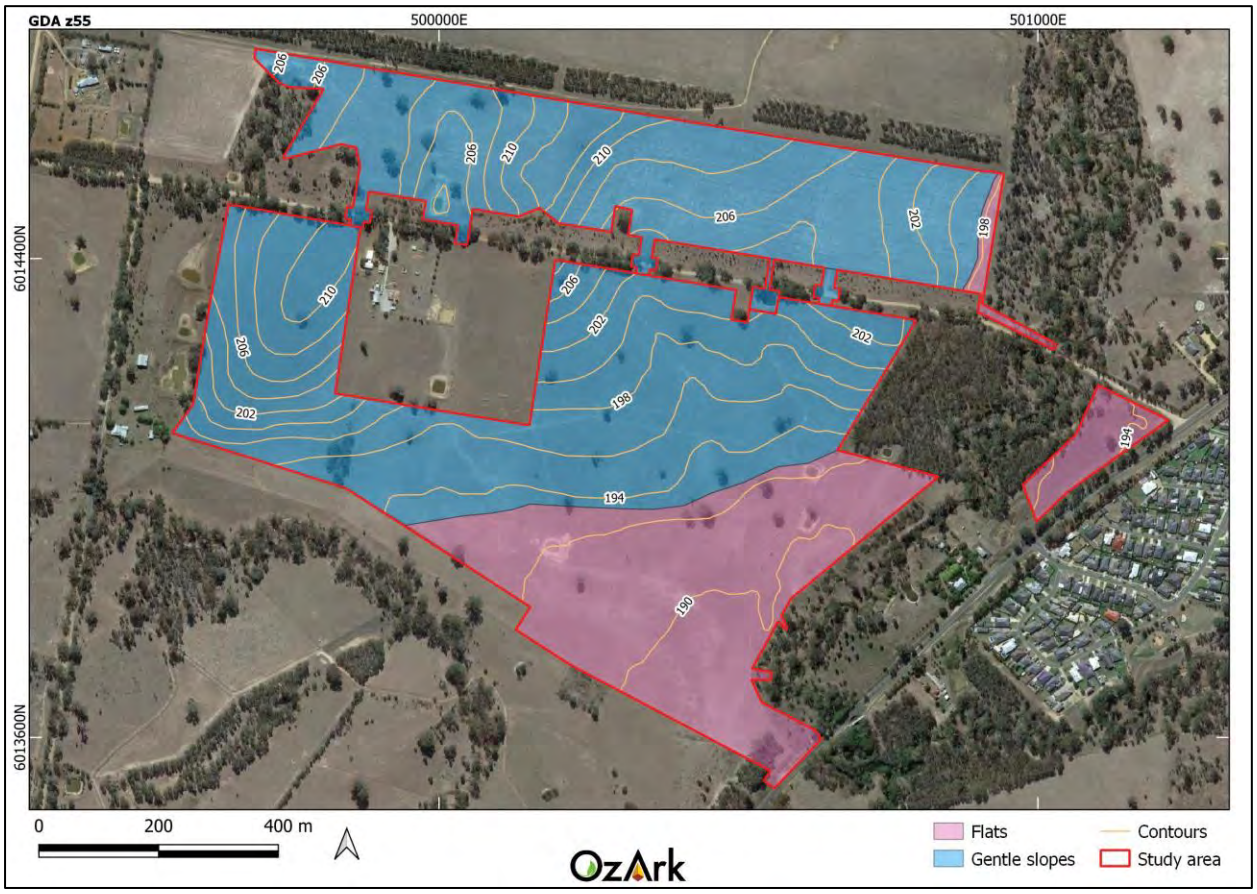
Based on the topography of the study area, landforms were identified to capture the major topographical features of the study area. The designation of landforms will allow a comparison of the archaeological potential of each major topographical feature within the study area to understand whether certain landform types are more likely to contain Aboriginal objects than others.

The study area can be characterised by two main landforms (**Table 4-1** and **Figure 4-1**). **Table 4-1** shows that most of the study area is comprised of gentle, undulating landforms located over 200 m from the surrounding semi-permanent watercourses.

Table 4-1: Landforms of the survey area.

Landforms	Landform description	Landform area (ha)
Flats	Flat plains surrounding the watercourses across the southern and eastern portions of the study area.	24
Gently undulating	Slopes characterised by gentle gradients and low crests across the north-western portion of the study area.	56
Total		**80**

Figure 4-1: Aerial of the study area showing the landforms present.



4.2 GEOLOGY AND SOILS

The geology of the South Western Slopes Bioregion in the Albury area has been described by Mitchell (2002: 20). In terms of geology the region is described as generally consisting of isolated hills and rises on folded lower Ordovician greywacke, phyllite, chert, schist, and small areas of Silurian-Devonian granite (Mitchell 2002:90).

Soil analysis has important ramifications for archaeological research through the potential impact of different soils on human activity (such as agricultural exploitation) and the impact of the soils on archaeological evidence (such as post-depositional movement). The soils known to occur throughout the study area are identified here to delineate their nature and impact on the survival and location of archaeological material.

The soils inside the study area consist of deep (1.0–1.5 m), well-drained red Chromosols and Kurosols (red Podzolic soils) on crests, with deep, moderately well-drained yellow Chromosols (yellow Podzolic soils) on slopes. Footslopes and drainage lines consist of deep, poorly drained yellow Sodosols. These types of soil are prone to gully and sheet wash erosion, especially if no surface cover is present. Furthermore, they are susceptible to seasonal waterlogging and localised poor drainage (Doughty 2003). Doughty (2003) highlights that the soil types across these landforms are not associated with outcropping rock.

4.3 HYDROLOGY

The Murray River is the closest permanent watercourse, located approximately 6.8 km south of the study area. Several semi-permanent creeks surround the study area, including Seven Mile Creek to the south, and Eight and Nine Mile Creeks to the east. A tributary of Eight Mile Creek intersects the study area on a generally north–south alignment (**Figure 1-3**).

Eight Mile Creek comprises four major tributaries that form in the upper catchment hill slopes and flow through Albury to the floodplain of the Murray River. Tributaries of Eight Mile Creek include Woolshed Creek, Seven Mile Creek, Nine Mile Creek, and Six Mile Creek. In the downstream section of the catchment the overlap with the Murray River floodplain results in non-regular creek topography (Jacobs 2019).

4.4 VEGETATION

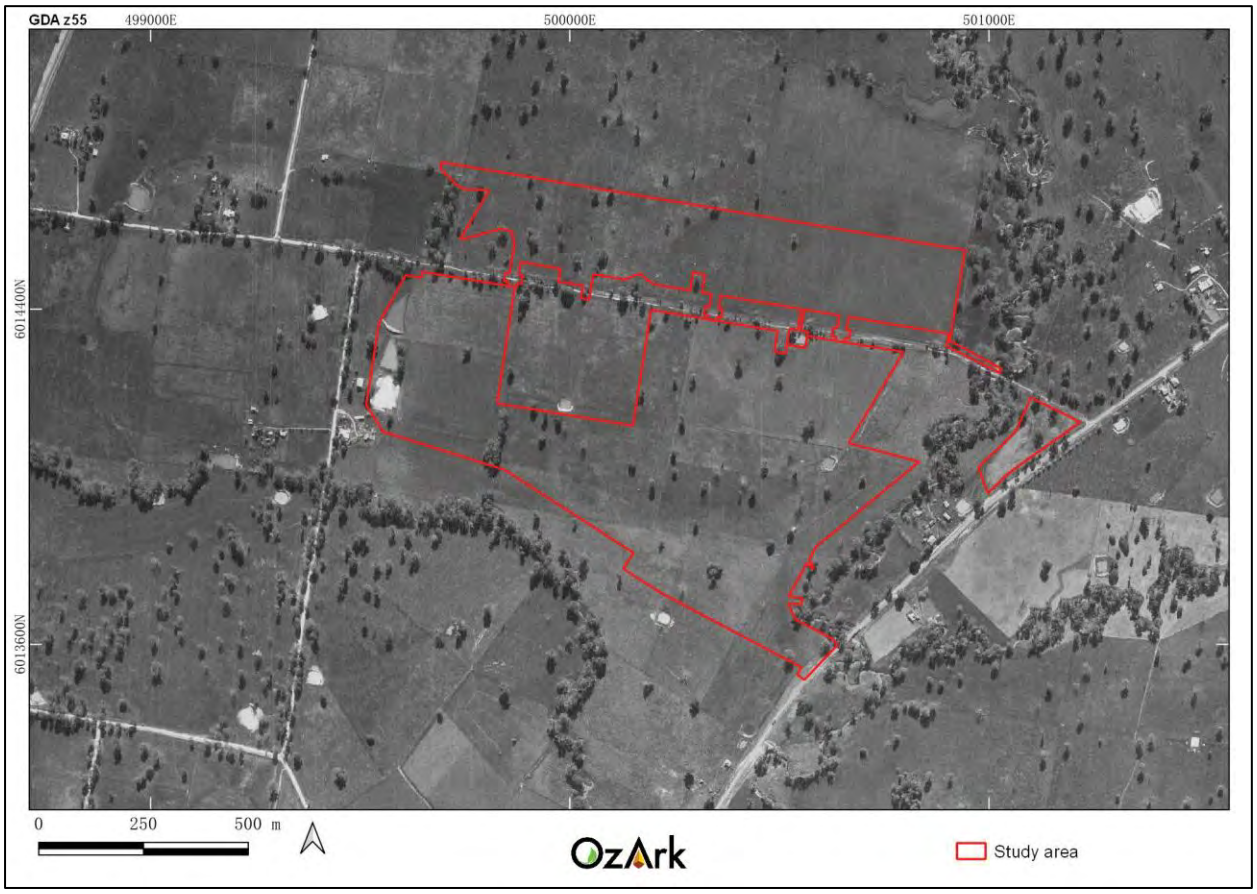
The study area is used primarily for grazing and cropping purposes. As a result, the study area has been subject to vegetation clearance although scattered remnant stands of trees remain. Tree species present in the area include *Eucalyptus albens* (white box) woodland with *E. melliodora* (yellow box) and E. blakelyi (Blakely's red gum). Other species include *E. microcarpa* (grey box) and *Acacia dealbata* (silver wattle) (DPIE 2020).

4.5 LAND USE HISTORY AND EXISTING LEVELS OF DISTURBANCE

The study area is used primarily for grazing and cropping purposes. As a result, the study area has been subject to vegetation clearance although remnant stands of trees remain scattered across the study area. An aerial from 1969 which covers the study area shows there has been little change in terms of land use over the past 53 years (**Figure 4-2**).

Cultivation acts to redistribute artefacts both horizontally and vertically within the soil profile and ultimately destroys the integrity of artefact assemblages within the top 25 centimetres (cm) of the soil profile. Further, the presence of hoofed livestock is likely to have resulted in trampling and compaction of the ground surface which accelerates soil loss. Soil erosion is also accelerated by widespread vegetation clearance which has taken place across the study area.

Figure 4-2: 1969 aerial with overlay of the study area (source: SS 2022).



4.6 CONCLUSION

The review of the environmental factors associated with the study area allows the following conclusions to be drawn in terms past Aboriginal occupation:

- Topography and hydrology: the flat to gently undulating landforms which dominate the study area would have been hospitable to Aboriginal people, however, apart from the nearby creek lines, there are few areas within the study area which would have encouraged substantial Aboriginal occupation of the landscape.

- Geology and soils: landforms which typically comprise outcropping rock, i.e., hills, are not present within the study area, and therefore sources of stone procurement for tool manufacture will not be present. Soils present inside the study area are likely to have been affected by sheet wash erosion and are poor draining. The erosional qualities of the soils present will have influenced the likelihood for *in situ* archaeological deposits being present. Furthermore, the widespread and comprehensive use of most of the study area for cultivation would have further promoted soil erosion and loss.

- Vegetation: the study area would have once supported an open woodland which would have provided some resources for Aboriginal subsistence in the past. However, the broad-scale vegetation clearance which has taken place across the study area for agricultural purposes reduces the likelihood that any culturally modified trees remain present.

- Land use: ground surface disturbances such as vegetation clearance, cultivation, and grazing exist throughout the study area. These activities may have displaced Aboriginal

objects and are likely to have reduced the potential for intact subsurface archaeological material. However, disturbance at a given location does not necessarily mean that there will be no cultural material present, as often a disturbed context will reveal objects which may have previously been subsurface. As noted above, initial vegetation clearing would also have significantly reduced the likelihood of culturally modified trees remaining.

5 ARCHAEOLOGICAL CONTEXT

5.1 ETHNO-HISTORIC SOURCES OF REGIONAL ABORIGINAL CULTURE

The study area is situated within the territory of the people belonging to the *Wiradjuri* tribal and linguistic group (Tindale 1974). According to Tindale (1974) and White (1986), the Murray River forms the southern extent of the Wiradjuri territory; although some RAPs believe that Wiradjuri territory extended across the Murray River (see **Section 3.2.2.1**).

Albury was previously known as Bungambrawatha (homeland) by the Wiradjuri people. In 1838, the name of the region was changed to Albury when the Assistant Surveyor General decided that this new name would sound more familiar to the ears of European settlers (White 1986).

The Aboriginal groups used the Murray River extensively, often travelling the river in bark canoes. The Murray River was a means of communication and trade for the Wiradjuri people and other neighbouring tribes such as the Bangerang. The area around the confluence of Bungambrawatha Creek and the Murray River has been noted as a gathering place for Wiradjuri before they left every summer to travel to the high plains in the search for Bogong Moths (Jones 1991). It is also likely that the Wiradjuri, Bangerang, and Monaro groups joined together for summer feasts of bogong moths in the alpine country (NPWS 2003).

The Murray River would have provided the local people with Murray cod, shellfish, and yabbies, with nuts, fruits, yam daises and orchid tubers being found across the landforms surrounding the river. Andrews (1920:35) explained that the Wiradjuri people "*usually chose a cleared space for their camps, in the neighbourhood of water, as fish and birds were their principal articles of food*". Ethnographic sources highlight that most Wiradjuri groups contained between 10 and 50 people, but could contain up to 100, with families sleeping in lean-tos known as gunyahs, which could take a variety of forms (Jacobs 2019). Camp sites would often be some distance back from rivers or creeks, under trees and close to firewood (McDonald 1993). In 1844, George Augustus Robinson counted 50 huts with about 250 inhabitants while travelling through the Albury area (Robinson 1844).

The material cultures of the Wiradjuri consisted of a wide variety of hunting implements including wooden spears, boomerangs, fishing hooks, clubs, and shields. Such hunting tools were common throughout south-eastern Australia (Attenbrow 2010). Wiradjuri people also employed nets and traps for fishing (Clayton and Barlow 1997).

5.2 REGIONAL ARCHAEOLOGICAL CONTEXT

Previous archaeological studies undertaken within the vicinity of the study area provides information to obtain a sound understanding of the nature and distribution of archaeological sites within the area.

<u>An archaeological survey of the Baranduda and Thurgoona areas (Albury-Wodonga)</u>

A regional survey of the Upper Murray around Albury-Wodonga was carried out by Witter (1976) in 1976. The survey focused on Thurgoona in NSW and Baranduda in Victoria for the purposes of intensive residential development by the Albury-Wodonga Development Corporation. The area surveyed in NSW during this study was in Thurgoona, north of the Riverina highway, and between St Johns Road and what is now Table Top Road. Three sites were recorded in this area, all artefact scatters primarily made up of quartz debitage.

A site survey in the Albury Area and Archaeological surveys for the Albury-Wodonga Development Corporation

In 1978, Crosby (1978) conducted a pedestrian survey of six areas around the Albury region, including one area next to where the study area is located. Crosby recorded seven Aboriginal sites and ten historical sites during the survey. One historical site was in Crosby's survey area closest to the study area. Overall, Crosby noted a concentration of scarred trees recorded in locations at the junction between geologically different rocks where water springs were also present. Crosby also noted that quartz was prevalent throughout the survey areas, especially in the form of small pebbles. During the field survey in 1979, all Aboriginal sites recorded by Crosby were scarred trees. Crosby also highlights the lack of surface camp sites in the areas surveyed (Crosby 1979).

Albury Sewage Treatment Site

Paton (1994) completed an archaeological assessment for the proposed augmentation of the existing sewage treatment at Kremur Street, West Albury. Two specific areas targeted for this investigation included the Nursery Valley and the floodplain between Bagnalls Range Lagoon and the Murray River. The Nursery Valley area was a small, semi-enclosed basin on the north side of the Riverina Highway, overlooking the Murray River floodplain. A total of ten artefact scatters and three isolated finds were recorded during the survey (five scatters and one isolated artefact in Nursery Valley and five scatters and two isolated artefacts on the Murray floodplain). Most artefacts were manufactured from quartz, with only one manufactured from silcrete.

A series of 0.25 x 0.25 m shovel test pits were excavated in locations considered to have high archaeological potential, with 30 locations in the Nursery Valley area and 77 on the Murray floodplain. A total of eight shovel test pits contained artefacts, all with 1–2 artefacts. Artefact bearing test pits were all located on the terrace systems of the Murray River floodplain.

A geomorphologic investigation was also undertaken, by mapping landforms, surveying cross sections, and carrying out several auger probes. Several terrace landforms were identified as having potential to contain burials, due to the sandy texture of the soils.

Paton's study concluded that artefact scatters were generally located on raised terrace landforms. The subsequent geomorphic assessment determined that artefacts of a relatively young age had

been buried by older sediments and vice versa, making the stratigraphy difficult to interpret and indicating the dynamic nature of the floodplain landforms.

'Thurgoona Park' Subdivision Woolshed Creek

Kelly (2001) investigated a dissected terrace along Woolshed Creek, north of Thurgoona Road. The investigation area was immediately east of the confluence of Woolshed and Eight Mile Creeks. As a result of these initially monitoring works, six quartz and quartzite artefacts were identified. A further 35 artefacts were identified on exposed graded surfaces and within spoil windrows. Much of this material was also quartz, apart from a single chert artefact.

Kelly (2002) concluded that (at the time) this location represented the largest concentration of Aboriginal archaeological material within the immediate Albury area and warranted further investigation. He also inferred that all areas associated with terrace landforms or within 100 m of Eight Mile or Woolshed Creeks should be considered areas of potential archaeological deposit.

Woolshed Creek and Eight Mile Creek survey

In 2003, Price completed a survey consisting of 50 m pedestrian transects on either side of both Eight Mile Creek and Woolshed Creek was undertaken with Aboriginal community as part of field training (Price 2003). This survey covered the creeks approximately 800 m south of the study area. During the survey 43 isolated finds and low-density artefact scatters were recorded. Of these, 33 sites were recorded along Woolshed Creek and 10 sites were along Eight Mile Creek. The 10 sites next to Eight Mile Creek consisted of pieces of debitage and one flake. Most of these sites (n=7) were in the Eight Mile Creek channel.

Woolshed Creek and Eight Mile Creek

The investigation completed by Price and Kelly (2003) followed on from that of Kelly (2002) within the same terrace adjacent to Woolshed Creek and included the sample sieving of 112 cross sections in windrows from previous construction and mechanic grader scrapes of two 0.5 x 4 m trenches to a depth of one metre.

Of the 205 artefacts retrieved, 115 were conclusively identified as being of Aboriginal origin. Most of the archaeological material was present within the upper 100 millimetres (mm) of the deposit, however, material was collected from depths up to 350 mm. Most of the artefacts were manufactured from quartz, with smaller quantities of silcrete, quartzite, and chert artefacts.

Price and Kelly (2003) concluded that within the Albury region there is a strong association between Aboriginal camp sites with water sources and elevated, level landforms (terraces).

Murray River Experience Project

Brooke and Jacobs (2009) carried out a series of transects within Noreuil Park, Oddies Creek Park, and Kremur Street within the floodplain of the Murray River. A total of 32 test units (TUs) (0.5 x 0.5 m) were excavated in locations that were to be impacted by the proposed works. At Noreuil Park, high levels of disturbance were identified due to the continued presence of modern refuse through the stratigraphic profile, and the upper 100 to 200 mm of sediment likely being fill. No Aboriginal archaeological objects were recorded.

At nearby Oddies Creek Park, upper units of sediment were generally disturbed, under which yellowish brown, fine silt graded into clayey deposits with depth. These silts and clays were interpreted as natural floodplain deposits. Sediments at Kremur Street were similar to those described at Oddies Creek Park. Brooke and Jacobs (2009) concluded that the potential archaeological sensitivity of similar, undisturbed floodplain landforms in the area are likely to have low-moderate or moderate for buried archaeological deposits.

Preliminary Aboriginal Cultural Heritage Assessment for rezoning of part Lot 1 DP128086 and part Lot 1 DP128087, Hawkscote Road and Riverina Highway, Thurgoona

Brown (2011) conducted a preliminary assessment of Aboriginal cultural heritage within an area proposed for residential rezoning in Thurgoona, near Albury, NSW. The preliminary assessment included a site inspection during which two sites were recorded: one scarred tree and one artefact scatter. Brown further predicted based on the desktop and site inspection that further subsurface archaeological deposits were likely to occur upon higher landforms within 500 m of watercourses (Brown 2011).

Kerr Road, Thurgoona

AECOM (2017) completed an archaeological assessment of 119 hectares (ha) of land west of Kerrs Road, Thurgoona. The investigation area consisted of an irregularly shaped parcel of land bound by Woolshed Creek to the east and Eight Mile Creek to the west. AECOM identified a single north to south trending, gently sloping spur dominating the topography of the area, with the northern, eastern, and western boundaries grading to the alluvial landforms of the waterways. The northern portion of the study area comprised an elevated terrace plain (large to very large flat landform, representing an element of a former floodplain that has been aggraded by, but no longer inundated by overbank stream flow) formed on alluvial soils, grading south to the valley flats of the confluence of Eight Mile and Woolshed Creeks. The southern localised area was characterised by a wide, flat floodplain with micro topographic variation, reflecting a dynamic alluvial environment comprising of minor terraces, drainage gullies, and slopes

A total of 26 artefacts were recorded, representing four Aboriginal sites. Landform-based artefact counts demonstrated most of the material was identified in the flat landform unit, which also experienced the highest rate of effective survey coverage.

A subsurface testing program comprising initially, 60 TUs (0.5 x 0.5 m) were excavated, followed by the expansion of two of the test pits from 0.5 x 0.5 m to 1 x 1 m and 4 x 4 m excavations. The subsurface investigation revealed that the distribution of artefacts was sparse and discontinuous, as 90 per cent of TUs contained no archaeological material. Artefact bearing TUs were confined to flat, floodplain and terraced landforms associated with the waterways. In artefact bearing TUs, numbers of artefacts were generally low with only one TU containing more than 10 artefacts.

The results of the investigation suggested an emphasis of the utilisation of low gradient landform elements within Eight Mile and Woolshed Creek alluvial valleys and associated periphery landforms. Raw materials in the assemblage suggest a complete reliance on the procurement and reduction of locally available quartz.

Nexus industrial subdivision, Ettamogah

Biosis (2017) completed an archaeological assessment of 73 ha of land located 13 km northeast of Albury, between Eight Mile Creek and Gerogery Road.

During the field survey, three artefact scatters and eight areas of potential archaeological deposit (PAD) were identified. Two main landforms were identified: undulating footslopes and creek banks/terraces. Archaeological sites were initially located in the footslopes landforms, visible due to recent grading related to road construction. A total of eight PADs were recorded in association with high points adjacent to watercourses.

A series of 0.5 x 0.5 m TUs were investigated across PADs with spacings of 20 m. A total of 68 TUs were excavated. Except for one, all PADs yielded subsurface archaeological material. Whilst PAD 4 did not have any subsurface archaeological material present, a surface artefact was recorded at the location during the survey. Sediments were described as sandy silts and sandy clays, to depths of 750 mm. Most excavations ceased at between 300–400 mm. Artefacts were located at depths between 0 and 300 mm. A total of 41 artefacts were recorded, along with the 22 surface artefacts recorded during the survey. Artefact numbers were generally low, with most artefact bearing TUs containing one to two artefacts and a maximum of seven. The artefacts were manufactured from quartz and crystal quartz, and a single manuport was made of basalt.

Aboriginal Cultural Heritage Assessment Report: Woolshed Estate, Thurgoona, NSW (OzArk 2018)

OzArk (2018) completed a survey and test excavation for a subdivision at Thurgoona, located 3.4 km south of the study area. The assessed area comprised 71 ha of land surrounding a section of Eight Mile Creek (otherwise known as Woolshed Creek) and its tributaries. No Aboriginal objects were recorded during the field survey although visibility was noted as being very low. Three landforms with PADs were identified (PADs 1–3) which included elevated landforms overlooking the watercourses.

Test excavation was subsequently completed at the three PADs. A total of 26 TUs, measuring 0.5 x 0.5 m were excavated to provide a representative sample of the deposits to characterise the subsurface archaeological potential of the three PADs. The test excavation confirmed the presence of archaeological subsurface deposits at each of the three PADs, although at a low density.

A total of 26 artefacts were recorded during the test excavation. Of the 26 artefacts recorded, 10 were flakes (38%) and 16 are pieces of shatter (62%). All the artefacts were quartz, and most had no cortex (tertiary reduction, n=21, 81%). 58% of artefacts had a maximum size of 1–2 cm (n=15), followed by 0–1 cm (n=9, 35%), and only two were 2–3 cm (7%). 62% of artefacts were in Spit 2 (10–20 cm deep, n=16), with 23% in Spit 3 (20–30 cm deep, n=6) and 15% in Spit 1 (0–10 cm deep, n=4).

5.3 LOCAL ARCHAEOLOGICAL CONTEXT

5.3.1 Desktop database searches conducted

A desktop search was conducted on the following databases to identify any previously recorded heritage within the study area. The results of this search are summarised in **Table 5-1** and presented in detail in **Appendix 4**.

Table 5-1: Aboriginal cultural heritage: desktop-database search results.

Name of Database Searched	Date of Search	Type of Search	Comment
Commonwealth Heritage Listings	14/6/2022	Albury City Council LGA	No places listed on either the National or Commonwealth heritage lists are located within or near the study area
National Native Title Claims Search	14/6/2022	NSW	No Native Title claims cover the study area.
AHIMS	12/4/2022	6 x 6 km centred on the study area	104 AHIMS sites returned within the search area, but none are located within or near the study area.
Local Environmental Plan (LEP)	14/6/2022	Albury LEP of 2010	None of the Aboriginal places occur within or near the study area.

A search of the AHIMS database on 12 April 2022 returned 104 records for Aboriginal heritage sites within a 6 km radius of the study area (GDA zone 55 Eastings: 497122–503122; Northings: 6011210– 6017210). None of the previously recorded sites are located within 500 m of the study area (**Figure 5-1**).

One site (61-1-0263) is listed as a restricted site, as such, the total of number of sites listed in **Table 5-2** is 103. AHIMS confirmed on 20 April 2022 that this site is not located within or near the study area.

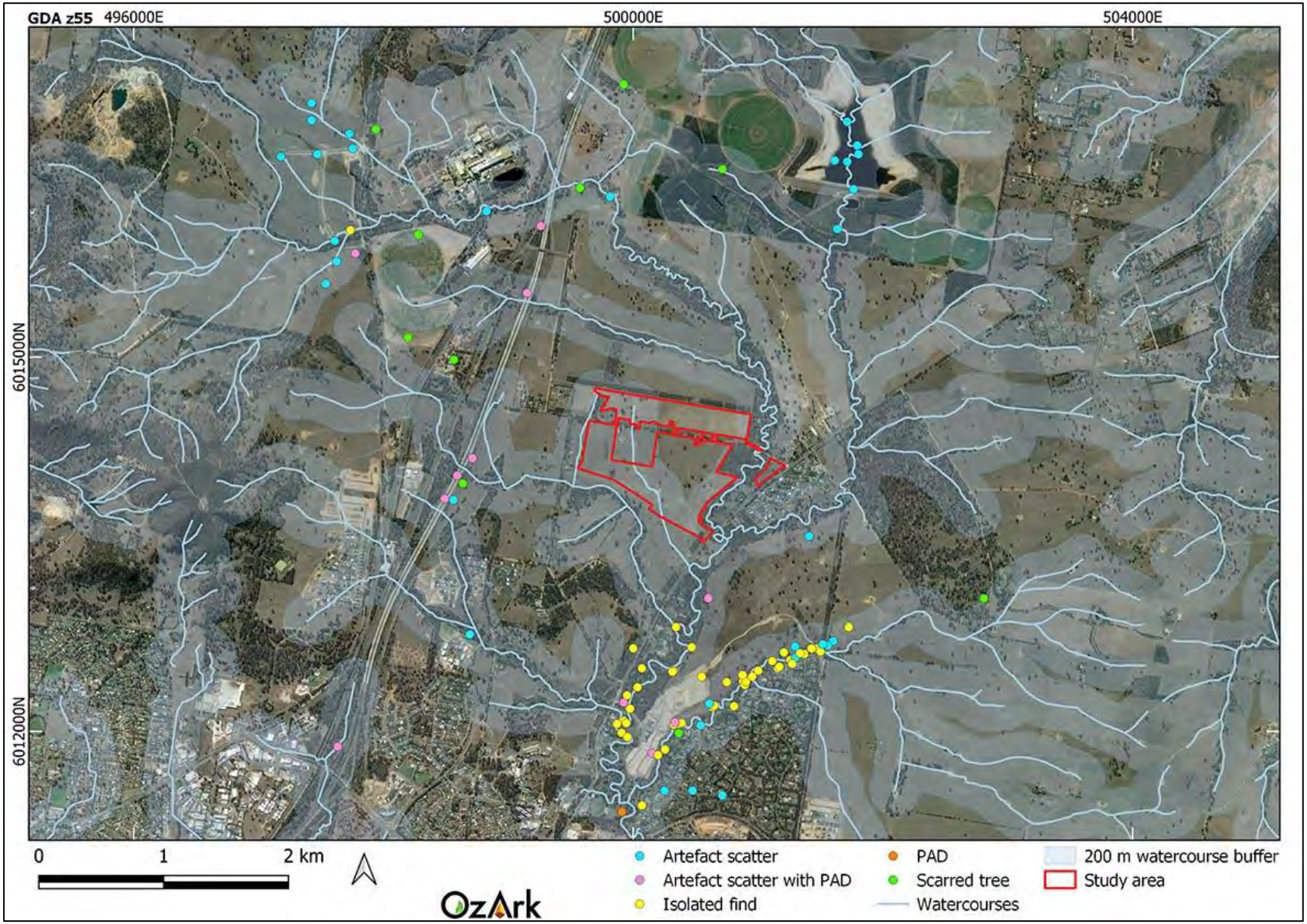
The most frequently recorded site types are stone artefact sites (isolated finds and artefacts scatters) with some artefact scatters recorded in association with PAD (**Table 5-2**). Of the stone artefact sites recorded within 6 km of the study area, 98% are located within 200 m of

watercourses (**Table 5-2**). Modified trees represent only 11.7 per cent of recorded site types and are typically recorded along riparian corridors (**Table 5-2**). In NSW there is a strong correlation between Aboriginal occupation sites and distance to water which is reflected in the AHIMS data.

