

Appendix D

ABORIGINAL CULTURAL HERITAGE ASSESSMENT

Aboriginal Cultural Heritage Assessment Report

Proposed Goonumbla Solar Farm, Parkes, NSW

Report to Renewable Energy Developments Pty Ltd

By

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A handwritten signature in blue ink, appearing to read "Doug Williams", is positioned above a horizontal line.

Doug Williams
Principal Consultant

EXECUTIVE SUMMARY

Renewable Energy Developments Pty Ltd proposes to establish a solar farm ~10km west of Parkes in the central west of NSW in a locality known as Goonumbla. Access Archaeology and Heritage Pty Ltd (AAH) was engaged by Renewable Energy Developments Pty Ltd to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the proposed development

The total property area being purchased for the solar farm is ~387 hectares and the proposed development footprint covers ~ 290 Hectares. Most of the difference in area is taken up by the slopes and crest of Millers Lookout which will be unsuitable for the installation of solar panels. Installation of solar panels requires minimal ground preparation as they are supported by legs that are drilled into the ground. Apart from establishment of the panel supports on ground screws the main ground disturbance would be from the establishment of cables in trenches and access tracks.

Consultation with Aboriginal stakeholders was undertaken in accordance with clause 80C of the *National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010*. The notification phase resulted in Robert Clegg (Parkes Aboriginal Community Working Party) and Jamie Gray (Binjang Wellington Aboriginal Heritage Survey) expressing interest in the project, and both participated in the field survey which took two days.

A total of sixteen archaeological sites were recorded during the field survey, these being:

- 12 Isolated artefacts,
- 3 Artefact Scatters and
- 1 stone hatchet quarry

The stone hatchet quarry is within the property boundary but is outside the proportion of the property able to be developed as a solar farm. It is therefore outside the formal consideration of the study.

It was recommended:

THE DEVELOPMENT GENERALLY

1. The development proposal should proceed with no further archaeological assessment. No areas of Potential Archaeological Deposit were identified that would warrant test excavation and the significance of the Aboriginal heritage objects within the study area is low. Monitoring of ground disturbing activities is not a warranted mitigation strategy as the widespread and sparse scatter is unlikely to be observed during the proposed development activities.
2. Where the development footprint is extended beyond the area currently assessed, the additional area should be subject to further archaeological survey in association with the registered Aboriginal Parties.

MANAGEMENT OF KNOWN ABORIGINAL SITES AND OBJECTS

3. The collection of flaked stone artefacts currently recorded within the property boundary is unnecessary as they are common and their ability to be found again is limited, through even a modest passage of time.
4. The known location of site GSF-5 at the western end of the study area should be pegged prior to development to ensure it remains undisturbed. If this cannot be achieved site GSF-5 should be

collected and the artefact conserved in cooperation with the Registered Aboriginal Parties. If this artefact is moved to a new location on the property the AHIMS site record form for the site must be amended and submitted to the NSW Office of Environment.

5. If the road works on Pat Meredith Drive required by the Minister's consent for the Parkes Solar Farm have not been constructed before the Goonumbla Solar Farm construction commences, and the proposed access to the Goonumbla site off Pat Meredith Drive is within 20 metres of the recorded location of PIF1 (43-3-0083 Bogan Pick) and Ridgey Creek – Parkes (43-3-0090 artefact) then an attempt to relocate these sites/artefacts should be made before the road works are undertaken, consistent with the Minister's consent (SSD 6784, 16 June 2016). This should be undertaken by the Registered Aboriginal Parties for this project and a qualified archaeologist. Page iii
6. Wilsons Lookout Quarry will not be affected by the development of the proposed Goonumbla Solar Farm as it is sufficiently distant from the more level land able to be developed for the purpose.
7. Ongoing management of the Wilsons Lookout Quarry must be considered in any overall property planning. Further management measures (for example, but not restricted to: fencing, revegetation, stock management, fire management, leasing, quarrying) may constitute harm even if a particular action is undertaken with the intent to be have an overall beneficial effect. Further assessment of such actions should be undertaken on an as needs basis.

MANAGEMENT OF SITES RECORDED DURING DEVELOPMENT AND/OR OPERATION

8. Section 89A of the National Parks and Wildlife (NSW) 1974 requires that any person who is aware of the existence of an Aboriginal Object is required to notify the Chief Executive of the NSW Office of Environment and Heritage. To ensure compliance with Section 89A the proponent should undertake the following:
 - a. Prepare an information poster for site staff that describes the most likely site occurrences that might be observed and how to recognise them. A face to face heritage induction may be considered.
 - b. Where a flaked ISOLATED ARTEFACT is discovered,
 - i. Record the location with a GPS using Eastings and Northings based on the GDA 94 Zone 55 Datum
 - ii. Take a photograph of the artefact with a scale (eg ruler) and a photograph of the general location noting the orientation (eg, 'looking north' or 'looking east' etc)
 - iii. Move the artefact during work that may harm it and return it to the location immediately the work has concluded.
 - c. Where an ISOLATED IMPLEMENT (eg, hammer, hatchet, grindstone, etc) is discovered,
 - i. Record the location with a GPS using Eastings and Northings based on the GDA 94 Zone 55 Datum
 - ii. Take a photograph of the artefact with a scale (eg ruler) and a photograph of the general location noting the orientation (eg, 'looking north' or 'looking east' etc)
 - iii. Collect the artefact and store securely on site along with labelling that includes the Eastings and Northings.
 - d. Where any other form or cluster of Aboriginal Objects is discovered,
 - i. Record the location with a GPS using Eastings and Northings based on the GDA 94 Zone 55 Datum
 - ii. Take a photograph of the artefacts with a scale (eg ruler) and a photograph of the general location noting the orientation (eg, 'looking north' or 'looking east' etc)
 - iii. Isolate the area with a ~50m buffer and contact a qualified archaeologist for further information/advice on the most appropriate strategy

- e. Within three months of making a discovery Renewable Energy Developments should inform OEH of its existence through a qualified archaeologist submitting an AHIMS recording form for each discovery. The person submitting the information will need to be supplied with the information recorded at the time of field recording and/or collection.
9. Although very unlikely, if any object is found suspected to be human remains work at the location must cease and the following must be contacted immediately:
 - a. NSW Police – Parkes Police Station
 - b. NSW OEH – Dubbo Office

The location is to be made secure to prevent unauthorised access. Work on the Goonumbra Solar Farm project may continue at a suitable distance from the potential human remains – not closer than 100m.

The proponent, their employees, contractors and agents are reminded that it is an offence under the National Parks and Wildlife Act (NSW) 1974 to destroy, deface or otherwise disturb an Aboriginal Object without first obtaining the consent of the Director General of the NSW NPWS.

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1. INTRODUCTION

1.1 Background

Renewable Energy Developments Pty Ltd proposes to establish a solar farm ~10km west of Parkes in the central west of NSW in a locality known as Goonumbla. Access Archaeology and Heritage Pty Ltd (AAH) was engaged by Renewable Energy Developments Pty Ltd to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the proposed development.

The proposed development will be located within the following lots:

- Lot 1 DP602329
- Lot 2 DP602329
- Lot 409 DP750152
- Lot 5 DP854193
- Lot 1 DP877903

Establishing a solar farm would involve ground disturbance with potential to disturb Aboriginal heritage objects which are protected under the NSW *National Parks and Wildlife Act 1974*. The proposed development has been determined to be State Significant Development, and as such is exempt from the requirement to obtain an Aboriginal Heritage Impact Permit to harm Aboriginal objects, but it is a requirement that Aboriginal heritage be assessed in a manner consistent with:

- *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*
<http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf>
- *Code of Practice for Archaeological Investigations*
<http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf>
- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*
<http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf>

This report documents the assessment of Aboriginal heritage in a manner consistent with an Aboriginal Cultural Heritage Assessment (ACHA).

It details the proposed methods for that ACHA and records input from registered Aboriginal parties regarding information relating to the known cultural values of the area, and/or comments on the proposed assessment methods. It provides registered Aboriginal parties with information about the project in accordance with the *NSW Office of Environment and Heritage's (OEH) Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*.

1.2 The Nature of the Development

The total property area being purchased for the solar farm is ~387 hectares and the proposed development footprint covers ~290 Hectares. Most of the difference in area is taken up by the slopes and crest of Millers Lookout which will be unsuitable for the installation of solar panels. Installation of solar panels requires minimal ground preparation as they are supported by legs that are drilled into the ground. There would be ground disturbance from the establishment of cables in trenches and access tracks, and other ancillary development. The primary access to the proposed development would be off Condobolin Road via Pat Meredith Drive. This access will require an upgrade to the intersection of these two roads and Pat Meredith Drive for as far as required to secure suitable access to the development area. Part of this road upgrade would be shared with the neighbouring solar farm development to the south being undertaken by Neoen Australia Pty Ltd, as per the Minister's consent for that project (SSD 6784, 16 June 2016).

1.3 Project Objectives

The objectives of this project were:

- Undertake a search of the NSW Office of Environment and Heritage (OEH) Aboriginal Heritage Management System (AHIMS) database to determine if there had been any archaeological material recorded in the subject land (Appendix 1).
- Consult the local Aboriginal community to standards prescribed in *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*.
- To undertake an archaeological survey to determine if there are landforms with a high potential to contain Aboriginal objects and whether Aboriginal objects occur within the study area.
- Assess the nature and level of disturbance of these landforms and the integrity of any Aboriginal objects.
- Complete a report on assessment and present recommendations for management of Aboriginal heritage in the study area.

1.4 Participants

Heritage Advisor – Doug Williams Bachelor of Arts – Honours (ANU) Graduate Diploma of Applied Science (University of Canberra), Full Member Australian Association of Consulting Archaeologists

Doug Williams has been a professional archaeologist and heritage manager since 1992 and has undertaken large-scale complex archaeological projects in New South Wales, ACT, Western Australia, Victoria and South Australia. He has qualifications in Australian Aboriginal archaeology and post graduate qualifications in Cultural Heritage Management. In particular, in recent years Doug has overseen several large excavation projects, as well as having implemented and managed field survey of several thousand square kilometres of development area in WA, NSW, ACT, Victoria and SA. In the course of this work he has worked on sites of local, regional, state, national and international significance.

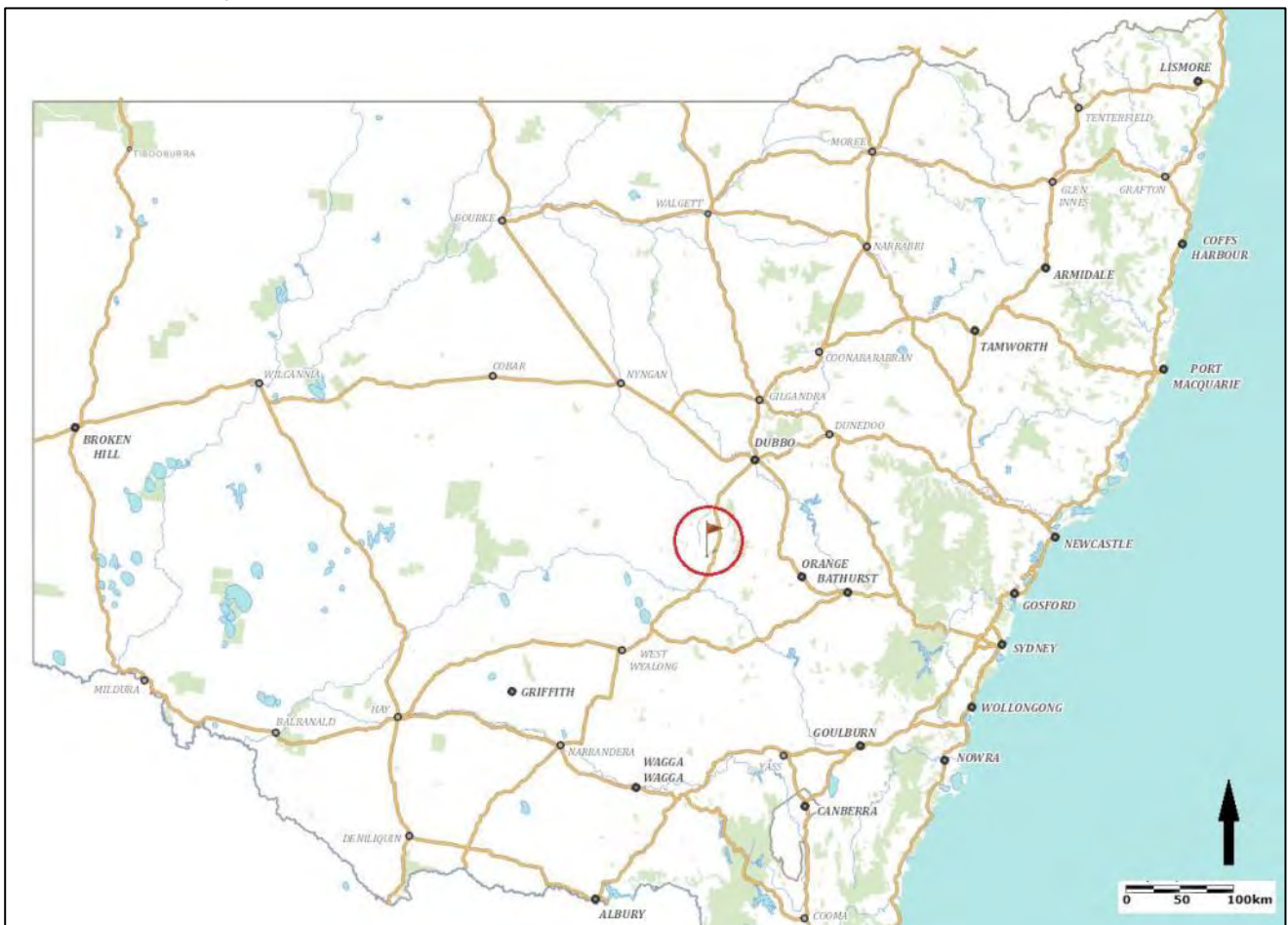


Figure 1. Location of the Study Area

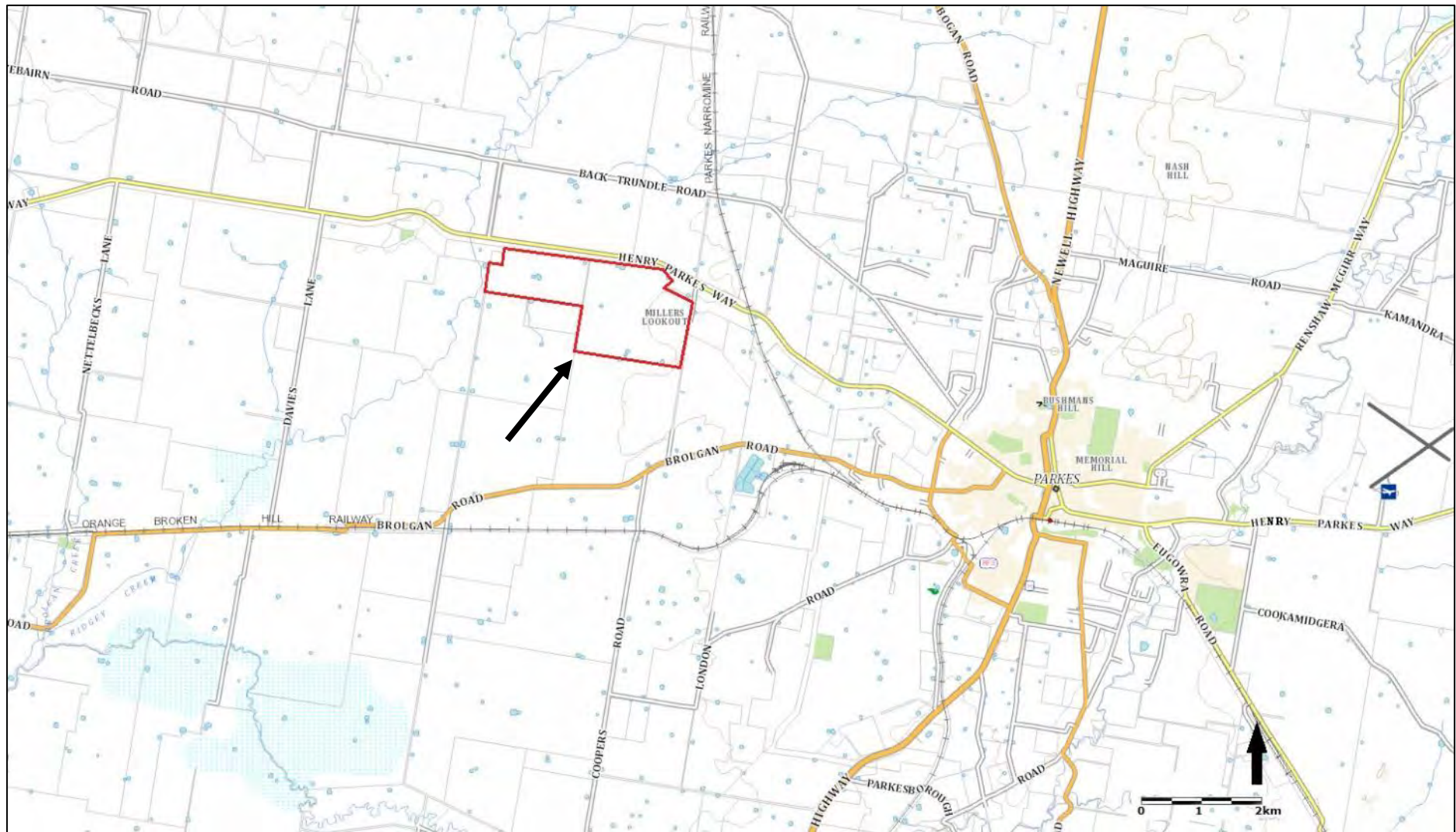


Figure 2. The Study Area.

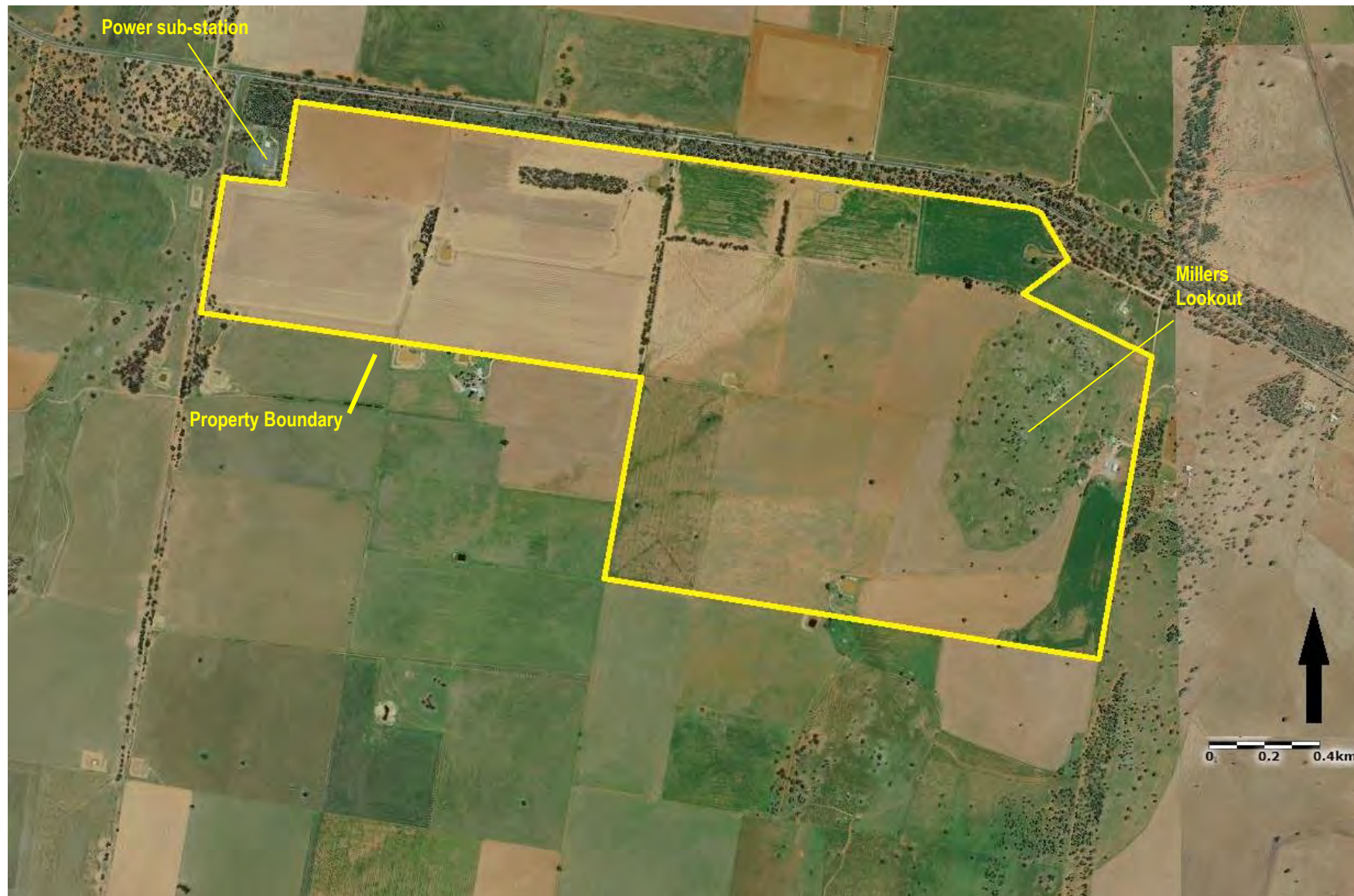


Figure 3. Study Area, Aerial

2. LEGISLATIVE FRAMEWORK

2.1 The National Parks and Wildlife Act 1974 (NSW)

In NSW, Aboriginal heritage objects and places are protected mainly by the National Parks and Wildlife Act 1974 (NSW) (NPWA) which contains provisions making it illegal to harm Aboriginal objects and Aboriginal places without appropriate defence or permission. The NPWA is presently administered by the NSW Office of Environment and Heritage (OEH). Under definitions provided in the Act:

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

Individuals or corporations may be prosecuted against two levels of offence. Knowingly or deliberately harming or desecrating Aboriginal places/objects is the higher of the two levels. Lower level offences are known as 'strict liability' offences - offences regardless of whether or not the offender knows they are harming an Aboriginal object or desecrating an Aboriginal place. A person or corporation may have a defence against such prosecution where they have:

- An Aboriginal Heritage Impact Permit (AHIP) authorising the harm (s.87(1))
- Exercised due diligence to establish Aboriginal objects will not be harmed (s.87(2))
- Otherwise complied with legislative requirements.

Due diligence may be demonstrated by following requirements described in the National Parks and Wildlife Regulation 2009 (the Regulation) or a code of practice adopted or prescribed by the NPW Regulation (s.87(3)).

