Appendix 7

Aboriginal Heritage Assessment

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TYPICAL PORTION OF THE PROPOSED EXPANSION AREA FOR THE NYNGAN WASTE AND RESOURCE MANAGEMENT FACILITY.

ABORIGINAL HERITAGE ASSESSMENT

Nyngan Waste and Resource Management Facility
December 2012

Report Prepared by
OzArk Environmental & Heritage Management Pty Ltd
for R.W. Corkery & Co. Pty Limited
on behalf of
Bogan Shire Council

Environmental and
Heritage Management P/L

OzArk EHM
145 Wingewarra St
(PO Box 2069)
Dubbo NSW 2830

Phone: (02) 6882 0118
Fax: (02) 6882 0630
jodie@ozarkehm.com.au
phil@ozarkehm.com.au
www.ozarkehm.com.au

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Christy Hill		Nick Harrop	
Location		OzArk Job No.	
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Prepared For		Prepared By	
Christy hill RW Corkery & Co Pty Limited Geological and Environmental Consultants Email: christy@rwcorkery.com		Nick Harrop Senior Archaeologist OzArk Environmental & Heritage Management Pty. Limited P 02 6882 0118 F 02 6882 6030 M 0405 793 146 Email: nick@ozarkehm.com.au	

EXECUTIVE SUMMARY

The Nyngan Waste and Resource Management Facility (NWRMF) project is located approximately 4km north of the centre of Nyngan on Colane Road, NSW, within the Bogan Shire Council LGA. Bogan Shire Council (BSC) propose to extend the existing Waste Management Facility to allow for the long term management of domestic and commercial waste within the Local Government Area (LGA)

BSC anticipates that an application under Part 4 of the Environmental Planning & Assessment Act will be required. R.W. Corkery have been commissioned to prepare an Environmental Impact Statement (EIS) for the project. As part of this, OzArk have been commissioned to conduct an Aboriginal heritage survey over the Impact Footprint for the project.

OzArk conducted this archaeological investigation to establish the presence of any remains of Aboriginal heritage within the study area. This assessment included background database searches of existing heritage items in the area, assessment of the landscape and cultural contexts, and a field survey. Field survey included a representative from Nyngan Local Aboriginal Land Council (NLALC). The results of these aspects of the investigation are synthesised in this report.

No Aboriginal sites were recorded as a result of the current assessment of the Study Area for the NWRMF project. Areas of exposure ranged from as low as 5% in thick grass areas to 70% under trees. Taking visibility and exposure into account, the Effective Coverage Area was 3672 sq m or 3.6% of the total Survey Unit Area. The assessment concluded that:

The minimal available resources and other landscape factors within the Project Site and immediate surrounds indicate that it was unlikely to host intensive and ongoing occupation by Aboriginal peoples. The Leopardwood and Windmill grass offer some resources and some hunting may have occurred, however, permanent water sources are at least a kilometre distant, meaning that better candidates for settlement were available. A lack of stone suitable for tool-making further removes practical reasons for people to spend time in the vicinity. Aboriginal people would have been more likely to pass through this area.

Limited archaeological investigation has previously been undertaken in the local area. Regional investigations and ethnographic observations suggest that the subject area is unlikely to contain substantial evidence of Aboriginal occupation, but that nearby areas such as the Bogan River would have attracted more intensive activity. Although possible relics over the Project Site may include isolated stone artefacts or scarred trees, land clearing would have removed evidence of the latter.

As no Aboriginal heritage items were identified in the survey, no further heritage management is required and there are no constraints to the proposed NWRMF project on the grounds of Aboriginal heritage.

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1 INTRODUCTION

1.1 BRIEF DESCRIPTION OF THE PROPOSAL

The Nyngan Waste and Resource Management Facility (NWRMF) project is located approximately 4km north of the centre of Nyngan on Colane Road, NSW, within the Bogan Shire Council LGA. Bogan Shire Council (BSC) propose to extend the existing Waste Management Facility to allow for the long term management of domestic and commercial waste within the Local Government Area (LGA) (**Figures 1 and 2**). The proposed life of the facility would be approximately 50 to 80 years, however, it is possible that an application may be required for a shorter period.