Table 5-2: Site types and frequencies of AHIMS sites near the study area.

Site Type	Number	% Frequency
Isolated find	48	46.7
Artefact scatter	31	30
Artefact scatter with PAD	11	10.7
Modified tree	12	11.7
PAD	1	0.9
Total	**103**	**100**

Figure 5-1: Location of previously recorded AHIMS sites in relation to the study area.



5.4 ARCHAEOLOGICAL CONTEXT: CONCLUSION

The archaeological investigations surrounding the study area as summarised in **Sections 5.2** and **5.3** indicate that:

- Stone artefact sites (isolated finds and artefact scatters) are frequent sites recorded in the area, especially within 200 m of watercourses but sites typically have low artefact density
- Scarred trees are present typically along riparian corridors which retain mature vegetation
- Quartz is the predominant material for stone artefact manufacture in the area
- Excavations completed across the Murray River floodplain highlight that the river flats are not good preservers of archaeological deposits with artefacts typically recovered from mixed deposits (Paton 1994 and Brooke and Jacobs 2009)
- Landforms distant to the Murray River such as the those within the study area would have been occupied by smaller groups of people (Jacobs 2019)
- Landforms adjacent to smaller ephemeral waterways, if intact, have archaeological potential (Price and Kelly 2003). Further, where terraces or rises are present, particularly in the Eight Mile Creek catchment area, subsurface artefact scatters are likely to be present
- Artefact bearing deposits are within the top-most 300 mm of the soil profile (Biosis 2017 and OzArk 2018)
- Artefact assemblages recorded in the region consist largely of shatter and unmodified flakes (AECOM 2017, Biosis 2017, and OzArk 2018).

5.5 PREDICTIVE MODEL FOR SITE LOCATION

Across Australia, numerous archaeological studies in widely varying environmental zones and contexts have demonstrated a high correlation between the permanence of a water source and the permanence and/or complexity of Aboriginal occupation. Site location is also affected by the availability of and/or accessibility to a range of other natural resources including plant and animal foods, stone and ochre resources and rock shelters, as well as by their general proximity to other sites/places of cultural/mythological significance. Consequently, sites tend to be found along permanent and ephemeral water sources, along access or trade routes, or in areas that have good flora/fauna resources and appropriate shelter.

In formulating a predictive model for Aboriginal archaeological site location within any landscape it is also necessary to consider post-depositional influences on Aboriginal material culture. In all but the best preservation conditions very little of the organic material culture remains of ancestral Aboriginal communities survives to the present. Generally, it is the more durable materials such as stone artefacts, stone hearths, shells, and some bones that remain preserved in the current landscape. Even these, however, may not be found in their original depositional context since these may be subject to either (a) the effects of wind and water erosion/transport, both over short-

and long-time scales, or (b) the historical impacts associated with the introduction of European farming practices including grazing and cropping, land degradation, and farm related infrastructure. Scarred trees, due to their nature, may survive for up to several hundred years but rarely beyond.

5.5.1 Site types in the region of the study area

The site types listed in **Table 5-3** are present in the region of the study area. The likelihood of these sites being present in the study area is discussed in **Section 5.5.3**.

Table 5-3: Site types recorded in the region of the study area.

Site type	Site description
Isolated finds	May be indicative of random loss or deliberate discard of a single artefact, the remnant of a now dispersed and disturbed artefact scatter, or an otherwise obscured or subsurface artefact scatter. They may occur anywhere within the landscape but are more likely to occur in topographies where open artefact scatters typically occur.
Open artefact scatters	Artefact scatters are defined as two or more artefacts, not located within a rock shelter, and located no more than 50 m away from any other constituent artefact. This site type may occur almost anywhere that Aboriginal people have travelled and may be associated with hunting and gathering activities, short- or long-term camps, and the manufacture and maintenance of stone tools. Artefact scatters typically consist of surface scatters or sub-surface distributions of flaked stone discarded during the manufacture of tools but may also include other artefactual rock types such as hearth and anvil stones. Less commonly, artefact scatters may include archaeological stratigraphic features such as hearths and artefact concentrations which relate to activity areas. Artefact density can vary considerably between and across individual sites. Small ground exposures revealing low density scatters may be indicative of a background scatter rather than a spatially or temporally distinct artefact assemblage. These sites are classed as 'open', that is, occurring on the land surface unprotected by rock overhangs, and are sometimes referred to as 'open camp sites'. Artefact scatters are most likely to occur on level or low gradient contexts, along the crests of ridgelines and spurs, and elevated areas fringing watercourses or wetlands. Larger sites may be expected in association with permanent water sources. Topographies which afford effective through-access across, and relative to, the surrounding landscape, such as the open basal valley slopes and the valleys of creeks, will tend to contain more and larger sites, mostly camp sites evidenced by open artefact scatters.
Culturally modified trees	Aboriginal scarred trees contain evidence of the removal of bark (and sometimes wood) in the past by Aboriginal people, in the form of a scar. Bark was removed from trees for a wide range of reasons. It was a raw material used in the manufacture of various tools, vessels, and commodities such as string, water containers, roofing for shelters, shields and canoes. Bark was also removed because of gathering food, such as collecting wood boring grubs or creating footholds to climb a tree for possum hunting. Due to the multiplicity of uses and the continuous process of occlusion (or healing) following removal, it is difficult to accurately determine the intended purpose for any example of bark removal. Scarred trees may occur anywhere old growth trees survive. The identification of scars as Aboriginal cultural heritage items can be problematical because some forms of natural trauma and European bark extraction create similar scars. Many remaining scarred trees probably date to the historic period when bark was removed by Aboriginal people for both their own purposes and for roofing on early European houses. Consequently, the distinction between European and Aboriginal scarred trees may not be clear.
Burials	Generally found in soft sediments such as aeolian sand, alluvial silts, and rock shelter deposits. In valley floor and plains contexts, burials may occur in locally elevated topographies rather than poorly drained sedimentary contexts. Burials are also known to have occurred on rocky hilltops in some limited areas. Burials are generally only visible where there has been some disturbance of sub-surface sediments or where some erosional process has exposed them.
Bora/Ceremonial sites	Places which have ceremonial or spiritual connections. Ceremonial sites may comprise of natural landscapes or have archaeological material. Bora sites are ceremonial sites which consist of a cleared area and earthen rings.

5.5.2 Landform modelling of archaeological potential

The large number of archaeological studies undertaken near the study area provides information to obtain a sound understanding of the nature and distribution of archaeological sites within the

area. Although there is some conjecture about the relationship between stream order, site numbers and densities, the general pattern is that most sites are present close to watercourses.

As most of the study area consists of gently undulating landforms and flats within 200 m of creeks and drainage lines, previous findings indicate that low-density artefact scatters would be the most common site type to be present. However, this site type, if present, is likely to have been dispersed by the post-colonial land use of the area, particularly tree clearance, low intensity grazing, and cultivation.

Previous studies in the region also indicate that elevated landforms within 200 m of water may contain intact archaeological deposits, however, as these areas in the study area have been impacted by erosion and cultivation, intact deposits would only be present if soils are deep. Artefact scatters in these areas may also be dispersed because of the previous land use.

The study area and surrounding land is primarily used for farming and grazing operations. The presence of hoofed livestock is likely to have resulted in trampling and compaction of the ground surface which accelerates soil loss. Erosional process within the study area would be exacerbated by the types of landforms present which have been largely cleared of vegetation.

5.5.3 Conclusion

Based on knowledge of the environmental contexts of the study area and a desktop review of the known local and regional archaeological record, the following predictions are made concerning the probability of landforms within the study area to contain Aboriginal objects (**Table 5-4**), and what types of sites may be present within the study area (**Table 5-5**).

Table 5-4: Likelihood of landforms within the study area to contain Aboriginal objects.

Landform type	Likelihood to contain Aboriginal objects
Flats	Flat landforms were favoured occupation locations when in proximity to permanent and semi-permanent water sources. Archaeological studies in the region indicate that banks and elevated terraces adjacent to drainage lines or watercourses were favoured occupation locations and therefore have high potential for occupation sites to be present. Due to the presence of semi-permanent creeks across the study area, low-density artefact scatters are the most likely site type to be recorded. Artefact scatters may be dispersed from the post-colonial land use in the area.
Slopes	Slopes are a degrading landform, especially in the study area where vegetation removal has accelerated soil loss. Given the slopes in the study area consist of gentle gradients, they are still suitable for occupation and often favoured as they are more elevated, however, when distant to water they are less likely to have been used for long-term camping activities.

Table 5-5: Likelihood of certain site types being present in the study area.

Site type	Likelihood of being present in the study area
Isolated finds	As isolated finds can occur anywhere, particularly within disturbed contexts, it is predicted that this site type could be recorded within the study area.
Open artefact scatters	Stone artefact distributions of variable artefact densities are some of the most common Aboriginal object recorded within the region. A general correlation between landform and the nature of the evidence of past Aboriginal occupation is evident with higher artefact density sites located on elevated landforms adjacent to waterways. Further, the perennial nature of watercourses in the general region does not impede the recording of artefacts and PADs near watercourses. Any artefact scatters are likely to be of low-density and comprised of artefacts predominately

Site type	Likelihood of being present in the study area
	manufactured from quartz, with lower frequencies of chert, silcrete and other fine-grained siliceous materials.
Culturally modified trees	While most of the study area has been cleared for grazing and farming activities, isolated stands of trees remain scattered across the study area. This site type is not highly represented in the surrounding area, however, there is potential to identify this site type if trees of an appropriate age are present, particularly within 200 m of the semi-permanent watercourses.
Burials	Although it is possible that this site type could be found within the study area, it is considered a rare site type especially given the disturbance that has occurred within the study area and the types of landforms present.
Bora/Ceremonial sites	This site type does not necessarily follow landform predictability and are, overall, a rare site type with a low likelihood of being present and remaining extant. These sites are generally identified through consultation with the RAPs.

5.6 RESEARCH QUESTIONS

Beyond forming an opinion regarding the nature of the archaeological resource within the study area with the aim of conserving any areas of high archaeological significance, the survey will also attempt to:

- Establish how the findings within the study area (if any) accord with the regional archaeological context examined in **Section 5.2**
- Test the veracity of the predictive model established in **Section 5.5** which indicates that artefact sites, primarily consisting of unmodified quartz artefacts, will be the most likely site to be recorded
- Establish whether high significance sites such as burials and stone arrangements have potential to be present within the study area.

6 RESULTS OF ABORIGINAL ARCHAEOLOGICAL ASSESSMENT

6.1 SAMPLING STRATEGY AND FIELD METHODS

The archaeological methods utilised in the Aboriginal archaeological assessment followed the Code of Practice. Standard archaeological field survey and recording methods were employed (Burke and Smith 2004).

It should be noted that the aim of any archaeological survey is not to locate each artefact in a landscape but to undertake investigations so that the archaeological potential and archaeological characteristics of all landforms within the study area are known. Therefore, the aims of the survey were to:

- Conduct pedestrian transects across all landforms in the study area so that their archaeological potential could be determined
- Evaluate whether the predictive model set out in **Section 5.5** is valid
- Determine if any portions of the study area require test excavation to understand the archaeological potential at a particular location.

The study area was assessed by pedestrian transects by one surveyor as shown on **Figure 6-1**.

6.2 EFFECTIVE SURVEY COVERAGE

Two of the key factors influencing the effectiveness of archaeological survey are ground surface visibility (GSV) and ground surface exposure (GSE). These factors are quantified to ensure that the survey data provides adequate evidence for the evaluation of the archaeological materials across the landscape. For the purposes of the current assessment, these terms are used in accordance with the definitions provided in the Code of Practice.

GSV is defined as:

> *… the amount of bare ground (or visibility) on the exposures which might reveal artefacts or other archaeological materials. It is important to note that visibility, on its own, is not a reliable indicator of the detectability of buried archaeological material. Things like vegetation, plant or leaf litter, loose sand, stone ground or introduced materials will affect the visibility. Put another way, visibility refers to 'what conceals'* (DECCW 2010:39).

GSE is defined as:

> *… different to visibility because it estimates the area with a likelihood of revealing buried artefacts or deposits rather than just being an observation of the amount of bare ground. It is the percentage of land for which erosion and exposure was sufficient to reveal archaeological evidence on the surface of the ground. Put another way, exposure refers to 'what reveals'* (DECCW 2010:37).

Figure 6-1: Pedestrian coverage across the survey units.

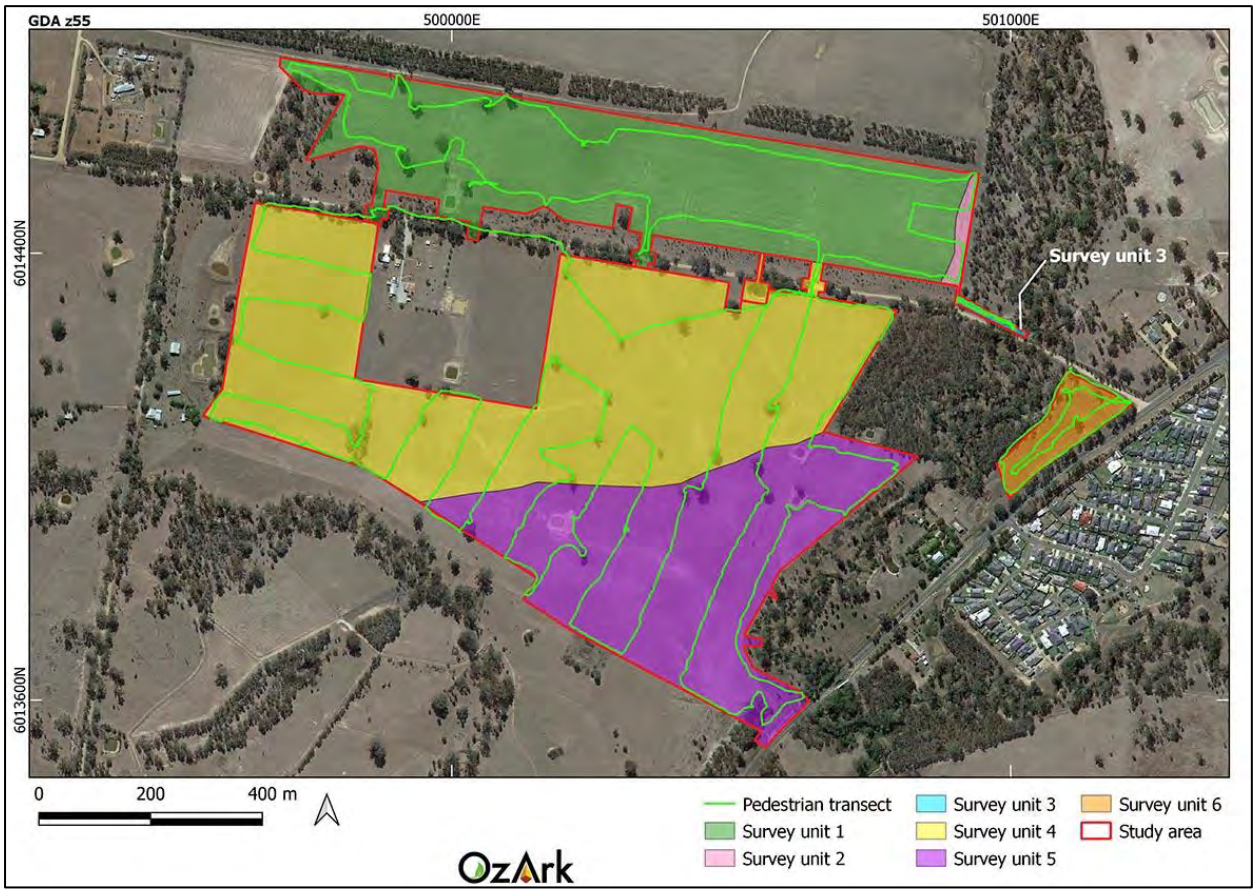


Table 6-1 calculates the effective survey coverage within the study area. In general, **Table 6-1** presents an approximation of the amount of ground surface able to be seen at any location within specific survey units.

For example, at any one location within Survey Units 1 and 2 approximately 35% of the ground surface could be seen. Exposures across all the survey units was afforded primarily from ploughing, except at Survey Unit 3, although the amount of exposure was variable due to crops being at different stages of growth.

Table 6-1: Effective survey coverage within the study area.

Landform Unit	Landform	Exposure type	Landform Unit Area (sq m)	Visibility %	Exposure %	Effective Coverage Area (sq m) (= Landform Unit Area x Visibility % x Exposure %)	Effective Coverage % (= Effective Coverage Area / Landform Unit Area x 100)
1	Gently undulating	Furrow rows; dam wall (**Plate 1** and **Plate 2**)	235,355	70	50	82,374.25	35%
2	Flat	Furrow rows; erosion scald; fence lines (**Plate 3**)	4,805	70	50	1,681.75	35%
3	Flat	Limited areas of erosion;	1,930	50	<5	48.25	2.5%

Landform Unit	Landform	Exposure type	Landform Unit Area (sq m)	Visibility %	Exposure %	Effective Coverage Area (sq m) (= Landform Unit Area x Visibility % x Exposure %)	Effective Coverage % (= Effective Coverage Area / Landform Unit Area x 100)
		fence line (**Plate 4**)					
4	Gently undulating	Furrow rows; fence lines (**Plate 5** and **Plate 6**)	344,070	50	10	17,203.5	5%
5	Flat	Furrow rows; dam walls; fence lines (**Plate 7**)	200,925	50	10	10,046.25	5%
6	Flat	Furrow rows; fence lines; small area of earthworks (**Plate 8**)	19,070	60	15	1,716.3	9%

Table 6-2 combines the survey units described above into the two main landforms present and demonstrates that the survey efficacy was relatively low at between 6.5–17%. This lack of visible ground surface may have contributed to the absence of sites recorded.

The gently undulating landforms of Survey Unit 1 were the most effectively surveyed landforms, while the flats (Survey Unit 2), which were considered to have higher archaeological potential based on proximity to named waterways, was the least effectively surveyed landform. The lack of exposure across most of the landforms closest to Seven and Eight Mile Creeks was a recognised constraint to the survey.

This constraint was significant as predicative modelling in **Section 5.5** identified that isolated finds and artefact scatters were likely to be identified across areas within 200 m of ephemeral watercourses. Due to the lack of ground exposure across these landforms, it was concluded that subsurface investigations are warranted to confirm whether archaeological deposits are present within areas identified during the survey as having increased archaeological potential (see **Section 6.3**).

Table 6-2: Effective survey coverage and incidences of site recording.

Landform	Landform area (sq m)	Area Effectively Surveyed (sq m) (= Effective Coverage Area)	% of Landform Effectively Surveyed (= Area Effectively Surveyed / Landform x 100)	Number of Sites	Number of Artefacts or Features
Gently undulating	579,405	99,577.75	17%	0	0
Flat	226,730	15,174.3	6.5%	0	0

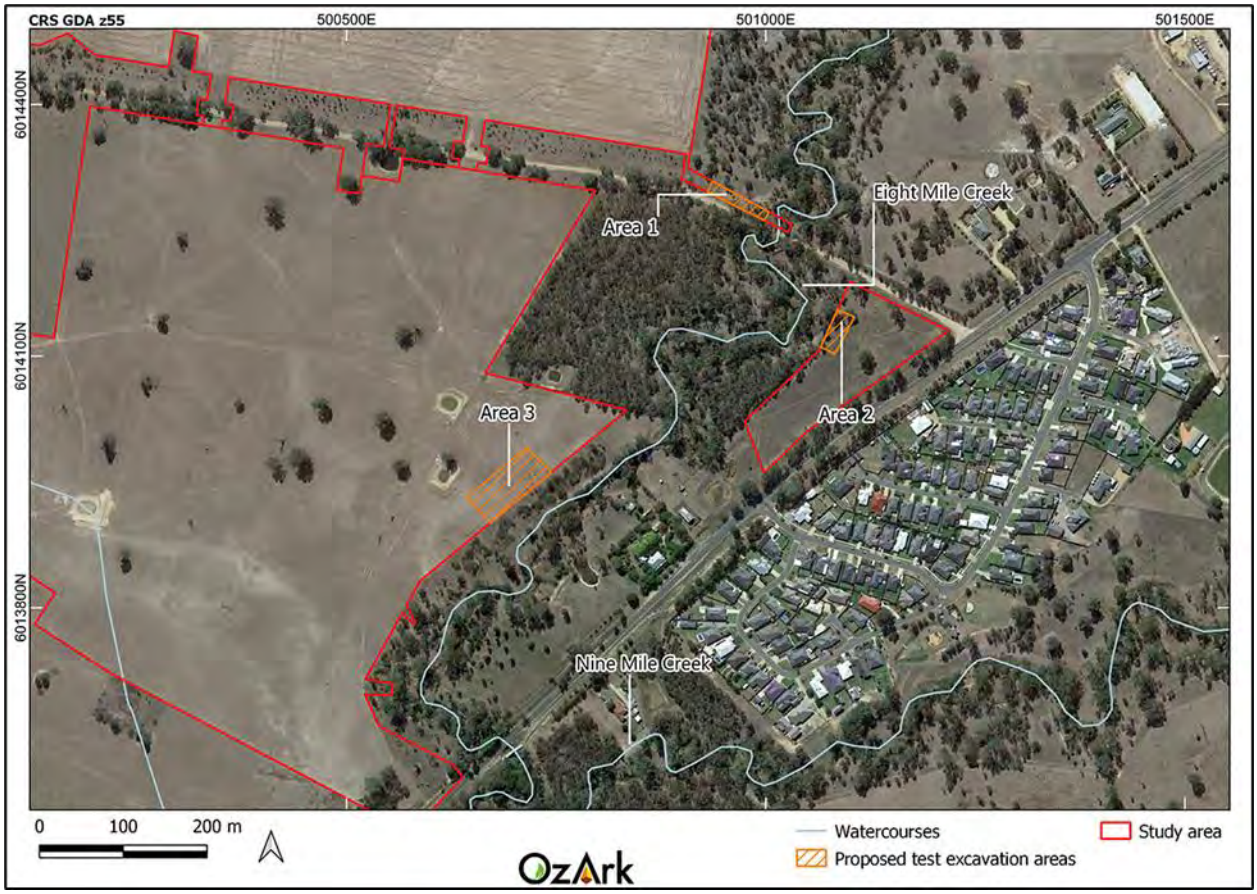
6.3 ABORIGINAL SITES RECORDED

No Aboriginal sites were recorded during the survey, though three landforms with the potential to contain archaeological deposits were identified. These PADs, (Areas 1–3), were identified based on landform features and the location of previously recorded sites in the local area, particularly along Eight Mile Creek. **Table 6-3** summarises the details of Areas 1–3 and the location of these are shown on **Figure 6-2**.

Table 6-3: Survey results.

Name	Site type	Survey unit	Landform
Area 1	PAD	3	Flat; terrace
Area 2	PAD	6	Flat
Area 3	PAD	5	Flat

Figure 6-2: Location of Areas 1–3 in relation to Eight Mile Creek.



6.4 DISCUSSION

No Aboriginal objects were identified in the study area during the field survey. Considering the poor GSV, this was unsurprising as this was a recognised constraint of the survey (**Section 6.2**).

The predicative modelling (**Section 4.4**) identified that isolated finds and artefact scatters were likely to be located on elevated landforms near watercourses. While these site types were not recorded, three PADs were identified during the survey in locations within the study area which

have the possibility to contain subsurface deposits. These areas conform with the locations of previously recorded sites along Eight Mile Creek and Woolshed Creek to the north of the study area. These sites, some containing subsurface deposits, have been predominately recorded along elevated landforms overlooking both creeks (see **Section 5.2**).

As no Aboriginal sites were recorded in the study area, the research questions set out in **Section 5.6** are unable to addressed due to lack of evidence.

7 TEST EXCAVATION PROGRAM

7.1 EXCAVATION METHODOLOGY

7.1.1 Purpose of the test excavation program

The purpose of the test excavation program is to understand more completely the nature of the sub-surface material across the study area. Data obtained from the test excavation program will inform the mitigation and management options in the forthcoming revised ACHAR.

The aims are therefore to:

1. Establish the extent and nature the of sub-surface archaeological deposits
2. Use the data gained from the test excavation program to better evaluate the archaeological significance and potential of the PAD
3. Develop, in consultation with the RAPs and the Proponent, an informed strategy for the management of impacts to any Aboriginal cultural heritage likely to be impacted by the Proposal.

7.1.2 Rationale of the test excavation program

The test excavation methodology is provided as **Appendix 3**. This document sets out the predictive model used to design the test excavation program.

While any test excavation program is limited in the level of research objectives it can achieve due to the restricted nature of the excavations, the test excavations attempted to answer the following research questions:

- How does the artefactual material and stratigraphy identified at the site compare to other archaeological excavations undertaken in the local area and the region?
- Are there intact stratigraphic deposits present beneath the 'plough zone' that are of conservation value?
- Is there evidence providing insight into the tasks were Aboriginal people undertaking?

7.2 SAMPLING METHODOLOGY FOR THE TEXT EXCAVATION PROGRAM

Three locations where test excavation could provide further information of the subsurface archaeological potential were identified (**Figure 6-2**). **Table 7-1** details the excavation effort proposed for each PAD.

Table 7-1: Sampling methodology for the text excavation program.

Area	Test excavation methodology	Landform area	0.5% of landform area	Proposed excavation area
Area 1	1 x 50 m transect (six 0.5 x 0.5 m TUs) to be excavated. The TUs will be spaced at least 10 m apart.	730 m^2	3.65 m^2	1.5 m^2

Area	Test excavation methodology	Landform area	0.5% of landform area	Proposed excavation area
Area 2	2 x 30 m transects (eight 0.5 x 0.5 m TUs) to be excavated. The transects will be placed parallel to each other spaced at least 10 m apart.	1006 m^2	5.03 m^2	2 m^2
Area 3	2 x 30 m transects (eight 0.5 x 0.5 m TUs) to be excavated. The transects will be placed parallel to each other spaced at least 10 m apart.	3886 m^2	19.43 m^2	2 m^2

7.2.1 Research considerations

Stone artefacts are probably the most resilient physical evidence of Aboriginal occupation in Australia and for many parts of the country form the most abundant archaeological evidence of Aboriginal occupation. Stone artefacts are important because they are tangible evidence of Aboriginal use of an area and can potentially contain information about lithic activities, the organisation of stone technologies, and potentially information about larger-scale issues of settlement organisation across regions and even social change over time.

The kinds of information which can be obtained from stone artefacts may vary considerably, depending in part on:

- The numbers of artefacts which can be examined and recorded: generally, the larger the number of artefacts the more reliable will be statistical statements about them
- The presence of other assemblages with which the artefacts can be compared
- The condition of sites in which they occur: generally undisturbed sites have more information potential than disturbed sites, depending on the scale at which research is carried out
- The theory which underlies the artefact recording and analysis.

Depending on the results of the test excavation program, an appropriate research approach considering these variables in artefact analysis will be developed.

7.3 TEST EXCAVATION RESULTS

In the excavation results the following abbreviations are made: Tr – transect, and Sq – square. In this way a TU can be described as, for example, Tr1 Sq1; identifying both the transect of the TU plus the location of the TU in that transect.

Spits are an arbitrary depth of deposit. In the absence of archaeological stratigraphy, TUs are often excavated in standard spits so that control on the depths of finds is maintained.

7.3.1 Area 1

Six TUs (0.5 x 0.5 m) spaced 10 m apart were excavated along one transect at Area 1 (**Figure 7-1**).

The transect was laid perpendicular to Eight Mile Creek across the terrace and is bounded to the west by a swampy area (**Figure 7-2**).

Soils across Area 1 typically consisted humic topsoil layer overlying of a mid-brown loam with compaction increasing with depth (**Table 7-2** and **Figure 7-3**). Excavation depths ranged between 49 to 52 cm before a pale orange sandy clay base was reached.

One artefact, a complete quartz flake, was recovered from Tr1 Sq6 spit 5 (**Figure 7-4**). The artefact measures 23 x 17 x 7 mm.

Figure 7-1: Location of the TUs at Area 1.

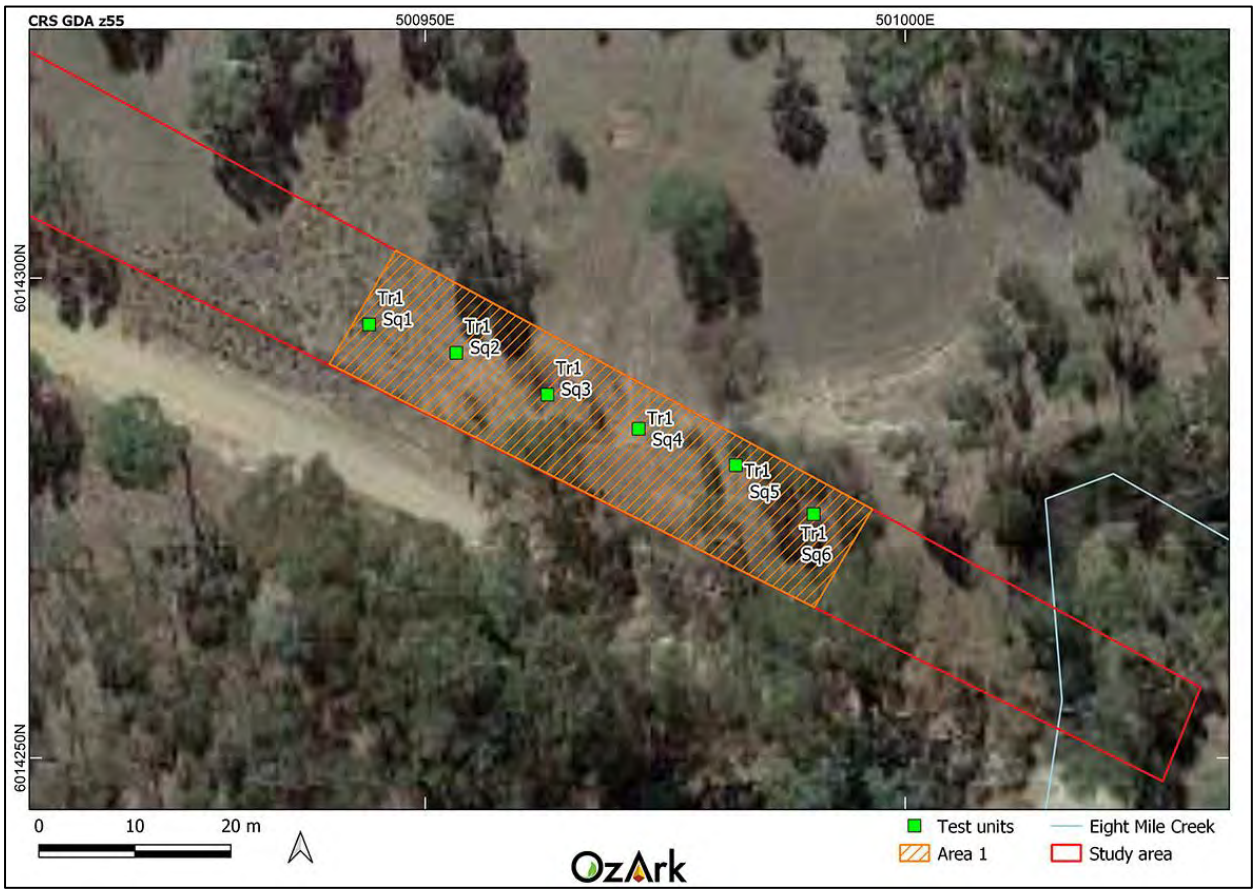


Figure 7-2: View of landforms at Area 1.