2.2 The Environment Planning and Assessment Act 1979 (NSW)

The Environment Planning & Assessment Act (NSW) 1979 (EPAA) establishes a planning structure that requires consideration of environmental impacts of new projects, including impact to Aboriginal cultural heritage. Proposals classified as State Significant Development (SSD) or State Significant Infrastructure (SSI) under the EPAA are exempt from the requirement to obtain AHIPs to undertake works that may harm Aboriginal Objects. Definitions of harm outlined in the NPWA are obviated once a development is classified as SSD or SSI and permission instead rests with the Secretary of the Department of Planning and Environment.

In this process the EPAA requires consideration of possible impact to cultural heritage that may arise from development activities and while formal AHIPs are not required a formal assessment process must be documented and it is current practice for this process to follow standards and guidelines established by NSW OEH for these purposes, in particular those steps outlined in *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*.

3. CONSULTATION

Consultation with Aboriginal stakeholders was undertaken in accordance with clause 80C of the *National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010*.

A four step process of consultation with Aboriginal stakeholders was undertaken in accordance with clause 80C of the *National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010*. The consultation steps, listed below, are outlined in the *OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (ACHCRP 2010)* guide.

- Step 1 – Notification of project proposal and registration of interest.
- Step 2 – Presentation of information about the proposed project.
- Step 3 – Gathering information about cultural significance.
- Step 4 – Review of draft cultural heritage assessment report.

Consultation Step 1 – NOTIFICATION

Notification letters were sent to the relevant bodies/agencies listed in section 4.1.2 of the *ACHCRP 2010*, requesting details of any parties with a known interest, or who hold knowledge related to the subject area (Attachment 1). Notification of the Aboriginal heritage project was undertaken via the placement of a newspaper notice in the *Parkes Advocate* on Friday 13 May 2016.



Figure 4. Copy of advertisement

Following receipt of a list of potential Aboriginal stakeholders from the OEH, notification letters were sent to these organisations and individuals on the 17th of May 2016.

The notification phase resulted in the following groups expressing interest in the project:

- Robert Clegg (Parkes Aboriginal Community Working Party)
- Jamie Gray (Binjang Wellington Aboriginal Heritage Survey)

Consultation Step 2 INFORMATION TO RESPONDENTS

A *Project Proposal Information* document for the assessment was forwarded to respondents. The document provided details of the project and the proposed heritage assessment methodology and invited comments from interested respondents. The document also sought any information regarding known Aboriginal cultural significance values associated with the subject area and/or any Aboriginal objects contained therein (Attachment 2)

Consultation Step 3 GATHERING INFORMATION ABOUT CULTURAL SIGNIFICANCE

The field inspection was attended by both Robert Clegg and Jamie Gray. General discussion was had regarding local Aboriginal heritage and the potential cultural significance of the area. No particular or immediate concerns were raised regarding the study area from the perspective of non-tangible cultural heritage.

Consultation Step 4 REVIEW

The draft report for this project was provided to the registered Aboriginal parties on 12 July 2016. No written response was received from Jamie Gray. Robert Clegg responded in detail and his assessment is included as Attachment 3. A summary of the response is included at section 9.1 below.

4. ENVIRONMENTAL BACKGROUND

4.1 Geology and Topography

The study area is located in the NSW South Western Bioregion on undulating plain and low hills. Millers Lookout, the low hill in the east of the study area is an outcrop of Goonumbla Volcanics which are reported to contain andesite, volcanoclastic conglomerate and sandstone and breccia. Conglomerates may yield stone material suitable for making flaked stone tools, and andesite is a material suitable for making stone axes. Granite, quartz and quartzite are also common materials in this landscape (OEH 2016a).

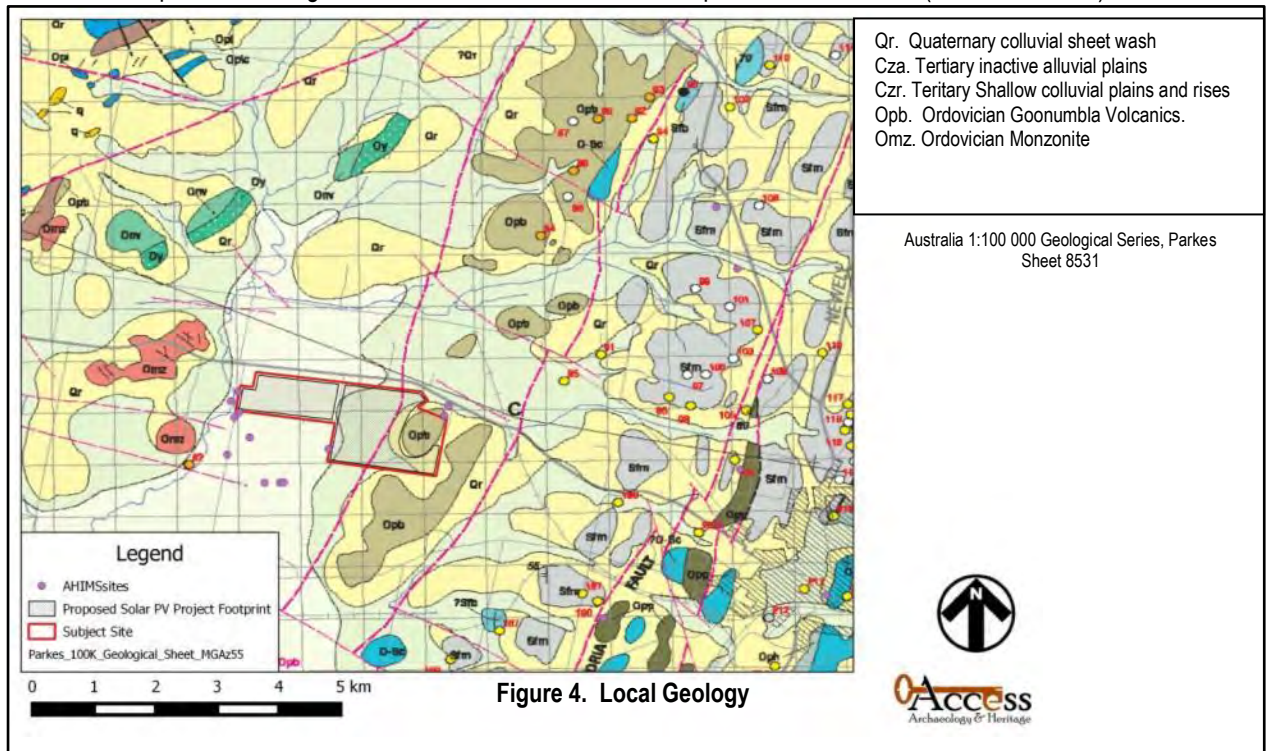
There is very little topographic variation in the study area where construction of the solar farm is proposed, as the hilly portion of Millers Lookout is not proposed to be developed. Gently sloping colluvial foot slopes of Millers Lookout fall mainly to the west, becoming undifferentiated level plain. Soil in the study area is generally red-brown to dark brown clay loam (OEH 2016b).

4.2 Vegetation

The study area has been cleared of virtually all native vegetation and is currently used for grazing and cropping. Some native trees were present, scattered across the paddocks. The original vegetation of the area was open Eucalyptus woodland dominated by grey box (*Eucalyptus microcarpa*), yellow box (*Eucalyptus melliodora*) and white box (*Eucalyptus albens* with stands of cypress pine (*Callitris glaucophylla*) on higher and sandier locations.

4.3 Landuse

European grazing and agricultural activities have had an impact on the study area for a long period. Clearing practices will have disturbed the soil profile as will cultivation. Undertaking these activities has ramifications for the potential survival of Aboriginal archaeological material in its original location. Aboriginal scarred trees, for example, would not be expected to survive broadscale clearing activities. Likewise sites like shell middens suffer a drastic loss of integrity after being cultivated. However, the effect of cultivation on sites like clusters of stone artefacts is less dramatic and spatial clustering can still be discerned even after multiple cultivation events (cf Williams 2007).



5. ARCHAEOLOGY OF THE LOCAL AREA

5.1 Ethnohistoric Setting

Ethnohistorical records are documentary pieces of evidence that record the contemporary observations of Aboriginal people by early European explorers and settlers. They are often useful in the reconstruction of the picture of Aboriginal life before the European settlement. For the purposes of this study, ethnohistorical records are informative in terms of predicting the sorts of sites that might occur in the study area, analysing archaeological material that might be found, and in assessing significance.

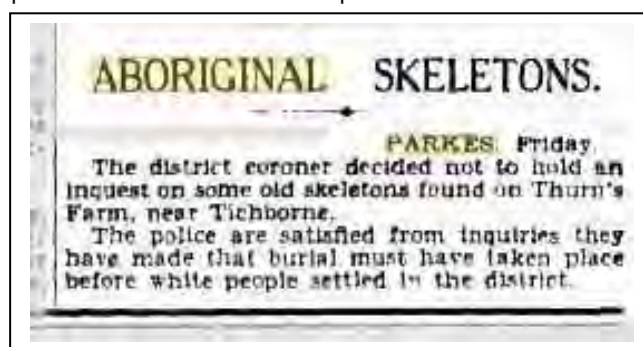
The Parkes area is within the area widely acknowledged to be part of the Wiradjuri language group (Howitt 1996, Tindale 1974, MacDonald 1983, AIATSIS 1994). The Wiradjuri language was the most widespread in NSW prior to European occupation.

The explorer Oxley passed through the area in 1817, with European colonists arriving in the 1830's. In April 1835 Mitchell's party encountered a group of local Aboriginal people on the eastern outskirts of the location of what would become Parkes township (Kass 2003; 29).

In terms of faunal resources, possums were widely noted by many early observers as an important and accessible food source and the skins were made into cloaks (Evans 1815, Oxley 1820, Mitchell 1839). Kangaroos were a particularly commonly hunted food and their skins also used. A wide range of reptiles such as goannas and turtles were also food sources.

Fish and mussels were sourced from the rivers and creeks, notably by women using a moveable dam of twisted dry grass (Kass2003: 2), in addition to crustaceans such as yabbies and Murray Crayfish. Emus were common as a food source and bird hunts were sometimes undertaken as group activities, with emus, ducks and other birds driven into nets (Ramson 1983). Plant foods were very important. Roots and tubers, such as that of Cumbungi were particularly important, with other edible plants from the Wiradjuri region including the Yam Daisy Kurrajong seeds and roots and Acacia seeds (Gott 1982, Low 1992).

Early observations describe weapons and tools made from wood such as spears, spear throwers, clubs, shields, boomerangs, digging sticks, and bark canoes. Stone hatchets hafted in a wooden handle were a ubiquitous tool/weapon. A. Ross recalled treating an Aboriginal man speared in the abdomen with a "spear – about 6ft to 7ft long with three very sharp barbs" (Ross 1899:7). Ross also remarks on an Aboriginal burial on the Brymadura Run near Molong saying "I was also present when the tribe buried him...with several trees carved around the grave as is the custom of the blacks to do on such occasions" (Ross 1899:7). Aboriginal burials have also been found in the Parkes area, with human remains reported from 'Thum's Farm' near Tichborne in 1933 (SMH 10/6/1933:7).



5.2 Local Archaeology

Aboriginal people have occupied what we now know as the Australian continent for in excess of 45,000 years. No sites have been found in the local area that are so old, but archaeological evidence from the Willandra Lakes provides the closest evidence of such antiquity (Gillespie 2002, Hiscock 2007).

Michael Pearson's 1981 PhD thesis remains a basis for presenting a model of site location for the region (Pearson 1981). From that study was obtained data for the oldest known sites in the region – Granites 2 Rockshelter 30km northeast of Orange dated to ~7,000BP. That no older sites have been found to date reflects the lack of investigation given the acknowledged length of Aboriginal occupation of Australia. Pearson recorded a strong relationship between open camp site locations (as defined by the presence of open artefact scatters) and presence of water.

Other environmental variables found to be conducive to site location were shelter from wind, well drained areas, views, level ground and elevation above frost hollows (Pearson 1981).

Koettig (1985) undertook an early regional analysis of the Dubbo region and concluded that Aboriginal sites were ubiquitous in the landscape, with artefact scatters, scarred trees and grinding groves the most common site types to be expected. She found the location and size of sites were heavily influenced by environmental factors, water availability being the primary one, but also geological influences.

Table 1. Summary of local archaeological studies

Author	Date	Summary
Thornhill	1977	Survey of a transmission line approximately 40 km to the north of Parkes identified a basalt quarry
Lance	1985	Survey of a transmission line from Wellington to Forbes found 16 low density open artefact scatters, 14 isolated artefacts and 2 scarred trees
Stone	1986	Survey for proposed North Parkes Mine recorded 15 open artefact scatters and 1 culturally modified tree.
Brayshaw	1993	Survey for proposed water supply pipe line for North Parkes Mine recorded 2 small open artefact scatters and 1 isolated artefact.
Navin Officer Heritage Consultants	1997	Reconnaissance survey for Marsden-Dubbo Natural Gas Pipeline, recorded 5 artefact scatters and 17 culturally modified trees.
Comber	2002	Survey for the Parkes Hub and service corridors. 3 culturally modified trees (Grey Box) were recorded.
Robinson	2002	A survey for Parkes Shire Council recorded 8 culturally modified trees.
Navin Officer Heritage Consultants	2008	A survey for a gas power plant and associated pipeline recorded two scarred trees and two isolated artefacts in close proximity to the present subject area boundaries.
OzArk	2013	A survey of transmission lines and an industrial area near Parkes recorded 1 culturally modified tree.
OzArk	2014	A survey of various areas for the Parkes Water and Waste Augmentation project. An artefact scatter with PAD and one culturally modified tree were recorded. The artefact scatter included an edge ground stone hatchet identified as basalt.
Barber	2016	A survey for a proposed solar farm immediately to the south and west of the present study area. The study recorded 7 isolated stone artefacts including flakes, cores and grinding implements. The artefacts were broadly scattered across the flat landscape.

An AHIMS search of a ~45km x ~45km area (>2000 square kilometres) centred approximately on the study area was undertaken in June 2016 and showed 75 previously recorded sites (Attachment 1). These included:

- 42 Culturally Modified Trees
- 30 Artefact Scatters or isolated Artefacts
- 1 Quarry
- 1 Potential Archaeological Deposit, and
- 1 Ceremonial Ring

Closer to the subject area, the nearest sites are sites recorded by Navin Officer Heritage Consultants (2008) and NGH Environmental (Barber 2016). Sites recorded by Navin Officer Heritage Consultants include two culturally modified trees found to the north east of the proposed development area and two isolated artefacts found at the western end of the study area. These isolated artefacts are shown on Figure 5 (PIF1 and PIF2) in corrected positions based on site plans provided in the AHIMS site cards for those sites (Attachment 2).



Figure 5. Location of previously recorded sites

PIF1 (AHIMS 43-3-0083) is recorded as being a 'Bogan Pick', a particularly rare type of Aboriginal artefact. The artefact was recorded on the western side of the road reserve for Pat Meredith Drive and outside, albeit near, the current study area.

PIF2 was recorded as a flake of volcanic material found just inside the current property boundary. Photographs show it to have been recorded approximately 5m inside the property boundary.



Plate 1. Picture of PIF-1 from site card 43-3-0083

An additional site 'Ridgey Creek' recorded by T.Robinson from the Peak Hill LALC, is located in close proximity to PIF1 and PIF2, in fact virtually the same position as PIF-1. No details are available apart from the site being recorded as being an 'artefact' site.

No burials are recorded in the search area on the AHIMS database, but as shown in section 5.1 above they have been noted in the local area. One noteworthy burial in the region was found a few kilometres north west of Dubbo near the Terramungamine Reserve (Witter et al 1993:78). The incomplete remains of two people were found in a grave along with grave goods that consisted of:

- A number of quartzite artefacts, 14 of which conjoined
- Mussel shell,
- kangaroo incisors, and
- a bone 'knife', made from human bone (tibia).

Analysis of the remains indicated the presence of a woman and child, and the bone tool made from human bone was a unique artefact but there was little else that could be concluded with confidence, although it was reported that local Aboriginal people considered it likely that the burial represented a payback or revenge execution (Witter et al 1993:88).

5.3. Summary

Based on the results of prior archaeological studies the following model of site occurrence and location can be proposed.

Open Artefact Scatters (more accurately called stone artefact 'clusters') may be found across the landscape, but are more likely to be more common, dense and diverse in proximity to water, and in association with a topographic feature that may have served to focus occupation, drawing people to camp in the same location again and again.



Plate 1. Flags mark locations of surface stone artefacts, Crace ACT.

Isolated Artefacts may also be found across the landscape, but are found at such a distance from other artefacts that 'clustering' cannot be reasonably inferred. These artefacts are more likely to be found in areas of low surface visibility, or in topographic/environmental locations less conducive to larger gatherings of people. The type of artefact found may be a useful indicator as to the likelihood of other nearby artefacts concealed from view.

Culturally Modified Trees are relatively common in the local area and may occur wherever mature eucalypt or Cypress Pine trees occur. The tree must be old enough to have supported Aboriginal scarring in the mid to late 19th Century. Scars are most likely to be the result of removing bark for everyday purposes like containers, shields or canoes. Parkes is within the area known to have carved trees, but these are rare, and it would be expected that any occurring in intensively used agricultural paddocks would have been well known by now.



Plate 2a. Canoe Scar, Murray River NSW.



Plate 2b Carved Tree, Yuranigh's Grave, Wellington NSW

Stone Quarries are any locations where Aboriginal people sourced material for making stone tools (Hiscock and Mitchell 1993:19-23, 32). The type of quarry is dependent on the stone source exposed and we should not be unduly influenced by western notions of the nature of a quarry, with large holes in the ground, or whole hills removed from the landscape. Aboriginal stone quarries may range from large, well organised sites and cover may hectares (eg the Mount William greenstone quarries, McBryde 1984) to simply locations of cobbles or pebbles which can be easily collected as required (cf. Gould 1977:162-8, Jones and White 1988:57-8). Where material has to be extracted and reduced at the quarry the resulting debris can be dense. It is unlikely for the solar farm footprint to contain Aboriginal stone quarries, but Millers Lookout is a high rocky outcrop that has potential.

Human burials are most likely to be found in soft sandy deposits such as sand dunes, or in association with water course. Neither of these occur in the study area, and it is rare to find human remains as part of surface surveys.

Shell Middens are accumulations of cultural refuse, the most obvious of which is shell from shell fish, but other cultural remains are often present. In the inland rivers and lakes of NSW shell middens are composed mainly of freshwater mussel *Velasunio ambiguous*. The present study area is not in close proximity to major water courses, and the presence of shell middens would be considered unlikely.



Plate 3. Freshwater shell midden, far west NSW

6. METHODS

The Aboriginal Heritage Information Management System (AHIMS) site register was consulted to determine if any sites had been previously recorded in, and near, the subject area.

Previous archaeological studies were reviewed to familiarise the consultant with local archaeology, and recent investigations in the area.

A field inspection was undertaken by one experienced archaeologist (Williams), and two Aboriginal representatives surveying pedestrian transects in the subject area. As the area was either under crop or pasture, both of which constrained surface visibility, survey transects were selected to maximise visibility conditions. This included utilising farm tracks and areas of erosion where they were encountered, as well as transects through pasture and crop. The formal survey area had few identifiable topographic divisions, those being colluvial footslopes and undifferentiated inactive alluvial plains.

Site locations and attributes were recorded on a hand held GPS-enabled data recorder running QGIS 2.10.1 software. Site names were given the prefix 'GSF', being an abbreviation of Goonumbla Solar Farm, with sites being labelled GSF-1, through to GSF 15.

7. REGISTER AND FIELD SEARCHES

7.1 AHIMS Search

The search of the AHIMS database is described in Section 5 above (Attachment 4). A detailed search of the AHIMS register with a 50m buffer around the subject area showed 75 sites recorded within 20km of the subject area and within 1 km of the boundary there are 12 previously recorded sites. These are noted and described above.

7.2 Coverage and Visibility

The effectiveness of archaeological survey is greatly affected by the ability to see stone artefacts on the ground. Any form of ground cover such as pasture, leaf litter will impede the ability to see artefacts. The subject area had overall low visibility due to crops which had advanced and were above ankle height prior to survey, and pasture in paddocks lying fallow. Of these two main visibility constraints, the latter resulted in a more blanket cover of the ground surface. There were some areas that afforded better surface visibility, such as farm access tracks and eroded areas such as

crests of erosion control banks and dam banks. Farm access tracks generally followed paddock boundaries and these areas of better visibility were targeted during survey and formed the basis of survey transects. This resulted in what is considered to be an effective series of north-south and east-west oriented transects, in addition to some ad hoc survey trajectories which examined other visibility opportunities, or were en route to examine isolated trees for evidence of scarring. Table 2 summarises approximate archaeological visibility and effective coverage of the study area. The examination of the crest of Millers Lookout is not included in these coverage figures as it is not within the area to be developed for solar panels.

Table 2. Survey Coverage

Survey Unit	Topography	Distance (m)	Transect Width	Area Examined (m ²)	% of study area	Visibility	Effective Coverage (m ²)	Effective Coverage (%)
Farm Tracks	Plains	11,340	4	45,360	1.56	80%	36,280	1.25
Non track transects	Plains	62,370	3	187,110	6.45	30%	56,135	1.94
Erosion control banks	Plains	635	2	1,270	0.04	80%	1,015	0.04
Pat Meredith Drive and Condobolin Road	Plains	700	5	3,500	0.12	30%	1,050	0.04
TOTALS		75,045		237,240	8.17		94,480	3.27

This analysis shows that of the ~290 hectare development area 23.724 hectares (8.17%) was examined and of that 9.448 hectares (3.27%) was effectively covered. This is comparable to most surface archaeological surveys in agricultural settings in all but the most dry conditions.