BSC anticipates that an application under Part 4 of the Environmental Planning & Assessment Act will be required. R.W. Corkery were commissioned to prepare an Environmental Impact Statement (EIS) for the project. As part of this, OzArk were commissioned to conduct an archaeological survey for Aboriginal heritage remains.

Figure 1: Locality Plan.

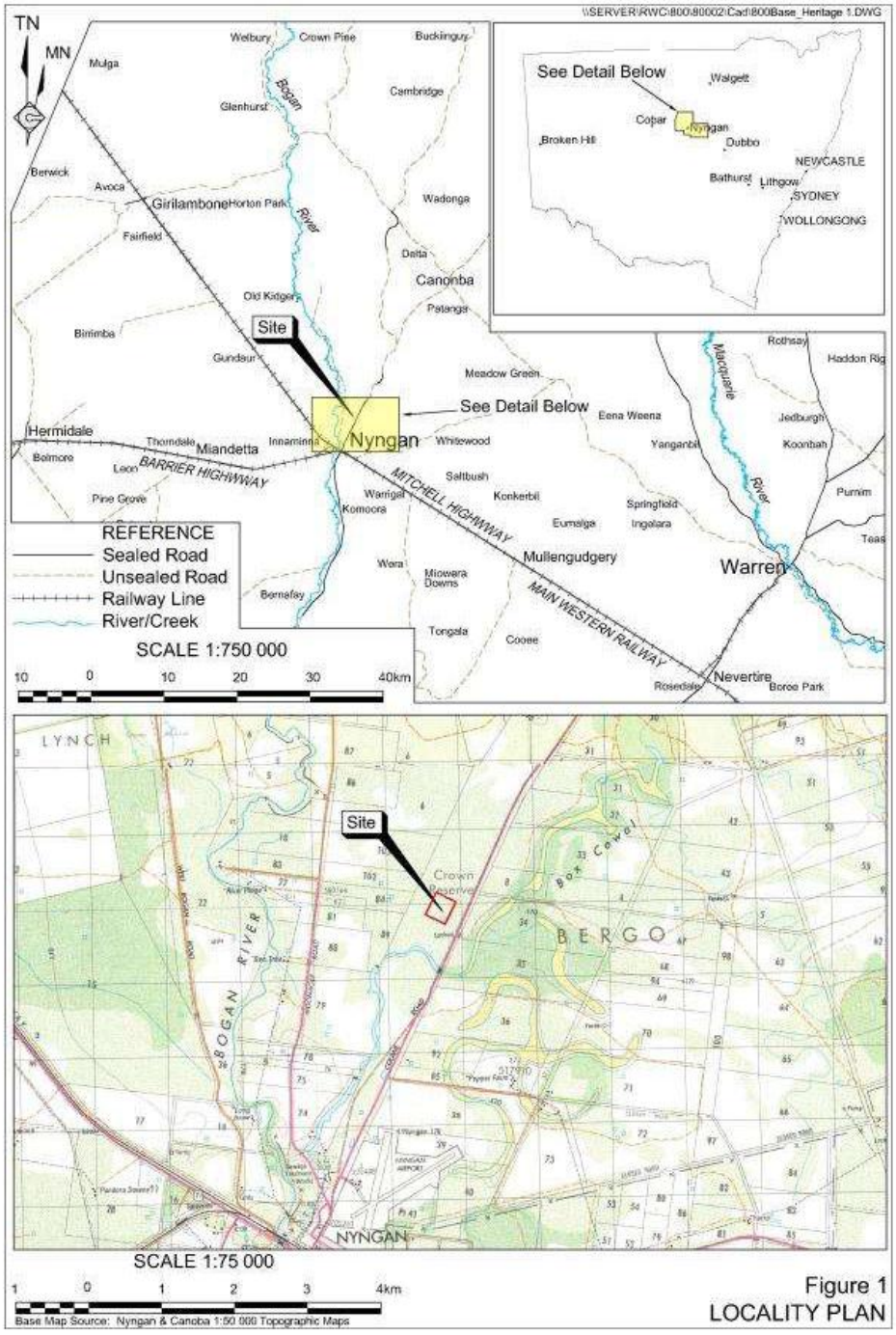
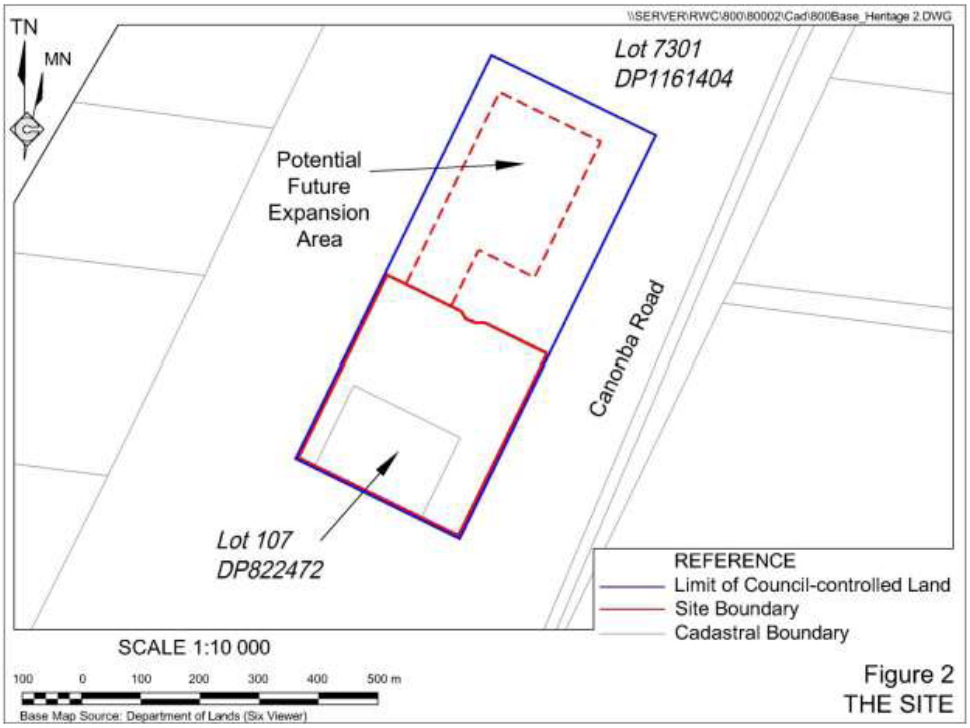