1. View southeast to Tr1 Sq6 showing Eight Mile Creek in the background.

2. View northwest across Tr1 at Area 1.

Table 7-2: Stratigraphy details for Area 1 TUs.

Tr	Sq	GDA Zone 54 Easting	GDA Zone 54 Northing	Total depth of square (cm)	Soil profile description
Tr1	1	500944	6014295	49 cm	Brown humic topsoil (0-11cm), overlying mid-brown loam (11-49 cm) then clay base.
Tr1	2	500953	6014292	45 cm	Brown humic topsoil (0-4 cm), overlying mid-brown loam (4-45 cm) then clay base.
Tr1	3	500962	6014287	52 cm	Brown humic topsoil (0-5 cm), overlying mid-brown loam (5-32 cm). Mid-brown/yellow clay loam from 32-52 cm then clay base.
Tr1	4	500972	6014284	40 cm	Brown humic topsoil (0-5 cm), overlying mid-brown loam (5-35 cm). Mid-brown/yellow clay loam from 35-40 cm then clay base.
Tr1	5	500982	6014280	41 cm	Brown humic topsoil (0-5 cm), overlying mid-brown loam (5-33 cm). Increased compaction from 33-41 cm then mid-brown/yellow compact clay base.
Tr1	6	500990	6014275	42 cm	Dark brown humic topsoil (0-4 cm), overlying mid-brown loam (4-32 cm). Increased compaction from 32-42 cm then mid-brown/yellow compact clay base.

Figure 7-3: Area 1 TU profiles.

1. Tr1 Sq1, west profile.

2. Tr1 Sq2, north profile.

3. Tr1 Sq5, west profile.

4. Tr1 Sq6, north profile.

Figure 7-4: Artefact from Area 1.

1. Quartz flake recovered from Tr1 Sq6 at Area 1.

7.3.2 Area 2

Three TUs (0.5 x 0.5 m) were excavated along each of the two transects at Area 2 (**Figure 7-5**). The transects were parallel to each other and offset by 10 m. The TUs were spaced 10 m apart along a transect.

The transects were laid across a flat, cropped landforms approximately 40 m east of Eight Mile Creek (**Figure 7-6**).

Soils across Area 2 typically consisted of a thin layer of topsoil overlying a mid-brown to orange loam (**Table 7-3** and **Figure 7-7**). Excavation depths ranged between 13 to 30 cm before a pale orange / yellow clay base was reached.

No artefacts or features were recorded from the TUs at Area 2.

Figure 7-5: Location of the TUs at Area 2.

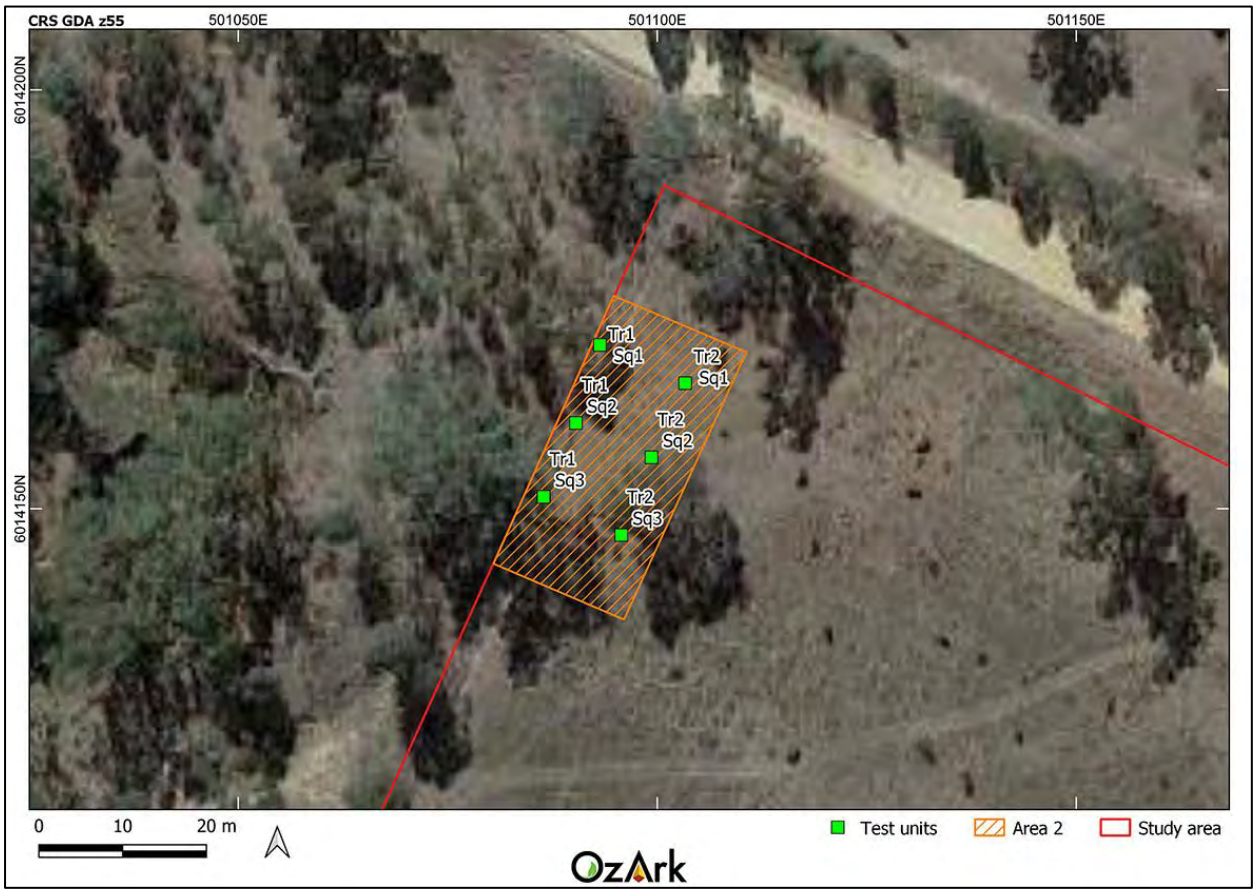


Figure 7-6: View of landforms at Area 2.

1. View southwest along Tr1 at Area 2.

2. View northeast across Tr1 at Area 2.

Table 7-3: Stratigraphy details for Area 2 TUs.

Tr	Sq	GDA Zone 54 Easting	GDA Zone 54 Northing	Total depth of square (cm)	Soil profile description
Tr1	1	501093	6014169	30 cm	Humic topsoil (0-4 cm), overlying mid-brown clay loam to 30 cm then mottled clay base.
Tr1	2	501090	6014160	21 cm	Humic topsoil (0-3 cm), overlying mid-brown/orange clay loam to 21 cm then mottled clay base.
Tr1	3	501086	6014151	16 cm	Humic topsoil (0-4 cm), overlying mid-brown/yellow clay loam to 30 cm then sticky yellow clay base.
Tr2	1	501103	6014164	15 cm	Humic topsoil (0-3 cm), mid-brown clay loam to 30 cm then mottled brown and orange clay base.
Tr2	2	501099	6014156	20 cm	Humic topsoil (0-3 cm), overlying mid-brown/orange clay loam to 20 cm then mottled clay base.
Tr2	3	501095	6014146	13 cm	Humic topsoil (0-2 cm), overlying mid-brown/orange clay loam to 13 cm then mottled clay base.

Figure 7-7: Area 2 TU profiles (sample).

1. Tr1 Sq1, north profile.

2. Tr1 Sq3, north profile.

	
3. Tr2 Sq1, north profile.	4. Tr2 Sq3, north profile.

7.3.3 Area 3

Four TUs (0.5 x 0.5 m) were excavated along each of the two transects at Area 3 (**Figure 7-8**). The transects were parallel to each other and offset by 10 m. The TUs were spaced 10 m apart along a transect.

The transects were laid across a gently elevated area above a flat plain approximately 30 m west of Eight Mile Creek (**Figure 7-9**).

Soils across Area 3 typically consisted of dark brown humic topsoil layer overlying a mid-brown/yellow loam with compaction increasing with depth (**Table 7-4** and **Figure 7-10**). Excavation depths ranged between 33 to 42 cm before a mid-brown/ yellow clay base was reached, except at Tr2 Sq3 where clay was not reached by 60 cm.

No artefacts or features were recovered from the TUs at Area 3.

Figure 7-8: Location of the TUs at Area 3.

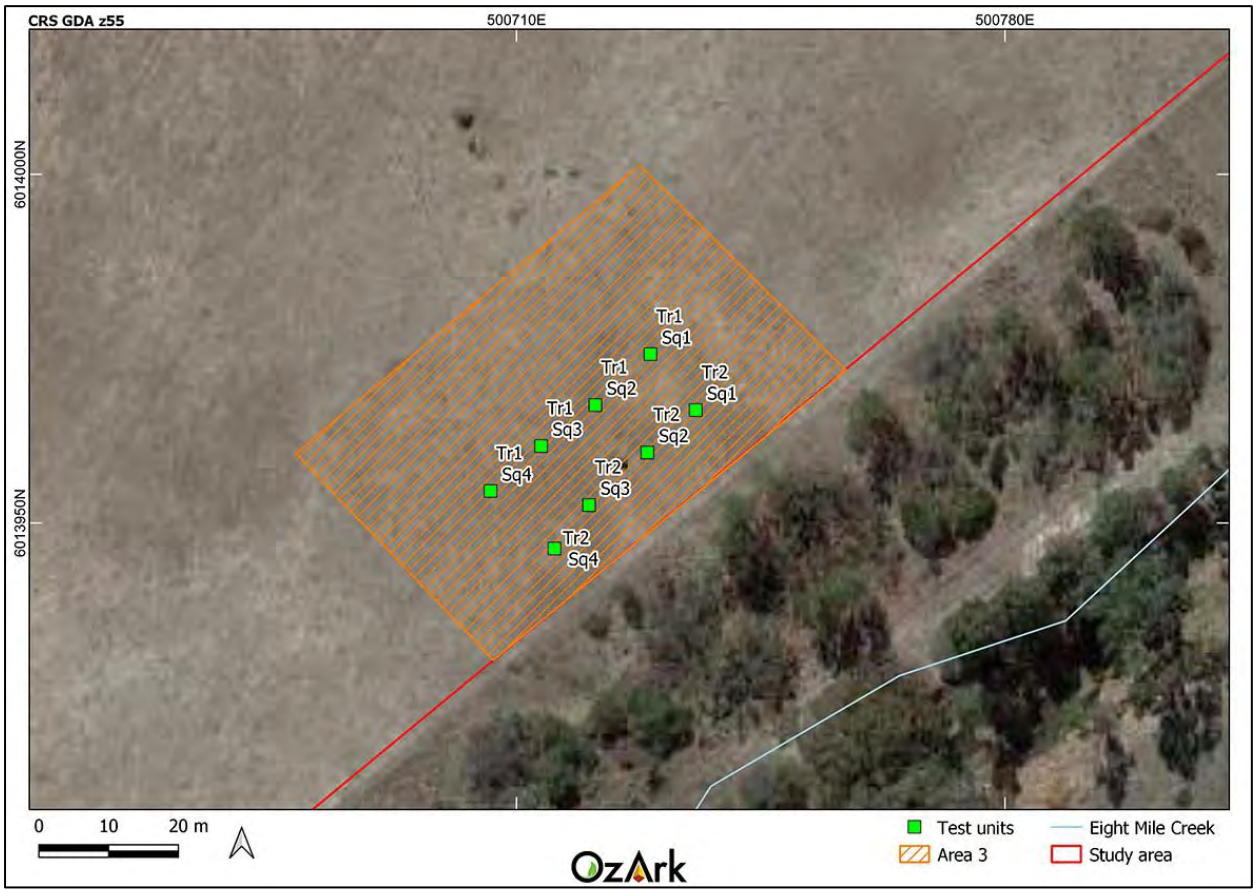


Figure 7-9: View of landforms at Area 3.

1. View northeast along Tr2 at Area 3.

2. View southwest across Tr2 at Area 3.

Table 7-4: Stratigraphy details for Area 3 TUs.

Tr	Sq	GDA Zone 54 Easting	GDA Zone 54 Northing	Total depth of square (cm)	Soil profile description
Tr1	1	500729	6013974	32 cm	Dark brown humic topsoil (0-10 cm), overlying mid-brown loam then orange clay base.
Tr1	2	500721	6013966	33 cm	Dark brown humic topsoil (0-12 cm), overlying mid-brown loam then orange clay base.
Tr1	3	500713	6013960	38 cm	Dark brown humic topsoil (0-12 cm), overlying mid-brown/yellow loam then yellow clay base.
Tr1	4	500706	6013954	42 cm	Dark brown humic topsoil (0-13 cm), overlying mid-brown/yellow clay loam then mottled clay base at 42 cm.
Tr2	1	500735	6013966	33 cm	Dark brown humic topsoil (0-8 cm), overlying mid-brown loam then orange clay base.
Tr2	2	500728	6013960	39 cm	Dark brown humic topsoil (0-14 cm), overlying mid-brown loam then orange clay base.
Tr2	3	500720	6013952	60 cm	Dark brown humic topsoil (0-12 cm), overlying mid-brown loam with few inclusions. Mid-brown/yellow clay loam with common gravels at 43-60 cm. Deemed culturally sterile at 60 cm.
Tr2	4	500715	6013946	30 cm	Dark brown humic topsoil (0-10 cm), overlying mid-brown/yellow loam then yellow clay base.

Figure 7-10: Area 3 TU profiles (sample).

1. Tr1 Sq1, south profile.

2. Tr1 Sq2, north profile.

3. Tr2 Sq1, north profile.

4. Tr2 Sq4, south profile.

7.3.4 Summary and conclusion

A total of 20 TUs were excavated at three separate localities: a total of 5 m^2. One artefact was recovered from Area 1 confirming that the landforms within the study area adjacent to Eight Mile Creek are unlikely to be associated with intact subsurface deposits.

The artefact recovered from Area 1 has been registered on AHIMS as 61-1-0291 (Eight Mile Creek-IF1). As the artefact has been collected, the site is now registered as destroyed on AHIMS. The artefact was reburied following the test excavation program approximately 55 m northeast from where it was recovered, outside of the impact footprint of the Proposal (**Figure 7-11**). The reburial location has been registered on AHIMS as site 61-1-0292.

Based on the results of the test excavation program, no further subsurface excavations are warranted and an AHIP is not required for the Proposal to proceed.

Figure 7-11: Recorded location of Eight Mile Creek-IF1 and the reburial location.

7.4 DISCUSSION OF THE TEST EXCAVATION PROGRAM

7.4.1 Research questions

In **Section 7.1.2**, several research questions were posed for the test excavation program. These will be answered below, where possible:

- How does the artefactual material and stratigraphy identified at the site compare to other archaeological excavations undertaken in the local area and the region?
    - The only artefact recovered during the test excavation included a quartz flake located between 20–25 cm of the deposit. The material is consistent with the most commonly recorded material in the local area and the depth at which it was located also accords with previous archaeological findings (**Section 5.4**).
- Are there intact stratigraphic deposits present beneath the 'plough zone' that are of conservation value?
    - No intact deposits with conservation value were identified during the test excavation.
- Is there evidence providing insight into the tasks were Aboriginal people undertaking?
    - The artefact assemblage is not substantial enough to draw conclusions about occupation and/or tasks undertaken within the study area.

8 SIGNIFICANCE ASSESSMENT

8.1 INTRODUCTION TO SIGNIFICANCE ASSESSMENT

8.1.1 Identifying cultural significance

The concept of cultural significance is used in Australian heritage practice and legislation to encompass all the cultural values and meanings that might be recognised in a place. The *Burra Charter*'s definition of cultural significance is broad and encompasses places that are significant to Indigenous cultures (Burra Charter 2013).

The *Burra Charter* definition of 'place' is also broad and encompasses Indigenous places of cultural significance. 'Place' includes locations that embody spiritual value (such as Dreaming places, sacred landscapes, and stone arrangements), social and historical value (such as massacre sites), as well as scientific value (such as archaeological sites). In fact, one place may be all these things or may embody all these values at the same time.

In some cases, the find-spot of a single artefact may constitute a 'place'. Equally, a suite of related locations may together comprise a single 'place', such as the many individual elements that make up a Songline. These more complex places are sometimes called a cultural landscape or cultural route.

The Guide (OEH 2011: 8–9) notes that cultural significance is comprised of an assessment of social values, scientific values, aesthetic values, and historic values. These values are described below.

8.1.1.1 Social or cultural value

Social or cultural value refers to the spiritual, traditional, historical, or contemporary associations and attachments the place or area has for Aboriginal people. Social or cultural value is how people express their connection with a place and the meaning that place has for them.

Places of social or cultural value have associations with contemporary community identity. These places can have associations with tragic or warmly remembered experiences, periods, or events. Communities can experience a sense of loss should a place of social or cultural value be damaged or destroyed.

There is not always consensus about a place's social or cultural value. Because people experience places and events differently, expressions of social or cultural value do vary and, in some instances, will be in direct conflict. When identifying values, it is not necessary to agree with or acknowledge the validity of each other's values, but it is necessary to document the range of values identified.

Social or cultural value can only be identified through consultation with Aboriginal people. This could involve a range of methodologies, such as cultural mapping, oral histories, archival

documentation, and specific information provided by Aboriginal people specifically for the investigation.

Cultural value involves both traditional links with specific areas, as well as an overall concern by Aboriginal people for their sites generally and the continued protection of these. This type of value may not be in accord with interpretations made by the archaeologist: a site may have low archaeological value but high social value, or vice versa.

8.1.1.2 Scientific (archaeological) value

This refers to the importance of a landscape, area, place or object because of its rarity, representativeness, and the extent to which it may contribute to further understanding and information (Burra Charter 2013).

Assessing a site in this context involves placing it into a broader regional framework, as well as assessing the site's individual merits in view of current archaeological discourse. This type of value relates to the ability of a site to answer current research questions and is also based on a site's condition (integrity), content and representativeness.

The overriding aim of cultural heritage management is to preserve a representative sample of the archaeological resource. This will ensure that future research within the discipline can be based on a valid sample of the past. Establishing whether a site can contribute to current research also involves defining 'research potential'. Questions regularly asked when determining significance are: can this site contribute information that no other site can? Is this site representative of other sites in the region?

Information about scientific values will be gathered through any archaeological investigation undertaken. Archaeological investigations must be carried out according to Heritage NSW's Code of Practice (DECCW 2010).

Often scientific values are informed by social values that allow a contemporary understanding of the archaeological data to be understood.

8.1.1.3 Aesthetic value

This refers to the sensory, scenic, architectural, and creative aspects of the place. It is often closely linked with the social values. It may consider form, scale, colour, texture and material of the fabric or landscape, and the smell and sounds associated with the place and its use (Burra Charter 2013).

8.1.1.4 Historic value

Historic value refers to the associations of a place with a historically important person, event, phase, or activity in an Aboriginal community. Historic places do not always have physical

evidence of their historical importance (such as structures, planted vegetation or landscape modifications). They may have 'shared' historic values with other (non-Aboriginal) communities.

Places of post-contact Aboriginal history have generally been poorly recognised in investigations of Aboriginal heritage. Consequently, the Aboriginal involvement and contribution to important regional historical themes is often missing from accepted historical narratives. This means it is often necessary to collect oral histories along with archival or documentary research to gain enough understanding of historic values.

8.2 ASSESSED SIGNIFICANCE OF THE RECORDED SITES

Table 8-1 presents a summary of the significance assessment of Aboriginal cultural heritage sites recorded during this assessment. Further details of each of the assessment criteria are provided below.

Social or Cultural Value

The social and cultural value of Aboriginal sites is generally determined through consultation with Aboriginal people.

A copy of the draft ACHAR was distributed to all RAPs for review on 27 September 2022 with a 28-day review period closing 26 October 2022 (**Appendix 1 Figure 8**). No feedback was received relating to the social or cultural value of the recorded sites or the broader study area. As such, for the purposes of assessing the potential impact to Aboriginal cultural heritage, the recorded site has been accorded high social and cultural values.

Archaeological/Scientific Value

Eight Mile Creek-IF1 consists of an isolated flake and is assessed as having low scientific values. The artefact is representative of sites found in the region in terms of the artefact type and material and has little research potential. Additionally, as the artefact was recorded in a test excavation it has been removed from its archaeological context.

Aesthetic Value

Eight Mile Creek-IF1 has been assessed as having low aesthetic value. The site does not have significant aesthetic value as the integrity of the sensory landscape has been altered in historic and modern times. Additionally, as the artefact was recorded in a test excavation it has been removed from its landscape context.

Historic Value

Eight Mile Creek-IF1 does not have specific historical significance as there are no known associations to specific people or events.

Table 8-1: Aboriginal cultural heritage: significance assessment.

Site Name	Social or Cultural Value	Archaeological / Scientific Value	Aesthetic Value	Historic Value
Eight Mile Creek-IF1	High	Low	Low	Nil

8.2.1 Statement of significance

The intangible Aboriginal cultural values across the wider district relate to several important places, such as Mungabareena Aboriginal Place and the Murray River, and themes associated with non-archaeological cultural values. There may be places with intangible cultural significance within the study area, although no specific locations have been identified by the Aboriginal community.

The survey and test excavation program has demonstrated that the study area has low scientific value and therefore has very little potential to yield further information regarding occupation across the landforms within the study area.

Apart from the general understanding of the aesthetic qualities of the study area (i.e. the sights, sounds and noises of the current landscape), there are no known places with identified aesthetic values important to the Aboriginal community. It is understood that the Proposal will alter the aesthetic qualities of the study area, particularly in terms of the visual impact to the landscape.

There are no known historical values associated with the study area.

9 ASSESSING HARM

9.1 AVOIDING AND MINIMISING HARM

9.1.1 Conserving significant Aboriginal cultural heritage

An object of the NPW Act is the '*conservation of objects places and features… of cultural value within the landscape, including… places, objects and features of significance to Aboriginal people*' (s.2A(1(b)(i)).

As heritage professionals, OzArk, strives for good conservation outcomes. In particular, OzArk is primarily concerned with the conservation and protection of Aboriginal cultural heritage that is of significance to Aboriginal people.

Two primary objectives when managing harm to an Aboriginal object are:

- Impacts to significant Aboriginal objects and places should always be avoided wherever possible
- Where impacts to Aboriginal objects and places cannot be avoided, proposals should be amended to reduce the extent and severity of impacts to significant Aboriginal objects and places using reasonable and feasible measures.

9.2 LIKELY IMPACTS TO ABORIGINAL HERITAGE FROM THE PROPOSAL

One Aboriginal object (Eight Mile Creek-IF1) was recorded within the study area. However, as noted in **Section 7.3.4**, this site was technically recorded and then destroyed (in the sense of removing the Aboriginal object from its location) during the test excavation program. Therefore, the site will be not impacted by the Proposal.

The artefact from Eight Mile Creek-IF1 was reburied 55 m from the impact footprint of the Proposal to ensure that it will not be harmed (**Figure 7-11**).

The Proposal will alter the aesthetic qualities of the study area, particularly in terms of the visual impact to the landscape. However, the landscape is already heavily modified from its pre-1788 state and aesthetic values have been changed remarkedly by British settlement of the landscape.

Apart from the change to the aesthetics of the study area, the Proposal will not harm any Aboriginal objects or known cultural values.

9.3 ECOLOGICALLY SUSTAINABLE DEVELOPMENT PRINCIPLES

Ecologically sustainable development principles (ESD) (defined in s.6 of the *Protection of the Environment Administration Act 1991*) requires the integration of economic and environmental considerations (including cultural heritage) in the decision-making process. Regarding Aboriginal cultural heritage, ESD can be achieved by applying the principle of intergenerational equity and the precautionary principle.

9.3.1 Intergenerational equity

Intergenerational equity is the principle whereby the present generation should ensure the health, diversity, and productivity of the environment for the benefit of future generations.

In terms of Aboriginal heritage, intergenerational equity can be considered in terms of the cumulative impacts to Aboriginal objects and places in a region. If few Aboriginal objects and places remain in a region (for example, because of impacts under previous permits), fewer opportunities remain for future generations of Aboriginal people to enjoy the cultural benefits of those Aboriginal objects and places.

Information about the integrity, rarity or representativeness of the Aboriginal objects and places proposed to be impacted, and how they illustrate the occupation and use of land by Aboriginal people across the region, will be relevant to the consideration of intergenerational equity and the understanding of the cumulative impacts of the proposal.

Where there is uncertainty, the precautionary principle should also be followed.

9.3.2 The precautionary principle

The precautionary principle states that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

In relation to Aboriginal cultural heritage values, the precautionary principle should be followed if:

- The proposal involves a risk of serious or irreversible damage to Aboriginal objects or places or to the value of those objects or places
- There is uncertainty about the Aboriginal cultural heritage values or scientific or archaeological values, including in relation to the integrity, rarity or representativeness of the Aboriginal objects or places proposed to be impacted.

9.3.3 Principle of Integration

The Plan of Implementation of the World Summit on Sustainable Development held in Johannesburg, 2002, noted the need to "*promote the integration of the three components of sustainable development- economic development, social development and environmental protection- as interdependent and mutually reinforcing pillars*".

The principle of integration ensures mutual respect and reciprocity between economic and environmental considerations:

- Environmental considerations are to be integrated into economic and other development plans, programs, and projects
- Development needs are to be considered in applying environmental objectives.

9.3.4 Applicability to the Proposal

The results of the surface survey and test excavation indicate that significant tangible or intangible Aboriginal cultural heritage values will not be harmed by the Proposal.

While one Aboriginal site (Eight Mile Creek-IF1) was recorded during the test excavation program, it is no longer in place and will not be harmed by the Proposal.

Table 9-1 examines the application of ESD principles to the Proposal.

Table 9-1: Application of ESD principles to the Proposal.

ESD principle	Response
Avoiding and minimising harm	The undertaking of the test excavation program has indicated that significant subsurface deposits are not present at the study area. **Section 10** sets out measures to be followed should any unanticipated objects or skeletal remains be identified during construction of the Proposal.
The integration principle	The environmental consequences of the Proposal have been carefully assessed and the Proposal has sought to minimise environmental and heritage harm wherever possible.
The precautionary principle	The Aboriginal cultural heritage investigation has followed the precautionary principle though undertaking a robust Aboriginal cultural heritage assessment to ensure that harm to Aboriginal objects and values is minimised. The survey adopted a precautionary principle when it came to describing and assessing landforms within the survey areas and the test excavation program was undertaken to provide certainty that significant subsurface deposits will not be harmed.
The intergenerational equity principle	It is assessed that the Proposal will not harm significant Aboriginal cultural heritage values and intergenerational equity will not be diminished.

10 RECOMMENDATIONS

Under Section 89A of the NPW Act it is mandatory that all newly recorded Aboriginal sites be registered with AHIMS. As a professional in the field of cultural heritage management it is the responsibility of OzArk to ensure this process is undertaken.

To this end it is noted that one Aboriginal site (Eight Mile Creek-IF1) was recorded during the test excavation program and has been registered as 61-1-0291. Eight Mile Creek-IF1 was removed from its location during the test excavation program and has been reburied nearby and the relocation site recorded as site 61-1-0292.

The results of the field survey and test excavation program concluded that the proposed works can proceed without an AHIP or any further archaeological investigation.

The following recommendations are made based on these impacts and regarding:

- Legal requirements under the terms of the NPW Act
- The findings of the current investigations undertaken within the study area
- The interests of the Aboriginal community.

Recommendations concerning Aboriginal cultural values within the study area are as follows:

1. All land-disturbing activities must be confined to the assessed study area. Should the parameters of the proposed work extend beyond the assessed area, then further archaeological assessment may be required.
2. This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage items or sites. However, during works, if Aboriginal objects are noted, all work should cease and the procedures in the *Unanticipated Finds Protocol* (**Appendix 5**) must be followed.
3. Work crews should undergo cultural heritage induction to ensure they recognise Aboriginal artefacts (**Appendix 7**) and are aware of the legislative protection of Aboriginal objects under the NPW Act and the contents of the *Unanticipated Finds Protocol* (**Appendix 5**).
4. Should skeletal material be encountered that is suspected to be of Aboriginal origin, all work will cease in the area and the procedures in *Unanticipated Skeletal Remains Protocol* (**Appendix 6**) must be followed.

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PLATES

Plate 1: View west across the central portion of Lot 301 DP1124543 within Survey Unit 1.

Plate 2: View west across the western portion of Lot 301 DP1124543 within Survey Unit 1.

Plate 3: View south across the eastern boundary of Lot 301 DP1124543 within Survey Unit 2.

Plate 4: View southeast across Survey Unit 3 located to the west of Eight Mile Creek.

Plate 5: View southwest across the western portion of Lot 302 DP1124543 to the west of Eight Mile Creek in Survey Unit 4.