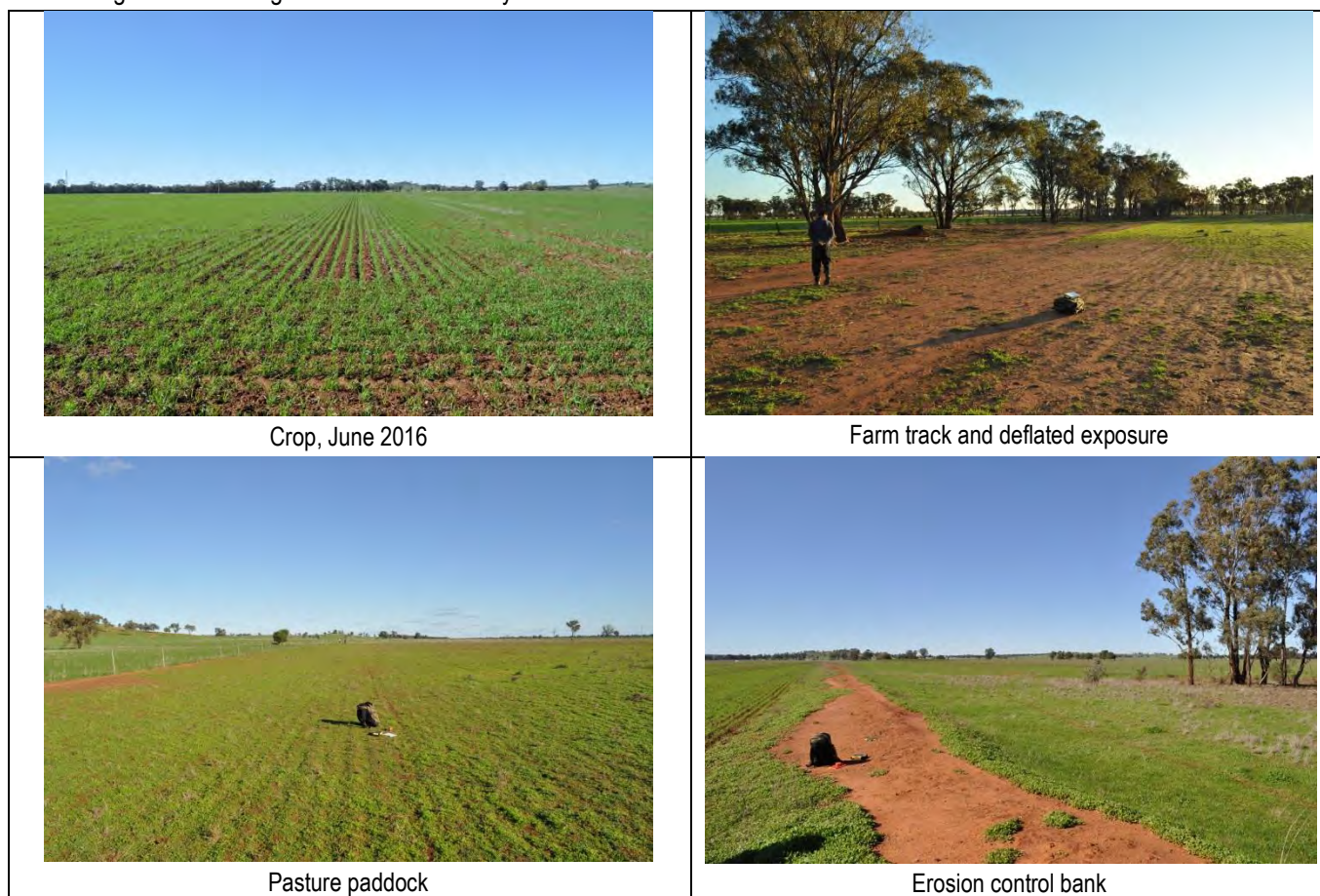


Plate 4. Surface Visibility

7.2 Study Results

7.2.1 Intangible Heritage.

Discussion and correspondence with the Aboriginal Parties participating in this process did not reveal the existence of known intangible Aboriginal heritage. The parties considered the landscape highly modified and the lack of water sources and variation in topography suggested no strong indication of the locality being particularly noteworthy.

Mr Clegg's response to the survey was that the survey was a sample survey due to the large area but adequate for the purposes of the project and the Wiradjuri Council of Elders was satisfied with the consultation and approach to the study. He considered it likely that additional stone artefacts were obscured by vegetation and also occurred beneath the ground surface for up to 100cm-200cm.

7.2.2 Tangible Heritage

A total of sixteen archaeological sites were recorded during the field survey, these being:

- 12 Isolated artefacts,
- 3 Artefact Scatters and
- 1 stone hatchet quarry

The locations of these sites are shown in Figure 6 below, and summary information is presented in Table 3. Detailed site records are provided in Attachment 3. The stone hatchet quarry is not located within the proposed development footprint and will be dealt with separately below.

The 15 locations of archaeological material within or close to the development footprint comprise a total of 25 stone artefacts (Tables 3 and 5). Silcrete was the most abundant stone material making up 36% of the assemblage, with quartz (20%) and Volcanic (16%) being the next most common materials recorded.

Flakes, cores, broken flakes and retouched flakes were the most abundant artefact types, collectively making up 22 (88%) of the 25 recorded artefacts.

Table 3. Artefact summary

	Silcrete	Quartz	Quartzite	Chert	Metamorphic	Volcanic	FGS	Totals
Flake	7	4		1			2	14
Core	1				1			2
LS Flake		1				1		2
Proximal Flake			1					1
Distal Flake						1		1
Retouched Flake	1						1	2
Hammer					1			1
Multifunction						1		1
Other				1		1		1
Totals	9	5	1	1	2	4	3	25

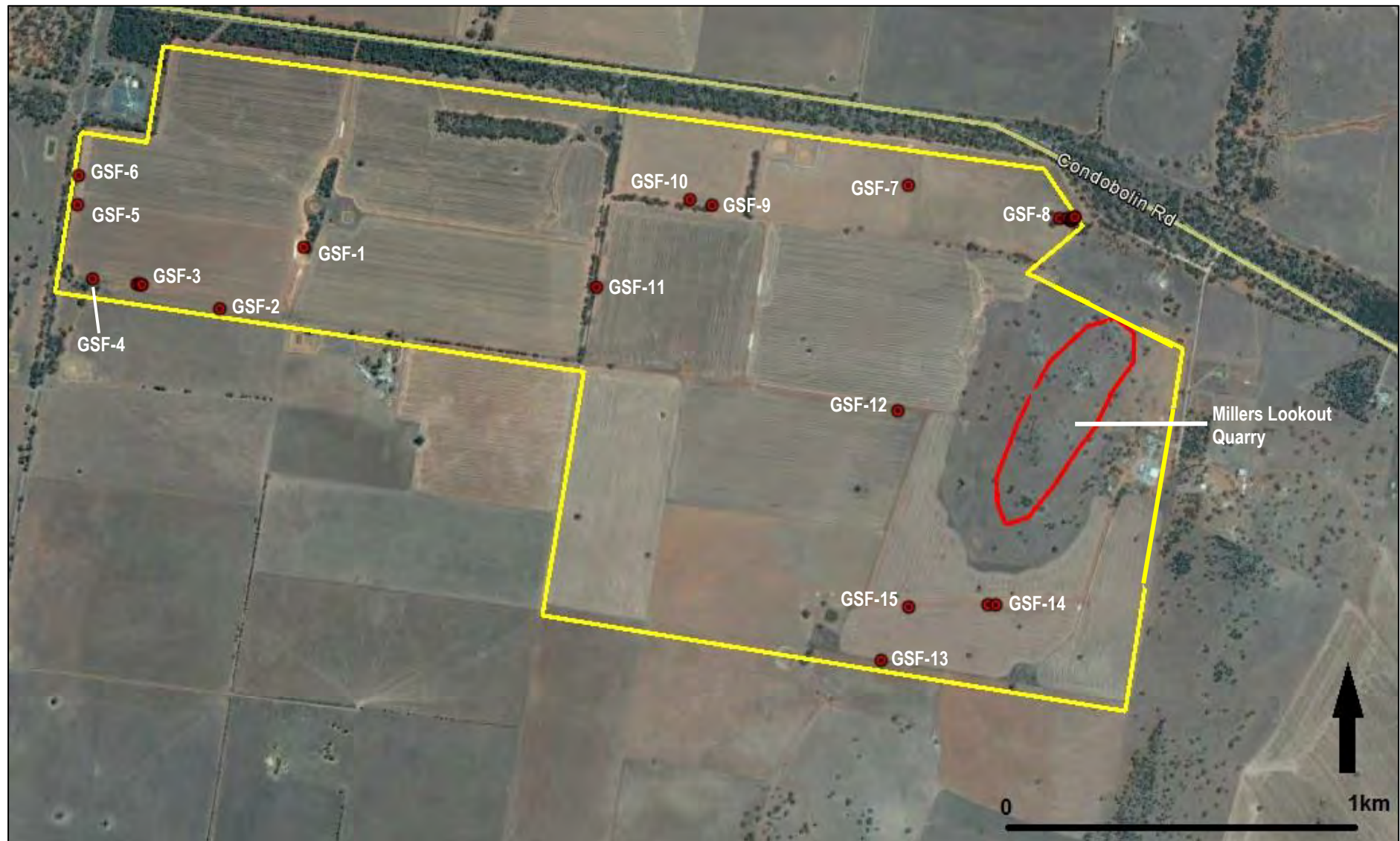


Figure 6. Site Locations

Table 4. Site Summary

Site Name	AHIMS Number	Site Type	Grid Ref (centroid)	Site Area (m)	Landform	Description
GSF-1	43-3-0134	Isolated Artefact	600838E 6336348N	1	Plain	Silcrete isolated flake located on plain.
GSF-2	43-3-0133	Isolated Artefact	600579E 6336165N	1	Plain	Silcrete isolated core located on plain.
GSF-3	43-3-0132	Artefact Scatter	600336E 6336242N	30	Plain	Three artefacts on a plain, found in a disturbed context on crest of erosion control bank.
GSF-4	43-3-0131	Isolated Artefact	600192E 6336259N	1	Plain	Isolated artefact on a plain, found in a disturbed context on crest of erosion control bank.
GSF-5	43-3-0135	Isolated Artefact	600148E 6336485N	1	Plain	Isolated multi-purpose tool on a plain, found in cultivated paddock
GSF-6	43-3-0121	Isolated Artefact	600148E 6336485N	1	Plain	Isolated artefact on a plain, found in cultivated paddock.
GSF-7	43-3-0120	Isolated Artefact	602680E 6336515N	1	Plain	Isolated broken hammer stone on a plain, found in cultivated paddock.
GSF-8	43-3-0128	Artefact Scatter	603165E 6336407N	435	Plain	Artefact scatter on a plain, found associated with erosion scar created by a ditch running water to a dam.
GSF-9	43-3-0127	Isolated Artefact	602083E 6336461N	1	Plain	Isolated artefact on a plain, found on a farm track
GSF-10	43-3-0126	Isolated Artefact	602016E 6336479N	1	Plain	Isolated artefact on a plain, found in paddock north of farm track.
GSF-11	43-3-0125	Isolated Artefact	601729E 6336217N	1	Plain	Isolated artefact on a plain, found in paddock on farm track.
GSF-12	43-3-0124	Isolated Artefact	601729E 6336217N	1	Foot slopes	Isolated artefact on west foot slopes of Millers Lookout, on edge of cultivated area
GSF-13	43-4-0123	Isolated Artefact	602582E 6335080N	1	Plain	Isolated artefact on a plain, found in paddock on farm track
GSF-14	43-3-0122	Artefact Scatter	602582E 6335080N	20	Foot slopes	Two artefacts on lower foot slopes of southern side of Millers Lookout, found 23m apart in paddock on farm track.
GSF-15	43-3-0130	Isolated Artefact	602667E 6335240N	1	Foot slopes	Isolated artefact on foot slopes of Millers Lookout, found in paddock on farm track
Millers Lookout Quarry	43-3-0129	Quarry	603128E 6335827N	75,000	Hill crest	A series of locations quarried by Aboriginal people for stone hatchet material along the main ridgeline of Millers Lookout. Locations are identified by large negative flake scars on insitu bedrock outcrops or boulders, as large primary flakes. Where ground cover is absent a dense scatter of smaller debris is apparent. The hill has been quarried by Europeans in the 20 th century, but this quarrying is distinguishable from that by Aboriginal people.

Table 5. Artefact Records

Site Name	AHIMS Number	Easting	Northing	COLOUR	MATERIAL	Technological Type	L	W	T	Platform Type	Platform Surface	Termination	SCARS				RET/ED				COMMENTS		
													Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
GSF-1	43-3-0	600838	6336348	Orange Brown	Silcrete	Flake	28	26	8	Focal	Unifacial	Feather	1		1								
GSF-2	43-3-0	600579	6336165	Tan	Silcrete	Core	33	32	22													6 Flake Scars from 3 platforms	
GSF-3	43-3-0	600327	6336242	White	Quartz	Flake	17	14	7	Focal	Faceted	Feather	1	3									
		600335	6336242	Grey	Silcrete	Flake	17	20	3	Focal	Unifacial	Feather	2										
		600342	6336240	Grey	Silcrete	Flake	9	14	2	Focal	Crush	Feather	2										
GSF-4	43-3-0	600192	6336259	Black	Metamorphic	Core	35	45	5													1 Flake Scar from 1 cortical platform	
GSF-5	43-3-0	600148	6336485	Brown/grey	Volcanic	Hammer/Anvil/Muller	85	75	50													Made on a pebble, anvil pitting both sides, hammer damage to 100% margin.	
GSF-6	43-3-0	600153	6336574	Brown	Silcrete	Flake	22	25	6	Broad	Bifacial	Feather	3										
GSF-7	43-3-0	602680	6336515	Brown	Metamorphic/sedimentary	Broken Hammerstone	57	35	32													Broken pebble	
GSF-8	43-3-0	603183	6336412	White	Quartz	Long Split Flake	26	20	5	Focal	Unifacial	Feather	1										
		603182	6336411	Grey	Silcrete	Retouched Flake	55	65	9	Focal	Cortical	Retouched		1		1		50	100	100			
		603175	6336405	Grey	Volcanic	Core	20	30	20														
		603173	6336405	Light Grey	Quartzite	Proximal Flake	27	45	4	Focal	Bifacial		3										
		603170	6336401	Grey Banded	Chert	Flake	28	15	4	Focal	Unifacial	Feather	2										
		603161	6336409	White	Quartz	Flake	15	20	5	Focal	Crushed	Feather	2										
		603179	6336409	Black	FGS	Flake	15	15	3	Focal	Unifacial	Feather	2										
603136	6336409	Grey	Volcanic	Bashed Cobble	270	80	70																
GSF-9	43-3-0	602083	6336461	Tan	Silcrete	Flake	25	14	4	Focal	Crushed	Feather	2										
GSF-10	43-3-0	602016	6336479	Grey	FGS	Retouched Flake	20	26	9	Focal	Unifacial	Retouched	3			1			100				
GSF-11	43-3-0	601729	6336217	Grey	Volcanic	Distal Flake	23	34	12				2										
GSF-12	43-3-0	602640	6335833	White	Quartz	Flake	15	25	9	Focal	Bifacial	Axial	2									Found on south edge of track on edge of crop on lower footslopes of Millers Lookout	
GSF-13	43-3-0	602582	6335080	White	Quartz	Flake	12	10	2	Focal	Crushed	Feather	1										
GSF-14	43-3-0	602931	6335245	Red	Silcrete	Flake	22	25	11	Broad	Bifacial	Step	2										
		602907	6335245	Grey	Silcrete	Flake	30	20	3	Focal	Unifacial	Feather	3										
GSF-15	43-3-0	602667	6335240	Grey	FGS	Flake	46	35	8	Focal	Unifacial	Feather	2		1	1							

Of particular interest in the open scatter sites was GSF-5, which was a grindstone/ anvil/ hammer stone found near the western boundary of the subject area. It was found ~25m east of the property boundary fence and is a fine example of a rare multi function tool.



Plate 5. Hammer / Anvil / Muller

Following completion of the formal field survey, the team examined the crest of the ridge of Miller's Lookout, a hill at the eastern end of the property. This hill is not proposed to be used for solar farm activities. The Millers Lookout hill is a prominent feature in the local landscape, being a large outcrop of Ordovician 'Goonumbla Volcanics'. At several locations along the crest signs of Aboriginal quarrying were observed. This conclusion was reached after careful observation as it was apparent that European quarrying had also occurred in some places on the hill. However, in areas where relatively unweathered bedrock cropped out repeated signs of conchoidal fracture was observed on bedrock and large boulders. Large, primary flakes were also observed, and in the few places where exposures occur a more dense scatter of flaked material was observed. One object was identified as a hatchet 'blank' or preform. This is an artefact trimmed to a desired shape in preparation for transport to a location where the edge can be ground to finish the hatchet. The material being sourced was a grey volcanic material, andesite, with a dense, variably grainy structure.

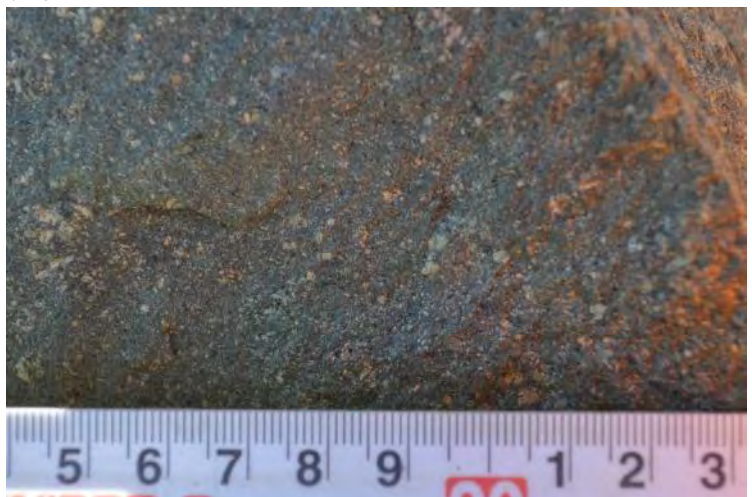


Plate 6. Quarried material

The quarried area is evident intermittently across ~500m x ~150m, and appeared to be restricted mainly to the crest and upper slopes of the ridge. However this observation is tentative due to the cursory nature of the inspection.

As the quarry was not in the formal development footprint, and also as it was an extensive and complex site, it was not recorded in detail, but was sufficiently observed to very generally determine its extent.



Plate 7. Examples of conchoidal fracture on boulders/bedrock



Plate 8. Primary flakes and quarry reduction debris

8. DISCUSSION

The survey recorded a sparse scatter of artefacts across the landscape, consistent with the results of other surveys undertaken in the area, particularly that of NGH Environmental (Barber 2016). Although this present survey recorded more artefacts at more locations it was undertaken over a larger area. Overall the results of the two surveys are consistent in the range of artefact types and stone materials recorded.



Figure 7. Current and prior site locations.

The distribution of archaeological material is widespread and sparse, although this study has identified the potential for clustering given adequate visibility conditions. This is evident at site GSF-3 and GSF-8, although neither of these sites is particularly dense.

Over the course of three separate studies/recordings a noteworthy cluster of artefacts occurs at the western end of the study area. Although sparse, the grouping of a Bogan Pick, a multi-function muller/anvil and several flaked artefacts offers unusual diversity of assemblage, and it can be no co-incidence that this grouping occurs at, or close to the margins of a drainage line – headwaters of Ridgely Creek. As the Bogan Pick recorded as PIF-1 was recorded outside the boundary of the study area time did not permit an attempt to find it, and the flaked artefact recorded as PIF-2 was not observed. This is not unusual for sparse scatters in an open context where natural processes and agricultural land use see small artefacts exposed, covered and re-exposed in turn.

In the soil context of the study area this periodic exposure and covering – a mixture of land use and bioturbation – is active within the top ~200-500mm of the soil profile. Noting Mr Clegg's desire to know of the existence of artefacts to a depth of 100cm-200cm, unless artefacts have been transported down burrows or soil cracks the widespread presence of stone artefacts deeper than 500mm is highly unlikely, and if there are any concentrations they are probably shallower.

The Millers Lookout Quarry site is a significant local and regional discovery. There have been no stone hatchet quarries recorded within ~25km of the study area prior to this recording. Stone sources make up ~1% of the

Aboriginal site record in NSW (Hiscock and Mitchell 1993:33), so by virtue of rarity the site is important. As a quarry of volcanic material the site has high potential to be used in studies of stone hatchet distribution through petrology, such as those successfully undertaken by McBryde (et al 1976: 163-74, 1978: 354-382, 1979:113-26, 1984:267-85, 1986: 77-93), who has worked on the distribution of ground edge implements originating from the Mount William greenstone quarries in Victoria, from quarries in northern New South Wales and from the ACT region. This work has had a large petrology component, in order to source materials, sometimes found at great distances from the quarry, to the exact point of origin. The geological map of the local area suggests that outcrops of Tertiary Goonumbra Volcanics may be petrologically indistinguishable from one another if they share an origin from the same process, but even the ability to source a finished hatchet to a local area is a useful analytical tool.

9. CULTURAL HERITAGE VALUES AND SIGNIFICANCE

9.1. Social or Cultural Value

Local Aboriginal people value evidence of their ancestors' occupation of the land extremely highly. Any evidence of occupation activity is afforded high cultural value. More complex or rare artefacts tend to be highly regarded. Robert Clegg has observed "...All sites hold cultural value to the local Aboriginal community and it must be noted that 5000 years ago or even a thousand years ago the area was used and traversed by Wiradjuri peoples as the evidence shows" (Clegg project correspondence, Attachment 3). Discussion held during fieldwork and Mr Clegg's written correspondence both illustrate a widely held deep and genuine regard for heritage sites and objects within the local Aboriginal community. The community representatives on this project were particularly impressed with the discovery of a hatchet quarry.

9.2. Scientific (Archaeological) Value

The scientific value of the occupation sites recorded during this study, while interesting, is limited due to overall low artefact numbers and sparse distribution. The archaeological value has largely been realised through the recording undertaken for this study.

9.3. Research Potential

9.3.1 Rarity

The assemblage associated with this study, and that of Navin Officer Heritage Consultants who recorded PIF-1 has elements of rarity in the Bogan Pick and the multi function tool recorded during this study (GSF-5). These are artefacts that should be recovered if they are under threat from development activities.

Millers Lookout Quarry is a rare site type.

9.3.2 Representativeness

The sites and objects recorded during this study are representative of their type and class in the region. While there are less common elements present, the majority of the archaeological remains observed will be very widespread in the local and regional landscape.

Millers Lookout Quarry would appear to be representative of its type

9.3.3 Overall

Overall, the archaeological remains of occupation sites recorded during this project have low research potential, bar isolated elements comprising less common artefact types.

Millers Lookout Quarry has high research potential in of itself, and high potential to contribute knowledge to wider studies of stone hatchet production, distribution and exchange.

9.4. Aesthetic Value

The occupation sites recorded during this study have low aesthetic value within the meaning attributed in a heritage assessment.

9.5. Historic Value

The study area in question is not directly associated with an important individual or identifiable historic event. Objects in the study area will not have 'historic value' within the meaning attributed by a heritage assessment.

9.6. Statement of Significance

As a group of objects the Aboriginal artefacts recorded during this project have overall low significance in that their ability to inform on Aboriginal life-ways and technology is limited, and largely realised during this recording. They are common and widespread elements that are to be found across the entire region. There are less common elements of the assemblage that have local significance in their ability to illustrate less commonly observed parts of the Aboriginal tool kit. The Millers Lookout Quarry has high significance due to its rarity and its ability to contribute knowledge to our understanding of Aboriginal hatchet production and exchange.