Figure 2: Site boundary.

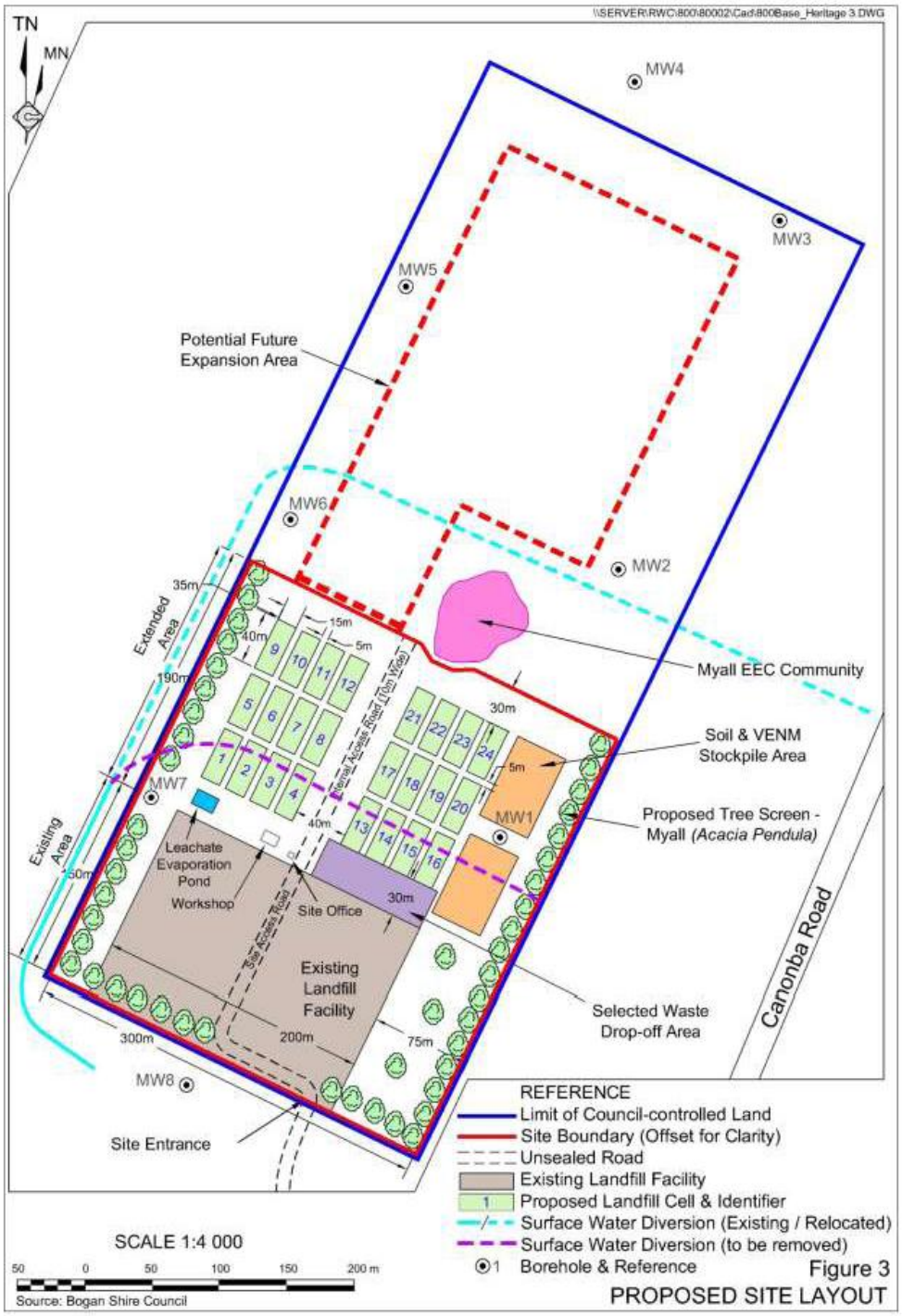


1.2 PROPOSED WORKS AND SUBJECT AREA

The Proposal would comprise approximately 26 cells, each approximately 40 m x 80 m in area and approximately 5 m to 6 m deep (**Figure 3**). All ground disturbing activities would be undertaken within an area of 600 m x 200 m referred to as the Waste Management Area (the 'Impact Footprint'). Additional infrastructure such as construction of monitoring bores and firebreaks would be undertaken within the Project Site Boundary (the 'Study Area'), which would be offset approximately 50 m from the Waste Management Boundary.

BSC proposes to accept general and commercial solid waste, as well as contaminated waste in an dedicated cell. In addition, recyclable material, including glass, paper and cardboard, metal, tyres, hydrocarbons and green waste would also be accepted, processed and removed from site.

Figure 3: Project Site Layout.