Plate 6: View east from the western boundary of Lot 302 DP1124543 in Survey Unit 4.

Plate 7: View north from the southern portion of Lot 302 DP1124543 in Survey Unit 5.

Plate 8: View northeast across the eastern portion of Lot 302 DP1124543 to the east of Eight Mile Creek in Survey Unit 6.

APPENDIX 1: ABORIGINAL COMMUNITY CONSULTATION

Appendix 1 Figure 1: Aboriginal Consultation Log.

Date	Organisation	Comment	Method
5.4.22	The Border Mail - Albury	Catherine Burrowes (CB) sent ad off to the newspaper publishing 7.4.22 closing date 22.4.22	Email
5.4.22	Heritage NSW	CB sent stage 1 agency letter requesting potential stakeholders. Closing date 22.4.22	Email
5.4.22	Albury Local Aboriginal Land Council	CB sent stage 1 agency letter requesting potential stakeholders. Closing date 22.4.22	Email
5.4.22	Office of The Registrar, ALRA	CB sent stage 1 agency letter requesting potential stakeholders. Closing date 22.4.22	Email
5.4.22	National Native Title Tribunal	CB sent stage 1 agency letter requesting potential stakeholders. Closing date 22.4.22	Email
5.4.22	NTSCORP	CB sent stage 1 agency letter requesting potential stakeholders. Closing date 22.4.22	Email
5.4.22	City of Albury	CB sent stage 1 agency letter requesting potential stakeholders. Closing date 22.4.22	Email
5.4.22	The Murray Local Land Services	CB sent stage 1 agency letter requesting potential stakeholders. Closing date 22.4.22	Email
5.4.22	National Native Title Tribunal	CB received notification *'Records held by the National Native Title Tribunal as at.....indicate that there are no Native Title Determination Applications, Determinations of Native Title, or Indigenous Land Use Agreements over the identified area of the.....*	Email
21.4.22	Yalmambirra	CB sent Community letter closing date 9.5.22	Email
21.4.22	Mungabareena Aboriginal Corporation	CB sent Community letter closing date 9.5.22	Email
21.4.22	Wiradjuri Council of Elders	CB sent Community letter closing date 9.5.22	Email
21.4.22	Denise McGrath	CB sent Community letter closing date 9.5.22	Email
21.4.22	Leonie McIntosh	CB sent Community letter closing date 9.5.22	Email
21.4.22	Dan Clegg	CB sent Community letter closing date 9.5.22	Email
21.4.22	Ken Murray	CB sent Community letter closing date 9.5.22	Mail
21.4.22	Liz Heta	CB sent Community letter closing date 9.5.22	Email
27.4.22	Yalmambirra	CB received email registering for the project	Email
16.5.22	Yalmambirra	CB sent Stage 2/3 methodology and letter closing date 14.6.22	Email
16.5.22	Albury Local Aboriginal Land Council	CB sent Stage 2/3 methodology and letter closing date 14.6.22	Email
19.5.22	Yalmambirra	CB received commentary on the project - this is in responses 2/3 folder	Email
27.5.22	Yalmambirra	Stephanie Rusden (SR) sent email thanking for sending feedback and noted that the points made would be considered when preparing the ACHAR	Email
30.5.22	Albury Local Aboriginal Land Council	CB sent FW invite closing date 14.6.22	Email
31.5.22	Albury Local Aboriginal Land Council	CB received email with FW officer details CB replied with thanks	Email
8.7.22	Albury Local Aboriginal Land Council	CB sent Stage 3 test excavation methodology and letter closing date 5.8.22	Email

Date	Organisation	Comment	Method
8.7.22	Yalmambirra	CB sent Stage 3 test excavation methodology and letter closing date 5.8.22	Email
12.7.22	Albury Local Aboriginal Land Council	CB sent FW invite for test excavation closing date 27.7.22	Email
27.9.22	Yalmambirra	CB sent stage 4 draft ACHAR and letter closing date 26.10.22	Email
27.9.22	Albury Local Aboriginal Land Council	CB sent stage 4 draft ACHAR and letter closing date 26.10.22	Email
28.10.22	Albury Local Aboriginal Land Council	CB received email from Albury LALC noting they have no comment or objection regarding the ACHAR and that they support the ACHAR.	Email
28.10.22	Albury Local Aboriginal Land Council	CB replied with thanks.	Email

Appendix 1 Figure 2: Stage 1 Advertisement placed in the *Border Mail-Albury*.

Expression of Interest
Cultural Heritage Management

OzArk Environment & Heritage has been engaged on behalf of the proponent, Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga, and seeks registration of Aboriginal groups or individuals who are interested in being consulted about an Aboriginal Cultural Heritage Assessment and potential Aboriginal Heritage Impact Permit application (AHIP) for a staged subdivision located on Williams Road at Table Top NSW.

This consultation group will assist OzArk and the proponent in preparing the Aboriginal Cultural Heritage Assessment Report (ACHAR) and potential Aboriginal Heritage Impact Permit (AHIP) application, as required by the Secretary of the Department of Premier and Cabinet (DPC) in their consideration and determination of the application. If you hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects or places in the proposed study area, please register your interest. We will continue to consult with this group.

Registrations can be made by post: OzArk PO Box 2069 Dubbo NSW 2830; email: catherine@ozarkehm.com.au or by phoning OzArk on 02 6882 0118. All submissions should be received no later than **22 April 2022.**

Appendix 1 Figure 3: Stage 1 letter sent to agencies (sample).

OzArk Environment & Heritage
Dubbo
Queanbeyan
Newcastle
T: 02 6882 0118
enquiry@ozarkehm.com.au
www.ozarkehm.com.au
ABN 59 104 582 354
145 Wingewarra St
PO Box 2069
DUBBO NSW 2830

5 April 2022

Heritage NSW
Department of Premier and Cabinet
Locked Bag 5020
Parramatta NSW 2124
heritagemailbox@environment.nsw.gov.au

Aboriginal Cultural Heritage Assessment Residential Subdivision, Williams Road, Table Top NSW

Dear Members,

OzArk Environment & Heritage (OzArk) has been engaged by Blueprint Planning on behalf of the Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga (the Proponent) to undertake Aboriginal community consultation as per the '*Aboriginal cultural heritage consultation requirements for proponents 2010' (DECCW 2010)*.

The proponent is proposing a staged residential subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543, Williams Road, Table Top NSW (**Figure 1 and Figure 2)**

We are therefore seeking Expressions of Interest from relevant Aboriginal stakeholder groups and individuals in the area who hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Williams Road, Table Top area.

This consultation group will assist OzArk in preparing the Aboriginal Cultural Heritage Assessment Report (ACHAR) and potential Aboriginal Heritage Impact Permit (AHIP) application, as required by the Secretary of the Department of Premier and Cabinet (DPC) in their consideration and determination of the application.

If your organisation can recommend and provide contact details for any known Aboriginal groups or individuals with cultural knowledge relevant to determining the impacts to the cultural significance of the above-mentioned project, please advise our office. We would appreciate it if you could provide any feedback, by responding to this email catherine@ozarkehm.com.au, regarding these Aboriginal stakeholder groups by Friday 22nd April 2022, or sooner if possible.

Once relevant groups and individuals have been identified, they will form part of the formal consultation process for the project.

Kind regards,

Catherine Burrowes
Office Manager/ Community Liaison

OzArk Environment & Heritage

Figure 1: Location map.

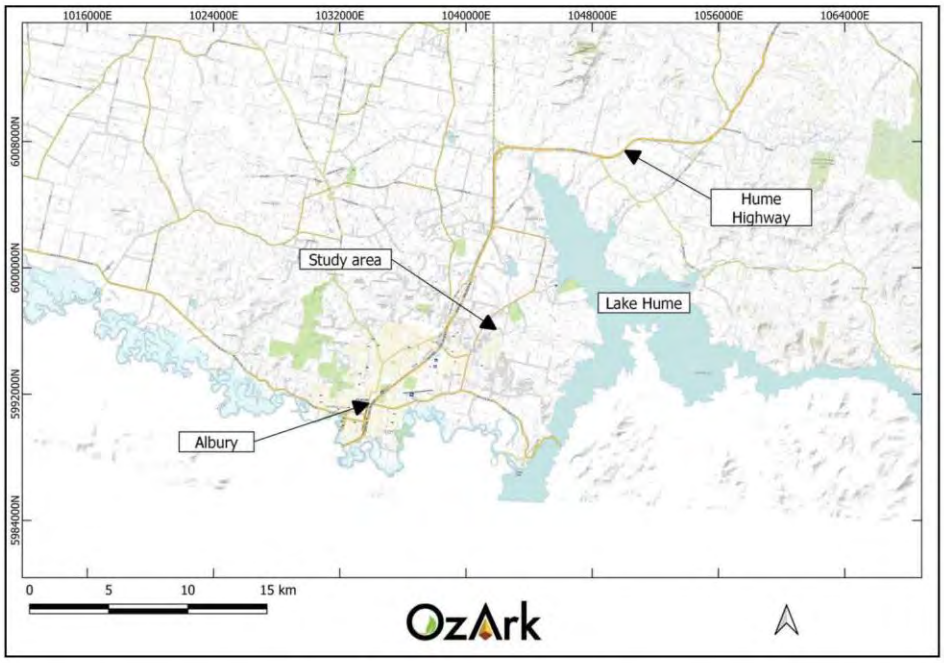
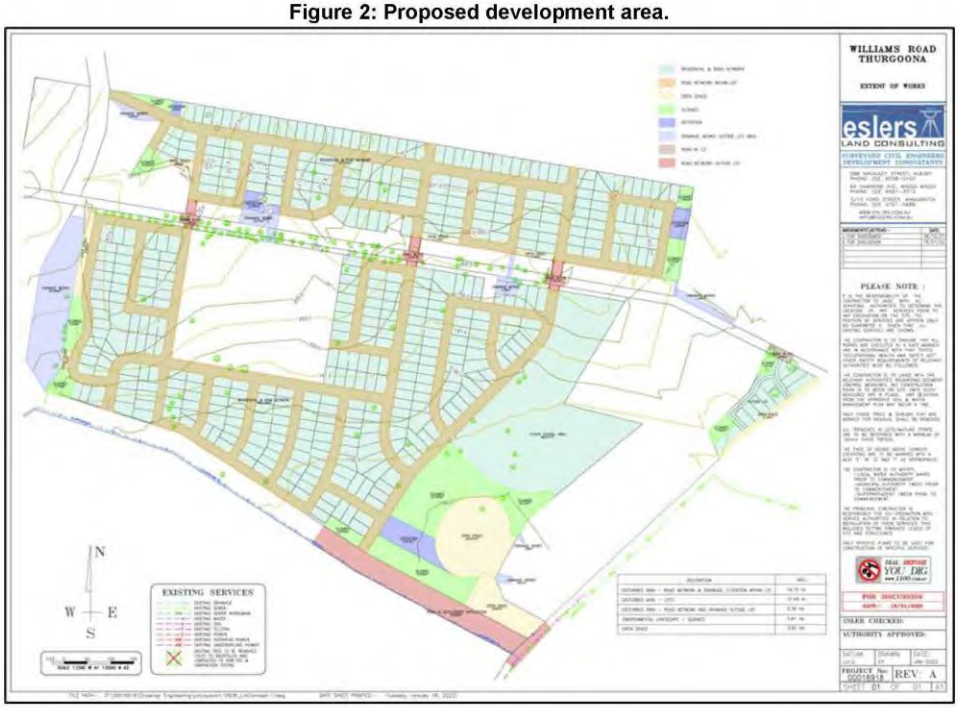


Figure 2: Proposed development area.



Appendix 1 Figure 4: Stage 1 Example of letter sent to Aboriginal community groups (sample).

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ABN 59 104 582 354
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T: 02 6882 0118
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145 Wingewarra St
PO Box 2069
DUBBO NSW 2830

21 April 2022

[redacted]

Aboriginal Cultural Heritage Assessment Residential Subdivision, Williams Road, Table Top NSW

Dear [redacted],

OzArk Environment & Heritage (OzArk) has been engaged by Blueprint Planning on behalf of the Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga (the Proponent) to undertake Aboriginal community consultation as per the '*Aboriginal cultural heritage consultation requirements for proponents 2010' (DECCW 2010).*

The proponent is proposing a staged residential subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543, Williams Road, Table Top NSW (**Figure 1 and Figure 2)**

This consultation is to assist OzArk and the proponent, in preparation of an Aboriginal Cultural Heritage Assessment Report (ACHAR), including a potential AHIP application, as required by the Secretary of the Department of Premier and Cabinet (DPC) in their consideration and determination of the application.

If you hold cultural knowledge relevant to determining the impacts to the cultural significance of this project area, please register your interest by responding to this email catherine@ozarkehm.com.au, The closing date for expressions of interest is by COB **9th May 2022**, or sooner if possible.

If you wish to register interest it is noteworthy that as per the Heritage NSW guidelines, we are required to provide your details to Heritage NSW and the Local Aboriginal Lands Council unless we are advised that you do not wish your details to be released.

Once relevant groups and individuals have been identified, they will form part of the formal consultation process for the project.

Kind regards,

Catherine Burrowes
Office Manager/ Community Liaison

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PO Box 2069
DUBBO NSW 2830

21 April 2022

[redacted]

Aboriginal Cultural Heritage Assessment Residential Subdivision, Williams Road, Table Top NSW

Dear [redacted],

OzArk Environment & Heritage (OzArk) has been engaged by Blueprint Planning on behalf of the Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga (the Proponent) to undertake Aboriginal community consultation as per the '*Aboriginal cultural heritage consultation requirements for proponents 2010' (DECCW 2010).*

The proponent is proposing a staged residential subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543, Williams Road, Table Top NSW (**Figure 1 and Figure 2)**

This consultation is to assist OzArk and the proponent, in preparation of an Aboriginal Cultural Heritage Assessment Report (ACHAR), including a potential AHIP application, as required by the Secretary of the Department of Premier and Cabinet (DPC) in their consideration and determination of the application.

If you hold cultural knowledge relevant to determining the impacts to the cultural significance of this project area, please register your interest by responding to this email catherine@ozarkehm.com.au, The closing date for expressions of interest is by COB **9th May 2022**, or sooner if possible.

If you wish to register interest it is noteworthy that as per the Heritage NSW guidelines, we are required to provide your details to Heritage NSW and the Local Aboriginal Lands Council unless we are advised that you do not wish your details to be released.

Once relevant groups and individuals have been identified, they will form part of the formal consultation process for the project.

Kind regards,

Catherine Burrowes
Office Manager/ Community Liaison

Appendix 1 Figure 5: Stage 2/3 cover letter and assessment methodology.

OzArk Environment & Heritage
ABN 59 104 582 354
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145 Wingewarra St
PO Box 2069
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16 May 2022

[redacted]

Aboriginal Cultural Heritage Assessment Methodology:
Lot 2 DP1189190 and Lots 301 and 302 DP1124543 on Williams Road, Table Top

Dear [redacted],

Thank-you for your registration of interest to become a Registered Aboriginal Party (RAP) to be consulted regarding the proposed staged residential subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543 on Williams Road, Table Top, New South Wales.

The purpose of this letter is to invite you to comment on the enclosed draft methodology for the Aboriginal cultural heritage assessment. This assessment will support a potential Aboriginal Heritage Impact Permit (AHIP) application when lodged with the Secretary of the Department of Premier and Cabinet (DPC).

In addition to comments on the draft methodology, if you can share any Aboriginal cultural heritage knowledge relevant to the proposed study area, we welcome this input to improve our assessment outcomes and to ensure Aboriginal cultural values are considered.

OzArk Environment & Heritage is required to give you 28 days to supply feedback on the attached documents. This period closes 5pm on **Tuesday 14th June 2022.**

If you need any help supplying feedback or have any queries in relation to the enclosed information, please do not hesitate to contact our office.

Kind regards,

Catherine Burrowes
Customer Liaison

Appendix 1 Figure 6: Stage 2/3 RAP feedback and OzArk response.

From: yalmambirra yalmambirra <yalmambirra@outlook.com>
Sent: Thursday, 19 May 2022 12:39 PM
To: Catherine Burrowes <catherine@ozarkehm.com.au>
Subject: RE: Stage 2/3 Methodology - Aboriginal Cultural Heritage Assessment : Williams Road, Table Top (Albury).

Hullo Catherine

I am happy with the methodology. I do have a few comments if I may...

Section 2.1.2...The timeline of 50,000 is contentious. I have resources that suggest that the timeline could be 120,000 years. Perhaps just a small tweak of the wording would be needed here.

Section 3.1...The Murray River was not a 'boarder' as such. I have resources that suggest that Wiradjuri peoples were living on both sides of the river. I can send you the info.

Section 3.4...The terminology 'debitage' suggests that 'left-over' material/s could be considered garbage. This would be incorrect as these 'left-overs' could have, and were, used by children as learning material/s. Feel free to use me as your resource.

I hope this is helpful...

Yalmambirra

Sent from Mail for Windows 10

RE: Stage 2/3 Methodology - Aboriginal Cultural Heritage Assessment : Williams Road, Table Top (Albury).

Reply | Reply All | Forward | ...

S Stephanie
To yalmambirra yalmambirra
Cc Catherine Burrowes

Fri 27/05/2022 3:45 PM

Hi Yalmambirra,

Thank you for taking the time to review and provide feedback on the assessment methodology for the Williams Road subdivision at Table Top, it is much appreciated.

We will take on board the points you have mentioned below when preparing the Aboriginal Cultural Heritage Assessment Report.

Have a nice weekend.

Kind regards,

.....

Stephanie Rusden
OzArk Environment & Heritage
Senior Archaeologist
0438 700 041
(02) 6882 0118

Appendix 1 Figure 7: Stage 3 test excavation cover letter.

OzArk Environment & Heritage
T: 02 6882 0118
enquiry@ozarkehm.com.au
www.ozarkehm.com.au
ABN 59 104 630 304
145 Wingewarra St
PO Box 2069
DUBBO NSW 2830

8th July 2022

Albury Local Aboriginal Land Council
ceo@alburydistrictlalc.org

Aboriginal Cultural Heritage Assessment Methodology:
Lot 2 DP1189190 and Lots 301 and 302 DP1124543 on Williams Road, Table Top
Test Excavation

Dear Members,

Thank-you for your registration of interest to become a Registered Aboriginal Party (RAP) to be consulted regarding the proposed staged residential subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543 on Williams Road, Table Top, New South Wales.

The purpose of this letter is to invite you to comment on the enclosed draft Test Excavation methodology for the Aboriginal cultural heritage assessment. This assessment will support a potential Aboriginal Heritage Impact Permit (AHIP) application when lodged with the Secretary of the Department of Planning and Environment in consideration and determination of the Project.

In addition to comments on the draft methodology, if you can share any Aboriginal cultural heritage knowledge relevant to the proposed study area, we welcome this input to improve our assessment outcomes and to ensure Aboriginal cultural values are considered.

OzArk Environment & Heritage is required to give you 28 days to supply feedback on the attached documents. This period closes 5pm on **Friday 5th August 2022.**

If you need any help supplying feedback or have any queries in relation to the enclosed information, please do not hesitate to contact our office.

Kind regards,

Catherine Burrowes
Customer Liaison

Appendix 1 Figure 8: Stage 4 cover letter.

OzArk Environment & Heritage ABN 59 104 582 354
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Queanbeyan enquiry@ozarkehm.com.au PO Box 2069
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27 September 2022

Members
Albury Local Aboriginal Land Council
ceo@alburydistrictlalc.org

Aboriginal Heritage Assessment for the Subdivision of Lot 2 DP1189190 and Lots 301 and Lots 302 DP1124543 on Williams Road, Table Top, NSW

Dear Members,

Thank-you for your continued participation as a Registered Aboriginal Party (RAP) and involvement in the above-mentioned project.

Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga (the Proponent) would like to offer you the opportunity to provide feedback on the draft report that has been undertaken in accordance with stage four (4) of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (ACHCR).

As per the ACHCRs we are required to give you twenty-eight (28) days to supply feedback on the attached document. This period closes on the **Wednesday 26th October 2022**. Should our office not be contacted within this time frame, we will presume that you are satisfied with the contents of the report as it stands.

If you need any help supplying feedback or have any queries, please do not hesitate to contact our office.

Kind regards,

Catherine Burrowes
Office Manager/ Community Liaison

Appendix 1 Figure 9: Stage 4 feedback.

From: CEO | Albury District ALC <ceo@alburydistrictlalc.org>
Sent: Friday, 28 October 2022 11:24 AM
To: Catherine Burrowes <catherine@ozarkehm.com.au>
Cc: Andom Rendell <andomrendell1975@gmail.com>; Andom rendell (andom.rendell@outlook.com) <andom.rendell@outlook.com>
Subject: RE: Stage 4 Methodology - Williams Road, Table Top (Albury)

Hi Catherine,

I have no comment or objection regarding the ACHAR.
If Andom has not provided comment or objection, the Albury & District LALC supports the ACHAR.

Regards,

Dennis Mirosevich
(CEO)

Albury & District Local Aboriginal Land Council

917 Chenery Street, Glenroy NSW 2640
PO Box 22 Lavington NSW 2641
E: ceo@alburydistrictlalc.org
P: (02) 6025 7075

APPENDIX 2: ASSESSMENT METHODOLOGY

View south across the eastern boundary of the study area from Williams Road.

ABORIGINAL CULTURAL HERITAGE ASSESSMENT METHODOLOGY

SUBDIVISION OF LOT 2 DP1189190 AND LOTS 301 AND 302 DP1124543 ON WILLIAMS ROAD, TABLE TOP, NSW

ALBURY CITY LOCAL GOVERNMENT AREA

JULY 2022

Report prepared by

OzArk Environment & Heritage

for Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga

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DOCUMENT CONTROLS

Proponent	Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga
Client	Blueprint Planning
Document Description	*Aboriginal Cultural Heritage Assessment Methodology: Subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543 on Williams Road, Table Top, NSW.*
File Location	OzArk Job No.
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James Laycock Principal Planner Blueprint Planning & Development Pty Ltd 3/576 Kiewa Street Albury, NSW 2640 P: 02 6023 6844 james@blueprintplanning.com.au	Stephanie Rusden Senior Archaeologist OzArk Environment & Heritage 145 Wingewarra Street (PO Box 2069) Dubbo NSW 2830 P: 02 6882 0118 stephanie@ozarkehm.com.au

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Acknowledgement

OzArk acknowledge the traditional custodians of the area on which this assessment will take place and pay respect to their beliefs, cultural heritage, and continuing connection with the land. We also acknowledge and pay respect to the post-contact experiences of Aboriginal people with attachment to the area and to the Elders, past and present, as the next generation of role models and vessels for memories, traditions, culture and hopes of local Aboriginal people.

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1 INTRODUCTION

1.1 PREAMBLE

OzArk Environment & Heritage (OzArk) has been engaged by Blueprint Planning on behalf of the Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga (the Proponent) to prepare an assessment methodology for the proposed subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543 on Williams Road, Table Top, New South Wales (NSW) (the Proposal).

The Proposal is located nine kilometres (km) northeast of Albury in southern NSW and is in the Albury City Council Local Government Area (**Figure 1-1**).

This methodology is in accordance with Stage 3 of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (ACHCRs; DECCW 2010b). The Proposal information provided here also complies with Stage 2 of the ACHCRs.

The investigation set out in this methodology aims to identify Aboriginal cultural values, both tangible and intangible, that exist in the study area. The results of this investigation will be presented in an *Aboriginal Cultural Heritage Assessment Report* (ACHAR).

1.2 STUDY AREA

The study area covers approximately 81.8 hectares (ha) across Lot 2 DP1189190 and Lots 301 and 302 DP1124543 (**Figure 1-2**).

The study area is located either side of Williams Road and is bordered to the east by Eight Mile Creek and to the south by Seven Mile Creek.

1.3 PROPOSAL OVERVIEW

The Proposal will include the staged subdivision of Lot 2 DP1189190 and Lots 301 and 302 DP1124543 (**Figure 1-3**) and will be assessed as an "Integrated Development" under Section 4.46 of the *Environmental Planning and Assessment Act 1979*.

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Figure 1-1: Location of the Proposal.

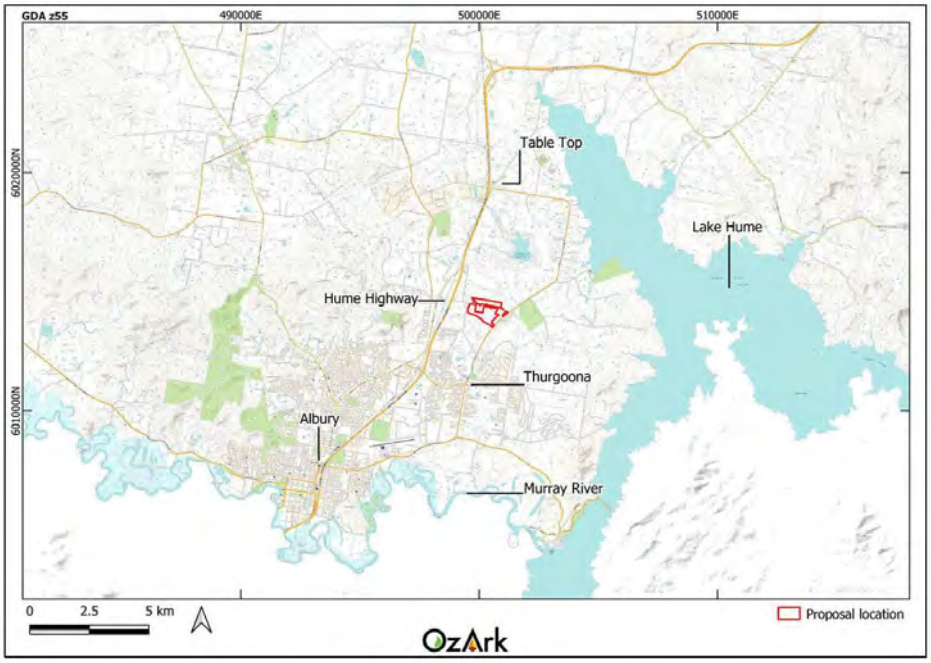

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Figure 1-2: Aerial of the study area.

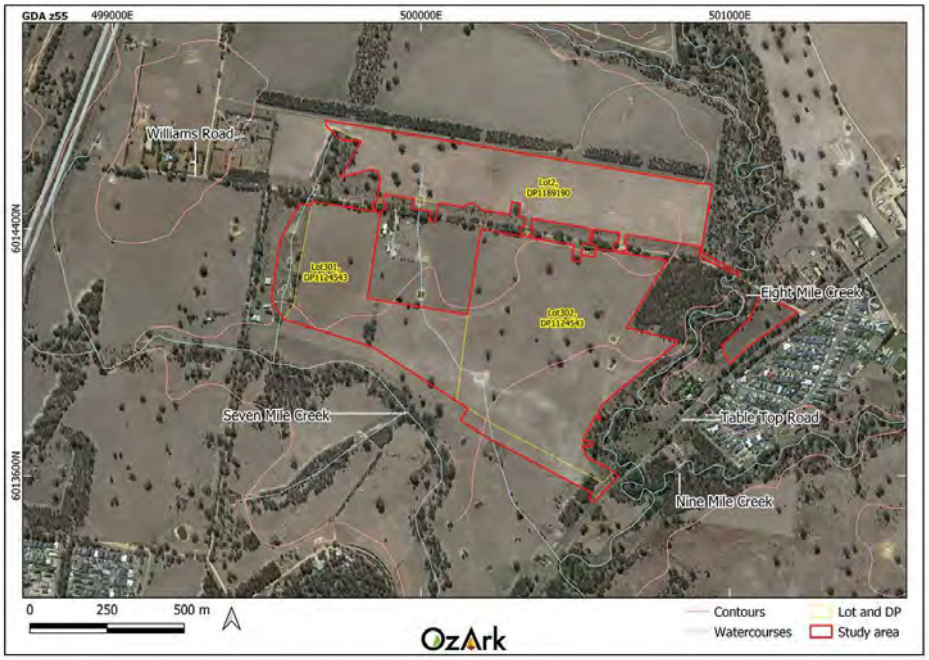

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Figure 1-3: Proposed subdivision plan.

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1.4 CONSULTATION ON THIS METHODOLOGY

Consultation for this Proposal has followed the guidelines established in the ACHCRs (DECCW 2010b) whereby an advertisement was placed in the local press and relevant agencies were contacted to ascertain if they were aware of groups or individuals who may have cultural knowledge of the region containing the Proposal.

On 7 April 2022 an advertisement was placed in *The Border Mail* requesting expressions of interest in being consulted about the Proposal. In addition, the following agencies were contacted to identify potential stakeholders for the area: Heritage NSW; the Albury Local Aboriginal Land Council (LALC); the Office of The Registrar, *Aboriginal Land Rights Act 1983*; the National Native Title Tribunal; Native Title Services Corporation Limited (NTSCORP); the Albury City Council; and the Murray Local Land Services.

As a result, the following individuals/groups registered to be consulted about the Proposal:

- Albury LALC
- Yalmambirra.

These individuals/groups constitute the Registered Aboriginal Parties (RAPs) for the Proposal.

RAPs were provided the stipulated 28 days in which to review this methodology and provide comment as per Stage 3 of the ACHCRs. The closing date for comment was 14 June 2022.

The following response was received from Yalmambirra on 19 May 2022.

> *I am happy with the methodology. I do have a few comments if I may...*
>
> *Section 2.1.2...The timeline of 50,000 is contentious. I have resources that suggest that the timeline could be 120,000 years. Perhaps just a small tweak of the wording would be needed here.*
>
> *Section 3.1...The Murray River was not a 'boarder' as such. I have resources that suggest that Wiradjuri peoples were living on both sides of the river. I can send you the info.*
>
> *Section 3.4...The terminology 'debitage' suggests that 'left-over' material/s could be considered garbage. This would be incorrect as these 'left-overs' could have, and were, used by children as learning material/s. Feel free to use me as your resource.*

OzArk replied on 27 May 2022 and would take on board the points that Yalmambirra have mentioned above when preparing the ACHAR.

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1.5 LANDSCAPE CHARACTERISTICS OF THE STUDY AREA

The study area is in the South Western Slopes Bioregion: a large area comprising of foothills and ranges. The topography of the study area comprises a very low gradient slope from the northwest to the southeast towards the confluence of Eight and Nine Mile Creeks (**Figure 1-2**).