10. THE PROPOSED ACTIVITY

10.1. Assessment of Harm

The establishment of the proposed Goonumbla Solar Farm will have a low impact on the archaeological resources of the study area. The installation of the framework to support the panels does not require substantial ground disturbing works and the vast majority of the land surface will remain undisturbed, and as a consequence there is low potential to cause significant harm to a sparse, widespread scatter. There is potential for the development to harm objects through the installation of roads and tracks and other infrastructure, but it is to be noted that the entirety of the subject area has been subject to similar disturbance regimes through agricultural land use over more than a century. It could be argued that establishment of the Goonumbla Solar Farm could have a net beneficial effect on the conservation of the integrity of Aboriginal heritage objects by breaking the semi-annual cycle of cultivation.

The proposed development, as currently configured, will not affect the Millers Lookout Quarry but it will be important for the proponent to take account of its existence in managing that area of land into the future.

Depending on the extent and configuration of the upgrade of Pat Meredith Drive, there is potential for the proposed development to disturb the recorded locations of previously recorded sites 43-3-0083 (PIF-1) and 43-3-0090 (Ridgey Creek-Parkes). If the access road is upgraded to the locations of either of these sites there is little potential to avoid their disturbance. It is unlikely that either of the 'sites' would be completely destroyed. As they are isolated artefacts they would be displaced by works, but would remain at the locality. As the artefact at PIF-1 is a larger artefact there is potential that it may be damaged by machinery, and given its rarity this would be unfortunate and should be avoided.

10.2. Impacts on Values

10.2.1. Social and Cultural Values

The proposed development would not diminish social or cultural values of any site located wholly or partially on the study area. Local Aboriginal people will continue to hold any evidence in the study area in high value.

Mr Clegg expressed the view that prior to the initiation of the development there should be a meeting on site to discuss monitoring of ground disturbing activities. Our assessment of the potential of the proposed development to harm Aboriginal Objects (section 10.1 above) would suggest this form of mitigation is not warranted. As the

archaeological resources of the subject area are sparse and widespread, the potential for any one panel footing to disturb an object is very low, and the potential for discovery of Aboriginal objects during track grading is also low. As such, construction monitoring is an ineffective method of mitigation.

10.2.2. Scientific (Archaeological) Values

The proposed development would not significantly diminish the scientific value of the archaeology of the landscape. Indeed, overall it could be argued that the change of land use, accompanied by disturbance to a small proportion of the area, halts processes that incrementally degrade the integrity of the archaeological resource.

11. RECOMMENDATIONS.

THE DEVELOPMENT GENERALLY

1. The development proposal should proceed with no further archaeological assessment. No areas of Potential Archaeological Deposit were identified that would warrant test excavation and the significance of the Aboriginal heritage objects within the study area is low. Monitoring of ground disturbing activities is not a warranted mitigation strategy as the widespread and sparse scatter is unlikely to be observed during the proposed development activities.
2. Where the development footprint is extended beyond the area currently assessed, the additional area should be subject to further archaeological survey in association with the registered Aboriginal Parties.

MANAGEMENT OF KNOWN ABORIGINAL SITES AND OBJECTS

3. The collection of flaked stone artefacts from within the development footprint is unnecessary as they are common and their ability to be found again is limited, through even a modest passage of time.
4. The known location of site GSF-5 at the western end of the study area should be pegged prior to development to ensure it remains undisturbed. If this cannot be achieved site GSF-5 should be collected and the artefact conserved in cooperation with the Registered Aboriginal Parties. If this artefact is moved to a new location on the property the AHIMS site record form for the site must be submitted to the NSW Office of Environment.
5. If the road works on Pat Meredith Drive required by the Minister's consent for the Parkes Solar Farm have not been constructed before the Goonumbla Solar Farm construction commences, and the proposed access to the Goonumbla site off Pat Meredith Drive is within 20 metres of the recorded location of PIF1 (43-3-0083 Bogan Pick) and Ridgey Creek – Parkes (43-3-0090 artefact) then an attempt to relocate these sites/artefacts should be made before the road works are undertaken, consistent with the Minister's consent (SSD 6784, 16 June 2016). This should be undertaken by the Registered Aboriginal Parties for this project and a qualified archaeologist.
6. Wilsons Lookout Quarry will not be affected by the development of the proposed Goonumbla Solar Farm as it is sufficiently distant from the more level land able to be developed for the purpose.
7. Ongoing management of the Wilsons Lookout Quarry must be considered in any overall property planning. Further management measures (for example, but not restricted to: fencing, revegetation, stock management, fire management, leasing, quarrying) may constitute harm even if a particular action is undertaken with the intent to be have an overall beneficial effect. Further assessment of such actions should be undertaken on an as needs basis.

MANAGEMENT OF SITES RECORDED DURING DEVELOPMENT AND/OR OPERATION

8. Section 89A of the National Parks and Wildlife (NSW) 1974 requires that any person who is aware of the existence of an Aboriginal Object is required to notify the Chief Executive of the NSW Office of Environment and Heritage. To ensure compliance with Section 89A the proponent should undertake the following:
- a. Prepare an information poster for site staff that describes the most likely site occurrences that might be observed and how to recognise them. A face to face heritage induction may be considered.
 - b. Where a flaked ISOLATED ARTEFACT is discovered,
 - i. Record the location with a GPS using Eastings and Northings based on the GDA 94 Zone 55 Datum
 - ii. Take a photograph of the artefact with a scale (eg ruler) and a photograph of the general location noting the orientation (eg, 'looking north' or 'looking east' etc)
 - iii. Move the artefact during work that may harm it and return it to the location immediately the work has concluded.
 - c. Where an ISOLATED IMPLEMENT (eg, hammer, hatchet, grindstone, etc) is discovered,
 - i. Record the location with a GPS using Eastings and Northings based on the GDA 94 Zone 55 Datum
 - ii. Take a photograph of the artefact with a scale (eg ruler) and a photograph of the general location noting the orientation (eg, 'looking north' or 'looking east' etc)
 - iii. Collect the artefact and store securely on site along with labelling that includes the Eastings and Northings.
 - d. Where any other form or cluster of Aboriginal Objects is discovered,
 - i. Record the location with a GPS using Eastings and Northings based on the GDA 94 Zone 55 Datum
 - ii. Take a photograph of the artefacts with a scale (eg ruler) and a photograph of the general location noting the orientation (eg, 'looking north' or 'looking east' etc)
 - iii. Isolate the area with a ~50m buffer and contact a qualified archaeologist for further information/advice on the most appropriate strategy
 - e. Within three months of making a discovery Renewable Energy Developments should inform OEH of its existence through a qualified archaeologist submitting an AHIMS recording form for each discovery. The person submitting the information will need to be supplied with the information recorded at the time of field recording and/or collection.
8. Although very unlikely, if any object is found suspected to be human remains work at the location must cease and the following must be contacted immediately:
- a. NSW Police – Parkes Police Station
 - b. NSW OEH – Dubbo Office
- The location is to be made secure to prevent unauthorised access. Work on the Goonumbla Solar Farm project may continue at a suitable distance from the potential human remains – not closer than 100m.

The proponent, their employees, contractors and agents are reminded that it is an offence under the National Parks and Wildlife Act (NSW) 1974 to destroy, deface or otherwise disturb an Aboriginal Object without first obtaining the consent of the Director General of the NSW NPWS.

12. REFERENCES

- AIATSIS. **Encyclopaedia of Aboriginal Australia**. CD-ROM Version, AIATSIS Library, Canberra
- Barber, M. 2016. **Aboriginal Cultural Heritage Assessment: Parkes Solar Farm**. Report to Neoen Australia Pty Ltd.
- Brayshaw, H. 1993. **Water supply pipeline to proposed North Park Mine, NSW Archaeological Survey for Aboriginal Sites**. A report prepared for the Department of Public Works Western Regional Office, Bathurst.
- Comber, J. 2004. **Parks Hub Archaeological survey**. A report prepared for Parks Shire Council.
- Evans, G. 1815 in **Historical Records of Australia**. Series 1 Vol. 8.
- Flood, J. 1980. **The Moth Hunters: Aboriginal Prehistory of the Australian Alps**. AIAS Canberra
- Gillespie, R. 2002. 'Dating the First Australians'. **Radicarbon** 44 (2):455-472
- Gott, B. 1982 "Ecology of Root Use by the Aborigines of Southern Australia" in **Archaeology in Oceania** 17:59-67
- Gould, R.A. 1977. 'Ethnoarchaeology; or, Where Do Models Come From?' In R.V.S Wright (Ed). **Stone Tools as Cultural Markers: Change Evolution and Complexity**. Australian Institute of Aboriginal Studies, Canberra. Pp.162-8
- Hiscock, P. 2007. **The Archaeology of Ancient Australia**. Routledge, New York.
- Hiscock, P., and Mitchell, S. 1993. **Stone Artefact. Quarries and Reduction Sites in Australia: Towards a Type Profile**. Australian Heritage Commission Technical Publications Series No.4. AGPS, Canberra
- Howitt, A. W. 1996. **The Native Tribes of South-East Australia**. Aboriginal Studies Press, Canberra.
- Jones R, and White, N. 1988. 'Point Blank: Stone Tool Manufacture at the Ngilipidji Quarry, Arnhem Land 1981.' In Meehan and Jones (eds) 1988 **Archaeology with Ethnography: an Australian perspective**. Department of Prehistory, Research School of Pacific Studies, ANU, Canberra. pp 51-87
- Kass, T. 2003. **Parks Shire Thematic History**. A report prepared for Parks Shire Council.
- Lance, A. 1985. **An archaeological survey of the proposed Wellington to Forbes Transmission Line**. A report prepared for NSW NPSWS and NSW Electricity Commission.
- Low, T. 1992. **Wild Food Plants of Australia**. Angus & Robertson Sydney
- MacDonald, G. 1983 **The Concept of Boundaries in Relation to the Wiradjuri People of Inland New South Wales: An assessment of Inter-group Relationships at the Time of European Conquest**. Report prepared for Wiradjuri Land Council.
- McBryde, I. 1978. 'Wil-im-ee Moor-ing': Or, Where Do Axes Come From?. **Mankind** 11:354-382
- McBryde, I. 1979. 'Petrology and Prehistory: Lithic Evidence for Exploitation of Stone Resources and Exchange Systems in Australia'. In Clough, T.H.Mck, and Cummins,W.A(eds). 1979. **Stone Axe Studies: Archaeological, Petrological, Experimental, and Ethnographic**. Council for British Archaeology Research Report, No.23. pp113-26.
- McBryde, I. 1984. 'Kulin greenstone quarries: the social contexts of production and distribution at the Mt. William site'. In **World Archaeology** 16(2): 267-85.
- McBryde, I. 1986. 'Artefacts, Language and Social Interaction: A Case Study from Southeastern Australia'. In Bailey, G.N., and Callow, P. 1986 **Stone Age Prehistory: Studies in Memory of Charles McBurney**. Cambridge University Press. Sydney. pp77-94.
- McBryde, I., and Watchman, A. 1976. 'The Distribution of Greenstone Axes in Southeast Australia: A Preliminary report'. **Mankind** 10: 163-74.
- McBryde, I, and Watchman, A. 1989. **Aboriginal Sites on the Southern Tablelands. NPWS Workshop November 1989: Tarago Dolerite Quarries**. Unpublished workshop paper for NPWS.
- Mitchell, T. 1839 **Three Expeditions to the Interior of Eastern Australia** 2 Vols. London

- Navin Officer Heritage Consultants. 1997 **Aboriginal Archaeology Reconnaissance Assessment Marsden-Dubbo Natural Pipeline Environmental Impact Assessment**. A report prepared for Maunsell Pty Ltd.
- Navin Officer Heritage Consultants. 2008. **Peaking Power Plant and Associated Gas Pipeline, Parkes NSW: Cultural Heritage Assessment Report**. Report to URS.
- OEH 2016a. **'South West Slopes – Landform'**
<http://www.environment.nsw.gov.au/bioregions/SouthWesternSlopes-Landform.htm>. Accessed 30 June 2016.
- OEH. 2016b. 'Brolgan Plain' **Soils Essentials Report, NSW Soil and Land Information System (eSPADE)**.
<http://www.environment.nsw.gov.au/eSpadeWebapp/report/SoilReport.aspx?reporttype=1&profileid=12211>. Accessed 30 June 2016
- Oxley, J. 1820 **Journals of Two Expeditions into the Interior of New South Wales by Order of the British Government in the Years 1817-1818**.
- OzArk EHM. 2011. **Aboriginal Heritage Assessment McWilliams Hanwood Proposed Winery Expansion Project**. Report to McWilliams Wines Pty Ltd.
- OzArk EHM. 2013. **Aboriginal Archaeological Assessment Parks Industrial Estate**. A report prepared for Parks Shire Council.
- Pearson, M. 1981. **Seen through different Eyes: Changing Land Use and Settlement Patterns in the Upper Macquarie Region of NSW From Prehistoric Times to 1860**. (Unpublished Ph.D. thesis, Department of Prehistory and Anthropology, ANU Canberra).
- Robinson, J. 2002. **Aboriginal Archaeological Survey West of Parkes**. A report prepared for Parks Shire Council.
- Ramson, M. 1983 **To Kill a Flocking Bird**. Unpublished B. Litt. Thesis, Department of Prehistory and Anthropology, ANU.
- Ross, A. 1899. 'Aboriginal Tribal Fights' in **The Evening News Friday** 12 May 1899, p7.
- Sydney Morning Herald. 1933. 'Aboriginal Skeletons'. Saturday 10 June 1933, p.7
- Thornhill, B. 1977. **Parkes to Peak Hill 66KV Transmission Line. Survey for Aboriginal Relics**. A report prepared for NSW NPWS.
- Tindale, N.B. 1974 **Aboriginal tribes of Australia: their terrain, environmental controls, distribution, limits, and proper names**. Australian National University Press Canberra.
- Williams, D. 2007. **Stage 2 Archaeological Investigation at Headquarters Joint Operations Command, between Queanbeyan and Bungendore, NSW: Sub Surface Probing**. DEC Permit #2422. Report to URS Australia Pty Ltd and Commonwealth Dept of Defence.
- Witter, D., Fullagar, R., and Pardoe, C. 1993. 'The Terramungamine Incident: a Double Burial with Grave Goods near Dubbo, New South Wales.' **Records of the Australian Museum**, Supplement 17: 77-89.

**Project Notification to Aboriginal groups
Consultation Register**

Date	Entity Contacted	Person/Position Contacted	Contacted by	Contact Method	Subject
11/05/2016	Dept Aboriginal Affairs	The Registrar	Doug Williams, AAH	Letter, by email	Seeking to identify Aboriginal persons/organisations with an interest in the project
11/05/2016	Peak Hill LALC	Chair	Doug Williams, AAH	Letter, by email	Seeking to identify Aboriginal persons/organisations with an interest in the project
11/05/2016	Central Tablelands Local Land Services Board	Not Specified	Doug Williams, AAH	Letter, by email	Seeking to identify Aboriginal persons/organisations with an interest in the project
11/05/2016	National Native Title Tribunal	Not Specified	Doug Williams, AAH	Letter, by email	Seeking to identify Aboriginal persons/organisations with an interest in the project
11/05/2016	Native Title Services Corporation Ltd	Not Specified	Doug Williams, AAH	Letter, by email	Seeking to identify Aboriginal persons/organisations with an interest in the project
11/05/2016	NSW Office of Environment & Heritage - Dubbo	Paul Houston	Doug Williams, AAH	Letter, by email	Seeking to identify Aboriginal persons/organisations with an interest in the project
11/05/2016	AAH	Doug Williams	Sylvia Jagtman, NNTT	Letter, by email	Forwarded request on to 'enquiries@nntt.gov.au
13/05/2016	AAH	Doug Williams	Larry Towney CT LLS	email	Robert Clegg may be interested to assist. Contact Kevin Bloomfield of the Parkes Aboriginal Community Working Party
17/05/2016	AAH	Doug Williams	Paul Houston, OEH	Letter	List of potentially interested Aboriginal parties
18/05/2016	AAH	Doug Williams	Tabatha Dantoine, ORALA	Letter, by email	No Aboriginal Owners registered under Aboriginal Land Rights Act
18/05/2016	AAH	Doug Williams	Robert Clegg	Letter, by email	Expression of interest
20/05/2016	Binjang Wellington Wiradjuri heritage Survey	Dorothy Stewart	Doug Williams, AAH	Letter	Method Statement, invitation to comment and register as an interested party
20/05/2016	Bogan River Peak Hill Wiradjuri Aboriginal Corporation	Chair	Doug Williams, AAH	Letter	Method Statement, invitation to comment and register as an interested party
20/05/2016	Bugandamine Roun Development Aboriginal Corporation	Chair	Doug Williams, AAH	Letter	Method Statement, invitation to comment and register as an interested party
20/05/2016	Condobolin LALC	Chair	Doug Williams, AAH	Letter	Method Statement, invitation to comment and register as an interested party
20/05/2016	Cowra LALC	Chair	Doug Williams, AAH	Letter	Method Statement, invitation to comment and register as an interested party
20/05/2016	Little Burning Mountain Aboriginal Corporation	Chair	Doug Williams, AAH	Letter	Method Statement, invitation to comment and register as an interested party
20/05/2016	Mooka	Neville Williams	Doug Williams, AAH	Letter	Method Statement, invitation to comment and register as an interested party
20/05/2016	Peter Peckham	Chair	Doug Williams, AAH	Letter	Method Statement, invitation to comment and register as an interested party
20/05/2016	Trevor Robinson	Chair	Doug Williams, AAH	Letter	Method Statement, invitation to comment and register as an interested party

Date	Entity Contacted	Person/Position Contacted	Contacted by	Contact Method	Subject
20/05/2016	Warramunga Community Advancement Co-opwerative Society LTD	Chair	Doug Williams, AAH	Letter	Method Statement, invitation to comment and register as an interested party
1/06/2016	Parkes Aboriginal Community Working Party	Robert Clegg	Doug Williams, AAH	Letter, by email	Method Statement
1/06/2016	Parkes Aboriginal Community Working Party	Kevin Bloomfield	Doug Williams, AAH	Letter, by email	Method Statement
1/06/2016	Binjang Wellington	Jamie Gray	Doug Williams, AAH	Letter, by email	Method Statement
1/06/2016	Peak Hill LALC	Chair	Doug Williams, AAH	Letter, by email	Method Statement
2/06/2016	AAH	Doug Williams	Robert Clegg	email	Confirming charge out rates and travel rates
7/06/2016	Parkes Aboriginal Community Working Party	Robert Clegg	Doug Williams, AAH	email	Enquiry re availability to survey on 9/6/2016
7/06/2016	AAH	Doug Williams	Robert Clegg	email	Confirmed availability for 9/6/2016
7/06/2016	Binjang Wellington	Jamie Gray	Doug Williams, AAH	email	Enquiry re availability to survey on 9/6/2016
8/06/2016	AAH	Doug Williams	Jamie Gray	email	Expression of interest
8/06/2016	Binjang Wellington	Jamie Gray	Doug Williams, AAH	email	Revision of fieldwork to 13-14/6/2016
8/06/2016	Parkes Aboriginal Community Working Party	Robert Clegg	Doug Williams, AAH	Phone call	Revision of fieldwork to 13-14/6/2016
12/06/2016	Parkes Aboriginal Community Working Party	Robert Clegg	Doug Williams, AAH	Phone call	Confirming availability and meeting time
12/06/2016	Binjang Wellington	Jamie Gray	Doug Williams, AAH	Phone call	Confirming availability and meeting time
15/06/2016	AAH	Doug Williams	Robert Clegg	Letter, by email	Invoice for fieldwork
20/06/2016	AAH	Doug Williams	Jamie Gray	Letter, by email	Invoice for fieldwork
12/07/2016	Parkes Aboriginal Community Working Party	Robert Clegg	Doug Williams, AAH	Document by email	Draft report for comment
12/07/2016	Binjang Wellington	Jamie Gray	Doug Williams, AAH	Document by email	Draft report for comment
12/07/2016	Peak Hill LALC	Chair	Doug Williams, AAH	Document by email	Draft report for comment
12/07/2016	AAH	Doug Williams	Robert Clegg	Letter, by email	Response to draft report.
21/07/2016	AAH	Doug Williams	Mike Nolan CT LLS	Letter, by email	Apologies for late response - suggest contacting OEH for list of interested parties

Our reference: GS_ACHA_20160511_LLS

Your Reference:

Date: 11/05/2016

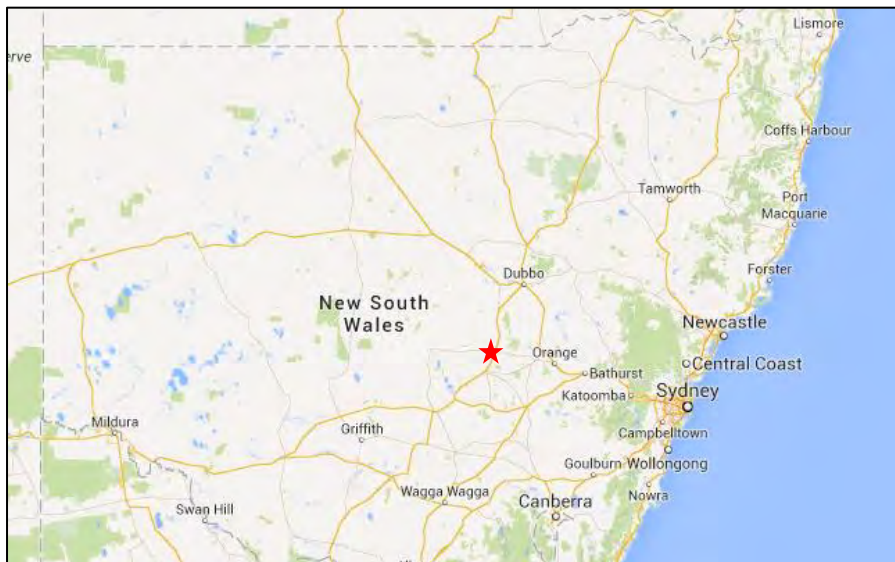
Central Tablelands Local Lands Services Board
PO Box 20
BATHURST NSW 2795

Dear Sir/Madam

Aboriginal Cultural Heritage Consultation for proposed solar farm development near Parkes NSW.

Access Archaeology & Heritage Pty Ltd is seeking to identify Aboriginal persons or organisations who wish to be consulted in relation to an Aboriginal Cultural Heritage Assessment of a proposed solar farm development approximately 10km west of Parkes, NSW. The location of the study is indicated with a red star in Figure 1 and is approximately 350Ha in area.