2 THE PROJECT

2.1 PURPOSE AND OBJECTIVES OF THE ARCHAEOLOGICAL INVESTIGATION

OzArk conducted this archaeological investigation to establish the presence of any Aboriginal heritage within the Study Area. This included a background search for existing heritage items in the area, assessment of the landscape and cultural contexts, and a field survey. The survey was conducted with the accompaniment of a representative from Nyngan Local Aboriginal Land Council (NLALC). The results of these aspects of the investigation are synthesised in this report.

Objective One: Conduct a desktop database search (**Section 2.5**) and background assessment (**Sections 3 and 4**).

Objective Two: Undertake field survey (**Section 5**).

Objective Three: Report on the results from objectives One and Two and synthesise into an overall assessment of heritage considerations and associated management recommendations.

2.2 DATE OF HERITAGE ASSESSMENT

The field survey took place on Tuesday 20th November 2012.

2.3 ABORIGINAL COMMUNITY INVOLVEMENT

Nyngan LALC was contacted on 15th November 2012 to inform them of the project. They were asked for their input for background information on Aboriginal knowledge of the area and to accompany the field survey team. A representative was nominated to join in the survey.

A log and copies of correspondence with Aboriginal community stakeholders is presented in **Appendix 1**.

2.4 OZARK EHM INVOLVEMENT

2.4.1 Field assessment

The fieldwork component of the current project was undertaken by Nick Harrop (BA [Hons]), Senior Archaeologist for OzArk EHM, and Lesly Ryan of NLALC:

2.4.2 Reporting

The reporting component of the current project was undertaken by:

- Report author: Nick Harrop (BA [Hons], Senior Archaeologist);
- Reviewer: Jodie Benton (PhD, University of Sydney);

Large sections of the landscape context were derived from OzArk 2010, the ecological report for this project[1]

2.5 DESKTOP DATABASE SEARCHES CONDUCTED

A desktop search was conducted on the following databases to identify any potential issues. The results of this search are summarised here in **Table 1** and presented in detail in **Appendix 2**. No previously-identified sites were located within the Project Site., althoughtwo sites have been previously recorded within 10 km of the Project Site (but over 3 km away from the centre of the Study Area (**Figure 4**).

Table 1: Desktop-database search results.

Name of database searched	Date of search	Type of search	Comment
Australian Heritage Database http://www.environment.gov.au/heritage/ahdb/	19.11.12	Bogan LGA.	No places on the search are within the Study Area
NSW Heritage Office State Heritage Register and State Heritage Inventory http://www.heritage.nsw.gov.au/	19.11.12	Bogan LGA	No places on the search are within the Study Area
National Native Title Claims Search http://www.nntt.gov.au/Applications-And-Determinations/Search-Applications/Pages/Search.aspx	19.11.12	NSW	Native Title Claim NC12/1 of the Ngempa-Ngiyampaa People includes Nyngan Nyngan is on the boundary of this claim)
DSEWPaC Protected Matters (EPBC Act) Database; http://www.environment.gov.au/erin/ert/epbc/index.html	19.11.12	Bogan LGA	None of the Aboriginal places on the RNE occur near the Study Area.
OEH Aboriginal Heritage Information Management System (AHIMS);	16.11.12	Lot 107 (Project Site)	0 sites within the search area.
		Lot 7301	0 sites within the search area.
		10 x 10 km centred on the Study Area	2 sites (OEH#s 27-4-0234 and 27-4-0001) within the search area, but not located wihtin the Porject Site
Local Environment Plan	19.11.12	Bogan LEP of 2011	No heritage places are listed in the Study Area.

2.6 PROJECT CONSTRAINTS

There were no limitations in forming this archaeological assessment. Access was available across the entire survey area, with ground surface visibility proving to be the only physical constraint.

[1] OzArk EHM 2010a.

Figure 4: The Project Site in relation to the town of Nyngan and previously recorded Aboriginal sites.

3 LANDSCAPE CONTEXT

The Study Area is within the Central West (Bogan - Macquarie) Catchment Management Area (CMA) which is within the larger Darling Riverine Plains Bioregion (DRPB).