The soils inside the study area consist of deep (1.0–1.5 metres [m]), well-drained red Chromosols and Kurosols (red Podzolic soils) on crests, with deep, moderately well-drained yellow Chromosols (yellow Podzolic soils) on slopes. Footslopes and drainage lines consist of deep, poorly drained yellow Sodosols. These types of soil are prone to gully and sheet wash erosion, especially if no surface cover is present. Furthermore, they are susceptible to seasonal waterlogging and localised poor drainage (DPIE 2020).

The Murray River is the closest permanent watercourse, located approximately 6.8 km south of the study area. Several creeks surround the study area, including Seven Mile Creek to the south, and Eight and Nine Mile Creeks to the east. A tributary of Eight Mile Creek intersects the study area on a generally north–south alignment (**Figure 1-2**).

The study area is used primarily for grazing and cropping purposes. As a result, the study area has been subject to vegetation clearance although remnant stands of trees remain scattered across the study area. Tree species present in the area include *Eucalyptus albens* (white box) woodland with *E. melliodora* (yellow box) and E. blakelyi (Blakely's red gum). Other species include *E. microcarpa* (grey box) and *Acacia dealbata* (silver wattle) (DPIE 2020).

2 CULTURAL VALUES

2.1 INTRODUCTION TO CULTURAL VALUES

No matter who you are, we all have culture. Each person's culture is important; it's part of what makes us who we are.

Many Aboriginal people in Australia have a unique view of the world that's distinct from the mainstream. Land, family, law, ceremony, and language are five key interconnected elements of Aboriginal culture. For example, families are connected to the land through the kinship system, and this connection to land comes with specific roles and responsibilities which are enshrined in the law and observed through ceremony. In this way, the five elements combine to create a way of seeing and being in the world that is distinctly Aboriginal.

Fundamentally, culture is living and is not static:

- Culture is acquired - we learn about culture from others in our community, including our parents
- Culture is shared - culture does not exist in a vacuum, it is shared amongst a group of people
- Culture defines core values - because we have been taught our culture and share it with our cultural group, we tend to form the same core values
- Cultures resist change but are not static - culture does and can change, but change is usually slow and gradual.

2.1.1 Connection to Country

Aboriginal and Torres Strait Islander peoples are connected to Country through lines of descent (paternal and maternal), as well as clan and language groups.

Although in the past (and sometimes into the present) there have been conflicts between different tribal groups, these were rarely over land. Aboriginal and Torres Strait Islander people have such a strong sense of belonging to country; they have no desire to own the land of others.

Territory is defined by spiritual as well as physical links. Landforms have deep meaning, recorded in art, stories, songs, and dance. Songlines or Dreaming Tracks as well as kinship structures link Aboriginal peoples to the territories of other groups. In the past, these links were also used for trade.

> *"When we say Country we might mean homeland, or tribal or clan area and in saying so we may mean something more than just a place; somewhere on the map. We are not necessarily referring to place in a geographical sense. But we are talking about the whole of the landscape, not just the places on it."*
>
> Professor Mick Dodson AM, August 2007

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2.1.2 Managing Country

Living on this land for around 50,000 years, Aboriginal and Torres Strait Islanders established effective ways to use and sustain resources. One important aspect is the right of certain people to control the use of resources in a particular area. Aboriginal and Torres Strait Islander people don't see themselves as 'owning' land, animals, plants, or nature, but rather belonging with these things as equal parts of creation.

The rights of different groups to live in and manage certain areas of land are clear and recorded through art, stories, songs, and dance.

Deep cultural and spiritual values like totemism have also played an important part in Aboriginal and Torres Strait Islander resource management. Totemism is a belief and value system that connects human beings to other animals, plants, and aspects of nature. Groups and individuals are assigned a particular animal that they are related to and must care for. This gives them a profound sense of connection to and responsibility for the natural world.

Aboriginal and Torres Strait Islanders people have a wide range of traditional methods for gathering food including fish traps, subsistence agriculture, hunting and harvesting a wide range of natural fruits and vegetables. Some groups of people would stay in one place, while others moved around the land according to the seasons, to ensure sustainable and rich food supplies, and to fulfil their spiritual and cultural obligations.

Even before 1788 there were complex relationships for long distance trade between Aboriginal and Torres Strait Islander communities especially for coastal shells and stone hatchets. When people from different groups met socially to share resources, for ceremonies or to settle disputes, they brought items to exchange. Items included stones for hatchets, kangaroo skins, timber for spears, ochre or clay for paint and marine shells for decoration. The exchange of objects was not motivated by a desire for wealth accumulation but a social system to build connection between people and groups.

2.1.3 Recognising lore

In much of eastern Australia, Aboriginal communities live their lives like most Australians without resorting to tribal lore. However, in certain crucial areas, particularly associated with family, leadership roles, and caring for Country, Aboriginal lore continues, even in the most urbanised communities.

2.2 IDENTIFYING CULTURAL VALUES

A major aim of this assessment is to identify any cultural values within the landscape in which the Proposal is located so that those values can be recognised and incorporated into the ACHAR's management recommendations.

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Any cultural values relating to the Proposal area will be captured by the OzArk archaeologists (if such information is provided by RAPs during the survey) and included in the ACHAR.

Understanding cultural landscapes can only come from the views of a particular community, in this case, the Aboriginal community. Unless informed, OzArk will not know of the community's feelings towards the cultural landscape in which the Proposal will be located. Should any RAPs have knowledge of cultural values regarding the Proposal area that they wish to share or that may affect the survey methodology set out in **Section 5**, OzArk invites them to contact us so that these values can be recorded and/or responded to in the methodology.

2.2.1 Use of information collected

An ACHAR will be prepared for the Proposal which articulates Aboriginal cultural values and associated conservation methods across the study area, as identified during the consultations. The ACHAR will be circulated to all RAPs for comment as is set out in the ACHCRs. The ACHAR will be available to Heritage NSW for their consideration of the Proposal and the report will be publicly available.

2.2.2 Public / confidential information

Information will be treated in accordance with instructions received by Aboriginal informants. Information described as confidential (culturally sensitive) will not be detailed in the publicly available report. Confidential information should be made available to the Proponent, its heritage consultants, and Heritage NSW so that significant cultural values can be conserved. On advice from the provider of the information, a redacted ACHAR would be made available to the wider public where any sensitive cultural information is removed.

2.2.3 Copyright

Information collected for this assessment remains the property of the Aboriginal informants and the author. Without written permission from individual informants and the author information may not be used for purposes other than those outlined above.

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3 ARCHAEOLOGICAL CONTEXT

3.1 ABORIGINAL PEOPLE OF THE STUDY AREA

The study area is situated within the territory of the people belonging to the *Wiradjuri* tribal and linguistic group (Tindale 1974). The study area is located at the southern extent of the Wiradjuri territory, boarded by the Murray River (White 1986).

Albury was previously known as Bungambrawatha (homeland) by the Wiradjuri people. In 1838, the name of the region was changed to Albury when the Assistant Surveyor General decided that this new name would sound more familiar to the ears of European settlers (White 1986).

The Aboriginal groups used the Murray River extensively, often travelling the river in bark canoes. The Murray River was a means of communication and trade for the Wiradjuri people and other neighbouring tribes such as the Bangerang. The river would have provided the local people with Murray cod and shellfish, with nuts, fruits and tubers being found in the areas surrounding the river. It is also likely that the Wiradjuri, Bangerang and Monaro groups joined together for summer feasts of bogong moths in the alpine country (NPWS 2003).

3.2 REGIONAL ARCHAEOLOGICAL CONTEXT

Previous archaeological studies undertaken within the vicinity of the study area provides information to obtain a sound understanding of the nature and distribution of archaeological sites within the area.

An archaeological survey of the Baranduda and Thurgoona areas (Albury-Wodonga)

A regional survey of the Upper Murray around Albury-Wodonga was carried out by Witter in 1976. The survey focused on Thurgoona in NSW and Baranduda in Victoria for the purposes of intensive residential development by the Albury-Wodonga Development Corporation. The area surveyed in NSW during this study was in Thurgoona, north of the Riverina highway, and between St Johns Road and what is now Table Top Road. Three sites were recorded in this area, all artefact scatters primarily made up of quartz debitage.

A site survey in the Albury Area and Archaeological surveys for the Albury-Wodonga Development Corporation

In 1978, Crosby conducted a pedestrian survey of six areas around the Albury region, including one area next to where the study area is located. Crosby recorded seven Aboriginal sites and ten historical sites during the survey. One historical site was in Crosby's survey area closest to the study area. Overall, Crosby noted a concentration of scarred trees recorded in locations at the junction between geologically different rocks where water springs were also present. Crosby also noted that quartz was prevalent throughout the survey areas, especially in the form of small

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pebbles. During the field survey in 1979, all Aboriginal sites recorded by Crosby were scarred trees. Crosby also highlights the lack of surface camp sites in the areas surveyed (1979).

Thurgoona Park Estate (Kelly 2001, Kelly 2002, Kelly 2003, Price and Kelly 2004)

In the early 2000s a series of archaeological investigations were conducted by Kelly (2001, 2002 and 2003) and Price and Kelly (2004) at the location of the Thurgoona Park Estate, NSW.

Kelly (2001) undertook monitoring of the vegetation striping in relation to the Thurgoona Park Estate development. During the monitoring, one Aboriginal object was identified but subsequently impacted by contractors and destroyed or lost. Further monitoring was undertaken at Thurgoona Park Estate development by Kelly in 2002, where further deposits were identified, and work stopped for investigation. The investigation of these deposits is outlined in Kelly (2003) where subsurface excavation resulted in 115 Aboriginal artefacts being identified and subsequently recorded as a site and recommended for salvage.

In 2004, Price and Kelly focused on the salvage conducted at the Thurgoona Park Estate residential development. The salvage took place in association with the construction of roadways and services infrastructure trenching. As a results of the salvage 131 Aboriginal artefacts were identified. Of these, 99.5% were quartz. There were few formal tool types represented and the majority of identified artefacts were debitage pieces. As a result of the salvage and analysis of the recovered Aboriginal artefacts, Price and Kelly (2004) concluded that raised level landforms in association with water sources are archaeologically sensitive in the Albury area and that the likelihood of quartz artefacts and debitage is high.

Woolshed Creek and Eight Mile Creek survey (Price 2003)

In 2003, a survey consisting of 50 m pedestrian transects on either side of both Eight Mile Creek and Woolshed Creek was undertaken with Aboriginal community as part of field training. This survey covered the creeks approximately 800 m south of the study area. During the survey 43 isolated finds and low-density artefact scatters were recorded. Of these, 33 sites were recorded along Woolshed Creek and 10 sites were along Eight Mile Creek. The 10 sites next to Eight Mile Creek consisted of pieces of debitage and one flake. Most of these sites (n=7) were in the Eight Mile Creek bed.

Woolshed Creek and Eight Mile Creek (Kelly and Price 2003)

In 2003, Kelly and Price investigated three proposed locations for bridge construction areas on Woolshed Creek and Eight Mile Creek at Thurgoona, to the northwest of the study area. Five Aboriginal sites were located during the survey, the majority of which were quartz debitage. Kelly and Price also identified that raised level landforms in association to water sources were archaeologically sensitive, and that the banks of Woolshed Creek and Eight Mile Creek were also sensitive, but only where there was less post-colonial settlement sediment deposit.

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Preliminary Aboriginal Cultural Heritage Assessment for rezoning of part Lot 1 DP128086 and part Lot 1 DP128087, Hawkscote Road and Riverina Highway, Thurgoona (Brown 2011)

Brown (2011) conducted a preliminary assessment of Aboriginal cultural heritage within an area proposed for residential rezoning in Thurgoona, near Albury, NSW. The preliminary assessment included a site inspection during which two sites were recorded: one scarred tree and one artefact scatter. Brown further predicted based on the desktop and site inspection that further subsurface archaeological deposits were likely to occur upon higher landforms within 500 m of watercourses (2011).

Aboriginal Cultural Heritage Assessment Report: Woolshed Estate, Thurgoona, NSW (OzArk 2018)

OzArk (2018) completed a survey and test excavation for a subdivision at Thurgoona, located 3.4 km south of the study area. The assessed area comprised 71 ha of land surrounding a section of Eight Mile Creek (otherwise known as Woolshed Creek) and its tributaries. No Aboriginal objects were recorded during the field survey although visibility was noted as being very low. Three landforms with the potential archaeological deposits (PADs) were identified (PAD 1 – 3) which included elevated landforms overlooking the watercourses.

Test excavation was subsequently completed at the three PADs. A total of 26 excavation squares, measuring 0.5 by 0.5 m were excavated to provide a representative sample of the deposits enough to characterise the subsurface archaeological potential of the three PADs. The test excavation confirmed the presence of archaeological subsurface deposits at each of the three PADs although at a low density.

A total of 26 artefacts were recorded during the test excavation. Of the 26 artefacts recorded, 10 were flakes (38%) and 16 are pieces of shatter (62%). All the artefacts were quartz, and most had no cortex (tertiary reduction, n=21, 81%). 58% of artefacts had a maximum size of 1 – 2 centimetres (cm) (n=15), followed by 0–1 cm (n=9, 35%), and only two were 2–3 cm (7%). 62% of artefacts were in Spit 2 (10–20 cm deep, n=16), with 23% in Spit 3 (20–30 cm deep, n=6) and 15% in Spit 1 (0–10 cm deep, n=4).

3.3 LOCAL ARCHAEOLOGICAL CONTEXT

A search of the Heritage NSW administered Aboriginal Heritage Information Management System (AHIMS) database on 12 April 2022 returned 104 results for Aboriginal sites within a 6 km radius of the study area (GDA Zone 56 Eastings: 497122–503122; Northings: 6011210–6017210) (see **Table 3-1** for site types and frequencies). No previously recorded sites are located within 500 m of the study area (**Figure 3-1**).

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One site (61-1-0263) is listed as a restricted site, as such, the total of number of sites listed in **Table 3-1** is 103. AHIMS confirmed on 20 April 2022 that the site is not located within or near the study area.

The most frequently recorded site types are stone artefact sites (isolated finds and artefacts scatters) with some artefact scatters recorded in association with PAD (**Table 3-1**). Of the stone artefact sites recorded within 6 km of the study area, 98% are located within 200 m of watercourses (**Figure 3-1**). Modified trees represent only 11.7 per cent of recorded site types and are typically recorded along riparian corridors (**Figure 3-1**). In NSW there is a strong correlation between Aboriginal occupation sites and distance to water which is reflected in the AHIMS data.

Table 3-1: AHIMS site types and frequencies.

Site Type	Number	% Frequency
Isolated find	48	46.7
Artefact scatter	31	30
Artefact scatter with PAD	11	10.7
Modified tree	12	11.7
PAD	1	0.9
Total	**103**	**100**

3.4 ARCHAEOLOGICAL CONTEXT: CONCLUSION

The archaeological investigations surrounding the study area as summarised in **Sections 3.2** and **3.3** indicate that:

- Stone artefact sites (isolated finds and artefact scatters) are also frequent sites recorded in the area, especially within 200 m of watercourses
- Scarred trees are present typically along riparian corridors which retain mature vegetation
- Raised level landforms in association to named watercourses have potential for subsurface deposits although these are typically low-density scatters and have been disturbed by cropping
- Quartz is the predominant material for stone artefacts in the area
- Artefact assemblages recorded in the region consist largely of debitage and unmodified flakes.

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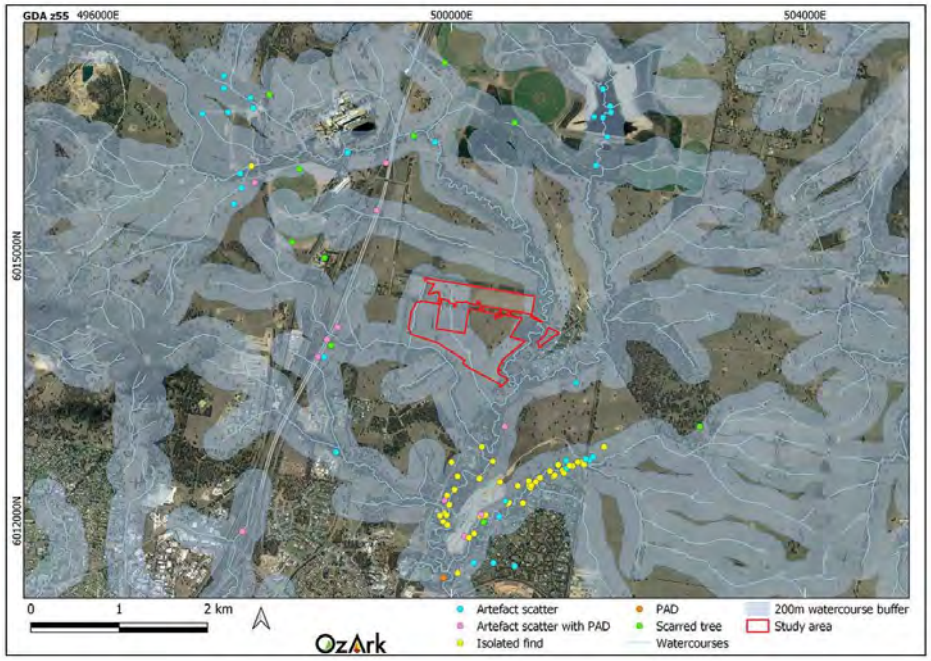
Figure 3-1: AHIMS sites in relation to the study area and watercourses.



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4 PREDICTIVE MODEL

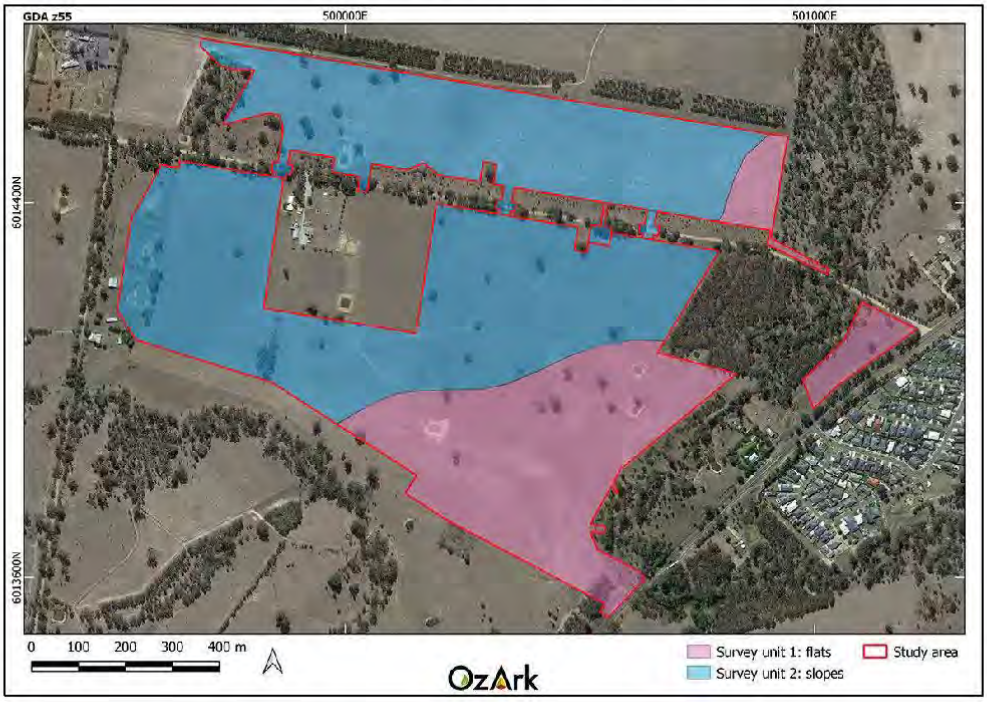
4.1 LANDFORM MODELLING

The topography of the study area is gentle slopes or flats, with the highest point being the north-western-most boundary of the study area with an elevation of 210 m which descends towards the southeast to an elevation of 190 m (see **Figure 1-3**). Previous studies in the region indicate that these gentle slopes or flats are likely to contain intact sites, especially near the watercourses which intersect with the study area.

Preliminary landform mapping within the study area indicates there are two main landform types (**Figure 4-1**):

- Survey Unit 1: Flats across the southern and eastern portions of the study area
- Survey Unit 2: Gentle slopes across the north-western portion of the study area.

Figure 4-1: Survey units within the study area.



4.2 PREDICTIVE MODEL FOR THE STUDY AREA

Across Australia, numerous archaeological studies in widely varying environmental zones and contexts have demonstrated a high correlation between the permanence of a water source and the permanence and/or complexity of Aboriginal occupation. Site location is also affected by the availability of and/or accessibility to a range of other natural resources including: plant and animal

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foods; stone and ochre resources and rock shelters; as well as by their general proximity to other sites/places of cultural/mythological significance. Consequently, sites tend to be found along permanent and ephemeral water sources, along access or trade routes, or in areas that have good flora/fauna resources and appropriate shelter.

In formulating a predictive model for Aboriginal archaeological site location within any landscape it is also necessary to consider post-depositional influences on Aboriginal material culture. In all but the best preservation conditions very little of the organic material culture remains of ancestral Aboriginal communities survives to the present. Generally, it is the more durable materials such as stone artefacts, stone hearths, shell, and some bones that remain preserved in the current landscape. Even these, however, may not be found in their original depositional context since these may be subject to either (a) the effects of wind and water erosion/transport—both over short- and long-time scales—or (b) the historical impacts associated with the introduction of colonial farming practices. Other site types, such as scarred trees, by their nature, may survive for up to several hundred years but rarely beyond.

4.2.1 Site types in the region of the study area

The site types listed in **Table 4-1** are present in the region of the study area. The likelihood of these sites being present in the study area is discussed in **Section 0**.

Table 4-1: Site types recorded in the region of the study area.

Site type	Site description
Isolated finds	May be indicative of random loss or deliberate discard of a single artefact, the remnant of a now dispersed and disturbed artefact scatter, or an otherwise obscured or subsurface artefact scatter. They may occur anywhere within the landscape but are more likely to occur in topographies where open artefact scatters typically occur.
Open artefact scatters	Artefact scatters are defined as two or more artefacts, not located within a rock shelter, and located no more than 50 m away from any other constituent artefact. This site type may occur almost anywhere that Aboriginal people have travelled and may be associated with hunting and gathering activities, short- or long-term camps, and the manufacture and maintenance of stone tools. Artefact scatters typically consist of surface scatters or sub-surface distributions of flaked stone discarded during the manufacture of tools but may also include other artefactual rock types such as hearth and anvil stones. Less commonly, artefact scatters may include archaeological stratigraphic features such as hearths and artefact concentrations which relate to activity areas. Artefact density can vary considerably between and across individual sites. Small ground exposures revealing low density scatters may be indicative of a background scatter rather than a spatially or temporally distinct artefact assemblage. These sites are classed as 'open', that is, occurring on the land surface unprotected by rock overhangs, and are sometimes referred to as 'open camp sites'. Artefact scatters are most likely to occur on level or low gradient contexts, along the crests of ridgelines and spurs, and elevated areas fringing watercourses or wetlands. Larger sites may be expected in association with permanent water sources. Topographies which afford effective through-access across, and relative to, the surrounding landscape, such as the open basal valley slopes and the valleys of creeks, will tend to contain more and larger sites, mostly camp sites evidenced by open artefact scatters.
Culturally modified trees	Aboriginal scarred trees contain evidence of the removal of bark (and sometimes wood) in the past by Aboriginal people, in the form of a scar. Bark was removed from trees for a wide range of reasons. It was a raw material used in the manufacture of various tools, vessels, and commodities such as string, water containers, roofing for shelters, shields and canoes. Bark was also removed because of gathering food, such as collecting wood boring grubs or creating footholds to climb a tree for possum hunting. Due to the multiplicity of uses and the continuous process of occlusion (or healing) following removal, it is difficult to accurately determine the intended purpose for any example of bark removal. Scarred trees may occur anywhere old growth trees survive. The identification of scars as Aboriginal cultural heritage items can be problematical because some forms of natural trauma and European bark extraction create similar scars. Many remaining scarred trees probably date to the historic period when bark was removed by Aboriginal people for

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Site type	Site description
	both their own purposes and for roofing on early European houses. Consequently, the distinction between European and Aboriginal scarred trees may not be clear.
Burials	Generally found in soft sediments such as aeolian sand, alluvial silts, and rock shelter deposits. In valley floor and plains contexts, burials may occur in locally elevated topographies rather than poorly drained sedimentary contexts. Burials are also known to have occurred on rocky hilltops in some limited areas. Burials are generally only visible where there has been some disturbance of sub-surface sediments or where some erosional process has exposed them.
Bora/Ceremonial sites	Places which have ceremonial or spiritual connections. Ceremonial sites may comprise of natural landscapes or have archaeological material. Bora sites are ceremonial sites which consist of a cleared area and earthen rings.

4.2.2 Landform modelling of archaeological potential

The large number of archaeological studies undertaken within the vicinity of the study area provides information to obtain a sound understanding of the nature and distribution of archaeological sites within the area. Although there is some conjecture about the relationship between stream order, site numbers and densities, the general pattern is that most sites are present close to watercourses.

As most of the study area consists of gentle slopes and flat plains within 200 m of creeks and drainage lines, previous findings indicate that low-density artefact scatters would be the most common site type to be present. However, this site type, if present, is likely to have been dispersed by the post-colonial land use of the area, particularly tree clearance, low intensity grazing, and cultivation.

Previous studies in the region also indicate that elevated landforms within 200 m of water may contain intact archaeological deposits, however, as these areas in the study area have been impacted by erosion and cultivation, intact deposits would only be present if soils are deep. Artefact scatters in these areas may also be dispersed because of the previous land use.

The study area and surrounding land is primarily used for farming and grazing operations. The presence of hoofed livestock is likely to have resulted in trampling and compaction of the ground surface which accelerates soil loss. Erosional process within the study area would be exacerbated by the types of landforms present which have been largely cleared of vegetation.

4.2.3 Conclusion

Based on knowledge of the environmental contexts of the study area and a desktop review of the known local and regional archaeological record, the following predictions are made concerning the probability of landforms within the study area to contain Aboriginal objects (**Table 4-2**), and what types of sites may be present within the study area (**Table 4-3**).

Table 4-2: Likelihood of landforms within the study area to contain Aboriginal objects.

Survey Unit	Landform type	Likelihood to contain Aboriginal objects
1	Flats	Flat landforms were favoured occupation locations when in proximity to permanent and semi-permanent water sources. Archaeological studies in the region indicate that banks and elevated terraces adjacent to drainage lines or watercourses were favoured occupation locations and therefore have high potential for occupation sites to be present. Due to the presence of semi-permanent creeks across the study area, low-density artefact scatters are the most likely site type to be recorded. Artefact scatters may be dispersed from the post-colonial land use in the area.
2	Slopes	Slopes are a degrading landform, especially in the study area where vegetation removal has accelerated soil loss. Given the slopes in the study area consist of gentle gradients, they are still suitable for occupation and often favoured as they are more elevated, however, when distant to water they are less likely to have been occupied.

Table 4-3: Likelihood of certain site types being present in the study area.

Site type	Likelihood of being present in the study area
Isolated finds	As isolated finds can occur anywhere, particularly within disturbed contexts, it is predicted that this site type could be recorded within the study area.
Open artefact scatters	Stone artefact distributions of variable artefact densities are some of the most common Aboriginal object found within the region. A general correlation between landform and the nature of the evidence of past Aboriginal occupation is evident. Higher artefact density sites are located on elevated landforms adjacent to waterways. Further, the perennial nature of watercourses in the general region does not impede the recording of artefacts and PADs near watercourses.
Culturally modified trees	While most of the study area has been cleared for grazing and farming activities, isolated stands of trees remain scattered across the study area. This site type is not highly represented in the surrounding area, however, there is potential to identify this site type if trees of an appropriate age are present, particularly near the semi-permanent water sources.
Burials	Although it is possible that this site type could be found within the study area, it is considered a rare site type especially given the disturbance that has occurred within the study area.
Bora/Ceremonial sites	This site type does not necessarily follow landform predictability and are, overall, a rare site type with a low likelihood of being present and remaining extant. These sites are generally identified through consultation with the RAPs.

4.3 RESEARCH QUESTIONS

Beyond forming an opinion regarding the nature of the archaeological resource within the study area with the aim of conserving any areas of high archaeological significance, the survey will also attempt to:

- Establish how the findings within the study area (if any) accord with the regional archaeological context examined in **Section 3.2**
- Test the veracity of the predictive model established in **Section 4.2** which indicates that artefact sites, primarily consisting of quartz artefacts, will be the most likely site to be recorded
- Establish whether high significance sites such as burials, stone arrangements, rock engravings and hearths are present or absent from the study area.

The survey methodology set out in **Section 5** will be framed to help answer these questions; should sites of sufficient significance be encountered.

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5 SURVEY METHODOLOGY

5.1 ASSESSMENT APPROACH

The Aboriginal cultural heritage assessment of the study area will follow the *Code of Practice for the Investigation of Aboriginal Objects in New South Wales* (Code of Practice; DECCW 2010). The field inspection will follow the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (The Guide, OEH 2011).

Survey for Aboriginal cultural heritage values will concentrate on the study area where Proposal impacts will be located.

5.2 SURVEY AIMS

The aim of any archaeological survey is not to locate each artefact in a landscape but to undertake investigations so that the archaeological potential and archaeological characteristics of all landforms within the study area are known. Therefore, the aims of the survey will be to:

- Inspect all landform types in the study area so that their archaeological potential can be determined
- Evaluate whether the predictive model set out in **Section 4.2** is valid
- Determine if the research questions set out in **Section 4.3** can be answered
- Determine if any landforms of the study area require test excavation to understand the archaeological potential at a particular location
- Undertake sufficient assessment to satisfy Sections 2.2, 2.4, 2.5, 2.6, and 2.7 in the Guide
- Collect sufficient data so that the results can be presented in an ACHAR as set out in Section 3 in the Guide
- Undertake survey and record keeping satisfying Requirements 1–13 of the Code of Practice.

5.3 SURVEY METHODOLOGY

Standard archaeological field survey and recording methods will be employed in this assessment (Burke & Smith 2004) and will follow the Code of Practice.