FIGURE 1. SITE LOCATION



If you are aware of any Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places in this location, could you please forward contact details at your earliest convenience. Your assistance in this matter is greatly appreciated.

Yours sincerely

DOUG WILLIAMS

0412 997 177

dwilliams@accessarchaeology.com

PO Box 816
MORUYA NSW 2537

Our reference: GS_ACHA_20160511_ALA

Your Reference:

Date: 11/05/2016

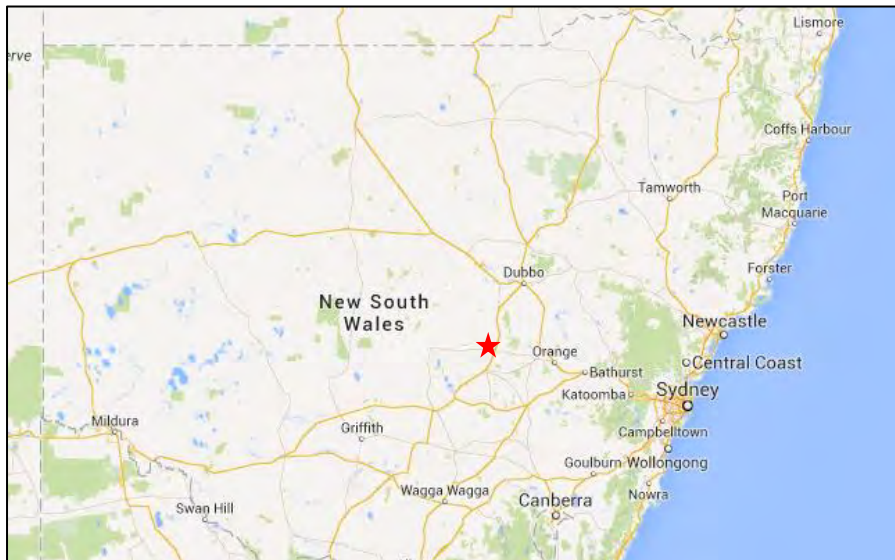
Mr Stephen Wright
The Registrar,
Aboriginal Land Rights Act 1983
PO Box 112
GLEBE NSW 2037

Dear Mr Wright

Aboriginal Cultural Heritage Consultation for Proposed Solar Farm Development at Parkes, NSW.

Access Archaeology & Heritage Pty Ltd is seeking to identify Aboriginal persons or organisations who wish to be consulted in relation to an Aboriginal Cultural Heritage Assessment of a proposed solar farm development approximately 10km west of Parkes, NSW. The location of the study is indicated with a red star in Figure 1.

FIGURE 1. SITE LOCATION



If you are aware of any Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places, could you please forward contact details at your earliest convenience. Your assistance in this matter is greatly appreciated.

Yours sincerely

DOUG WILLIAMS

0412 997 177

dwilliams@accessarchaeology.com

PO Box 816
MORUYA NSW 2537

Our reference: GS_ACHA_20160511_NNTT

Your Reference:

Date: 11/05/2016

National Native Title Tribunal
GPO Box 9973
Sydney NSW 2000

Dear Sir/Madam

Aboriginal Cultural Heritage Consultation for proposed solar farm development near Parkes NSW.

Access Archaeology & Heritage Pty Ltd is seeking to identify Aboriginal persons or organisations who wish to be consulted in relation to an Aboriginal Cultural Heritage Assessment of a proposed solar farm development approximately 10km west of Parkes, NSW. The location of the study is indicated with a red star in Figure 1 and is approximately 350Ha in area.

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If you are aware of any Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places, could you please forward contact details at your earliest convenience. Your assistance in this matter is greatly appreciated.

Yours sincerely

DOUG WILLIAMS

0412 997 177

dwilliams@accessarchaeology.com

PO Box 816
MORUYA NSW 2537

Our reference: GS_ACHA_20160511_NTSCorp

Your Reference:

Date:11/05/2016

Native Title Services Corporation
PO Box 2105
Strawberry Hills NSW 2016

Dear Sir/Madam

Aboriginal Cultural Heritage Consultation for proposed solar farm development near Parkes NSW.

Access Archaeology & Heritage Pty Ltd is seeking to identify Aboriginal persons or organisations who wish to be consulted in relation to an Aboriginal Cultural Heritage Assessment of a proposed solar farm development approximately 10km west of Parkes, NSW. The location of the study is indicated with a red star in Figure 1 and is approximately 350Ha in area.

FIGURE 1. SITE LOCATION



If you are aware of any Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places in this area, could you please forward contact details at your earliest convenience. Your assistance in this matter is greatly appreciated.

Yours sincerely

DOUG WILLIAMS

0412 997 177

dwilliams@accessarchaeology.com

PO Box 816
MORUYA NSW 2537

Our reference: GS_ACHA_20160511_OEH

Your Reference:

Date: 11/05/2016

Mr Paul Houston
Office of Environment and Heritage
DUBBO NSW 2830 Dear Sir/Madam,

Dear Mr Houston

Aboriginal Cultural Heritage Consultation for proposed solar farm development near Parkes NSW.

Access Archaeology & Heritage Pty Ltd is seeking to identify Aboriginal persons or organisations who wish to be consulted in relation to an Aboriginal Cultural Heritage Assessment of a proposed solar farm development approximately 10km west of Parkes, NSW. The location of the study is indicated with a red star in Figure 1.

FIGURE 1. SITE LOCATION



If you are aware of any Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places, could you please forward contact details at your earliest convenience. Your assistance in this matter is greatly appreciated.

Yours sincerely

DOUG WILLIAMS

0412 997 177

dwilliams@accessarchaeology.com

PO Box 816
MORUYA NSW 2537



Request for Search of Tribunal Registers

*mandatory fields are marked with an asterisk

1. Your details*

NAME: Doug Williams

POSITION: Director

COMPANY/ORGANISATION: Access Archaeology & Heritage Pty Ltd

POSTAL ADDRESS: PO Box 816, MORUYA NSW 2537

TELEPHONE: 0412997177

EMAIL: dwilliams@accessarchaeology.com

YOUR REFERENCE: GS_ACHA_20160511

DATE OF REQUEST: 11/05/2016

2. Reason for your request - please complete either Part A OR Part B*

Part A - Are you a party to a native title proceeding? Yes No

Please provide Federal Court/Tribunal file number/
or application name: _____

OR

Part B - Do you need to identify existing native title interests to comply with the *Native Title Act 1993* (Cth) or other State/Territory legislation? Yes No

Please provide brief details of these obligations here: NSW Aboriginal Community Consultation Guidelines

3. Identify the area to be searched – please complete either Part A OR Part B*

Part A - Mining tenure Tenement ref/s: _____
State/Territory: _____

OR

Part B - Other tenure type

Crown Land, crown reserve
 Agricultural/pastoral lease
 Freehold (privately owned)**

State/Territory: NSW

Local Government Area: Eurobodalla

4. Description (please provide as many details as possible)

Provide any additional details, including maps with landmarks clearly shown

Lot and plan details: Lots 1 and 2 DP602329
Lot 409 DP750152, Lot 5
DP854193 and
Lot 1 DP877903

Property name: _____

Pastoral Lease number or name: _____

County: _____

Parish: _____

Town: Parkes

Section:

Northern Territory Portion:

Hundred:

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5. Submit your request

NNTT Office	Search jurisdiction	Email address	Fax
Perth	WA searches	waenquiries@nntt.gov.au	(08) 9425 1193
Melbourne	VIC, TAS searches SA, NT searches	vicandtasenquiries@nntt.gov.au sa_and_ntenquiries@nntt.gov.au	(03) 9606 0680 (03) 9606 0680
Sydney	NSW, ACT searches	nswenquiries@nntt.gov.au	(02) 9227 4030
Brisbane	QLD searches	qldenquiries@nntt.gov.au	(07) 3307 5050

Or post to: National Native Title Tribunal, GPO Box 9973 (Perth 6848, Melbourne 3001, Sydney 2001, Brisbane 4001)

- There is no charge for conducting searches of the Tribunal's databases.
- Timeframe for providing results is generally 3-5 business days.
- Register and schedule extracts, plus map attachments will be provided with your results. Technical coordinates may be omitted.

Did you know?

Native Title Vision (NTV) is the National Native Title Tribunal's free online visualisation, mapping and query tool. All that is needed to use NTV is a computer connected to the internet, a current web browser and an NTV user account. NTV puts you in the driver's seat in exploring native title and brings together:

- a geospatial view of the Tribunal's registers and databases
- overlays of administrative regions, non-freehold land parcels and resources tenure.

To obtain a NTV user account visit the [Geospatial section](#) on our website.

**Native title & freehold tenure

Under the *Native Title Act 1993* (Cth), the valid grant of a freehold estate (other than certain types of Aboriginal and Torres Strait Islander land) on or before 23 December 1996 is known as a 'previous exclusive possession act'. This means that native title has been extinguished over the area.

The Tribunal is not the custodian of the data for freehold estates. To determine whether a particular parcel of land is freehold land, you may wish to seek such information from the relevant state/territory government custodian.

Project Methods and Correspondence with Aboriginal Groups

Access Archaeology & Heritage
Po Box 2816
MORUYA NSW 2537
Att: Doug Williams

17th May 2016

Dear Doug,

**WRITTEN NOTIFICATION AS REQUIRED UNDER OFFICE OF ENVIRONMENT AND
HERITAGE (OEH) ABORIGINAL CULTURAL HERITAGE REQUIREMENT FOR
PROPOSERS 2010 – For a proposed Solar Farm near Parkes.**

I refer to your letter dated 11th May 2016 to the Office of Environment and Heritage (OEH) regarding the above matter.

A list of known Aboriginal parties that OEH feels is likely to have an interest in this development is attached as Attachment 1 (overleaf). Please note this list is not necessarily an exhaustive list of all interested Aboriginal parties and receipt of this list does not remove the requirement of a proponent/consultant to advertise in local print media and contact other bodies seeking interested Aboriginal parties, in accordance with the requirements.

If you wish to discuss any of the above matters further please contact me, at your earliest convenience, on (02) 6883 5361.

Yours sincerely

Paul Houston
Aboriginal Heritage Planning Officer
OEH

The Department of Environment Climate Change and Water is now known as
The Office of Environment and Heritage.

PO Box 2111, Dubbo NSW 2830
48-52 Wingewarra St Dubbo NSW
Tel: (02) 6883 5330 Fax: (02) 6884 9382
www.environment.nsw.gov.au

ATTACHMENT 1

OEH'S LIST OF ABORIGINAL STAKEHOLDER GROUPS WITHIN THE PARKES LGA- THAT MAY HAVE AN INTEREST IN THE PROJECT; PROVIDED AS PER THE "OEH ABORIGINAL CULTURAL HERITAGE REQUIREMENT FOR PROPONENTS 2010".

Organisation/Affiliation	Name/Title	Address
Binjang Wellington Wiradjuri heritage Survey	Dorothy Stewart	260 Myall St, Dubbo NSW 2830
Bogan River Peak Hill Wiradjuri Aboriginal Corporation	Chairperson	PO Box 42, Peak Hill NSW 2869
Bulgandramine Youth Development Aboriginal Corporation	Chairperson	PO Box 119, Peak hill NSW 28369
Condobolin LALC	Chairperson	PO Box 114 CONDOBOLIN NSW
Cowra LALC	Chairperson	PO Box 769 Cowra, NSW 2794
Eva Coe		4 Yarnbildine Place Cowra NSW 2794
Little Burning Mountain Aboriginal Corporation	Chairperson	PO Box 152, Peak Hill NSW 2869
Mooka	Neville Williams	Po Box 70 Cowra NSW 2794
Peak Hill LALC	Chairperson	PO Box 63 Peak Hill, NSW 2869
Peter Peckham		27 Jennings St, Geurie, NSW 2831
Trevor Robinson		Po Box 73, Peak Hill NSW 2869
Warramunga Community Advancement Co-operative Society LTD	Chairperson	79 Caswell Street, Peak Hill NSW 2869
Wiradjuri Council of Elders	Robert Clegg	7 Keast St Parkes 2870

The Department of Environment Climate Change and Water is now known as
The Office of Environment and Heritage.

Our reference: GS_ACHA_20160511_Method

Your Reference:

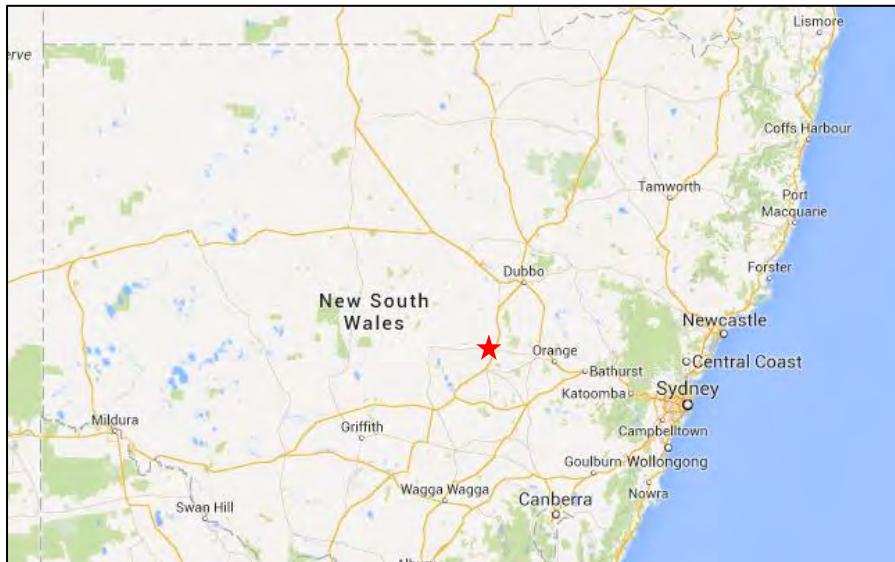
Date: 11/05/2016

Dear Sir/Madam,

Aboriginal Cultural Heritage Consultation for proposed solar farm development near Parkes NSW.

Access Archaeology & Heritage Pty Ltd (AAH) has been commissioned to undertake an Aboriginal Heritage Assessment of a proposed solar farm development approximately 10km west of Parkes, NSW. You or your group has been identified to AAH as potentially having an interest in this project. The location of the study is indicated with a red star in Figure 1, and is a rural block residential block about 350Ha in area. A more detailed figure is attached overleaf.

FIGURE 1. SITE LOCATION



AAH proposes to physically examine the block particularly noting any locations where surface visibility may be conducive to seeing stone artefacts and any mature trees for cultural modification. We propose to walk the area in transects approximately 50m apart, but also paying special attention to any areas of good surface visibility.

If you are aware of any cultural knowledge specific to determining the significance of Aboriginal objects and/or places in the area we would be interested in including it in the assessment. I may be contacted at the addresses provided on this letterhead. Due to travel for other projects contact by email is preferred.

Yours sincerely

DOUG WILLIAMS

0412 997 177

dwilliams@accessarchaeology.com

PO Box 816

MORUYA NSW 2537



Response to draft report – Robert Clegg

ABORIGINAL CULTURAL HERITAGE ASSESSMENT PARKES SOLAR FARM

BACKGROUND

Author Name : Robert Clegg Cultural Heritage Officer
Traditional Custodian, Parkes NSW
Chair person Wiradjuri Council of Elders
Parkes Aboriginal Working group
Organisation Name: Wiradjuri Council of Elders

Contact details Email: rclegg55@gmail.com Phone:0450530920

Address of Subject Area Reference: Goonumbla, Local Government Area: Parkes NSW
2870 (Approximately 10 km from Parkes)

Lot numbers: Lot 1 DP602329 • Lot 2 DP602329 • Lot 409 DP750152 • Lot 5 DP854193 •
Lot 1 DP877903

Report prepared for Access Archaeology and Heritage Pty Ltd (AAH) and Renewable
Energy Developments Pty Ltd: Contact Person Douglas Williams.
Date of Report June 2016

INTRODUCTION

All the previous survey efforts made in the area were discussed, Designing the remaining areas to be surveyed as well as the methodology for that survey were planned in order to provide the clearances required for construction. The Aboriginal Cultural Heritage Assessment (ACHA) was to investigate the presence of any Aboriginal sites and to assess the impacts and management strategies that may mitigate any impact.

RESULTS

The survey was undertaken by a team of three on 13,14 / 06 / 2016. The team members walked in parallel lines along and across farm tracks and areas of erosion where they were encountered, as well as transects through pasture and crop in each paddock looking for the evidence of Aboriginal occupation approximately 290 Hectares, but as a result of the area being so large and visibility in some areas was poor, much of the area was covered in pasture grasses, only a representation of the area was covered, it is likely that additional artefacts will occur within the proposed development area (**Monitoring of the area will need to be undertaken**) All mature trees within the property were also inspected for evidence of Aboriginal scarring. 25 Artefacts were located despite the poor visibility. All sites hold cultural value to the local Aboriginal community.

CONCLUSION

The Survey was completed on the 14/06/2016, 25 Artefacts were located no remains were located, All sites hold cultural value to the local Aboriginal community and it must be noted that 5000 years ago or even a thousand years ago the area was used and traversed by Wiradjuri peoples as the evidence shows. The local Wiradjuri community would like to know if there are any materials beneath the surface of this area (approximately 100 or 200 cm deep).

To formalise and finalise the clearances required before any work starts on this site, a meeting with the Aboriginal representatives that were on site needs to take place to discuss monitoring of cultural sites and/or if relocation would be needed when the area is developed with Renewable Energy Developments Pty Ltd as well as timing to suit their plans and agenda.

NOTE XXX

Doug: Thank you for your tolerance and patience, your leadership in this project was infallible and I look forward to working with you again.

Robert Clegg (My name is my signature in this instance)
Wiradjuri Council of Elders
Cultural Advisor rclegg55@gmail.com 0450530920

AHIMS Search and relevant AHIMS site record forms

Access Archaeology and Heritage Pty Ltd

Date: 15 June 2016

PO Box 816

MORUYA New South Wales 2537

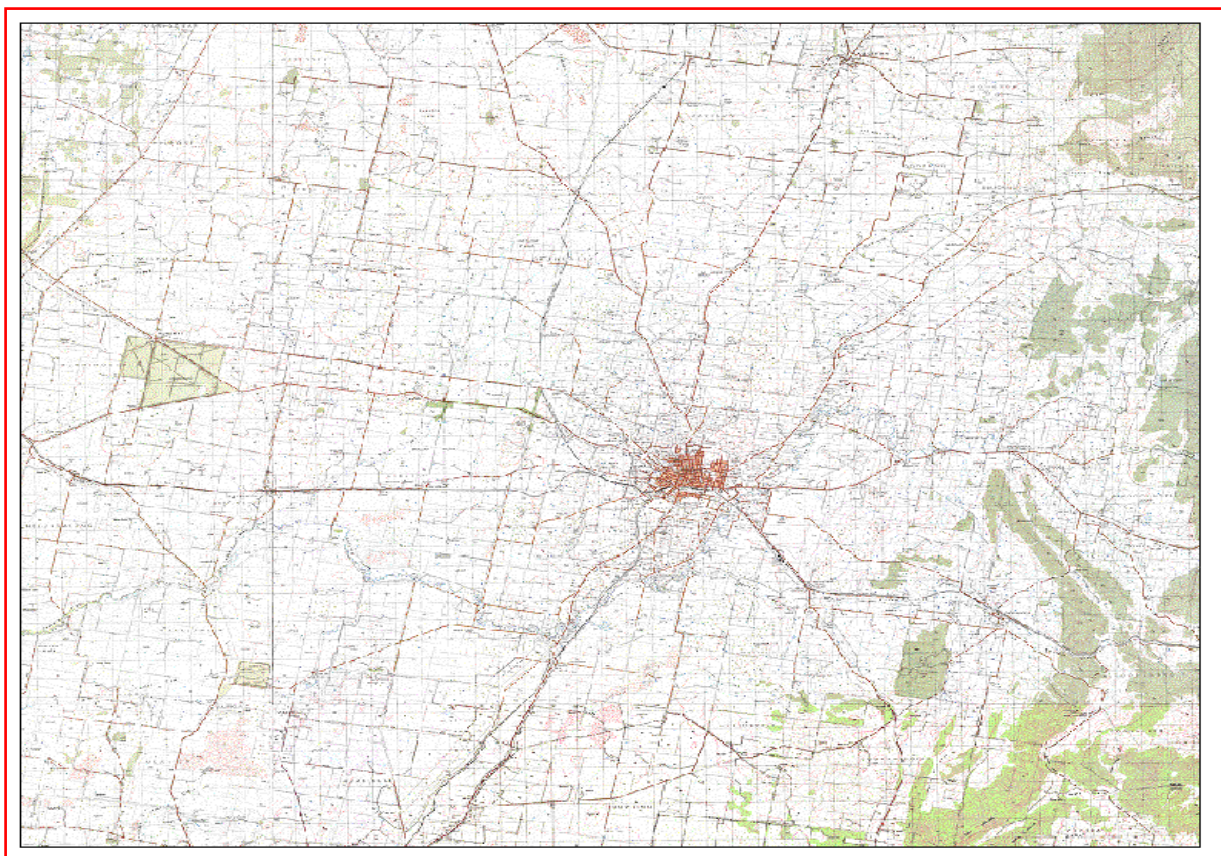
Attention: Doug Williams

Email: dwilliams@accessarchaeology.com

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : -33.2724, 147.897 - Lat, Long To : -32.9623, 148.3887 with a Buffer of 50 meters, conducted by Doug Williams on 15 June 2016.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

75	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(http://www.nsw.gov.au/gazette\)](http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-4-0018	MD 33	AGD	55	604720	6324450	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	
	Contact									
43-4-0019	MD 50	AGD	55	604900	6325380	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	
	Contact									
43-3-0037	Goobang 26;Goobang National Park;	AGD	55	629332	6341205	Open site	Valid	Artefact : -	Open Camp Site	
	Contact									
35-6-0083	OS-27 Goobang National Park	AGD	55	628836	6341020	Open site	Valid	Artefact : -	Open Camp Site	4641
	Contact									
44-3-0110	G-OS-1 Parkes-Orange Rd (Goobang National Park)	AGD	55	629100	6328640	Open site	Valid	Artefact : -	Open Camp Site	97991
	Contact									
43-3-0011	LV 4;	AGD	55	604721	6329037	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1327,1411
	Contact									
43-3-0012	LV 5;	AGD	55	604721	6329037	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1327,1411
	Contact									
43-3-0013	LV 6;	AGD	55	604731	6328032	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1327,1411
	Contact									
43-3-0014	LV 7;	AGD	55	604731	6328032	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1327,1411
	Contact									
43-3-0015	LV 8;	AGD	55	604731	6328032	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1327,1411
	Contact									
43-3-0016	LV 9;	AGD	55	604175	6328849	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1327,1411
	Contact									