The NWRMF Project is located approximately 4km north of the centre of Nyngan on Colane Road (GDA Zone 55 520032.833 E / 6513341.680 N). The Study Area can be located using the above coordinates on the Nyngan 8334n 1:25K topographic map (note map is in AGD). **Table 2**, below shows environmental characteristics salient to the Project Site.

Table 2: Characteristics of the Bogan-Macquarie Subregion of the Central West CMA (source: Morgan and Terrey 1992).

Subregion	Geology	Characteristic landforms	Typical soils	Vegetation
Bogan-Macquarie	Bogan and Macquarie River alluvial fans of Quaternary period. Western margin is bedrock of the Cobar bioregion. Alluvial sediments from mixed Palaeozoic bedrock bury basement rock to 100m. Underlying sediments of Cretaceous and Jurassic periods form part of the Great Artesian Basin.	Channels, floodplains, and through flow swamps of past and present river systems.	Grey and brown clays on the plains and depressions with texture contrast soils on the low rises of former levees and channels.	River red gum and river cooba on the channels. White cypress pine and poplar box on coarser levees. Black box, belah, Myall and lignum on floodplains. Complex patterns of common reed, cumbungi, and water couch depending on water levels in marshes. Poplar box woodland with wilga, budda, white pine, grey box, yellow box and Blakely's red gum on red soils on fan margins.

3.1 TOPOGRAPHY

Terrain within the Project Site is generally flat. The elevation is approximately 170 m Australian Height Datum (AHD). The Project site is located on Bogan Alluvial Plains (V3 Mitchells Landscapes, **Figure 4**). Although the Study Area is itself not subject to flooding, it may, in 1:100 year floods, be subject to temporary inundation.

3.2 GEOLOGY AND SOILS

The study area is located within the Great Artesian Basin. The geological basement of the immediate Study Area is comprised of Palaeozoic rock units of the Girilambone Structural Zone within the Lachlan Fold Belt sequence (Watkins & Meakin, 1996). Within the mapped boundaries of the Girilambone Structural Zone, the main rock units that outcrop are described as Cambro-Ordovician metasediments of the Girilambone Group (Watkins, 1996). These outcrops are generally confined to very small areas at the top of several low rises to the west of the Study Area and to scattered road material pits adjacent to roads. The Girilambone Group metasediments are described as being a very monotonous sequence of fine-grained, quartz rich metasediments that include phyllites, schists, laminated siltstone and quartzite rocks (Watkins & Meakin, 1996).

Rocky outcrops are, however, uncommon within the Nyngan district. Most consolidated rock units are overlain by a variable sequence, up to 100m thick, of residual fluvial and colluvial sediments deposited throughout the Cainozoic and especially in the Quaternary period (Watkins, 1996; Watkins & Meakin, 1996). In fact the current surficial geology of up to 90% of the area covered by the Nyngan 1:250,000 Map sheet comprises Quaternary sediments deposited in the Darling Riverine Basin (Watkins & Meakin, 1996). Situated just to the west of this Riverine Plain, Cainozoic period sediments of the main Study Area are mapped as being limited to residual and/or colluvial units deposited in the Late Pleistocene. These Quaternary sediments overlie and/or flank the metasediments of the Girilambone Group and form the colluvial aprons at the eastern and western margins of the Cobar Peneplain. They are typically comprised of unconsolidated moderately deep to deep red earths and/or sandy lithosols with variable quartz, lithic fragments and/or feruginised gravels that may be exhumed or be apparent at shallow depth (Watkins & Meakin, 1996).

The soils observed in the Project Site were predominantly reddish brown clays, typical of the subregion. Very few rocks in general were sighted on the surface. Only a few small, low-grade quartz pebbles were noted, which was consistent with the geology of the area.

The site is within an alluvial plains designation (**Figure 6**), although as discussed below this formation would not account for the area's more recent development.