As highlighted in **Sections 3** and **4**, greater Aboriginal archaeological potential tends to exist on landforms within 200 m of permanent and ephemeral water sources, along access or trade routes, and areas with suitable flora/fauna and shelter. Archaeological potential is generally reduced on landforms disturbed by erosion and historical impacts (e.g., farming and infrastructure installation). As such, during the field assessment, greater survey effort will be expended on landforms deemed to have greater Aboriginal archaeological potential. 'Full pedestrian survey' refers to systematic transects walked by surveyors spaced approximately 20 m apart throughout

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the landform or area being surveyed. 'Targeted pedestrian survey' refers to transects walked by surveyors spaced approximately 20 m apart that will not cover the entire area but instead will focus on understanding the archaeological potential of representative landforms within these areas.

As such, the field assessment will include:

- Full pedestrian survey will occur in areas with minimal disturbance and good ground surface visibility within landforms possessing Aboriginal archaeological potential, i.e., areas within 200 m of the watercourses, elevated landforms, and areas with remnant vegetation (**Figure 5-1**)
- Targeted pedestrian survey will occur in all other areas: i.e., areas more than 200 m from watercourses; areas with poor ground surface visibility; landforms with low archaeological potential; and areas with significant prior disturbance (**Figure 5-1)**
- All trees deemed to be of sufficient maturity to contain cultural modification will be inspected
- Some areas may not be physically surveyed if the RAP and OzArk staff agree they are too disturbed or possess a very low likelihood of sites.

In the field, OzArk staff will identify, record, and evaluate physical (i.e., archaeological) evidence. Site recording will capture all the information required to complete current AHIMS site recording forms (e.g., site location, site boundary, site plan, representative photographs, artefact recording and feature recording). A RAP will participate in the survey, identifying Aboriginal objects, determining the cultural significance of Aboriginal objects, and identifying cultural places or non-physical site types within the study area. OzArk staff understand that cultural knowledge may not be provided in some instances due to cultural sensitivities (e.g., men's and/or women's places). Under these circumstances, to assess the potential impacts, OzArk staff will need to be told, only in general terms, why a particular place is important, and what the significance of the impact will be. OzArk staff will liaise with RAPs on a case-by-case basis to determine how to record the location in a culturally sensitive manner.

5.4 TEST EXCAVATION

It is possible that the survey may identify landforms where test excavation under the Code of Practice (Requirements 14–17) is required. Should such landforms be identified during the survey, the test excavation methodology will be prepared as a separate document that will be circulated to all RAPs for review and comment.

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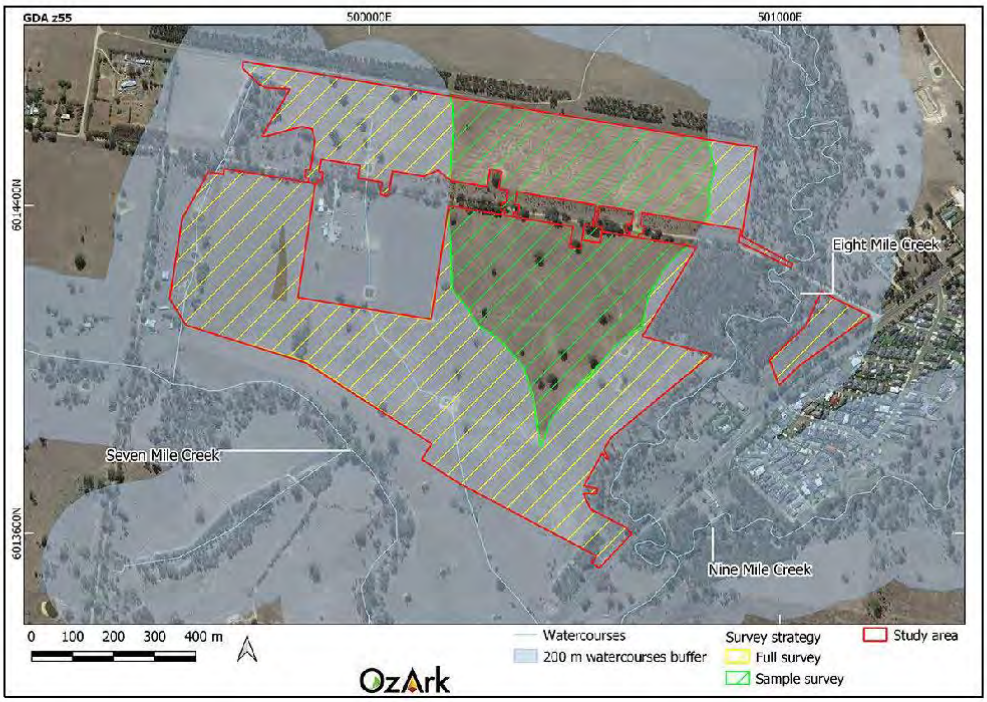
Figure 5-1: Aerial showing the proposed survey areas.



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APPENDIX 3: TEST EXCAVATION METHODOLOGY

View of Eight Mile Creek near Area 1.

ARCHAEOLOGICAL TEST EXCAVATION METHODOLOGY

SUBDIVISION OF LOT 2 DP1189190 AND LOTS 301 AND 302 DP1124543 ON WILLIAMS ROAD, TABLE TOP, NSW

ALBURY CITY LOCAL GOVERNMENT AREA

AUGUST 2022

Report prepared by

OzArk Environment & Heritage

for Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga

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DOCUMENT CONTROLS

Proponent	Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga
Client	Blueprint Planning
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File Location	OzArk Job No.
Blueprint Planning\Williams Road, Table Top (Albury)	3494

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Acknowledgement

OzArk acknowledge the traditional custodians of the area on which this assessment will take place and pay respect to their beliefs, cultural heritage, and continuing connection with the land. We also acknowledge and pay respect to the post-contact experiences of Aboriginal people with attachment to the area and to the Elders, past and present, as the next generation of role models and vessels for memories, traditions, culture and hopes of local Aboriginal people.

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1 INTRODUCTION

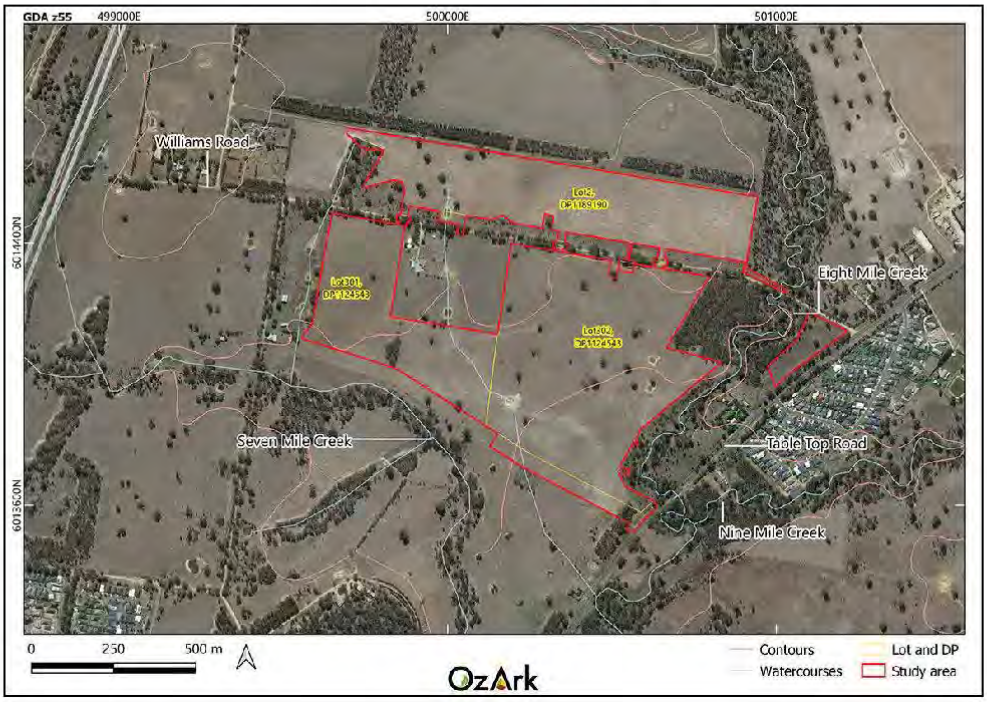
1.1 PREAMBLE

The Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga (the Proponent) intends to subdivide Lot 2 DP1189190 and Lots 301 and 302 DP1124543 (the study area) on Williams Road, Table Top, New South Wales (NSW) (the Proposal; **Figure 1-1**).

OzArk Environment and Heritage (OzArk) has been commissioned by Blueprint Planning (the client) on behalf of the Proponent to prepare an archaeological test excavation methodology and conduct archaeological test excavations in accordance with the *Code of Practice for the Investigation of Aboriginal Objects in New South Wales* (Code of Practice; DECCW 2010) for the Proposal. Archaeological test excavation is required to determine if subsurface archaeological material is present and to provide management recommendations in relation to the findings.

This methodology has been prepared in accordance with Stage 3 of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (ACHCRs; DECCW 2010b).

Figure 1-1: Aerial of the study area.



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1.2 BACKGROUND TO THE TEST EXCAVATION PROGRAM

The test excavation program follows a survey assessment of the study area for the Proposal. The survey was completed on 16 June 2022 by OzArk Senior Archaeologist Stephanie Rusden (**Figure 1-2**).

The survey included:

- Full pedestrian survey across landforms areas within 200 m of the watercourses (Seven and Eight Mile Creeks), elevated landforms, and areas with remnant vegetation
- Targeted pedestrian survey across landforms with lower archaeological potential and areas greater than 200 m from the watercourses.

No Aboriginal sites or artefacts were identified on the ground surface during the survey. Areas of exposure were greatest across Lot 2 1189190 and the portion of Lot 302 DP1124543 located to the east of Eight Mile Creek. Exposures across these areas averaged 70 per cent as they contain crops at an early stage of growth. Exposures across the remainder of Lot 302 DP1124543 and Lot 301 DP1124543 was much lower, comprising only 20 per cent of these landforms. The lack of exposure across most of the landforms closest to Seven and Eight Mile Creeks was a recognised constraint to the survey. This constraint was significant as predicative modelling in the assessment methodology identified that isolated finds and artefact scatters were likely to be identified across areas within 200 m of ephemeral watercourses.

Due to the lack of ground exposure across these landforms, subsurface investigations are warranted to confirm whether archaeological deposits are present within areas identified during the survey as having increased archaeological potential (Areas 1 to 3; **Figure 1-2**). Area 1 is located on an upper terrace adjacent to Eight Mile Creek while Areas 2 and 3 are on flat landforms along Eight Mile Creek. No areas adjacent to Seven Mile Creek were considered to have subsurface potential as the adjacent flat plain maps as being flood prone.

Figure 1-2 illustrates the pedestrian coverage of the study area and the areas identified for test excavation.

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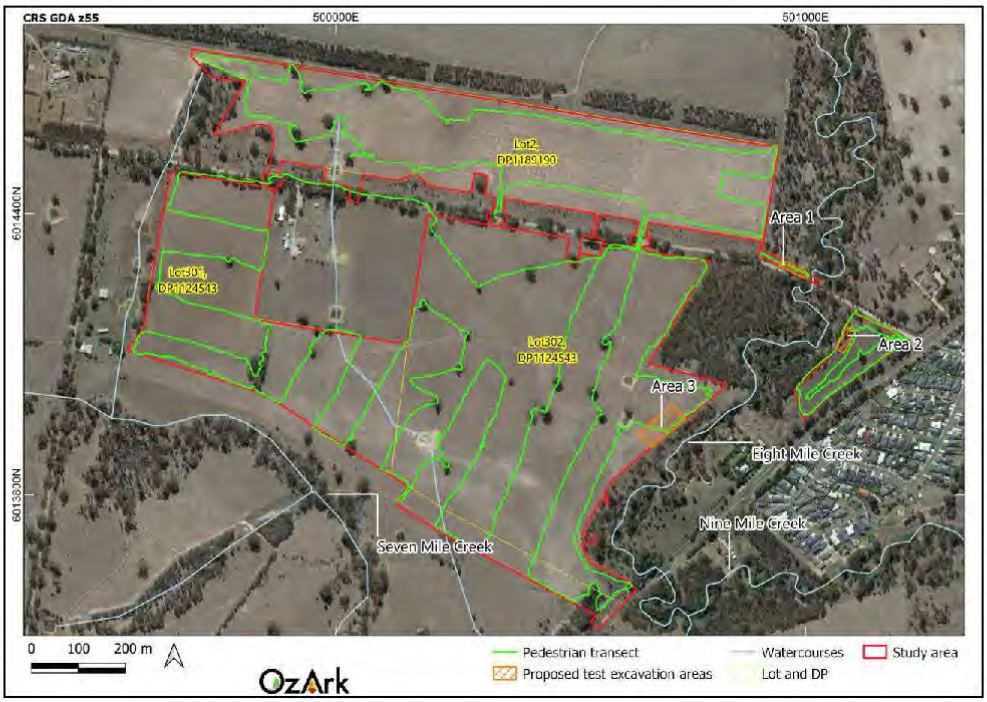
Figure 1-2: Pedestrian coverage of the study area and proposed test excavation areas.



1.3 CODE REQUIREMENTS FOR THE TEST EXCAVATION PROGRAM

Excavations undertaken as per the Code of Practice do not require an AHIP under the *National Parks and Wildlife Act 1974* (NPW Act).

The Code of Practice lists several requirements pertaining to test excavation. These requirements are enumerated below and further information pertaining to these requirements follow in subsequent sections of this document.

- **Requirement 14** (Test excavation which is not excluded from the definition of harm):

  Sub-surface investigation will not be excluded from harm where they are carried out in the following areas:

  a) in or within 50 metres (m) of an area where burial sites are known or are likely to exist

  b) in or within 50 m of a declared Aboriginal place

  c) in or within 50 m of a rock shelter, shell midden or earth mound

  d) in areas known or suspected to be Aboriginal missions or previous Aboriginal reserves or institutes

  e) in areas known or suspected to be conflict or contact sites.

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  - The test excavation locations are not located within the vicinity of the items listed under Requirement 14 of the Code of Practice.

- **Requirement 15a** (Consultation): As the proposed archaeological test excavation program is part of the project, consultation has been ongoing with the RAPs and has been completed to the stage described in subclause 60C (6) of the *National Parks and Wildlife Regulation 2019* (NPW Regulation).
- **Requirement 15b** (Test excavation sampling strategy): This document sets out the proposed sampling strategy for the test excavation program.
- **Requirement 15c** (Notification):
  - the location of the proposed test excavation and the subject area.
    - This document sets out the proposed location of the test excavation program (see **Section 3.2**).
  - the name and contact details of the legal entity with overall responsibility for the project.
    - Trustees of the Roman Catholic Church for the Diocese of Wagga Wagga, PO Box 473, Wagga Wagga NSW 2650.
  - the name and contact details of the person who will be carrying out the test excavations where this is different to the legal entity with overall responsibility for the project.
    - OzArk Environment & Heritage, 145 Wingewarra St, Dubbo NSW 2830
  - the proposed date of commencement, and estimated date of completion, of the test excavations.
    - Anticipated commencement: July/August 2022
    - Anticipated completion: July/August 2022

    Weather permitting, the projected period for the excavation is two days.
  - the location of the temporary storage location for any Aboriginal objects uncovered during the test excavations.
    - Aboriginal objects recovered during the excavations will be temporarily stored in a locked cupboard at 145 Wingewarra Street, Dubbo, NSW (OzArk office) for analysis. Other objects, such as faunal or charcoal samples, may be sent to third party specialists for analysis.
- **Requirement 16a** (Test Excavation):
    - The test excavation program will adhere to Requirement 16a of the Code of Practice as set out in this document (see **Section 3.4**).
- **Requirement 16b** (Objects recovered during test excavations):

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- If further analysis Aboriginal objects recovered during the excavations will be analysed at 145 Wingewarra Street, Dubbo, NSW (OzArk office). When not being analysed, the objects will be temporarily stored in a locked cupboard at 145 Wingewarra Street, Dubbo, NSW. The long-term management of any recovered artefacts will be determined in consultation with the RAPs.

- **Requirement 17** (When to stop test excavations): the test excavation program will adhere to the requirements set out in the Code of Practice: *Any test excavation carried out under this requirement will cease when suspected human remains area encountered; or when enough information has been recovered to adequately characterise the objects present with regard to their nature and significance.*

  - OzArk shall ensure that this Requirement is adhered to during the test excavation program. This will include ceasing work as soon as human skeletal material is noted and immediately notifying the police. If the skeletal material is determined to be Aboriginal, Heritage NSW will be immediately notified.

1.4 CONSULTATION ON THIS METHODOLOGY

The test excavation methodology was distributed to all RAPs on 8 July 2022. The closing date for comment was 5 August 2022.

No comments were received from the RAPs on the test excavation methodology.

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2 ARCHAEOLOGICAL BACKGROUND TO THE TEST EXCAVATION

The test excavation program follows a program of pedestrian survey across the study area (**Section 1.2**).

No previous subsurface archaeological investigation has occurred within the study area nor have subsurface investigations been undertaken in closely adjacent landforms.

The results of previous subsurface investigations across the region are summarised below to gain an understanding on the nature of subsurface deposits that may be encountered within the study area.

2.1 SUBSURFACE INVESTIGATIONS WITHIN THE REGION OF THE PROPOSAL

Albury Sewage Treatment Site (Paton 1994)

Paton (1994) completed an archaeological assessment for the proposed augmentation of the existing sewage treatment at Kremur Street, West Albury. Two specific areas targeted for this investigation included the Nursery Valley and the floodplain between Bagnalls Range Lagoon and the Murray River. The Nursery Valley area was a small, semi-enclosed basin on the north side of the Riverina Highway, overlooking the Murray River floodplain. A total of ten artefact scatters and three isolated finds were recorded during the survey (five scatters and one isolated artefact in Nursery Valley and five scatters and two isolated artefacts on the Murray floodplain). Most artefacts were manufactured from quartz, with only one manufactured from silcrete.

A series of 0.25 x 0.25 m shovel test pits were excavated in locations considered to have high archaeological potential, with 30 locations in the Nursery Valley area and 77 on the Murray floodplain. A total of eight shovel test pits contained artefacts, all with 1–2 artefacts. Artefact bearing test pits were all located on the terrace systems of the Murray River floodplain.

A geomorphologic investigation was also undertaken, by mapping landforms, surveying cross sections and carrying out a number of augers. Several terrace landforms were identified as having potential to contain burials, due to the sandy textures of soils.

Paton's study concluded that artefact scatters were generally located on raised terrace landforms. The subsequent geomorphic assessment determined that artefacts of a relatively young age had been buried by older sediments and vice versa, making the stratigraphy difficult to interpret.

'Thurgoona Park' Subdivision Woolshed Creek (Kelly 2002)

Kelly (2002) investigated a dissected terrace along Woolshed Creek, north of Thurgoona Road. The investigation area was immediately east of the confluence of Woolshed and Eight Mile Creeks. As a result of these initially monitoring works, six quartz and quartzite artefacts were identified. A further 35 artefacts were identified on exposed graded surfaces and within spoil windrows. Much of this material was also quartz, apart from a single chert artefact.

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Kelly (2002) concluded that (at the time) this location represented the largest concentration of Aboriginal archaeological material within the immediate Albury area and warranted further investigation. He also inferred that all areas associated with terrace landforms or within 100 m of Eight Mile or Woolshed Creeks should be considered areas of potential archaeological deposit.

Woolshed Creek (Price and Kelly 2003)

The investigation completed by Price and Kelly (2003) followed on from that of Kelly (2002) within the same terrace adjacent to Woolshed Creek and included the sample sieving of 112 cross sections in windrows from previous construction and mechanic grader scrapes of two 0.5 x 4 m trenches to a depth of one metre.

Of the 205 artefacts retrieved, 115 were conclusively identified as being of Aboriginal origin. Most of the archaeological material was present within the upper 100 millimetres (mm) of the deposit, however, material was collected from depths up to 350 mm. Most of the artefacts were manufactured from quartz, with smaller quantities of silcrete, quartzite and chert artefacts.

Price and Kelly (2003) concluded that within the Albury region there is a strong association with water sources and raised level landforms (terraces).

Murray River Experience Project (Brooke and Jacobs 2009)

Brooke and Jacobs (2009) carried out a series of transects within Noreuil Park, Oddies Creek Park and Kremur Street within the floodplain of the Murray River. A total of 32 test units (TUs) (0.5 x 0.5 m) were excavated in locations that were to be impacted by the proposed works. At Noreuil Park, high levels of disturbance were identified due to the continued presence of modern refuse through the stratigraphic profile, and the upper 100 to 200 mm of sediment likely being fill. No Aboriginal archaeological sites were found.

At nearby Oddies Creek Park upper units of sediment were generally disturbed, under which yellowish brown, fine silt graded into clayey deposits with depth. These silts and clays were interpreted as natural floodplain deposits. Sediments at Kremur Street were similar to those described at Oddies Creek Park. Brooke and Jacobs (2009) concluded that the potential archaeological sensitivity of similar, undisturbed floodplain landforms in the area are likely to have low-moderate or moderate for buried archaeological deposits.

Kerr Road, Thurgoona (AECOM 2017)

AECOM (2017) completed an archaeological assessment of 119 hectares (ha) of land west of Kerrs Road, Thurgoona. The investigation area consisted of an irregularly shaped parcel of land bound by Woolshed Creek to the east and Eight Mile Creek to the west. AECOM identified a single north to south trending, gently sloping spur dominating the topography of the area, with the northern, eastern and western boundaries grading to the alluvial landforms of the waterways. The northern portion of the study area comprises an elevated terrace plain (large to very large flat

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landform, representing an element of a former floodplain that has been aggraded by, but no longer inundated by overbank stream flow) formed on alluvial soils, grading south to the valley flats of the confluence of Eight Mile and Woolshed Creeks. The southern localised area was characterised by a wide, flat floodplain with micro topographic variation, reflecting a dynamic alluvial environment comprising of minor terraces, drainage gullies and slopes

A total of 26 artefacts were recorded, representing four Aboriginal sites. Landform-based artefact counts demonstrated most of the material was identified in the flat landform unit, which also experienced the highest rate of effective survey coverage.

A subsurface testing program comprising initially, 60 TUs (0.5 x 0.5 m) were excavated, followed by the expansion of two of the test pits from 0.5 x 0.5 m to 1 x 1 m and 4 x 4 m excavations. The subsurface investigation revealed that the distribution of artefacts was sparse and discontinuous, as 90 per cent of test pits contain no archaeological material. Artefact bearing test pits were confined to flat, floodplain and terraced landforms associated with the waterways. In artefact bearing TUs, numbers of artefacts were generally low with only one test pit containing more than 10 artefacts.

The results of the investigation suggested an emphasis of the utilisation of low gradient landform elements within Eight Mile and Woolshed Creek alluvial valleys and associated periphery landforms. Raw materials in the assemblage suggest a complete reliance on the procurement and reduction of locally available quartz.

Nexus industrial subdivision, Ettamogah (Biosis 2017)

Biosis (2017) completed an archaeological assessment of 73 ha of land located 13 kilometres (km) northeast of Albury, between Eight Mile Creek and Gerogery Road.

During the field survey, three artefact scatters and eight areas of potential archaeological deposit (PAD) were identified. Two main landforms were identified: undulating footslopes and creek banks/terraces. Archaeological sites were initially located in the footslopes landforms, visible due to recent grading related to road construction. A total of eight PADs were recorded in association with high points adjacent to watercourses.

A series of 0.5 x 0.5 m TUs were carried out across PADs with spacings of 20 m. A total of 68 TUs were excavated. Except for one, all PADs yielded subsurface archaeological material. Whilst PAD 4 did not have any subsurface archaeological material present, a surface artefact was recorded in the location during the survey. Sediments were described as sandy silts and sandy clays, to depths of 750 mm. Most excavations ceased at between 300–400 mm. Artefacts were located at depths between 0 and 300 mm. A total of 41 artefacts were collected, along with the 22 surface artefacts recorded during the survey. Artefact numbers were generally low, with most artefact bearing TUs containing one to two artefacts and a maximum of seven. The artefacts were manufactured from quartz and crystal quartz, and a single manuport was made of basalt.

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Aboriginal Cultural Heritage Assessment Report: Woolshed Estate, Thurgoona, NSW (OzArk 2018)

OzArk (2018) completed a survey and test excavation for a subdivision at Thurgoona, located 3.4 km south of the study area. The assessed area comprised 71 ha of land surrounding a section of Eight Mile Creek (otherwise known as Woolshed Creek) and its tributaries. No Aboriginal objects were recorded during the field survey although visibility was noted as being very low. Three landforms with the PADs were identified (PADs 1–3) which included elevated landforms overlooking the watercourses.

Test excavation was subsequently completed at the three PADs. A total of 26 TUs (0.5 x 0.5 m) were excavated to provide a representative sample of the deposits enough to characterise the subsurface archaeological potential of the PADs. The test excavation confirmed the presence of archaeological subsurface deposits at each of the three PADs although at a low density.

A total of 26 artefacts were recorded during the test excavation. Of the 26 artefacts recorded, 10 were flakes (38%) and 16 are pieces of shatter (62%). All the artefacts were quartz, and most had no cortex (tertiary reduction, n=21, 81%). 58 per cent of artefacts had a maximum size of 1–2 centimetres (cm) (n=15), followed by 0–1 cm (n=9, 35%), and only two were 2–3 cm (7%). 62 per cent of artefacts were in Spit 2 (10–20 cm, n=16), with 23 per cent in Spit 3 (20–30 cm, n=6) and 15 per cent in Spit 1 (0–10 cm, n=4).

2.2 ARCHAEOLOGICAL CONTEXT: SUMMARY

Salient points from the archaeological context presented above are:

- Excavations completed across the Murray River floodplain highlight that the river flats are not good preservers of archaeological deposits with artefacts typically recovered from mixed deposits (Paton 1994 and Brooke and Jacobs 2009)
- Landforms adjacent to smaller ephemeral waterways, if intact, have archaeological potential (Price and Kelly 2003). Further, where terraces or rises are present, particularly in the Eight Mile Creek catchment area, subsurface artefact scatters are likely to be present
- Artefact bearing deposits are typically no greater than 300 mm (Biosis 2017 and OzArk 2018)
- Subsurface deposits across landforms adjacent to ephemeral waterways are typically low-density
- Quartz is the predominant material for stone artefacts in the area and artefact assemblages recorded in the region consist largely of shatter and unmodified flakes (AECOM; Biosis 2017 and OzArk 2018).

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3 TEST EXCAVATION METHODOLOGY

3.1 PURPOSE OF THE TEST EXCAVATION METHODOLOGY

The purpose of the test excavation program is to understand more completely the nature of the sub-surface material across the study area. Data obtained from the test excavation program will inform the mitigation and management options in the forthcoming revised ACHAR.

The aims are therefore to:

1. Establish the extent and nature the of sub-surface archaeological deposits
2. Use the data gained from the test excavation program to better evaluate the archaeological significance and potential of the PAD
3. Develop, in consultation with the RAPs and the Proponent, an informed strategy for the management of impacts to any Aboriginal cultural heritage likely to be impacted by the Proposal.

3.2 RESEARCH QUESTIONS

While any test excavation program is limited in the level of research objectives it can achieve due to the restricted nature of the excavations, the test excavations within the study area will attempt to shed light on:

- How does the artefactual material and stratigraphy identified at the site compare to other archaeological excavations undertaken in the local area and the region?
- Are there intact stratigraphic deposits present beneath the 'plough zone' that are of conservation value?
- Is there evidence providing insight into the tasks were Aboriginal people undertaking?

3.3 PROPOSED TEST EXCAVATION AREAS

Three locations where test excavation could provide a clearer picture of the subsurface archaeological potential across the study area have been identified. The reasons why these locations have been selected are outlined in **Table 3-1**. The location of these three areas is shown on **Figure 3-1**.

Figure 3-2 to **Figure 3-4** show the preliminary layout of transects to adequately investigate the subsurface potential of the areas. However, the ultimate location of the transects and their associated TUs will be determined in the field so that both are placed at the most advantageous locations (i.e. away from disturbances etc). Consultation between the OzArk archaeologists and the RAPs will take place if this is to occur.

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Table 3-1: Proposed areas for test excavation and sampling strategy.

Area	Test excavation methodology	Landform area	0.5% of landform area	Proposed excavation area
Area 1	1 x 50 m transect (six 0.5 x 0.5 m TUs) will be excavated. The TUs will be spaced at least 10 m apart (**Figure 3-2**).	730 m²	3.65 m²	1.5 m²
Area 2	2 x 30 m transects (eight 0.5 x 0.5 m TUs) will be excavated. The transects will be placed parallel to each other spaced at least 10 m apart (**Figure 3-3**).	1006 m²	5.03 m²	2 m²
Area 3	2 x 30 m transects (eight 0.5 x 0.5 m TUs) will be excavated. The transects will be placed parallel to each other spaced at least 10 m apart (**Figure 3-4**).	3886 m²	19.43 m²	2 m²

Figure 3-1: Proposed areas for test excavation.

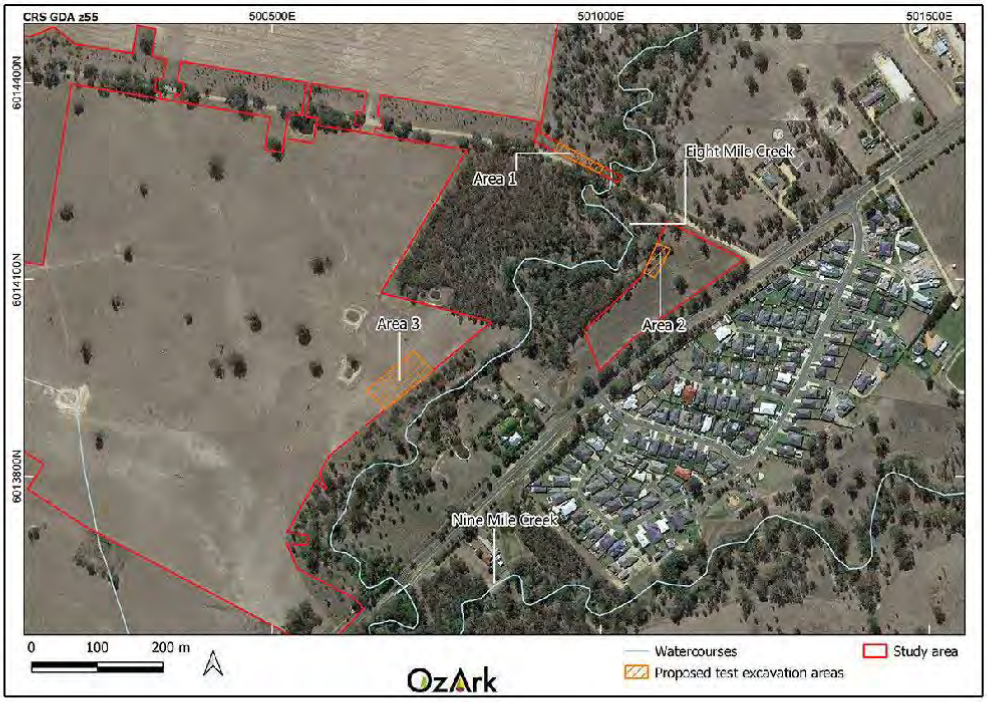

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Figure 3-2: Indicative transect locations at Area 1.