Report generated by AHIMS Web Service on 15/06/2016 for Doug Williams for the following area at Lat, Long From : -33.2724, 147.897 - Lat, Long To : -32.9623, 148.3887 with a Buffer of 50 meters. Additional Info : Background to ACHA. Number of Aboriginal sites and Aboriginal objects found is 75

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-3-0017	LV 11;	AGD	55	604902	6329313	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	1327,1411,102 769
	Contact	Recorders	Mary Dallas Consulting Archaeologists				Permits			
43-3-0018	site 1;	AGD	55	608250	6338870	Open site	Valid	Artefact : -	Open Camp Site	2584,98332,10 2769
	Contact	Recorders	Helen Brayshaw				Permits			
43-3-0019	site 2;	AGD	55	607920	6340060	Open site	Valid	Artefact : -	Open Camp Site	2584,98332,10 2769
	Contact	Recorders	Helen Brayshaw				Permits			
43-3-0030	Millwood;	AGD	55	601350	6327200	Open site	Valid	Artefact : -	Isolated Find	102769
	Contact	Recorders	L Kingham				Permits			
43-2-0013	x;	AGD	55	591500	6346600	Open site	Valid	Ceremonial Ring (Stone or Earth) : -	Bora/Ceremonial	
	Contact	Recorders	E Riley				Permits			
43-2-0017	Kirraabee Lodge;	AGD	55	615500	6338600	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	102769
	Contact	Recorders	Warren Bluff				Permits			
43-2-0018	Goobang Creek;	AGD	55	616000	6340000	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	
	Contact	Recorders	Warren Bluff				Permits			
43-2-0019	Goobang Creek;	AGD	55	628900	6348000	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	
	Contact	Recorders	Warren Bluff				Permits			
43-3-0002	Parkes;	AGD	55	609622	6332556	Open site	Valid	Modified Tree (Carved or Scarred) : -	Carved Tree	65
	Contact	Recorders	ASRSYS				Permits			
43-3-0003	Goobang Creek/WF 15;Avocavale;	AGD	55	598330	6327520	Open site	Valid	Artefact : -	Open Camp Site	975,102769
	Contact	Recorders	Mr.Allan Lance				Permits			
43-3-0004	Goobang Creek /WF 16;Avocavale;	AGD	55	598150	6327570	Open site	Valid	Artefact : -	Open Camp Site	975,102769
	Contact	Recorders	Mr.Allan Lance				Permits			
43-3-0006	Crooked Creek/WF17;Kyneton;	AGD	55	597800	6321990	Open site	Valid	Artefact : -	Open Camp Site	975,102769
	Contact	Recorders	Mr.Allan Lance				Permits			

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-3-0008	LV 1;	AGD	55	605530	6330507	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1327,1411,102769
	Contact									
		Recorders	Mary Dallas Consulting Archaeologists						Permits	
43-3-0009	LV 2;	AGD	55	604896	6329861	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1327,1411
	Contact									
		Recorders	Mary Dallas Consulting Archaeologists						Permits	
43-3-0010	LV 3;	AGD	55	604805	6329860	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1327,1411
	Contact									
		Recorders	Mary Dallas Consulting Archaeologists						Permits	
43-3-0058	MD49	AGD	55	604900	6325440	Open site	Valid	Modified Tree (Carved or Scarred) :		102769
	Contact									
		Recorders	Navin Officer Heritage Consultants Pty Ltd						Permits	
43-2-0045	N-ST-1/Nelungaloo	AGD	55	588860	6329730	Open site	Valid	Modified Tree (Carved or Scarred) :		97705
	Contact									
		Recorders	Central West Archaeological and Heritage Services Pty Ltd						Permits	
43-3-0118	Parkes Solar IF6	GDA	55	600300	6335697	Open site	Valid	Artefact : -		
	Contact									
		Recorders	Mr.Matthew Barber,NGH Heritage - Fyshwick						Permits	
43-3-0059	PH3-1	AGD	55	608250	6335000	Open site	Valid	Modified Tree (Carved or Scarred) :		98880,102769
	Contact									
		Recorders	Ms.Jillian Comber						Permits	
43-3-0060	PH2	AGD	55	606000	6332150	Open site	Valid	Modified Tree (Carved or Scarred) :		98880,102769
	Contact									
		Recorders	Ms.Jillian Comber						Permits	
43-3-0061	PH1-1	AGD	55	607200	6329350	Open site	Valid	Modified Tree (Carved or Scarred) :		98880
	Contact									
		Recorders	Ms.Jillian Comber						Permits	
43-3-0062	Parkes 1	AGD	55	610100	6331100	Open site	Valid	Artefact : 2		102769
	Contact									
		Recorders	Ms.Jillian Comber						Permits	
43-3-0063	Parkes 2- IF	AGD	55	610250	6331100	Open site	Valid	Artefact : 1		102769
	Contact									
		Recorders	Ms.Jillian Comber						Permits	

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-3-0065	PST-3	AGD	55	610672	6342979	Open site	Valid	Modified Tree (Carved or Scarred) : 4		102769
	Contact									
	Recorders			Mr.John Appleton						
43-3-0066	PST-4	AGD	55	610564	6342392	Open site	Valid	Modified Tree (Carved or Scarred) : 1		102769
	Contact									
	Recorders			Mr.John Appleton						
43-3-0067	PST 2	AGD	55	610880	6343315	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact									
	Recorders			Mr.John Appleton						
43-3-0068	PST 1	AGD	55	611920	6344575	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact									
	Recorders			Mr.John Appleton						
43-3-0069	Forbes/Titchbourn TSR	AGD	55	601097	6318088	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact			T Russell						
	Recorders			Mr.Graeme Towney						
43-3-0070	Forbes-Titchbourn TSR	AGD	55	601280	6318426	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact			T Russell						
	Recorders			Mr.Graeme Towney						
43-3-0071	Forbes - Titchbourn TSR	AGD	55	601693	6318972	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact			T Russell						
	Recorders			Mr.Graeme Towney						
43-3-0072	Parkes TSR	AGD	55	603440	6322660	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact			T Russell						
	Recorders			Mr.Graeme Towney						
43-3-0073	scar tree 73	AGD	55	602064	6320561	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact			T Russell						
	Recorders			Mr.Graeme Towney						
43-3-0074	TSR74	AGD	55	602054	6320587	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact			T Russell						
	Recorders			Mr.Graeme Towney						

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-2-0016	Tottenham Road;	AGD	55	613400	6334700	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	102769
	Contact									
	Recorders			Warren Bluff						
43-3-0080	Parkes P1	GDA	55	603525	6336275	Open site	Valid	Modified Tree (Carved or Scarred) :		102769
	Contact									
	Recorders			Navin Officer Heritage Consultants Pty Ltd						
43-3-0079	BWR-ST3	GDA	55	593650	6343827	Open site	Valid	Modified Tree (Carved or Scarred) :		101137
	Contact									
	Recorders			Doctor.Jodie Benton						
43-3-0081	PIF2	GDA	55	600053	6336084	Open site	Valid	Artefact : 1		102769
	Contact									
	Recorders			Navin Officer Heritage Consultants Pty Ltd						
43-3-0082	P2.	GDA	55	603464	6336084	Open site	Valid	Modified Tree (Carved or Scarred) :		102769
	Contact									
	Recorders			Navin Officer Heritage Consultants Pty Ltd						
43-3-0083	PIF1	GDA	55	600000	6336400	Open site	Valid	Artefact : 1		102769
	Contact									
	Recorders			Navin Officer Heritage Consultants Pty Ltd						
43-3-0090	Ridgey Creek - Parkes	GDA	55	600114	6336585	Open site	Valid	Artefact : -		102769
	Contact			Mr.Trevor Robinson						
	Recorders			Mr.Trevor Robinson						
43-3-0084	Parked Manildra-Open Site 1 (PM-OS1)	GDA	55	622883	6323061	Open site	Partially Destroyed	Artefact : 3		102488
	Contact									
	Recorders			OzArk Environmental and Heritage Management,OzArk Environmental and Heritag					Permits 3346	
43-3-0085	Parked Manildra-Open Site 2 (PM-OS2)	GDA	55	623661	6323331	Open site	Valid	Artefact : -		102488
	Contact									
	Recorders			OzArk Environmental and Heritage Management						
43-3-0086	Parked Minildra-Open Site 3 (PM-OS3)	GDA	55	624158	6323281	Open site	Partially Destroyed	Artefact : -		102488
	Contact									
	Recorders			OzArk Environmental and Heritage Management					Permits 3346	
43-3-0087	Parked Manildra-Open Site 8 with PAD (PM-OS8)	GDA	55	625399	6323026	Open site	Valid	Potential Archaeological Deposit (PAD) :-		102488
	Contact									
	Recorders			OzArk Environmental and Heritage Management						
43-3-0088	Parked Manildra-Open Site 9 (PM-OS9)	GDA	55	625932	6323088	Open site	Partially Destroyed	Artefact : 2		102488
	Contact									
	Recorders			OzArk Environmental and Heritage Management						

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-3-0089	Parked Manildra-Scarred Tree 1 (PM-ST1)	GDA	55	616299	6324129	Open site	Valid	Modified Tree (Carved or Scarred) :		102488
	Contact									
	Recorders									
43-3-0093	PM-ST3	GDA	55	601956	6328882	Open site	Partially Destroyed	Modified Tree (Carved or Scarred) : -, Artefact : -		102488
	Contact									
	Recorders									
43-3-0094	Parkes-Manildra Open Site 16 (PM-OS16)	GDA	55	606382	6326345	Open site	Partially Destroyed	Artefact : -		102488
	Contact									
	Recorders									
43-3-0102	Parkes-Manildra Open Site 37 (PM-OS37)	GDA	55	628397	6323383	Open site	Valid	Artefact : -		102488
	Contact									
	Recorders									
43-3-0103	Parkes-Manildra Open Site 42 (PM-OS42)	GDA	55	623788	6323177	Open site	Partially Destroyed	Artefact : -		102488
	Contact									
	Recorders									
43-3-0104	PIE-ST1	GDA	55	608082	6329633	Open site	Valid	Modified Tree (Carved or Scarred) :		102964
	Contact									
	Recorders									
43-2-0071	Quarry	GDA	55	588572	6326904	Open site	Valid	Aboriginal Resource and Gathering : -		
	Contact									
	Recorders									
43-2-0073	Bogan Gate 1	GDA	55	591234	6328714	Open site	Valid	Modified Tree (Carved or Scarred) :		
	Contact									
	Recorders									
43-3-0109	Akuna Road PSC Scarred Tree 1	GDA	55	611442	6330457	Open site	Valid	Modified Tree (Carved or Scarred) :		
	Contact									
	Recorders									
43-3-0110	Akuna Road PSC Scarred Tree-1 (Duplicate of 43-3-0109)	GDA	55	611142	6330457	Open site	Not a Site	Modified Tree (Carved or Scarred) :		
	Contact									
	Recorders									
43-3-0111	P2N IA1	GDA	55	604867	6344393	Open site	Valid	Artefact : -		
	Contact									
	Recorders									
43-2-0074	Forbes Gunningblne TSR	GDA	55	591130	6320914	Open site	Valid	Modified Tree (Carved or Scarred) :		
	Contact									
	Recorders									

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AHIMS Web Services (AWS)

Extensive search - Site list report

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders								Permits
43-3-0112	Parkes Solar IF7	GDA	55	600130	6336182	Open site	Valid	Artefact : -		
	Contact	Recorders								Permits
43-3-0113	Parkes Solar IF5	GDA	55	599931	6335372	Open site	Valid	Artefact : -		
	Contact	Recorders								Permits
43-3-0114	Parkes Solar IF4	GDA	55	601575	6335464	Open site	Valid	Artefact : -		
	Contact	Recorders								Permits
43-3-0115	Parkes Solar IF3	GDA	55	600780	6334824	Open site	Valid	Artefact : -		
	Contact	Recorders								Permits
43-3-0116	Parkes Solar IF2	GDA	55	600844	6334824	Open site	Valid	Artefact : -		
	Contact	Recorders								Permits
43-3-0117	Parkes Solar IF1	GDA	55	600530	6334822	Open site	Valid	Artefact : -		
	Contact	Recorders								Permits
43-3-0119	Parkes Solar IF6a	GDA	55	600300	6335697	Open site	Valid	Artefact : -		
	Contact	Recorders								Permits

Report generated by AHIMS Web Service on 15/06/2016 for Doug Williams for the following area at Lat, Long From : -33.2724, 147.897 - Lat, Long To : -32.9623, 148.3887 with a Buffer of 50 meters. Additional Info : Background to ACHA. Number of Aboriginal sites and Aboriginal objects found is 75

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Aboriginal Sites Register of NSW

NPWS, PO Box 1967, Hurstville NSW 2220

Standard Site Recording Form

New Recording Additional information

SITE IDENTIFICATION

Site name	PIF2	NPWS Site Number	43-3-0081
Owner/manager			
Owner Address			

LOCATION

Location	Parkes			
How to get to the site	see attached aerial photo			
1:250,000 map name			NPWS map code	
AMG Zone	AMG Easting	600053	AMG Northing	6336084
Method for grid reference		Map scale (if method = map)	1:50,000	Map name Parkes Topographic Map 8531-1 & 1V 1 st edition
NPWS District Name (see map)			NPWS Zone (see map)	
Portion no.			Parish	

SITE DESCRIPTION

Site type(s)	Isolated Find	Site type code (NPWS use only)	
Description of site and contents CHECKLIST: eg. length, width, depth, height of site, shelter, deposit, structure, element eg. tree scar, grooves in rock. DEPOSIT: colour, texture, estimated depth, stratigraphy, contents-shell, bone, stone, charcoal, density & distribution of these, stone types, artefact types. TREES: number, alive, dead. likely age, scar shape, position, size, patterns, axe marks, regrowth. QUARRIES: rock type, debris, recognisable artefacts, percentage quarried	<p>The artefact was found in a disturbed context and it is not considered that the artefact is in its Isolated find was located within the paddock where the proposed peaking power plant is to be located (Figure 4.6). The artefact was located on the edge of the plough zone (the paddock has been recently ploughed). The visibility within the paddock was very good at 80% due to recent rain.</p> <p>There is low to moderate potential for this site to contain more artefacts and low potential for subsurface archaeological deposits to be associated with the site.</p> <p><i>The artefact:</i></p> <p>black volcanic flake with white (quartz) inclusions, 23 x 24 x 4 mm (Figure 4.7)</p>		

Version: June 1998

Data entered by:

Date entered:



Aboriginal Sites Register of NSW

NPWS, PO Box 1967, Hurstville NSW 2220

Standard Site Recording Form

SITE ENVIRONMENT						
Land form	flat plain		Aspect	open	Slope	
Mark position of the site						
Local rock type		Land use/effect	pastoral uses			
Distance from drinking water		Source				
Resource zone (eg. estuarine, river, forest)	plains, creekline		Vegetation	scattered immature eucalypts		
Edible plants	--		Faunal resources (include shellfish)	--		
Other exploitable resources (eg. ochre)	--					
Are there other sites in the locality	no	Are they in the Sites Register		Other site types include		
SITE MANAGEMENT						
Site condition	good					
Management recommendations						
Have artefacts been removed from site	n/a		When	n/a		
By whom	n/a		Deposited at	n/a		
Consent applied for	<input type="checkbox"/>		Consent issued	<input type="checkbox"/>		
Date of issue			Consent number			
SITE INSPECTION AND RECORDING						
Reason for investigation	Parkes peaking power plant and associated pipeline					
Were local Aborigines contacted or present for the recording	Yes	Names and addresses	Peak Hill LALC 88 Caswell Street PEAK HILL NSW 2869			
Is the site important to local Aborigines	—					
Verbal/written reference sources	Peaking Power Plant and Associated Gas Pipeline, Parkes, NSW. Cultural Heritage Assessment Report by Navin Officer Heritage Consultants Pty Ltd to URS Addendum Report		ASR report number(s) (or title)	C- C-		
Photographs taken	Yes		No. of Photos attached	2		
Site recorded by	Navin Officer Heritage Consultants Pty Ltd		Date of recording	February 2008		
Address/institution	4/71 Leichhardt Street, Kingston, ACT 2604					



Aboriginal Sites Register of NSW

NPWS, PO Box 1967, Hurstville NSW 2220

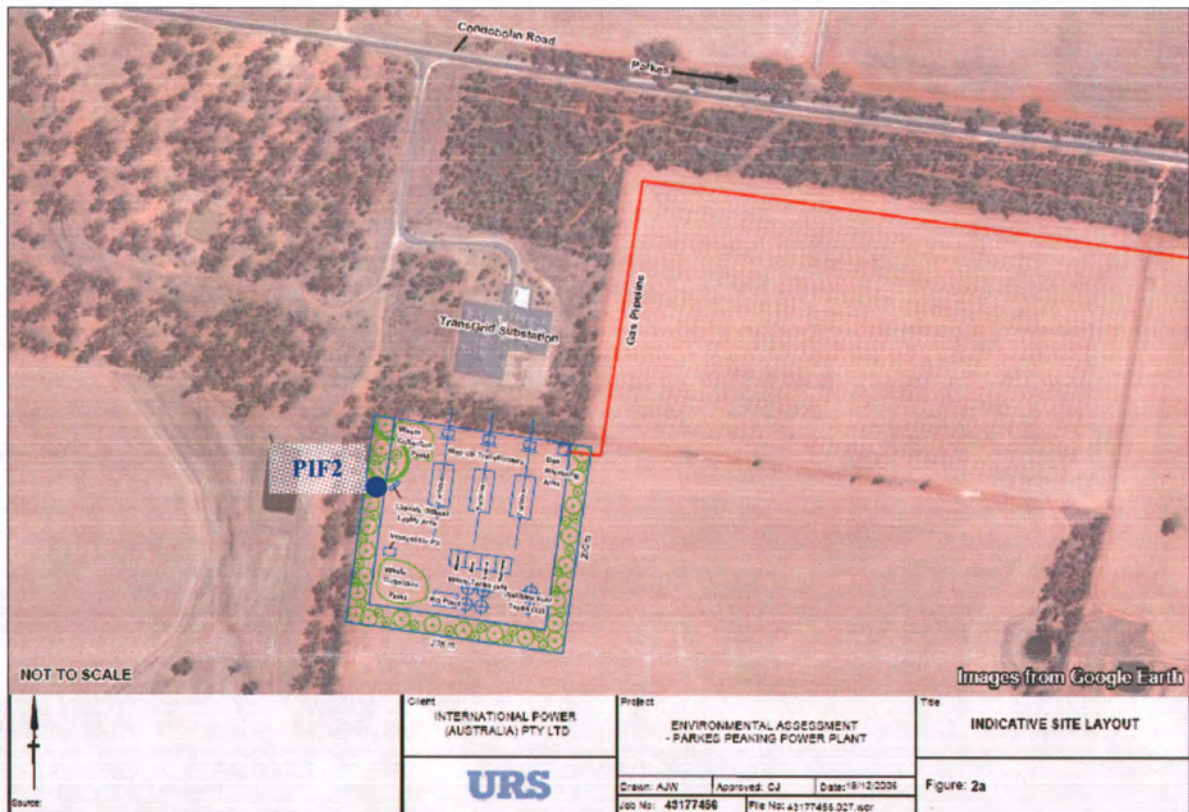
Standard Site Recording Form



PIF2, at backpack, looking east



PIF2 artefact



Approximate location of previously unrecorded Aboriginal site PIF2 within the Parkes Peaking Power Plant study area (base map supplied by URS)

0



Aboriginal Sites Register of NSW

NPWS, PO Box 1967, Hurstville NSW 2220

Standard Site Recording Form

New Recording Additional information

SITE IDENTIFICATION

Site name	PIF1	NPWS Site Number	43-3-0083
Owner/manager			
Owner Address			

LOCATION

Location	Parkes			
How to get to the site	see attached aerial photo			
1:250,000 map name			NPWS map code	
AMG Zone	AMG Easting	600000	AMG Northing	6336400
Method for grid reference		Map scale (if method = map)	1:50,000	Map name
				Parkes Topographic Map 8531-1 & 1V 1 st edition
NPWS District Name (see map)			NPWS Zone (see map)	
Portion no.			Parish	

SITE DESCRIPTION

Site type(s)	Isolated Find	Site type code (NPWS use only)	
Description of site and contents CHECKLIST: eg. length, width, depth, height of site, shelter, deposit, structure, element eg. tree scar, grooves in rock. DEPOSIT: colour, texture, estimated depth, stratigraphy, contents-shell, bone, stone, charcoal, density & distribution of these, stone types, artefact types. TREES: number, alive, dead, likely age, scar shape, position, size, patterns, axe marks, regrowth. QUARRIES: rock type, debris, recognisable artefacts, percentage quarried	<p>The artefact was found in a disturbed context and it is not considered that the artefact is in its original position. It may have been moved to its current location through farming activities. There is low to moderate potential for this site to contain more artefacts and low potential for subsurface archaeological deposits to be associated with the site.</p> <p><i>The artefact:</i></p> <ul style="list-style-type: none"> Red volcanic <i>bogan pick</i>, 29 x 10 x 7.5 cm (Figures 4.1 - 4.4) <p>A "bogan pick" is described by McCarthy (1976) as a rare pick-shaped implement with a rounded butt and body tapering to a point at the distal end. The specimen found during the current study has a polished point at one end and is possibly adze shaped at the other the end. Scattered specimens have been found from eastern Victoria to the southern and central tableland of New South Wales. Nothing is known of their function (McCarthy 1976).</p> <p>Two clumps of what appears to be burnt clay were visible m north of the artefact (Figure 4.5). These are possibly the remains of burnt termite mounds that may have been used for heat retention by Aboriginal people in the past. The clumps do not appear to be <i>in situ</i>.</p>		

Version: June 1998

Data entered by:

Date entered:



Aboriginal Sites Register of NSW

NPWS, PO Box 1967, Hurstville NSW 2220

Standard Site Recording Form

SITE ENVIRONMENT				
Land form	flat plain	Aspect	open	Slope
Mark position of the site				
Local rock type		Land use/effect	pastoral uses	
Distance from drinking water		Source		
Resource zone (eg. estuarine, river, forest)	plains, creekline	Vegetation	scattered immature eucalypts	
Edible plants	--	Faunal resources (include shellfish)	--	
Other exploitable resources (eg. ochre)	--			
Are there other sites in the locality	no	Are they in the Sites Register	Other site types include	
SITE MANAGEMENT				
Site condition	good			
Management recommendations				
Have artefacts been removed from site	n/a	When	n/a	
By whom	n/a	Deposited at	n/a	
Consent applied for	<input type="checkbox"/>	Consent issued	<input type="checkbox"/>	
Date of issue		Consent number		
SITE INSPECTION AND RECORDING				
Reason for investigation	Parkes peaking power plant and associated pipeline			
Were local Aborigines contacted or present for the recording	Yes	Names and addresses	Peak Hill LALC 88 Caswell Street PEAK HILL NSW 2869	
Is the site important to local Aborigines	—			
Verbal/written reference sources	Peaking Power Plant and Associated Gas Pipeline, Parkes, NSW. Cultural Heritage Assessment Report by Navin Officer Heritage Consultants Pty Ltd to URS Addendum Report		ASR report number(s) (or title)	C- C-
Photographs taken	Yes		No. of Photos attached	2
Site recorded by	Navin Officer Heritage Consultants Pty Ltd		Date of recording	February 2008
Address/institution	4/71 Leichhardt Street, Kingston, ACT 2604			



Aboriginal Sites Register of NSW

NPWS, PO Box 1967, Hurstville NSW 2220

Standard Site Recording Form



PIF1 - bogan pick - top



PIF1 - bogan pick - bottom



PIF1 - bogan pick - left side



PIF1 - bogan pick - right side



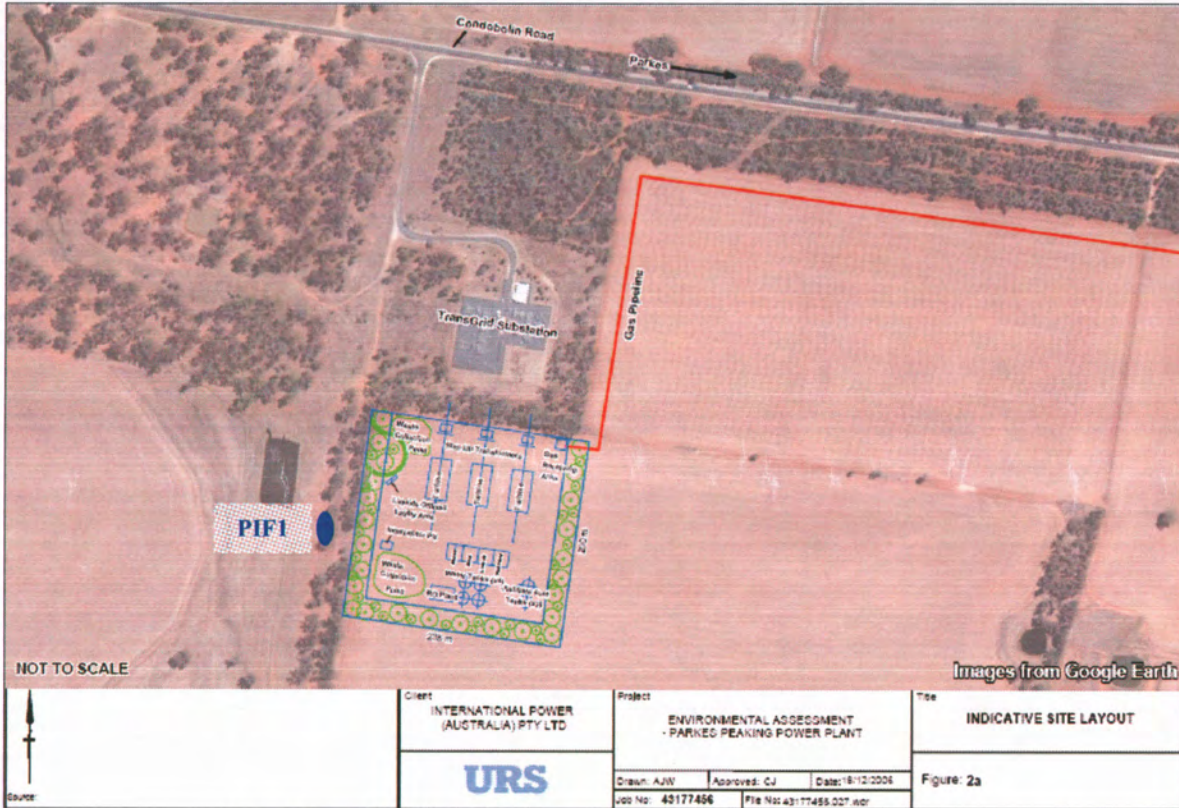
clay lumps found near PIF1



Aboriginal Sites Register of NSW

NPWS, PO Box 1967, Hurstville NSW 2220

Standard Site Recording Form



Approximate location of new sites within the Parkes Peaking Power Plant study area (base map supplied by URS)

Attachment 5.

Project Site Records

Site Name: GSF-1	Site Type: Isolated Artefact (Flake)
Grid Ref (centroid): 600838E 6336348N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Silcrete Isolated artefact located on plain.



Site Photographs:



Artefact – Dorsal Surface



Looking South across site. Kneeling figure marks location.

Site Name	Easting	Northing	COLOUR	MATERIAL	Technological Type	L	W	T	Platform Type	Platform Surface	Termination	SCARS				RET/ED				COMMENTS
												Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
GSF-1	600838	6336348	Orange Brown	Silcrete	Flake	28	26	8	Focal	Unifacial	Feather	1		1						

Site Name: GSF-2	Site Type: Isolated Artefact (core)
Grid Ref (centroid): 600579E 6336165N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Silcrete Isolated artefact located on plain.



Site Photographs:



Artefact – Core



Looking east across site, arrow marks location.

Site Name	Easting	Northing	COLOUR	MATERIAL	Technological Type	L	W	T	Platform Type	Platform Surface	Termination	SCARS				RETED				COMMENTS
												Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
GSF-2	600579	6336166	Tan	Silcrete	Cere	33	32	22												8 Flake Scars from 3 platforms

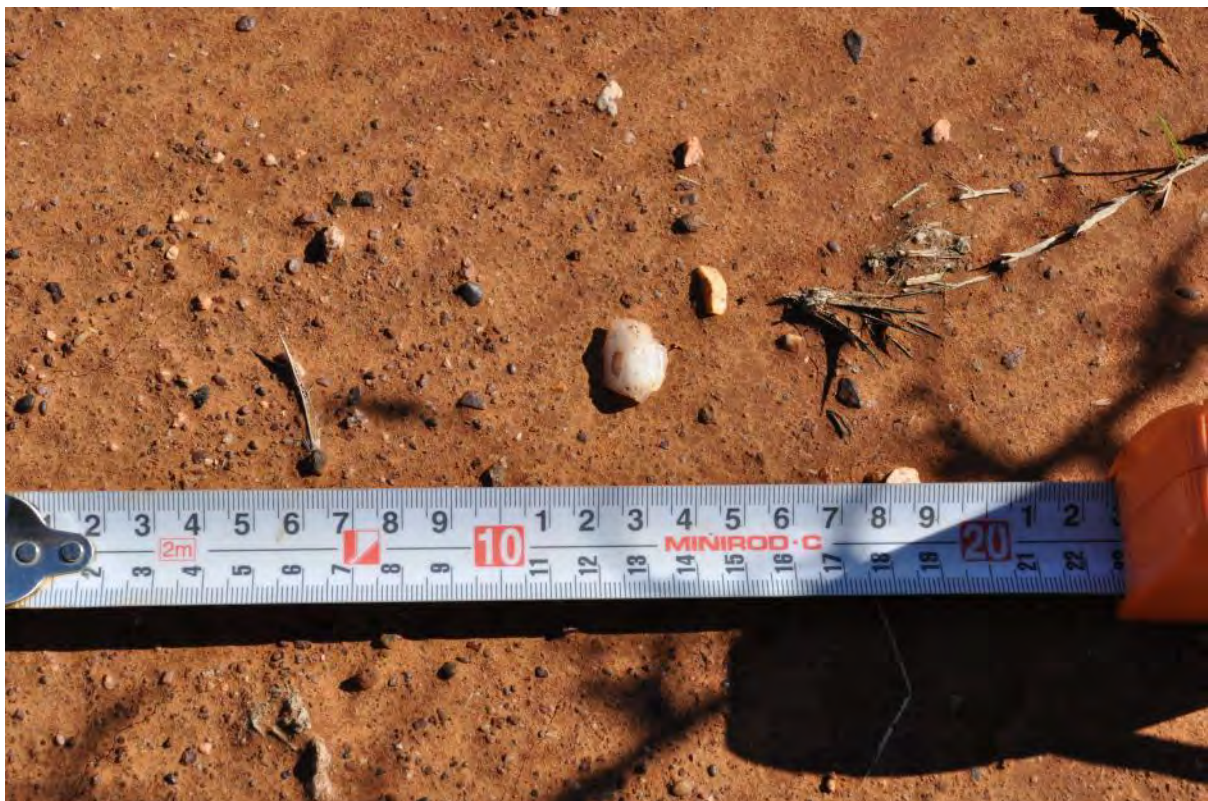
Site Name: GSF-3	Site Type: Artefact Scatter(core)
Grid Ref (centroid): 600336E 6336242N	Dimensions: 15.5m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Three artefacts on a plain, found in a disturbed context on crest of erosion control bank.

Site Location Map:



Site Photographs:

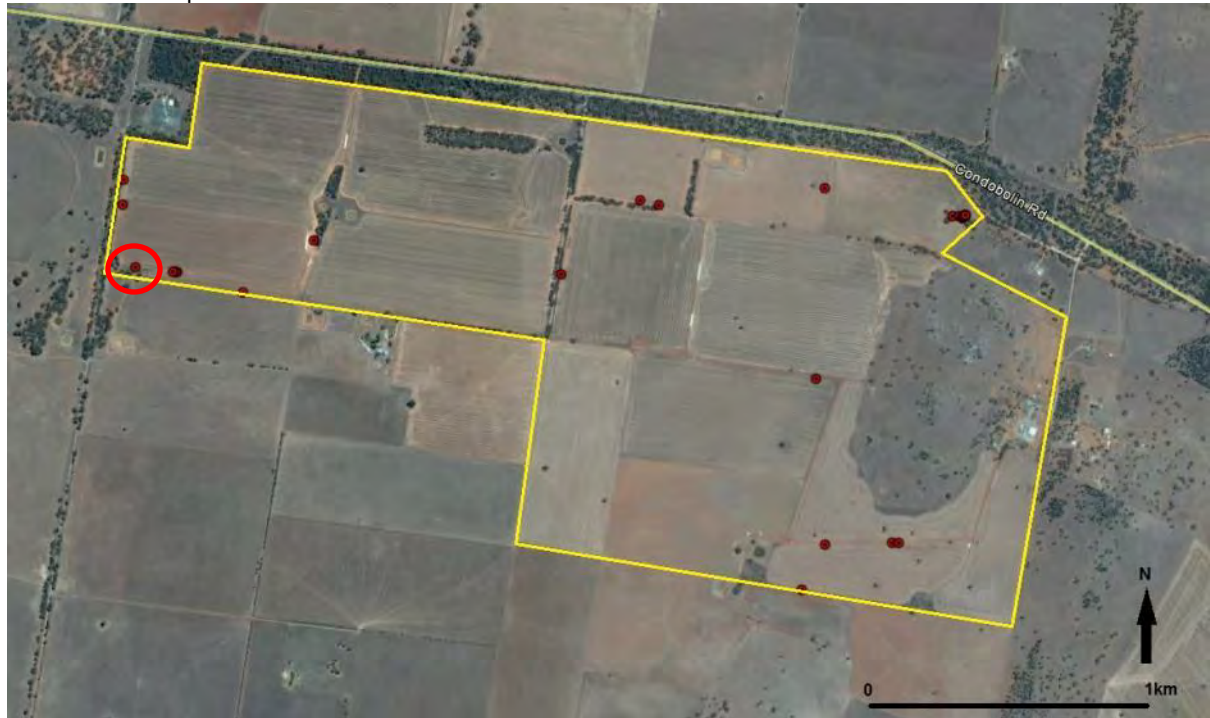


Quartz artefact

Site Name: GSF-4	Site Type: Isolated Artefact (core)
Grid Ref (centroid): 600192E 6336259N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Isolated artefact on a plain, found in a disturbed context on crest of erosion control bank.

Site Location Map:



Site Photographs:



Core



Looking east across site along erosion control bank, equipment at artefact location

Site Name	Easting	Northing	COLOUR	MATERIAL	Technological Type	L	W	T	COMMENTS
GSF-4	600192	6336259	Black	Metamorphic	Core	35	45	5	1 Flake Scar from 1 cortical platform

Site Name: GSF-5	Site Type: Isolated Artefact (hammer/Anvil/Muller)
Grid Ref (centroid): 600148E 6336485N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Isolated multi-purpose tool on a plain, found in cultivated paddock.

Site Location Map:



Site Photographs:



Multi-Function artefact



Multi-function artefact showing grinding, anvil and hammer use



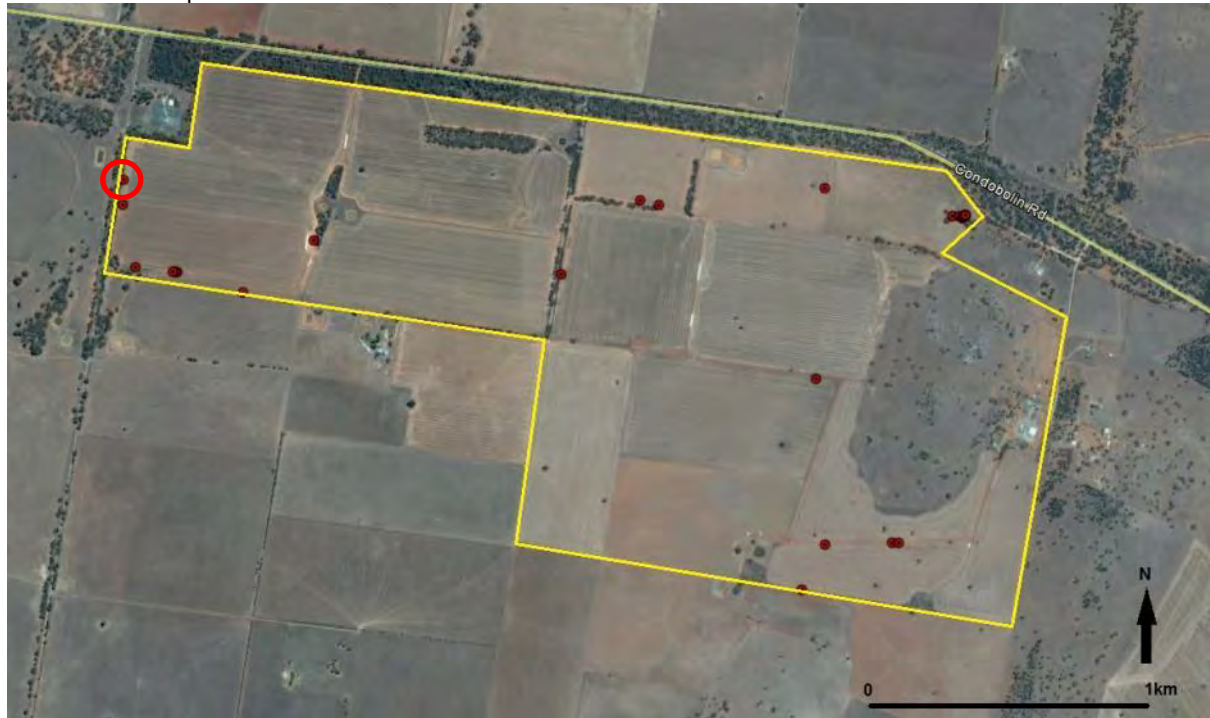
Looking north across site, artefact circled.

Site Name	Easting	Northing	COLOUR	MATERIAL	Technological Type	L	W	T	COMMENTS
GSF-5	600148	6336485	Brown/grey	Volcanic	Hammer/ Anvil/Muller	85	75	50	Made on a pebble, anvil pitting both sides, hammer damage to 100% margin.

Site Name: GSF-6	Site Type: Isolated Artefact (Flake)
Grid Ref (centroid): 600148E 6336485N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Isolated artefact on a plain, found in cultivated paddock.

Site Location Map:



Site Photographs:



Flake, dorsal surface

Site Name: GSF-7	Site Type: Isolated Artefact (broken hammer stone)
Grid Ref (centroid): 602680E 6336515N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Isolated broken hammer stone on a plain, found in cultivated paddock.

Site Location Map:



Site Photographs:



Artefact



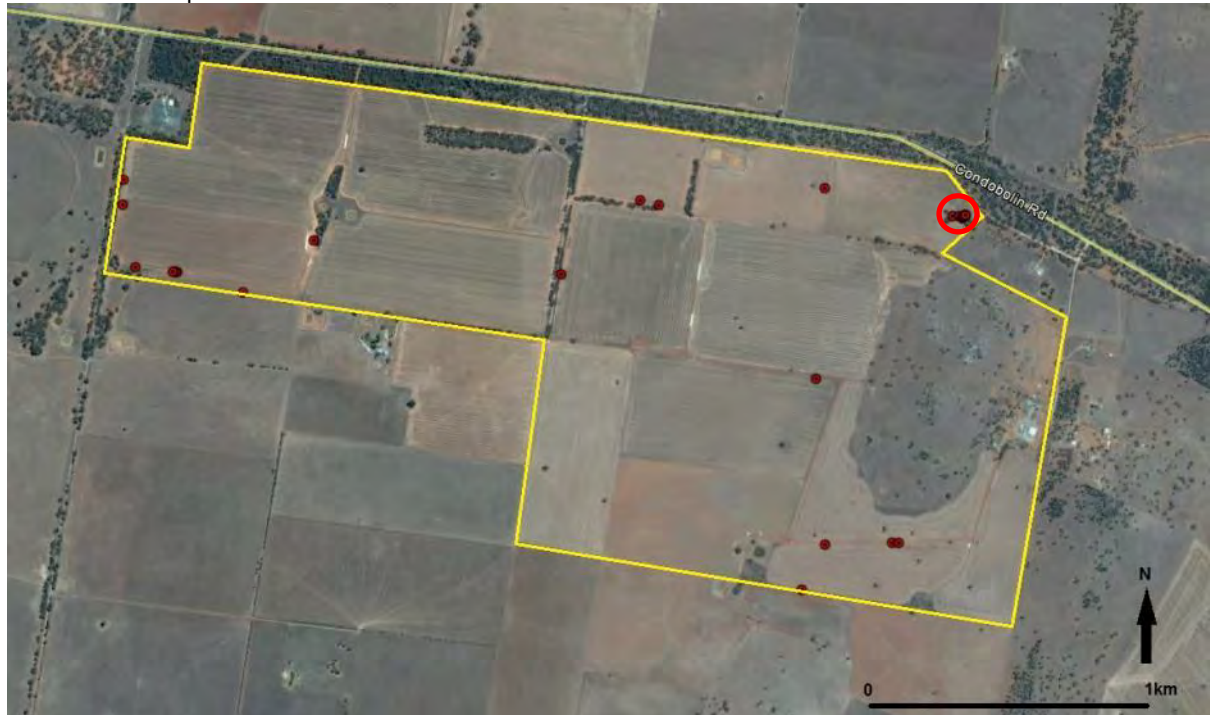
Looking west across site, artefact location indicated

Site Name	Easting	Northing	Colour	Material	Technological Type	L	W	T	Comments
GSF-7	602680	6336515	Brown	Metamorphic/sedimentary	Broken Hammerstone	57	35	32	Broken pebble

Site Name: GSF-8	Site Type: Artefact Scatter
Grid Ref (centroid): 603165E 6336407N	Dimensions: 55m x 10m
Topographic Location: Plain	AHIMS No:

Site Description: Artefact scatter on a plain, found associated with erosion scar created by a ditch running water to a dam.

Site Location Map:



Site Location



Site Extent

Site Photographs:



Looking west from east end of site



Large silcrete flake, ventral surface



Large silcrete flake, showing retouch



Large volcanic damaged cobble

Site Name	Easting	Northing	Colour	Material	Technological Type	L	W	T	Platform Type	Platform Surface	Termination	SCARS				RETIED				Comments	
												Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
GSF-8	603183	6336412	White	Quartz	Long Split Flake	26	20	5	Focal	Unifacial	Feather		1								
	603182	6336411	Grey	Silcrete	Retouched Flake	55	65	9	Focal	Cortical	Retouched			1			50	100	100		
	603175	6336405	Grey	Volcanic	Core	20	30	20													5 flake scars from 2 platforms
	603173	6336405	Light Grey	Quartzite	Proximal Flake	27	45	4	Focal	Bifacial			3								
	603170	6336401	Grey Banded	Chert	Flake	28	15	4	Focal	Unifacial	Feather		2								
	603161	6336409	White	Quartz	Flake	15	20	5	Focal	Crushed	Feather		2								
	603179	6336409	Black	FGS	Flake	15	15	3	Focal	Unifacial	Feather		2								
	603136	6336409	Grey	Volcanic	Bashed Cobble	270	80	70													

Site Name: GSF-9	Site Type: Isolated Artefact (flake)
Grid Ref (centroid): 602083E 6336461N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

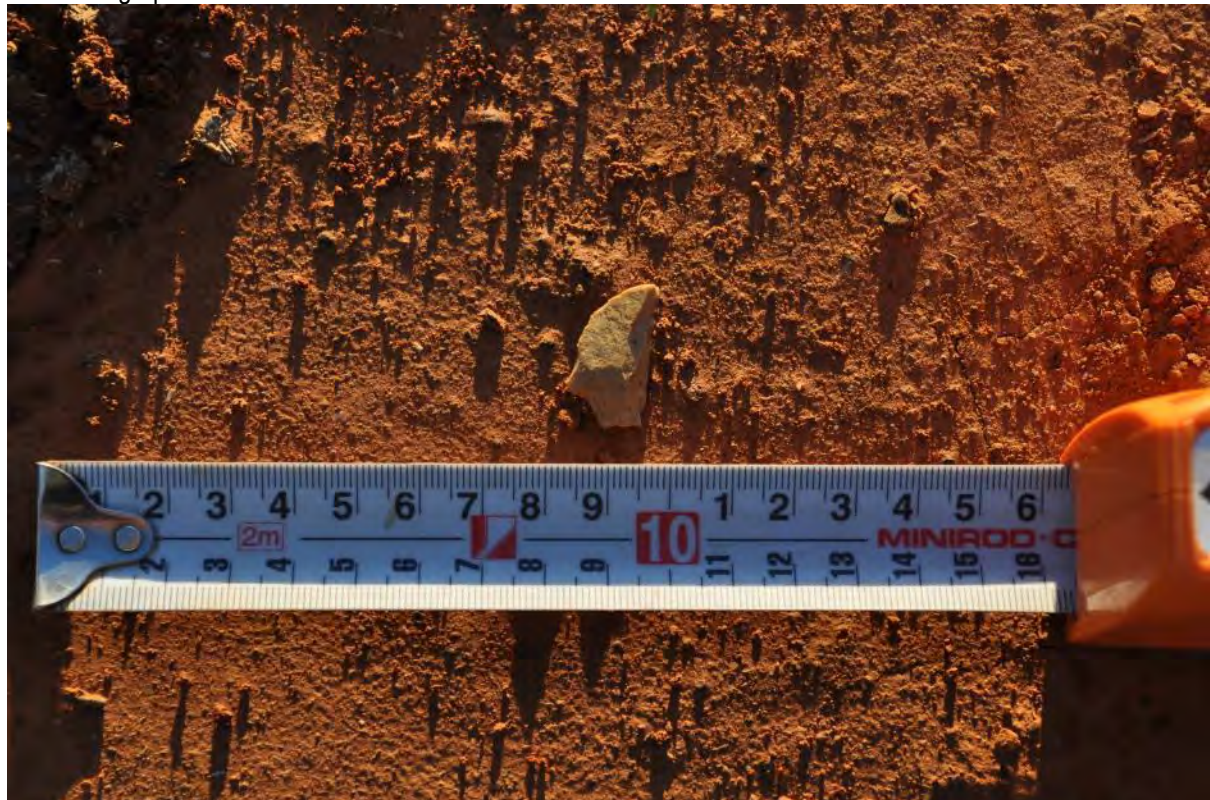
Site Description: Isolated artefact on a plain, found on a farm track.