Figure 3-3: Indicative transect locations at Area 2.

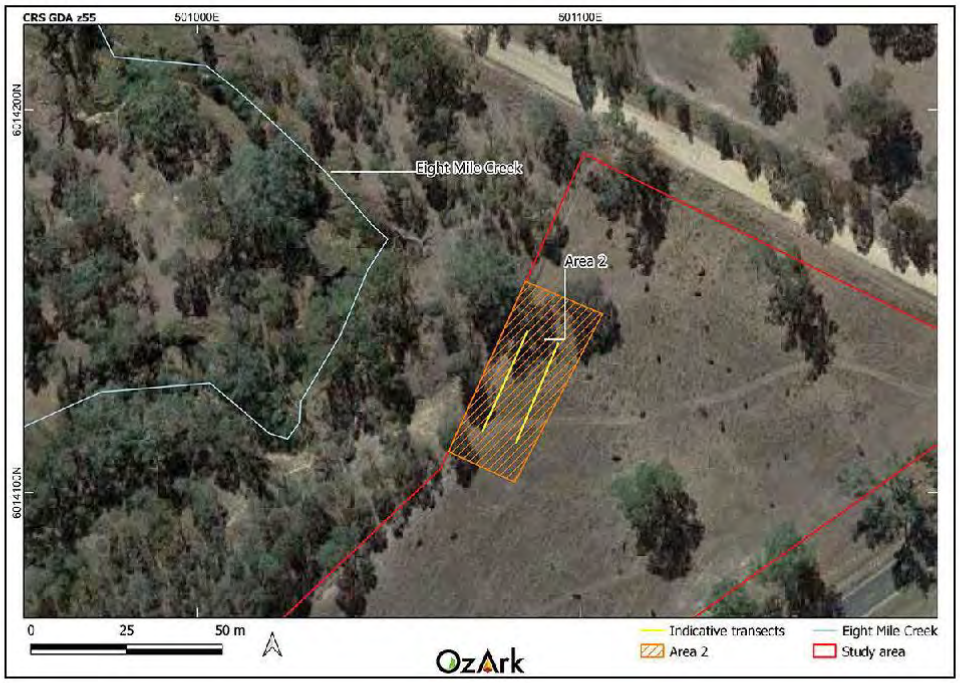

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Figure 3-4: Indicative transect locations at Area 3.

3.4 SAMPLING STRATEGY

The excavation program will be undertaken by archaeologists and representatives of RAPs and will include the following aspects:

1. Three areas will be investigated by the test excavation program (**Table 3-1**).
2. The location for the proposed test excavation program and approximate transect locations are shown on **Figure 3-2** to **Figure 3-4**. It is noted that there can be some flexibility in the field about the precise location of an area to test and the precise location of excavation transects. Any decisions about where to place excavation areas will be done in consultation with the RAPs who are in present at the time.
3. TUs will generally be spaced with a 10 m interval so that a broad representation of the landforms will be obtained. Some minor movement off this grid may be needed to avoid vegetation or areas of disturbance. No TU will be closer than 5 m to another.
4. Prior to any excavation, the area will be recorded via digital photography.
5. Initial TUs will be excavated in 5 cm spits to determine whether archaeological stratigraphy is present. If not, spit size will be increased to 10 cm. If archaeological stratigraphy is

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present, this will be used, so long as the stratigraphic layers are less than 10 cm deep. Otherwise, excavation will remain at 5 cm or 10 cm spits.

6. The excavated material from all squares will be sieved on site using dry sieving through a 5 mm sieve. A 3 mm sieve will be available should the deposits and artefacts being recorded suggest that it would be warranted to use a smaller sieve size.

7. If the soils within the PAD are deep, the decision on when to stop excavation will rest with the supervising archaeologist although Requirement 16a, point 9 will be followed. This states: *Test excavation units must be excavated to at least the base of the identified Aboriginal object-bearing units, and must continue to confirm the soils below are culturally sterile*.

8. Each excavator (by hand) will be responsible for sieving the deposit from their TU, retrieving the artefacts and, in conjunction with the supervising archaeologist, correctly recording their provenance. There could be some room for assistance with the sieving, but a self-contained approach is preferable. Deposits will be sieved on to tarpaulins and the spoil used to backfill the TU once it has been photographed and recorded.

9. A standard excavation recording form will be used for each TU. Details will include: date, site recorder, spit number and excavation depth, description of the soil profile with Munsell colours being used as appropriate, measured section of the excavation, and soil pH recordings (when necessary or appropriate).

10. It is envisioned that the excavation crew will consist of an Excavation Director, two assistant archaeologists and two cultural heritage field workers. The excavator of each TU, in conjunction with the Excavation Director, will be responsible for ensuring all forms are correctly completed. It will be the archaeologists' responsibility to perform all photographic tasks, undertake any planning and section drawing if required, and to ensure that a correct location of each TU is maintained.

11. Given that the work will be reasonably physical, all persons conducting activities must be fit for work.

12. If intact archaeological deposits or archaeological features are encountered, then additional archaeological TUs may be excavated to ensure documentation of any features and/or retrieval of artefacts and other relevant archaeological material. A feature would include a high density of artefacts within a TU, or a square containing rare or unusual artefacts (such as artefacts constructed from a stone type rarely represented in the area or less-common tool forms such as ground edge hatchet heads, hammerstones, etc.), or other signs of human occupation i.e. ground ovens/hearths or charcoal concentrations. Any expansion must adhere to Requirement 16 (5). Any expansion would only occur with the consent of

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the Excavation Director who will determine if an expansion is required to gain the appropriate scientific information.

13. Rather than expanding around an individual square as set out in Point 12, it is more likely that any expansion will involve setting out an additional transect at 90 degrees to a transect that has demonstrated significant and intact archaeological deposits. The perpendicular transect will be used to assist in determining the spatial spread of the subsurface deposits.
14. Section drawings and photographs will be completed for all TUs to show the soil profile.
15. Analysis of all excavated lithics will be made to determine the site's characteristics and to enable the site to be compared with other sites in the region. Analysis will also assist in determining what type of activities the Aboriginal people carried out at the site and their relationship with local resources (fauna, flora, water, and stone). All artefacts will be analysed and selectively photographed. If charcoal from a secure stratigraphic context is obtained, it may be sent to a laboratory for Carbon 14 dating (subject to the Proponent's agreement).
16. All faunal remains, if recovered, will be analysed by a fauna specialist. Remnant shell and bone fragments may assist in determining what foods Aboriginal people may have eaten at the specific site and may elucidate possible foraging strategies. In conjunction with *in situ* stone tools, bone/shell fragments may also provide evidence of specific usage of stone tools for food processing.
17. Artefacts will remain at the OzArk office (145 Wingewarra Street, Dubbo NSW) until the analysis is complete. Once complete, the artefacts will remain at the OzArk office where whey will be kept at a locked location until point 19 below is enacted.
18. The results of the test excavation program will inform the forthcoming ACHAR. Excavation results will be used to advise further courses of action in relation to the management and mitigation options for the study area.
19. Once all salvage activities for the Proposal are complete (should the Proposal be approved), artefacts will be amalgamated and managed as per the AHIP. Artefacts will be either be subject to a future care agreement negotiated between the RAPs and Heritage NSW; or reburied in accordance with Requirement 26 of the Code of Practice. The long-term management of any recovered artefacts will be determined in consultation with the RAPs.

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3.5 SAMPLING STRATEGY COMPLIANCE WITH THE CODE OF PRACTICE: REQUIREMENT 16

1 *Test excavation units must be placed on a systematic grid appropriate to the scale of the area—either PAD or site—being investigated e.g. 10 m intervals, 20 m intervals, or other justifiable and regular spacing.*

- The sampling strategy outlined above complies with this requirement. All TUs will be confined to within Areas 1 to 3. TUs at Areas 2 and 3 will be placed along two parallel transects in the area proposed for the ground disturbance work. The transects will be at least 10 m apart. TUs at Area 1 will be placed along one transect due to the linear nature of the ground disturbance work at this location.

2 *Any test excavation point must be separated by at least 5 m.*

- The sampling strategy outlined above complies with this requirement as all pits will be separated by 10 m. However, depending on the depth to the B-Horizon identified in the pits, additional TUs may be placed adjacent (making the pits 0.5 x 1 m) to determine the depth of the horizon and identified stratigraphic information should the pits become too deep to excavate at 0.5 x 0.5 m. Some minor variation of the spacing may be required to avoid vegetation or disturbed areas. No TU will be closer than 5 m to another except if adjacent TUs are required to achieve suitable work space if the deposits are deep.

3 *Test excavations units must be excavated using hand tools only.*

- The sampling strategy outlined in **Section 3.4** complies with this requirement.

4 *Test excavations must be excavated in 0.5 m x 0.5 m units.*

- The sampling strategy outlined in **Section 3.4** complies with this requirement. However, depending on the depth to the B-Horizon identified in a TU, an additional TU may be placed adjacent (making the TU 0.5 x 1 m) should the TU become too deep to excavate at 0.5 x 0.5 m.

5 *Test excavations units may be combined and excavated as necessary to understand the site characteristics, however:*

i) the maximum continuous surface area of a combination of test excavation units at any single excavation point conducted in accordance with point 1 (above) must be no greater than 3 m^2

- The sampling strategy outlined in **Section 3.4** complies with this requirement.

ii) the maximum surface area of all test excavation units must be no greater than 0.5% of the area—either PAD or site—being investigated.

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- The number and size of test excavations undertaken as part of this program will be managed to ensure that this requirement is satisfied.

6 *Where the 0.5 m x 0.5 m excavation unit is greater than 0.5% of the area then point 5 (ii) (above) does not apply.*

- Not applicable. Less than 0.5 per cent of the known potential archaeological deposit's dimensions will be investigated (see
- **Table** 3-1).

7 *The first excavation unit must be excavated and documented in 5 cm spits at each area —either PAD or site—being investigated. Based on the evidence of the first excavation unit, 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) may then be implemented.*

- Complies. See **Section 3.4** Point 5.

8 *All material excavated from the test excavation units must be sieved using a 5 mm aperture wire-mesh sieve.*

- Complies. See **Section 3.4** Point 6.

9 *Test excavation units must be excavated to at least the base of the identified Aboriginal object-bearing units and must continue to confirm the soils below are culturally sterile.*

- This requirement will be fulfilled in the field and all TUs will be excavated to the basal clays or where it is considered that culturally sterile units are present. The decision on when this point is reached will rest with the Excavation Director.

11 *Photographic and scale-drawn records of the stratigraphy/soil profile, features and informative Aboriginal objects must be made for each single excavation point.*

- Complies. See **Section 3.4** Points 9, 10, 14, 15 and 16.

12 *Test excavations units must be backfilled as soon as practicable.*

- Complies. See **Section 3.4** Point 8.

13 *Following test excavation, an Aboriginal Site Impact Recording form must be completed and submitted to the AHIMS Registrar as soon as practicable, for each AHIMS site that has been the subject of test excavation in accordance with the requirements of the Code.*

- It will be the responsibility of OzArk to ensure that this requirement is met.

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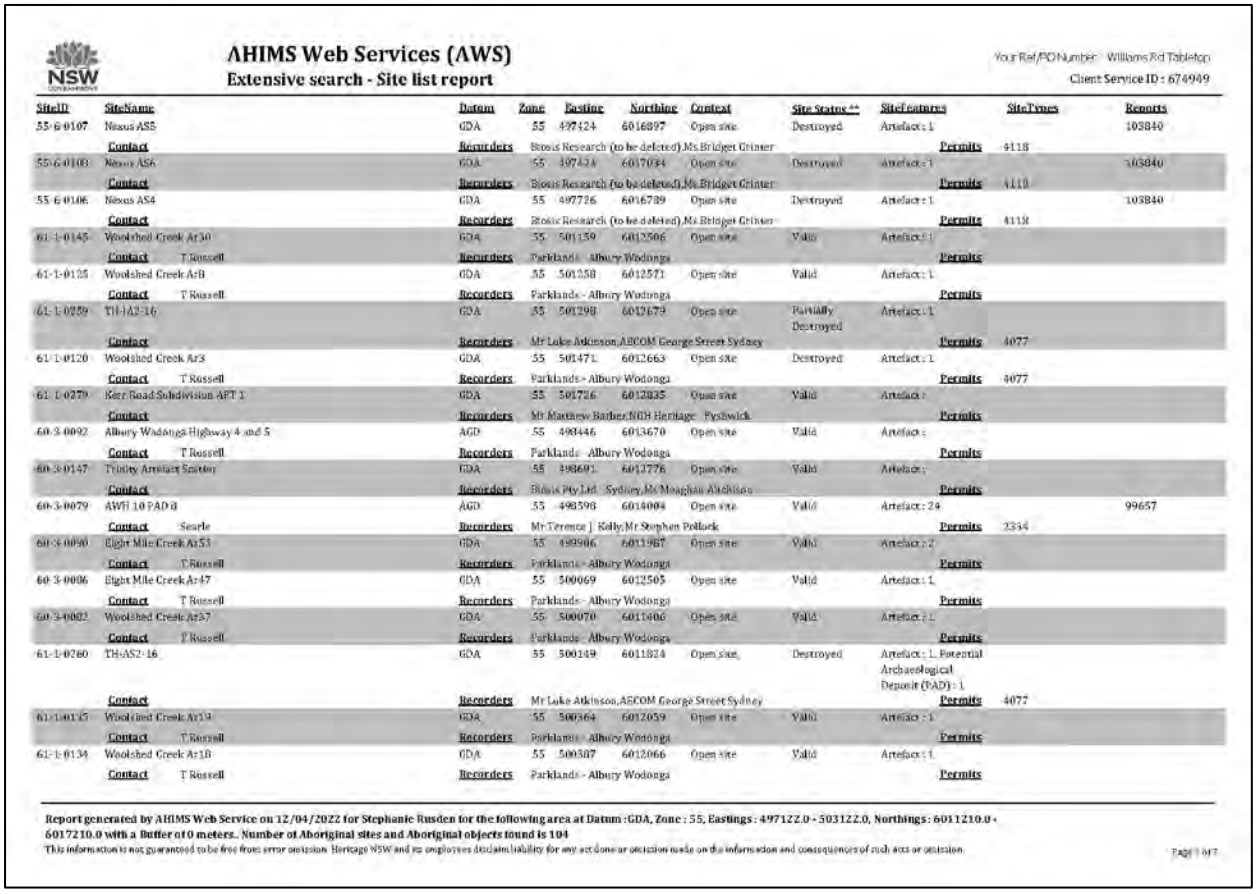
APPENDIX 4: AHIMS SEARCH RESULT



AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : Williams Rd Tabletop
Client Service ID : 674949

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55-6-0107	Nexus AS5	GDA	55	497124	6016897	Open site	Destroyed	Artefact : 1		103840
	Contact	Recorders	Biosis Research (to be deleted),Ms Bridget Grinter					Permits	4118	
55-6-0103	Nexus AS6	GDA	55	497424	6017034	Open site	Destroyed	Artefact : 1		103840
	Contact	Recorders	Biosis Research (to be deleted),Ms Bridget Grinter					Permits	4118	
55-6-0106	Nexus AS4	GDA	55	497726	6016789	Open site	Destroyed	Artefact : 1		103840
	Contact	Recorders	Biosis Research (to be deleted),Ms Bridget Grinter					Permits	4118	
61-1-0145	Woolshed Creek Ar30	GDA	55	501159	6012506	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0125	Woolshed Creek Ar8	GDA	55	501258	6012571	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0259	TH-A2-16	GDA	55	501298	6012679	Open site	Partially Destroyed	Artefact : 1		
	Contact	Recorders	Mr Luke Atkinson,AECOM George Street Sydney					Permits	4077	
61-1-0120	Woolshed Creek Ar3	GDA	55	501471	6012663	Open site	Destroyed	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits	4077	
61-1-0279	Kerr Road Subdivision AFT 1	GDA	55	501726	6012835	Open site	Valid	Artefact :		
	Contact	Recorders	Mr Matthew Barber,NGH Heritage Pyrmont					Permits		
60-3-0092	Albury Wodonga Highway 4 and 5	AGD	55	498446	6013670	Open site	Valid	Artefact :		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0147	Trinity Artefact Scatter	GDA	55	498691	6012776	Open site	Valid	Artefact :		
	Contact	Recorders	Biosis Pty Ltd Sydney,Ms Meaghan Aitchison					Permits		
60-3-0079	AWH 10 PAD 8	AGD	55	498598	6014004	Open site	Valid	Artefact : 24		99657
	Contact Searle	Recorders	Mr Terence J Kelly,Mr Stephen Pollock					Permits	3334	
60-3-0090	Eight Mile Creek Ar53	GDA	55	499906	6011987	Open site	Valid	Artefact : 2		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0006	Eight Mile Creek Ar47	GDA	55	500069	6012505	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0002	Woolshed Creek Ar37	GDA	55	500070	6011606	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0260	TH-AS2-16	GDA	55	500149	6011824	Open site	Destroyed	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders	Mr Luke Atkinson,AECOM George Street Sydney					Permits	4077	
61-1-0145	Woolshed Creek Ar19	GDA	55	500364	6012059	Open site	Valid	Artefact : 1		
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61-1-0134	Woolshed Creek Ar18	GDA	55	500587	6012066	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		

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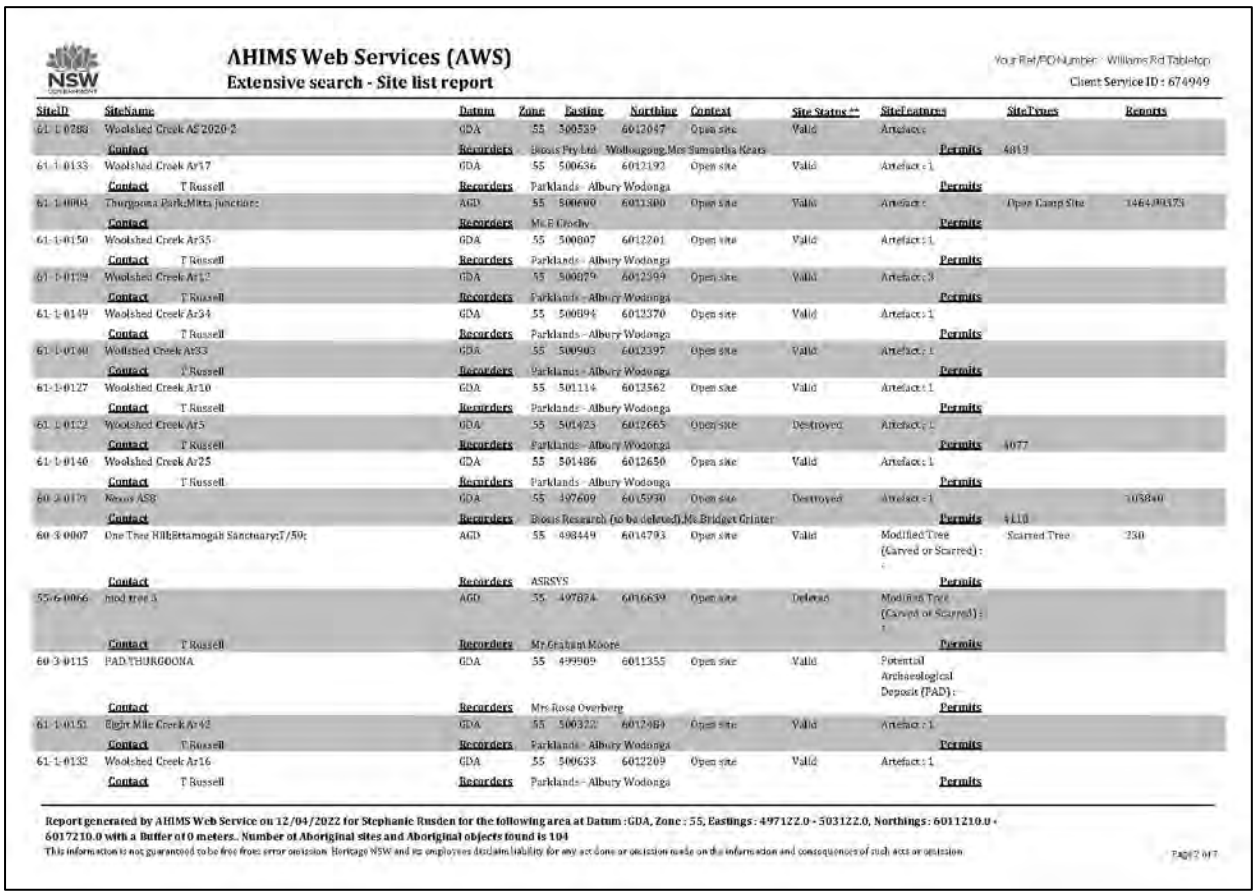

AHIMS Web Services (AWS)
Extensive search - Site list report

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Client Service ID : 674949

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61-1-0288	Woolshed Creek AS 2020-2	GDA	55	500539	6012047	Open site	Valid	Artefact :		
	Contact	Recorders	Biosis Pty Ltd Wollongong,Mrs Samantha Keats					Permits	4013	
61-1-0133	Woolshed Creek Ar17	GDA	55	500636	6012192	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0004	Thurgoona Park/Mitta Junction	AGD	55	500690	6011880	Open site	Valid	Artefact :	Open Camp Site	146430173
	Contact	Recorders	Mr E Crosby					Permits		
61-1-0150	Woolshed Creek Ar35	GDA	55	500807	6012201	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0139	Woolshed Creek Ar12	GDA	55	500879	6012394	Open site	Valid	Artefact : 3		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0149	Woolshed Creek Ar34	GDA	55	500894	6012370	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0140	Woolshed Creek Ar33	GDA	55	500903	6012397	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0127	Woolshed Creek Ar10	GDA	55	501114	6012562	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0122	Woolshed Creek Ar5	GDA	55	501423	6012665	Open site	Destroyed	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits	4077	
61-1-0140	Woolshed Creek Ar25	GDA	55	501486	6012650	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0175	Nexus AS8	GDA	55	497609	6015930	Open site	Destroyed	Artefact : 1		103840
	Contact	Recorders	Biosis Research (to be deleted),Ms Bridget Grinter					Permits	4118	
60-3-0007	One Tree Hill/Bettamogah Sanctuary;T/50;	AGD	55	498449	6014793	Open site	Valid	Modified Tree (Carved or Scarred) : 1	Scarred Tree	230
	Contact	Recorders	ASRSYS					Permits		
55-6-0066	mod tree 3	AGD	55	497874	6016639	Open site	Deleted	Modified Tree (Carved or Scarred) : 1		
	Contact T Russell	Recorders	Mr Graham Moore					Permits		
60-3-0115	PAD THURGOONA	GDA	55	499909	6011355	Open site	Valid	Potential Archaeological Deposit (PAD) :		
	Contact	Recorders	Mrs Rose Overberg					Permits		
61-1-0151	Eight Mile Creek Ar42	GDA	55	500322	6012489	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0132	Woolshed Creek Ar16	GDA	55	500633	6012209	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		

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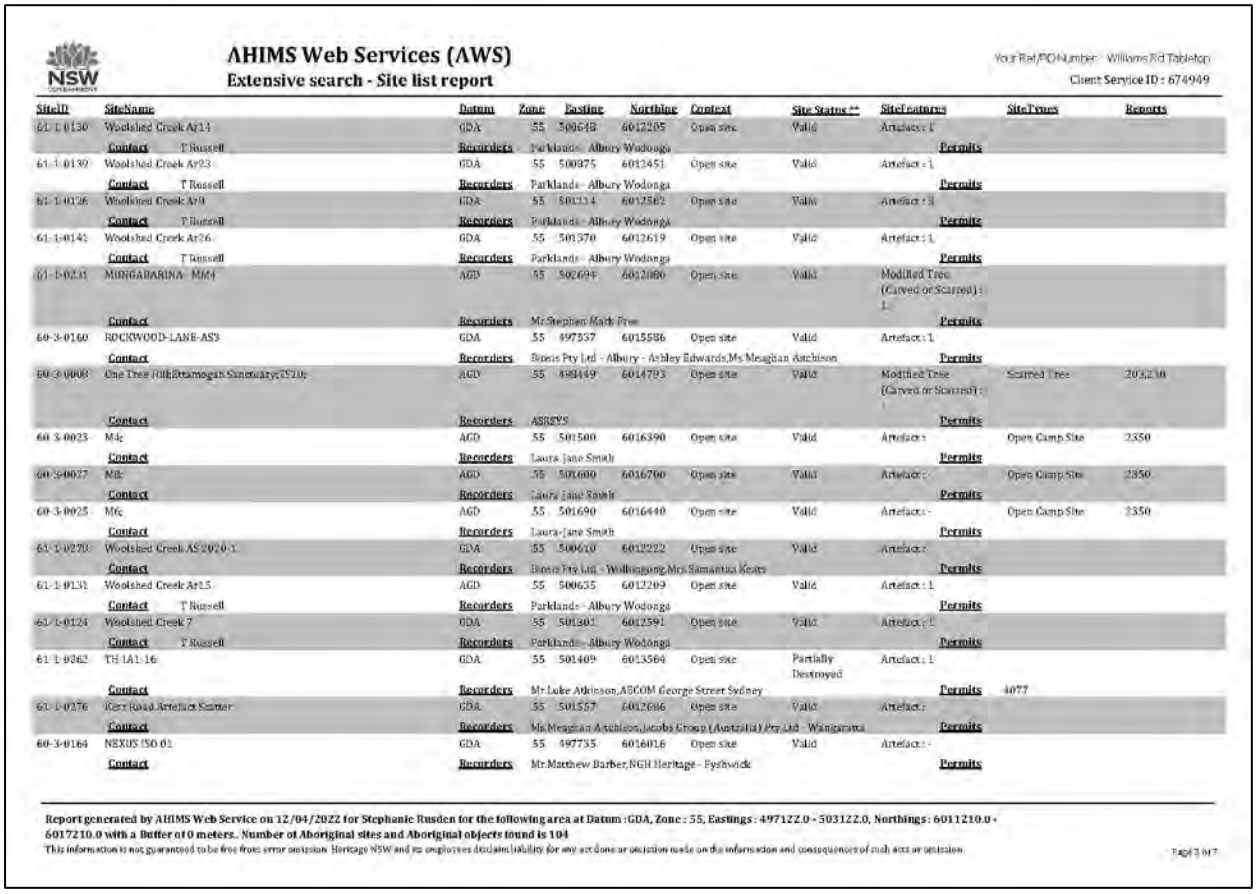

NSW

AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : Williams Rd Tabletop
Client Service ID : 674949

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status **	SiteFeatures	SiteTypes	Reports
61-1-0130	Woolshed Creek Ar14	GDA	55	500648	6012205	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0139	Woolshed Creek Ar23	GDA	55	500875	6012451	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0126	Woolshed Creek Ar9	GDA	55	501114	6012562	Open site	Valid	Artefact : 3		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0142	Woolshed Creek Ar26	GDA	55	501370	6012619	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0231	MUNGABARINA MM4	AGD	55	502694	6012080	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact	Recorders	Mr Stephen Mark Free					Permits		
60-3-0160	ROCKWOOD-LANE-AS3	GDA	55	497537	6015586	Open site	Valid	Artefact : 1		
	Contact	Recorders	Biosis Pty Ltd - Albury - Ashley Edwards,Ms Meaghan Aitchison					Permits		
60-3-0008	One Tree Hill;Bramogah Sanctuary;TS10;	AGD	55	498449	6014793	Open site	Valid	Modified Tree (Carved or Scarred) : 1	Scarred Tree	203230
	Contact	Recorders	ASKSYS					Permits		
60-3-0023	M4;	AGD	55	501500	6016390	Open site	Valid	Artefact :	Open Camp Site	2350
	Contact	Recorders	Laura-Jane Smith					Permits		
60-3-0027	M8;	AGD	55	501600	6016700	Open site	Valid	Artefact : -	Open Camp Site	2350
	Contact	Recorders	Laura-Jane Smith					Permits		
60-3-0025	M6;	AGD	55	501690	6016440	Open site	Valid	Artefact : -	Open Camp Site	2350
	Contact	Recorders	Laura-Jane Smith					Permits		
61-1-0278	Woolshed Creek AS2020-1	GDA	55	500610	6012222	Open site	Valid	Artefact :		
	Contact	Recorders	Biosis Pty Ltd - Wollongong,Mrs Samantha Keats					Permits		
61-1-0131	Woolshed Creek Ar15	AGD	55	500635	6012209	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0124	Woolshed Creek 7	GDA	55	501301	6012591	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0262	TH IA1-16	GDA	55	501409	6013564	Open site	Partially Destroyed	Artefact : 1		
	Contact	Recorders	Mr Luke Atkinson,AECOM George Street Sydney					Permits	4077	
61-1-0276	Kerr Road Artefact Scatter	GDA	55	501557	6012686	Open site	Valid	Artefact :		
	Contact	Recorders	Ms Meaghan Aitchison,Jacobs Group (Australia) Pty Ltd - Wangaratta					Permits		
60-3-0164	NEXUS ISO 01	GDA	55	497735	6016016	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr Matthew Barber,NGH Heritage - Eyshwick					Permits		

Report generated by AHIMS Web Service on 12/04/2022 for Stephanie Rusden for the following area at Datum : GDA, Zone : 55, Eastings : 497122.0 - 503122.0, Northings : 6011210.0 - 6017210.0 with a Buffer of 0 meters. Number of Aboriginal sites and Aboriginal objects found is 104

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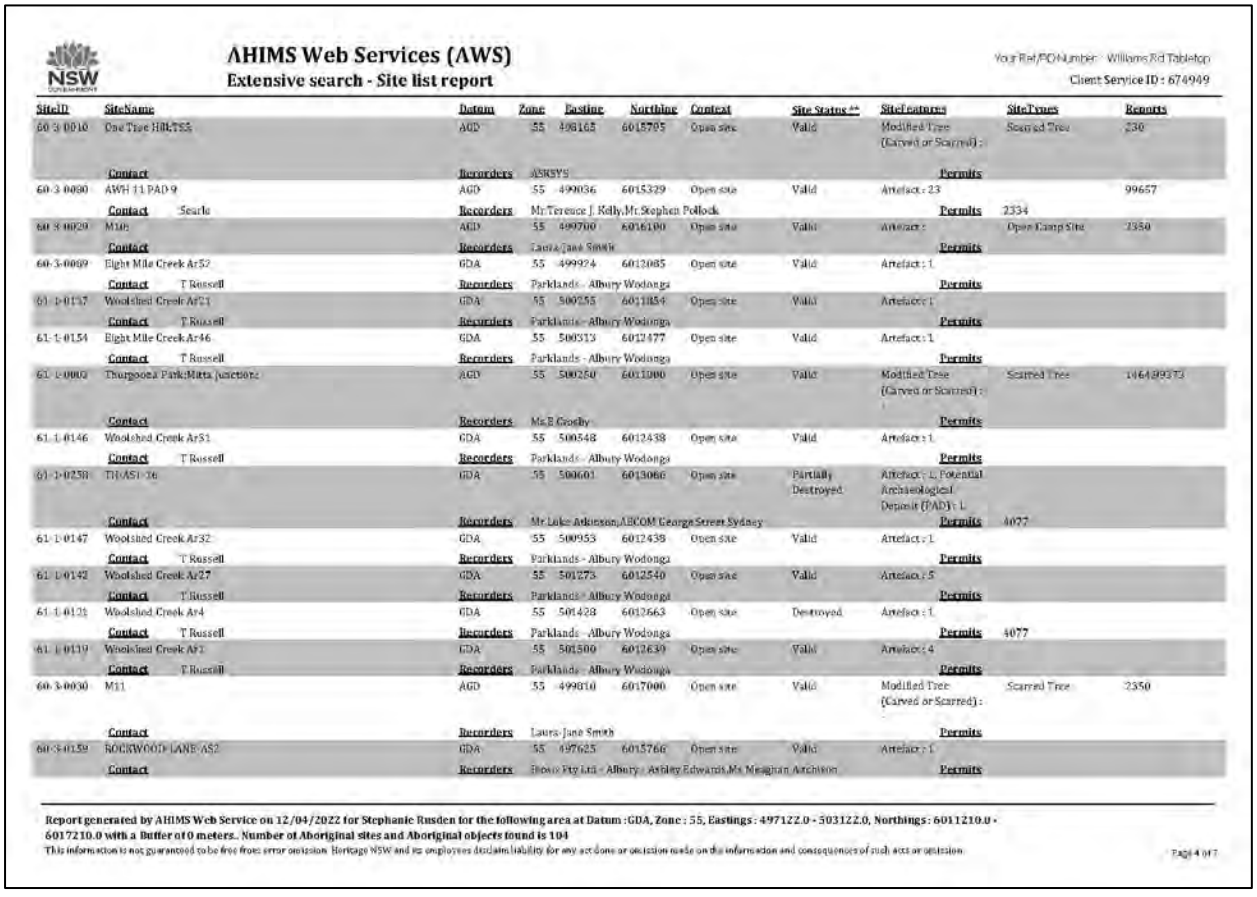

NSW

AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number : Williams Rd Tabletop
Client Service ID : 674949

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status **	SiteFeatures	SiteTypes	Reports
60-3-0010	One Tree Hill;TS5	AGD	55	498165	6015705	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	230
	Contact	Recorders	ASKSYS					Permits		
60-3-0080	AWH 11 PAD 9	AGD	55	499036	6015329	Open site	Valid	Artefact : 23		99657
	Contact Searle	Recorders	Mr Terence J. Kelly,Mr Stephen Pollock					Permits	2334	
60-3-0029	M10;	AGD	55	499700	6016100	Open site	Valid	Artefact :	Open Camp Site	2350
	Contact	Recorders	Laura-Jane Smith					Permits		
60-3-0069	Eight Mile Creek Ar52	GDA	55	499924	6012085	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0137	Woolshed Creek Ar21	GDA	55	500255	6011854	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0154	Eight Mile Creek Ar46	GDA	55	500313	6012477	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0003	Thurgoona Park;Mitta Junction;	AGD	55	500250	6013000	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1464399373
	Contact	Recorders	Ms E Crosby					Permits		
61-1-0146	Woolshed Creek Ar31	GDA	55	500548	6012438	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0258	TH AS1-16	GDA	55	500601	6013086	Open site	Partially Destroyed	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders	Mr Luke Atkinson,AECOM George Street Sydney					Permits	4077	
61-1-0147	Woolshed Creek Ar32	GDA	55	500953	6012438	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0142	Woolshed Creek Ar27	GDA	55	501275	6012540	Open site	Valid	Artefact : 5		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0125	Woolshed Creek Ar4	GDA	55	501428	6012663	Open site	Destroyed	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits	4077	
61-1-0139	Woolshed Creek Ar1	GDA	55	501500	6012630	Open site	Valid	Artefact : 4		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0030	M11	AGD	55	499010	6017000	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	2350
	Contact	Recorders	Laura-Jane Smith					Permits		
60-3-0159	ROCKWOOD-LANE-AS2	GDA	55	497625	6015766	Open site	Valid	Artefact : 1		
	Contact	Recorders	Biosis Pty Ltd - Albury - Ashley Edwards,Ms Meaghan Aitchison					Permits		

Report generated by AHIMS Web Service on 12/04/2022 for Stephanie Rusden for the following area at Datum : GDA, Zone : 55, Eastings : 497122.0 - 503122.0, Northings : 6011210.0 - 6017210.0 with a Buffer of 0 meters. Number of Aboriginal sites and Aboriginal objects found is 104

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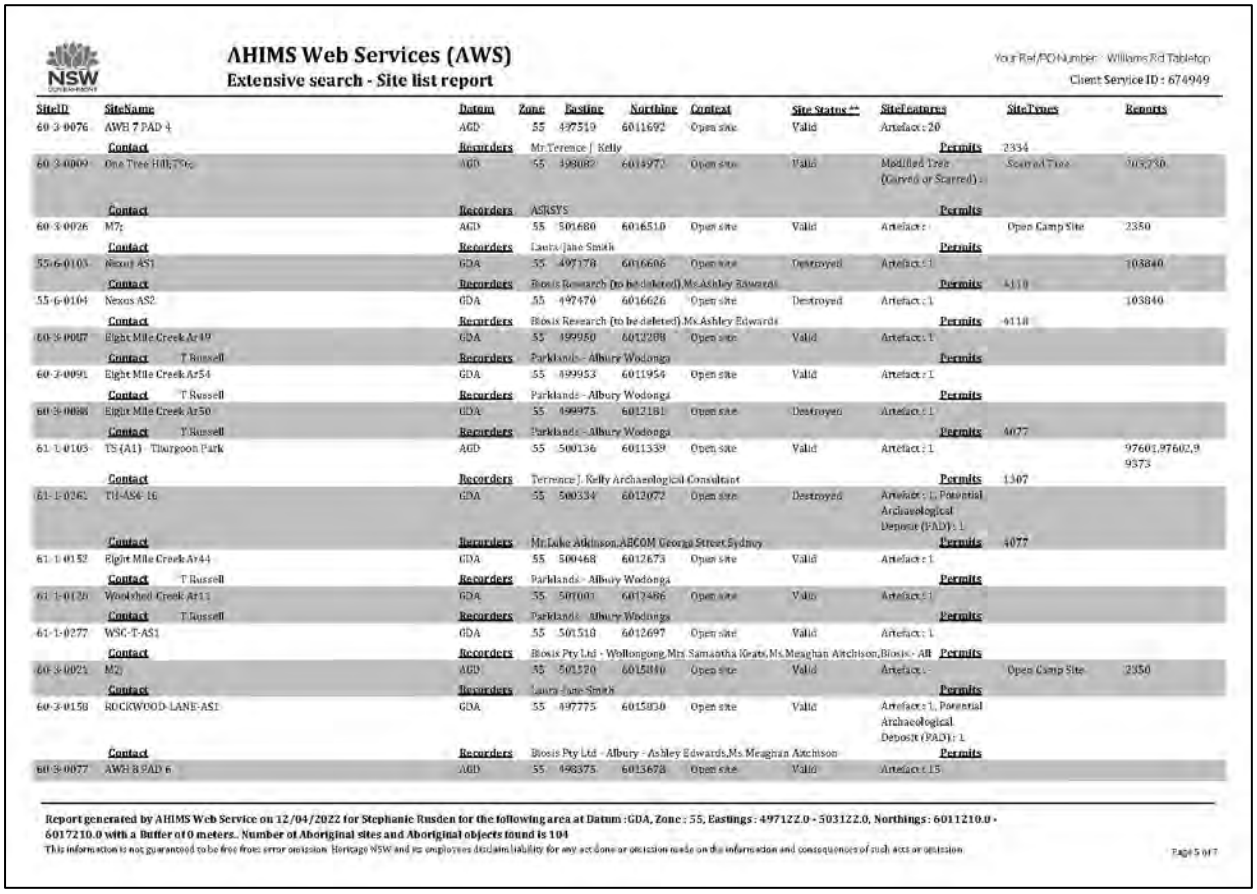

AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number: Williams Rd Tabletop
Client Service ID : 674949

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status **	SiteFeatures	SiteTypes	Reports
60-3-0076	AWH 7 PAD 4	AGD	55	497519	6011692	Open site	Valid	Artefact : 20		
	Contact	Recorders	Mr Terence J Kelly					Permits	2334	
60-3-0009	One Tree Hill;TS;	AGD	55	498082	6014973	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	103750
	Contact	Recorders	AHMS YS					Permits		
60-3-0026	M7;	AGD	55	501680	6016510	Open site	Valid	Artefact :	Open Camp Site	2350
	Contact	Recorders	Laura-Jane Smith					Permits		
55-6-0103	Nexus AS1	GDA	55	497178	6016606	Open site	Destroyed	Artefact : 1		103840
	Contact	Recorders	Biosis Research (to be deleted),Ms Ashley Bowerman					Permits	4110	
55-6-0104	Nexus AS2	GDA	55	497470	6016626	Open site	Destroyed	Artefact : 1		103840
	Contact	Recorders	Biosis Research (to be deleted),Ms Ashley Edwards					Permits	4110	
60-3-0047	Eight Mile Creek Ar49	GDA	55	499950	6013208	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0091	Eight Mile Creek Ar54	GDA	55	499953	6011954	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0088	Eight Mile Creek Ar50	GDA	55	499975	6012181	Open site	Destroyed	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits	4077	
61-1-0103	TS (A1) Thurgoon Park	AGD	55	500136	6011339	Open site	Valid	Artefact : 1		97601,97602,9 9373
	Contact	Recorders	Terrence J. Kelly Archaeological Consultant					Permits	1307	
61-1-0261	TH-AS4-16	GDA	55	500334	6012072	Open site	Destroyed	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders	Mr Luke Atkinson,AECOM George Street Sydney					Permits	4077	
61-1-0152	Eight Mile Creek Ar44	GDA	55	500468	6012673	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0120	Woolshed Creek Ar13	GDA	55	501003	6012486	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0277	WSC-T-AS1	GDA	55	501518	6012697	Open site	Valid	Artefact : 1		
	Contact	Recorders	Biosis Pty Ltd - Wollongong,Mrs Samantha Keats,Ms Meaghan Aitchison,Biosis - All					Permits		
60-3-0021	M2;	AGD	55	501570	6015440	Open site	Valid	Artefact :	Open Camp Site	2350
	Contact	Recorders	Laura-Jane Smith					Permits		
60-3-0158	ROCKWOOD-LANE-AS1	GDA	55	497775	6015830	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders	Biosis Pty Ltd - Albury - Ashley Edwards,Ms. Meaghan Aitchison					Permits		
60-3-0077	AWH 8 PAD 6	AGD	55	498375	6013678	Open site	Valid	Artefact : 15		

Report generated by AHIMS Web Service on 12/04/2022 for Stephanie Rusden for the following area at Datum : GDA, Zone : 55, Eastings : 497122.0 - 503122.0, Northings : 6011210.0 - 6017210.0 with a Buffer of 0 meters. Number of Aboriginal sites and Aboriginal objects found is 104

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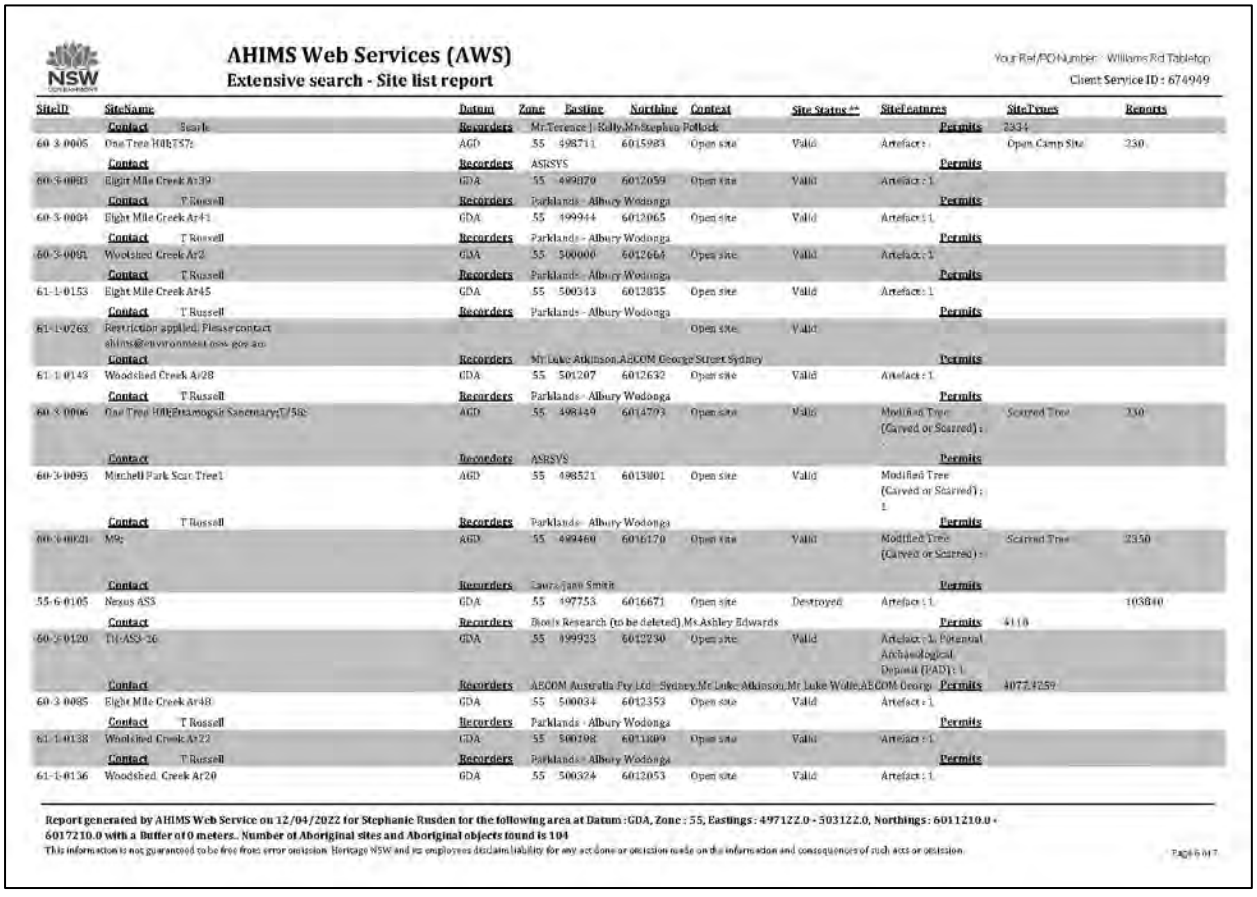

AHIMS Web Services (AWS)
Extensive search - Site list report

Your Ref/PO Number: Williams Rd Tabletop
Client Service ID : 674949

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status **	SiteFeatures	SiteTypes	Reports
	Contact Searle	Recorders	Mr Terence J. Kelly,Ms Stephen Pollock					Permits	2334	
60-3-0005	One Tree Hill;TS7;	AGD	55	498711	6015983	Open site	Valid	Artefact :	Open Camp Site	230
	Contact	Recorders	AHMS YS					Permits		
60-3-0083	Eight Mile Creek Ar39	GDA	55	499870	6012059	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0084	Eight Mile Creek Ar41	GDA	55	499944	6012065	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0081	Woolshed Creek Ar2	GDA	55	500000	6012664	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0153	Eight Mile Creek Ar45	GDA	55	500343	6012835	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0263	Restriction applied. Please contact ahims@environment.nsw.gov.au					Open site	Valid			
	Contact	Recorders	Mr Luke Atkinson,AECOM George Street Sydney					Permits		
61-1-0143	Woodshed Creek Ar28	GDA	55	501207	6012632	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0006	One Tree Hill;Bramwood Sanctuary;TS8;	AGD	55	498449	6014793	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	230
	Contact	Recorders	AHMS YS					Permits		
60-3-0093	Mitchell Park Scar Tree1	AGD	55	498521	6013801	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
60-3-0021	M9;	AGD	55	499460	6016170	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	2350
	Contact	Recorders	Laura-Jane Smith					Permits		
55-6-0105	Nexus AS3	GDA	55	497753	6016671	Open site	Destroyed	Artefact : 1		103840
	Contact	Recorders	Biosis Research (to be deleted),Ms Ashley Edwards					Permits	4110	
60-3-0120	TH-AS3-26	GDA	55	499923	6012230	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders	AECOM Australia Pty Ltd - Sydney,Mr Luke Atkinson,Mr Luke Wolfe,AECOM George					Permits	4077,4259	
60-3-0085	Eight Mile Creek Ar48	GDA	55	500034	6012353	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0138	Woolshed Creek Ar22	GDA	55	500198	6013389	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0136	Woodshed Creek Ar20	GDA	55	500324	6012053	Open site	Valid	Artefact : 1		

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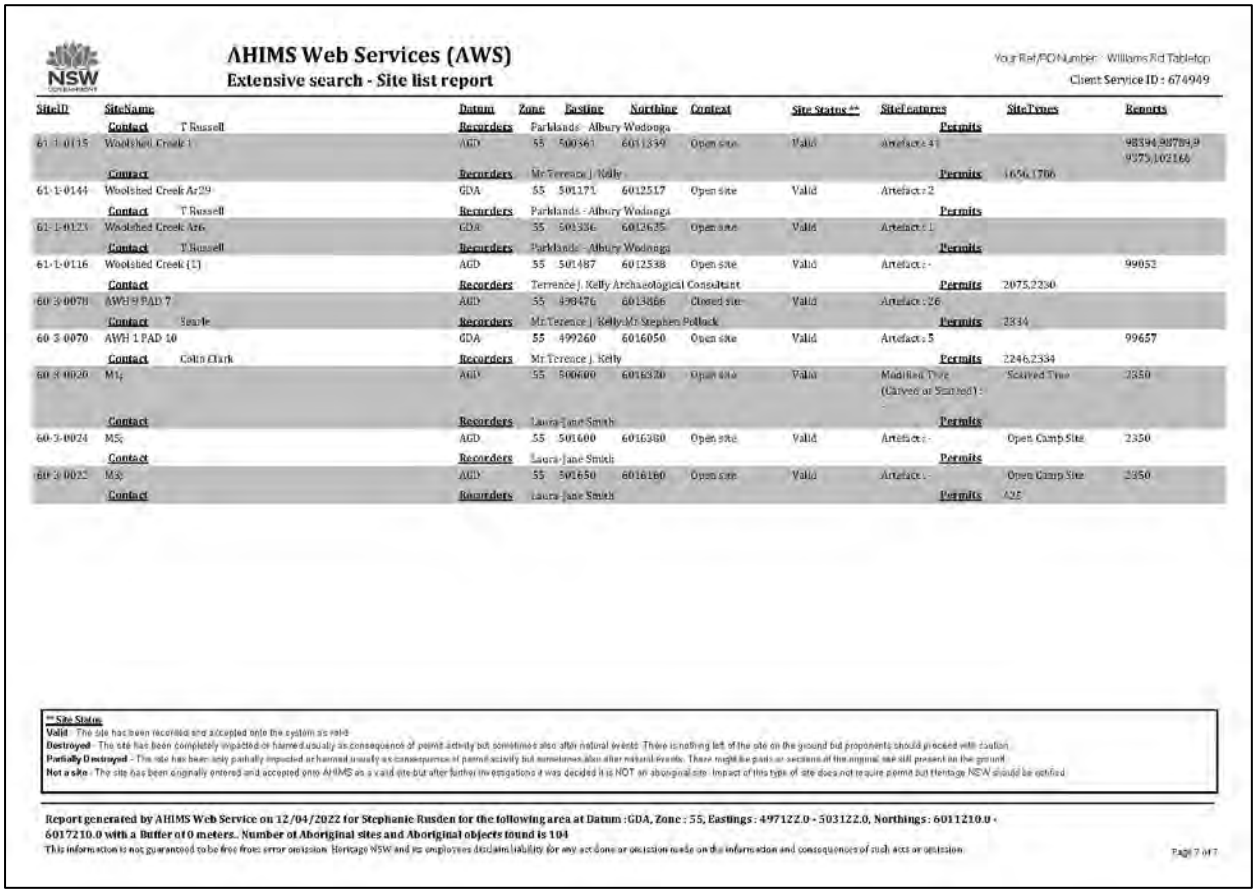

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : Williams Rd Tabletop
Client Service ID : 674949

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status **	SiteFeatures	SiteTypes	Reports
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0115	Woolshed Creek 1	AGD	55	500561	6011339	Open site	Valid	Artefact : 41		98394,98789,9375,102166
	Contact	Recorders	Mr Terrence J. Kelly					Permits	1656,1766	
61-1-0144	Woolshed Creek Ar29	GDA	55	501171	6012517	Open site	Valid	Artefact : 2		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0123	Woolshed Creek Ar6	GDA	55	501336	6012635	Open site	Valid	Artefact : 1		
	Contact T Russell	Recorders	Parklands - Albury Wodonga					Permits		
61-1-0116	Woolshed Creek (1)	AGD	55	501487	6012538	Open site	Valid	Artefact : -		99052
	Contact	Recorders	Terrence J. Kelly Archaeological Consultant					Permits	2075,2230	
60-3-0078	AWH 9 PAD 7	AGD	55	498476	6013866	Closed site	Valid	Artefact : 26		
	Contact Searle	Recorders	Mr Terrence J. Kelly,Mr Stephen Pollack					Permits	2334	
60-3-0070	AWH 1 PAD 10	GDA	55	499260	6016050	Open site	Valid	Artefact : 5		99657
	Contact Colin Clark	Recorders	Mr Terrence J. Kelly					Permits	2246,2334	
60-3-0020	M1;	AGD	55	500600	6016320	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	2350
	Contact	Recorders	Laura-Jane Smith					Permits		
60-3-0024	M5;	AGD	55	501600	6016380	Open site	Valid	Artefact : -	Open Camp Site	2350
	Contact	Recorders	Laura-Jane Smith					Permits		
60-3-0025	M3;	AGD	55	501650	6016160	Open site	Valid	Artefact : -	Open Camp Site	2350
	Contact	Recorders	Laura-Jane Smith					Permits	A25	

Site Status
Valid - The site has been recorded and accepted into the system as valid
Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution
Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground
Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 12/04/2022 for Stephanie Rusden for the following area at Datum : GDA, Zone : 55, Eastings : 497122.0 - 503122.0, Northings : 6011210.0 - 6017210.0 with a Buffer of 0 meters. Number of Aboriginal sites and Aboriginal objects found is 104
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APPENDIX 5: ABORIGINAL HERITAGE: UNANTICIPATED FINDS PROTOCOL

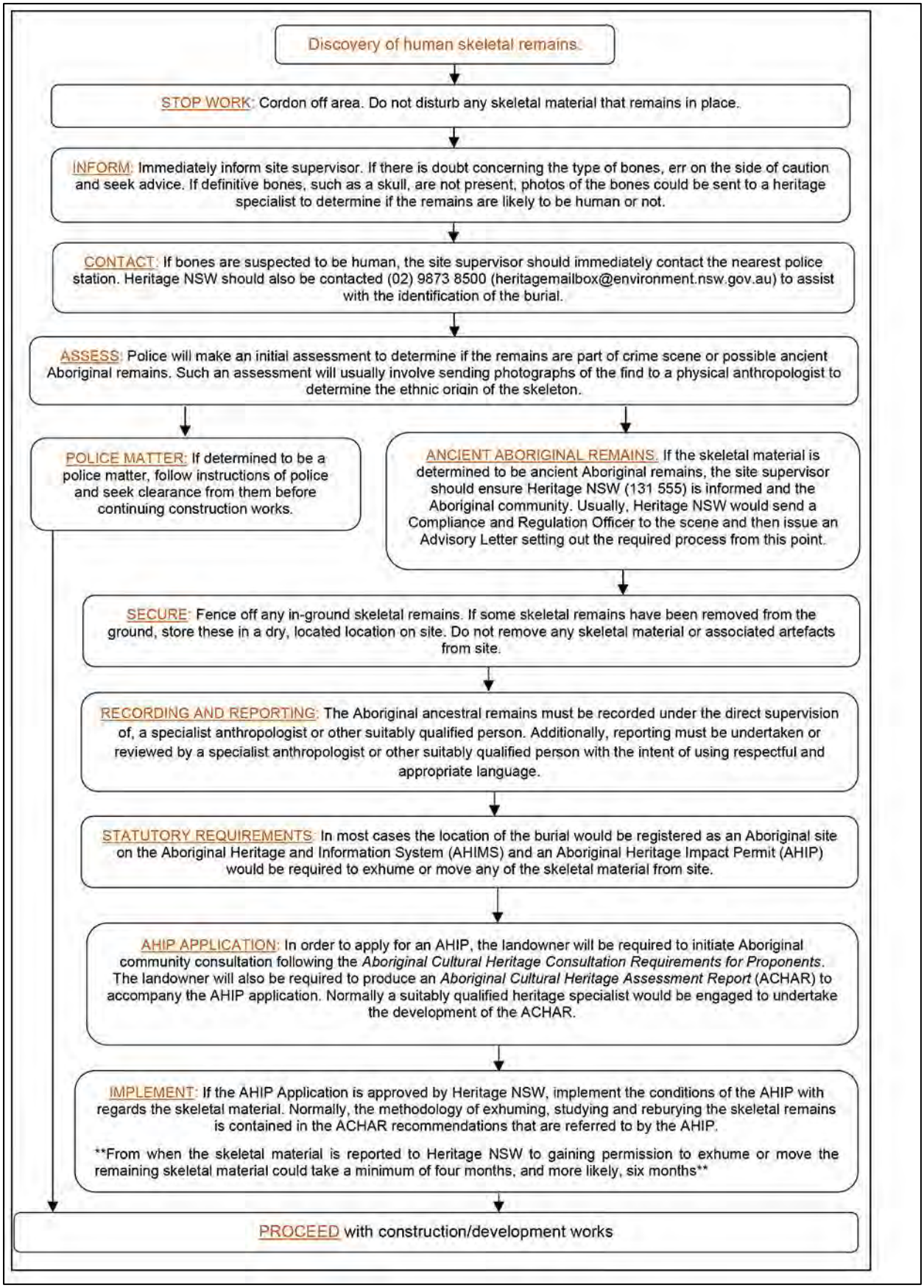
An Aboriginal artefact is anything which is the result of past Aboriginal activity. This includes stone (artefacts, rock engravings etc.), plant (culturally scarred trees) and animal (if showing signs of modification; i.e. smoothing, use). Human bone (skeletal) remains may also be uncovered while onsite.

Cultural heritage significance is assessed by the Aboriginal community and is typically based on traditional and contemporary lore, spiritual values, and oral history, and may also consider scientific and educational value.

Protocol to be followed if previously unrecorded or unanticipated Aboriginal object(s) are encountered:

1. If any Aboriginal object is discovered and/or harmed in, or under the land, while undertaking the proposed development activities, the proponent must:
    a. Not further harm the object
    b. Immediately cease all work at the particular location
    c. Secure the area to avoid further harm to the Aboriginal object
    d. Notify Heritage NSW as soon as practical on (02) 9873 8500 (heritagemailbox @environment.nsw.gov.au), providing any details of the Aboriginal object and its location; and
    e. Not recommence any work at the particular location unless authorised in writing by Heritage NSW.
2. If Aboriginal burials are unexpectedly encountered during the activity, work must stop immediately, the area secured to prevent unauthorised access and NSW Police and Heritage NSW contacted.
3. Cooperate with the appropriate authorities and relevant Aboriginal community representatives to facilitate:
    a. The recording and assessment of the find(s)
    b. The fulfilment of any legal constraints arising from the find(s), including complying with Heritage NSW directions
    c. The development and implementation of appropriate management strategies, including consultation with stakeholders and the assessment of the significance of the find(s).
4. Where the find(s) are determined to be Aboriginal object(s), recommencement of work in the area of the find(s) can only occur in accordance with any consequential legal requirements and after gaining written approval from Heritage NSW (normally an Aboriginal Heritage Impact Permit).

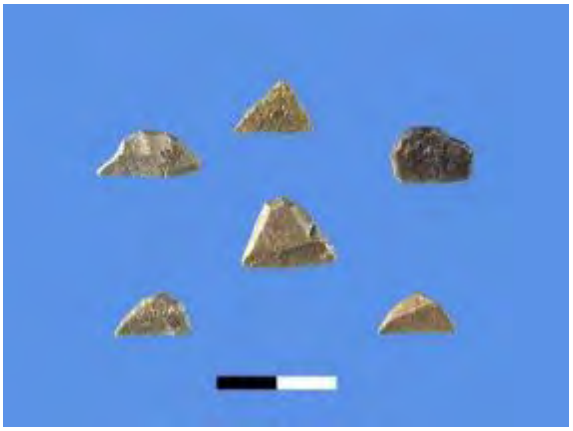
APPENDIX 6: UNANTICIPATED SKELETAL REMAINS PROTOCOL



APPENDIX 7: ABORIGINAL HERITAGE: ARTEFACT IDENTIFICATION

A retouched silcrete flake

A quartz flake



Microliths (scale = 1 cm)

Volcanic flakes

Flake characteristics (scale = 1 cm)

A mudstone/tuff core from which flakes have been removed