Site Location Map:



Site Location

Site Photographs:

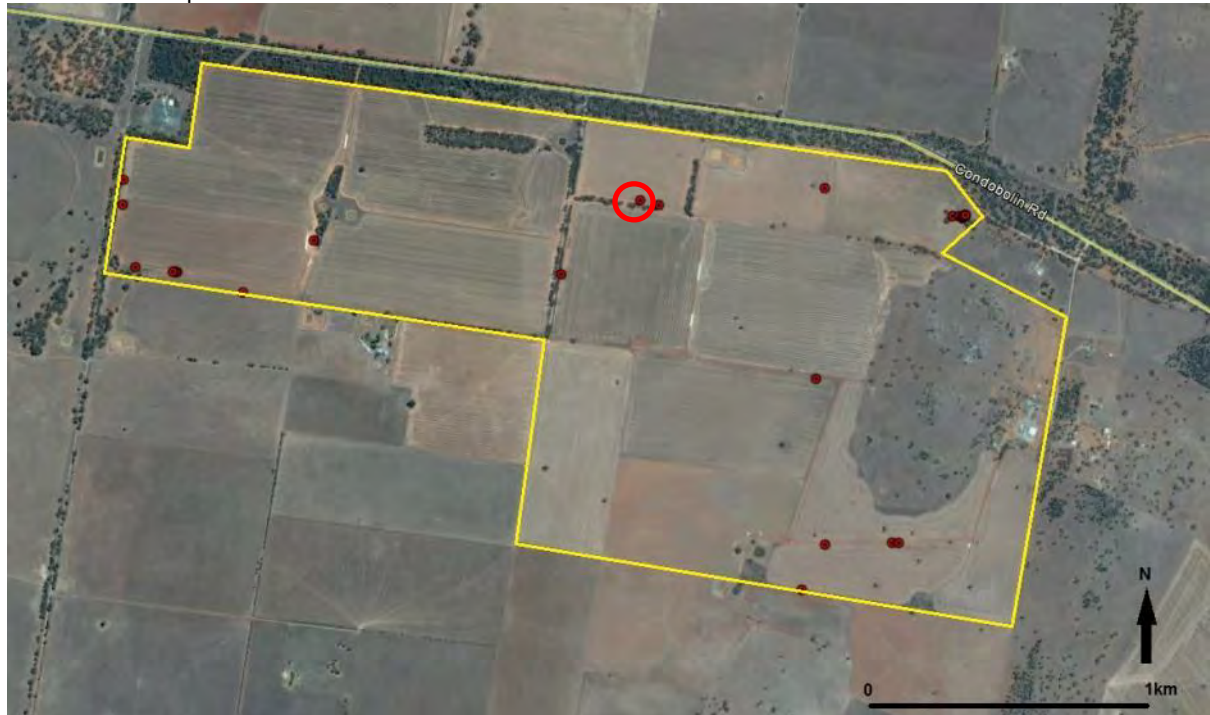


Flake, dorsal surface

Site Name: GSF-10	Site Type: Isolated Artefact (retouched flake)
Grid Ref (centroid): 602016E 6336479N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Isolated artefact on a plain, found in paddock north of farm track.

Site Location Map:



Site Location

Site Photographs:



Flake, dorsal surface



Looking west across site. Equipment at artefact location

Site Name	Easting	Northing	Colour	Material	Technological Type	L	W	T	Platform Type	Platform Surface	Termination	SCARS				RET/ED				Comments
												Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
GSF-10	602016	6336479	Grey	FGS	Retouched Flake	20	26	9	Focal	Unifacial	Retouched	3			1				100	

Site Name: GSF-11	Site Type: Isolated Artefact (distal flake fragment)
Grid Ref (centroid): 601729E 6336217N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Isolated artefact on a plain, found in paddock on farm track.

Site Location Map:



Site Location

Site Photographs:

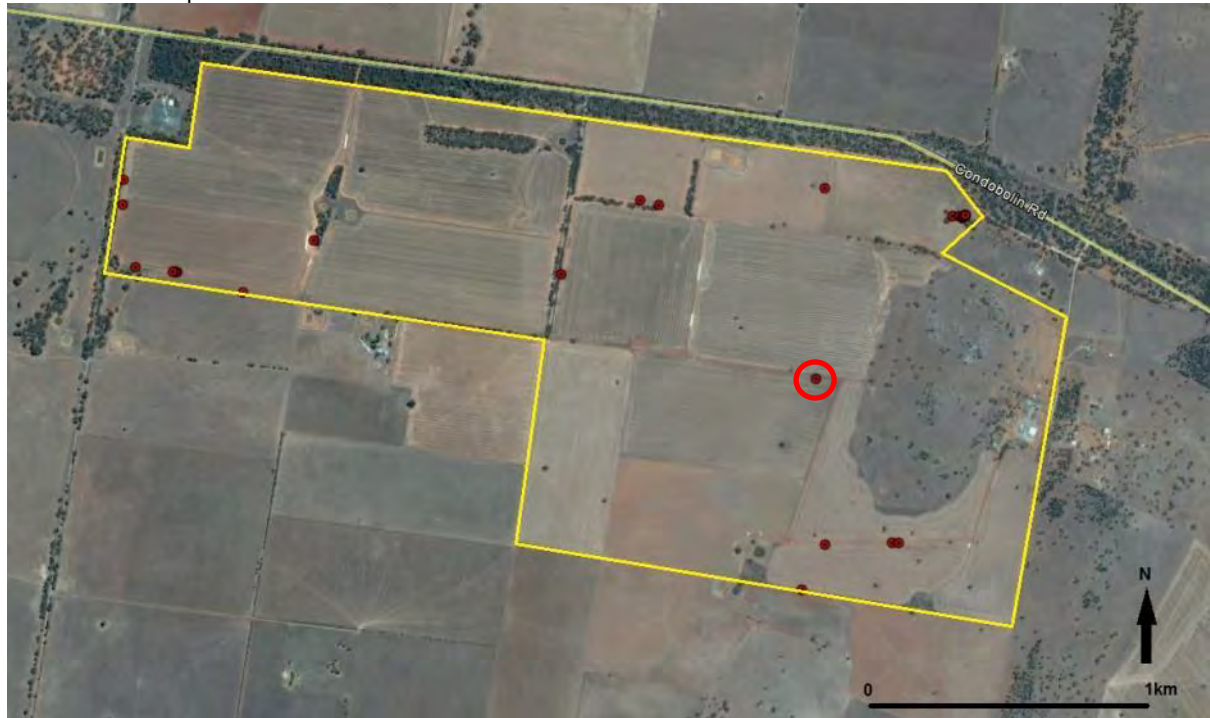


Distal flake, dorsal surface

Site Name: GSF-12	Site Type: Isolated Artefact (Flake)
Grid Ref (centroid): 601729E 6336217N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Isolated artefact on west footslopes of Millers Lookout, on edge of cultivated area.

Site Location Map:



Site Location

Site Photographs:



Quartz Flake, ventral surface



Looking east across site. Artefact location indicated

Site Name	Easting	Northing	Colour	Material	Technological Type	L	W	T	Platform Type	Platform Surface	Termination	SCARS				RET/ED				Comments
												Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
GSF-12	602640	6335833	White	Quartz	Flake	15	25	9	Focal	Bifacial	Axial	2								Found on south edge of track on edge of crop on lower footslopes of Millers Lookout

Site Name: GSF-13	Site Type: Isolated Artefact (Flake)
Grid Ref (centroid): 602582E 6335080N	Dimensions: 1m x 1m
Topographic Location: Plain	AHIMS No:

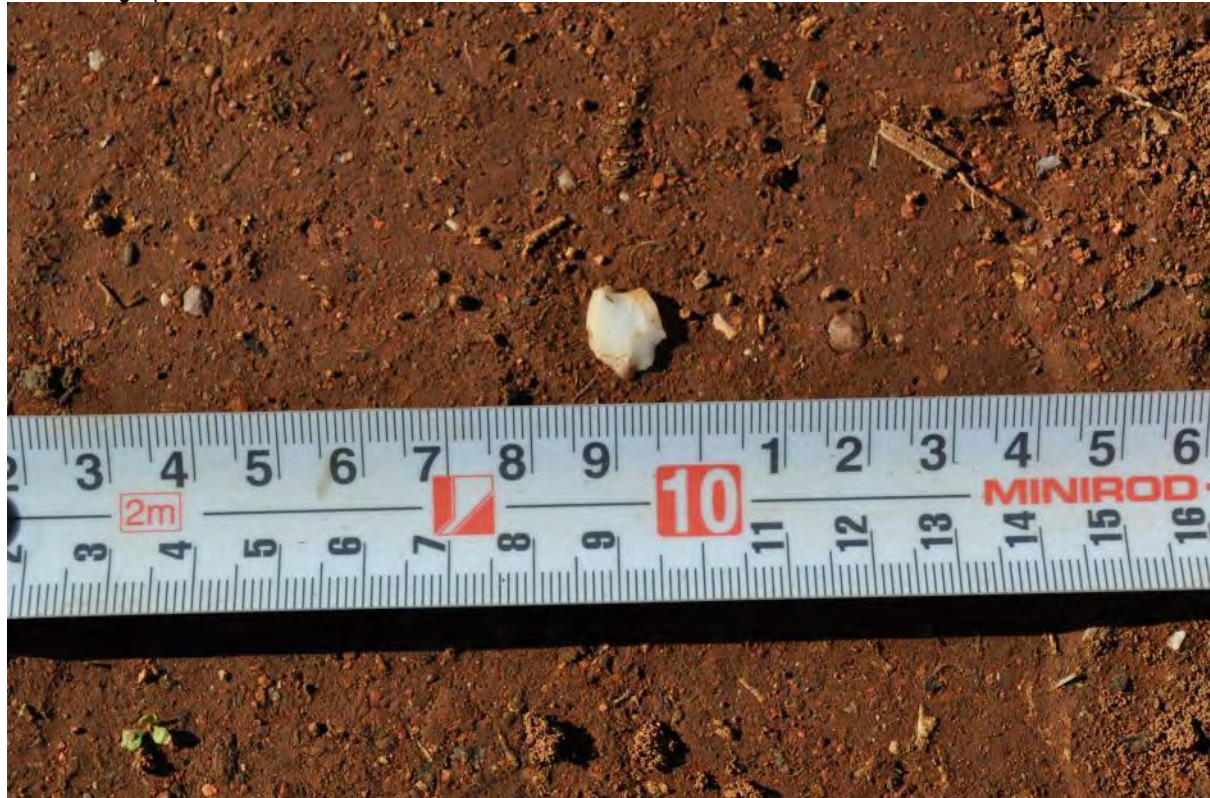
Site Description: Isolated artefact on a plain, found in paddock on farm track.

Site Location Map:



Site Location

Site Photographs:

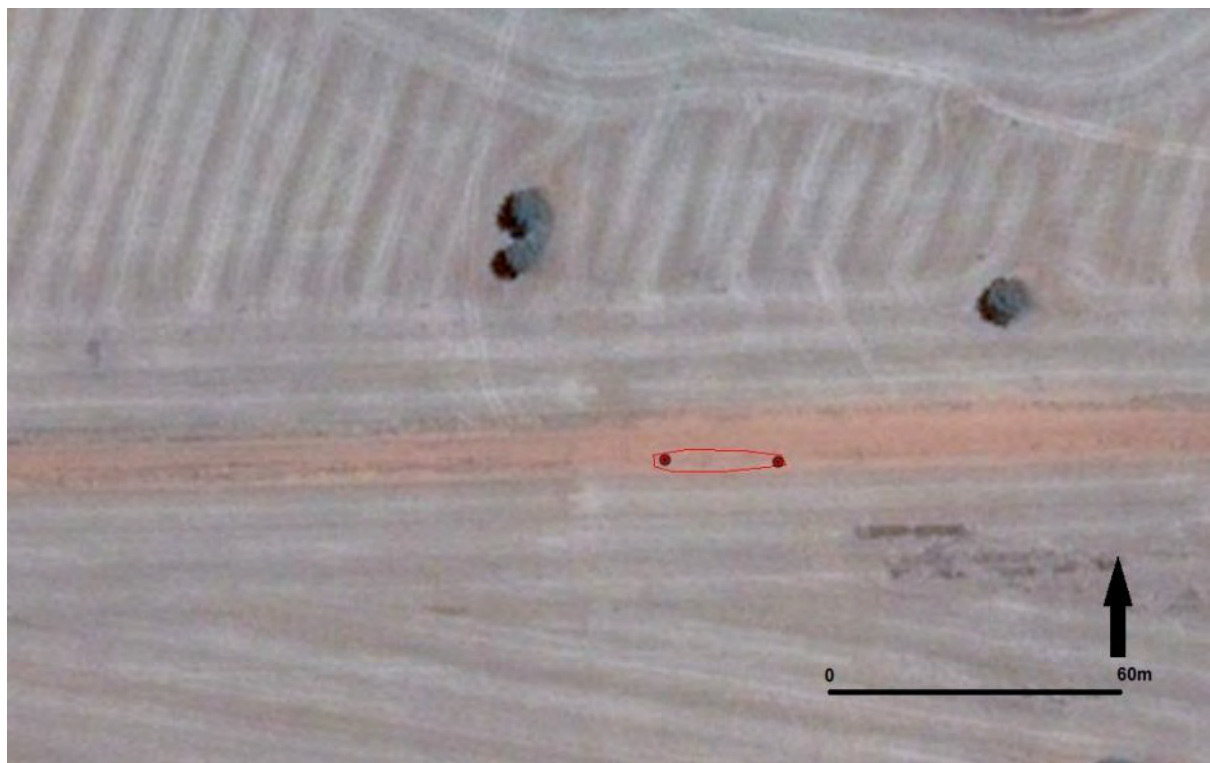


Quartz Flake, dorsal surface

Site Name: GSF-14	Site Type: Artefact scatter
Grid Ref (centroid): 602582E 6335080N	Dimensions: 20m x 1m
Topographic Location: Plain	AHIMS No:

Site Description: Two artefacts on lower footslopes of southern side of Millers Lookout, found 23m apart in paddock on farm track.

Site Location Map:



Site Plan

Site Photographs:



Artefacts, dorsal surface

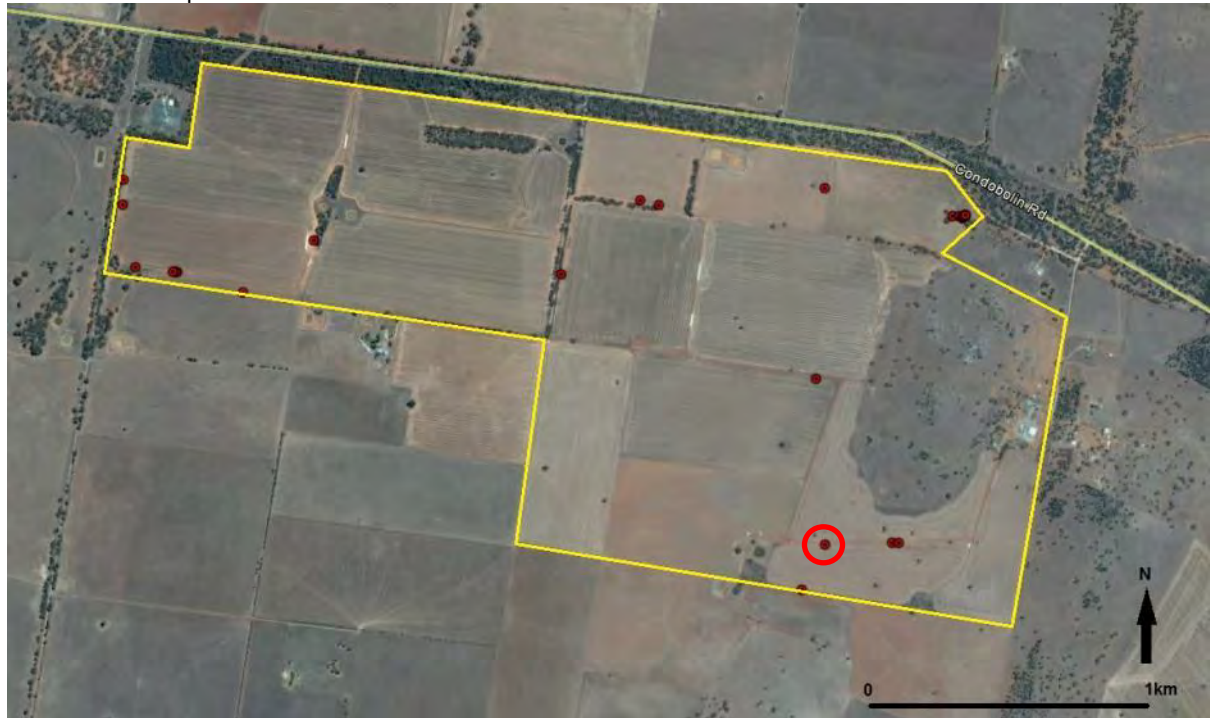


Looking west across site. Artefact location indicated

Site Name: GSF-15	Site Type: Isolated Artefact (Flake)
Grid Ref (centroid): 602667E 6335240N	Dimensions: 1m x 1m
Topographic Location: Foothslopes	AHIMS No:

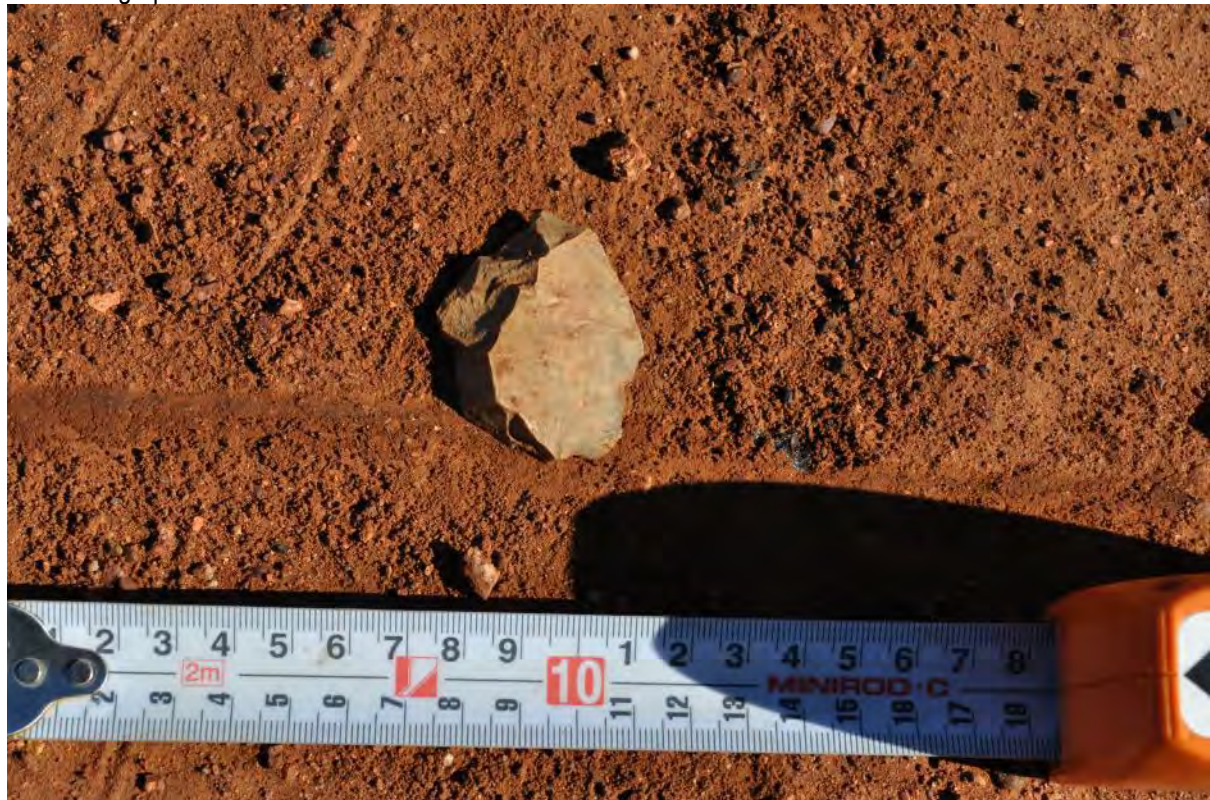
Site Description: Isolated artefact on foothslopes of Millers Lookout, found in paddock on farm track.

Site Location Map:



Site Location

Site Photographs:



Flake, dorsal surface



Looking west across site. Artefact location indicated

Site Name	Easting	Northing	Colour	Material	Technological Type	L	W	T	Platform Type	Platform Surface	Termination	SCARS				RET/ED				Comments
												Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
GSF-15	602667	6335240	Grey	FGS	Flake	46	35	8	Focal	Unifacial	Feather	2	1	1						

Site Name: Miller's Lookout Quarry	Site Type: Isolated Artefact (Flake)
Grid Ref (centroid): 603128E 6335827N	Dimensions: 600m x 200m
Topographic Location: Crest of isolated ridge (Millers Lookout)	AHIMS No:

Site Description: A series of locations quarried by Aboriginal people for stone hatchet material along the main ridgeline of Millers Lookout. Locations are identified by large negative flake scars on insitu bedrock outcrops or boulders, as large primary flakes. Where ground cover is absent a dense scatter of smaller debris is apparent. The hill has been quarried by Europeans in the 20th century, but this quarrying is distinguishable from that by Aboriginal people.

Site Location Map:



Site Location (red boundary)

Site Photographs:



Millers Lookout, looking east. Quarried locations indicated



Flake, ventral surface



Flake scar on boulder



Looking south across southern quarried outcrop.



Flake scar on boulder



Flake



Close up of material