3.3 HYDROLOGY

The Project Site is situated 2.5 km east of the Bogan River and 850 m west of Box Cowal (**Figure 5**). Water flows east and south, draining into Box Cowl a third order drainage (Strahler Stream Order[2]) line near the Project Site (**Figure 6**). All water drains eventually into the Bogan River. There are no current or historical waterways within the Project Site that would have been permanent enough to support large areas of Fuzzy Box woodland.

Although not necessarily subject to flooding from waterways, it was clear that the site has been temporarily subject to poor drainage in times of heavy inundation. This was evidenced by soil crusting and the presence of deep cattle hoof prints.

Groundwater has recently been measured at 16.5 m+ below the surface.[3]

3.4 VEGETATION AND FAUNA

A review of aerial imagery shows substrative tracks and remnants of native vegetation exist adjacent to the Project Site associated with the Bogan River, Box Cowal and a Crown Reserve

[2] The Strahler Stream Order is used to define stream size based on a hierarchy of tributaries. A 2nd Order waterway must have two 1st Order waterways entering it. A 3rd Order waterway must have two 2nd Order waterways entering it. This concept is shown in the diagram below.

[3] R.W. Corkery & Co. Pty Limited, Sep 2012, p.25.

within which the Project Site is situated. *Flindersia Maculosa* or Leopardwood was common on the fringes of the site (**Plate 2**). Windmill grass *(Chloris truncate)* was found throughout the site and its surrounds (**Plates 1, 3**).

High connectivity of surrounding vegetation provides habitat suitable for a range of birds, mammals and small marsupials of sufficient body size to be able to travel across the Project Site to water sources. During the survey both kangaroos and emus were sighted nearby to the site. It was also clear that at least kangaroos camped there overnight.

3.5 CLIMATE

The semi-arid climate of the majority of the DRPB consists of hot summers and is persistently dry (Stern et al. 2000 in DECCW 2008a). Rainfall is significantly lower in the west (c. 400mm per year) than in the eastern portion of the DRPB. The Commonwealth Bureau of Meteorology (BOM 2010) reports that the mean maximum temperature in Nyngan occurs in January (34.2°C), whilst the mean minimum temperature is recorded in July (3.7°C). Mean annual rainfall is 442.5 mm.

3.6 LAND–USE HISTORY

The Project Site is within Lot 7301, a designated Crown Reserve. The site has been cleared and used for grazing, if only temporarily.

3.6.1 Existing levels of disturbance

The main areas of disturbance in the Project Site are within the existing Waste Management Facility. Disturbance levels are currently low over the Project Site, however historical clearing of timber (most likely Bimble Box) and grazing is evident. It appears as though grazing has been largely excluded from the Project Site and surrounds for 30 to 50 years. This has allowed for the relatively young eucalyptus re-growth and small stands of myall in the Project Site. Nonetheless, cattle have been moved through the area in a recent wet period causing substantial disturbance to a depth of up to 15 cm in concentrated areas (**Plate 1**). Additionally, a large vehicle track has been created running parallel to the northeastern side of the existing facility through the expansion area. It is roughly 20 m wide and would have been graded to up to 30 cm.

3.7 LANDSCAPE CONTEXT - CONCLUSION

A background analysis of the landscape of the Project Site coupled with the survey revealed a landscape primarily of transitional use. In terms of the local fauna, it does not appear to be a fixed habitat. Floral resources were also limited, but both animals and plants of some use can be found in the area. No outcroppings or substantial occurrences of stone suitable for tool-making were apparent.

The site is removed from permanent water and rainfall in the area is low. The site is outside of a flood zone but drainage would be poor in times of heavy rain. No major alluvial deposits are anticipated to have buried evidence of human activity within the last few hundred years.

The site has been disturbed by agricultural practices, but not to an extent that would have removed evidence of other human activity.

Figure 5: Surrounding Topography.

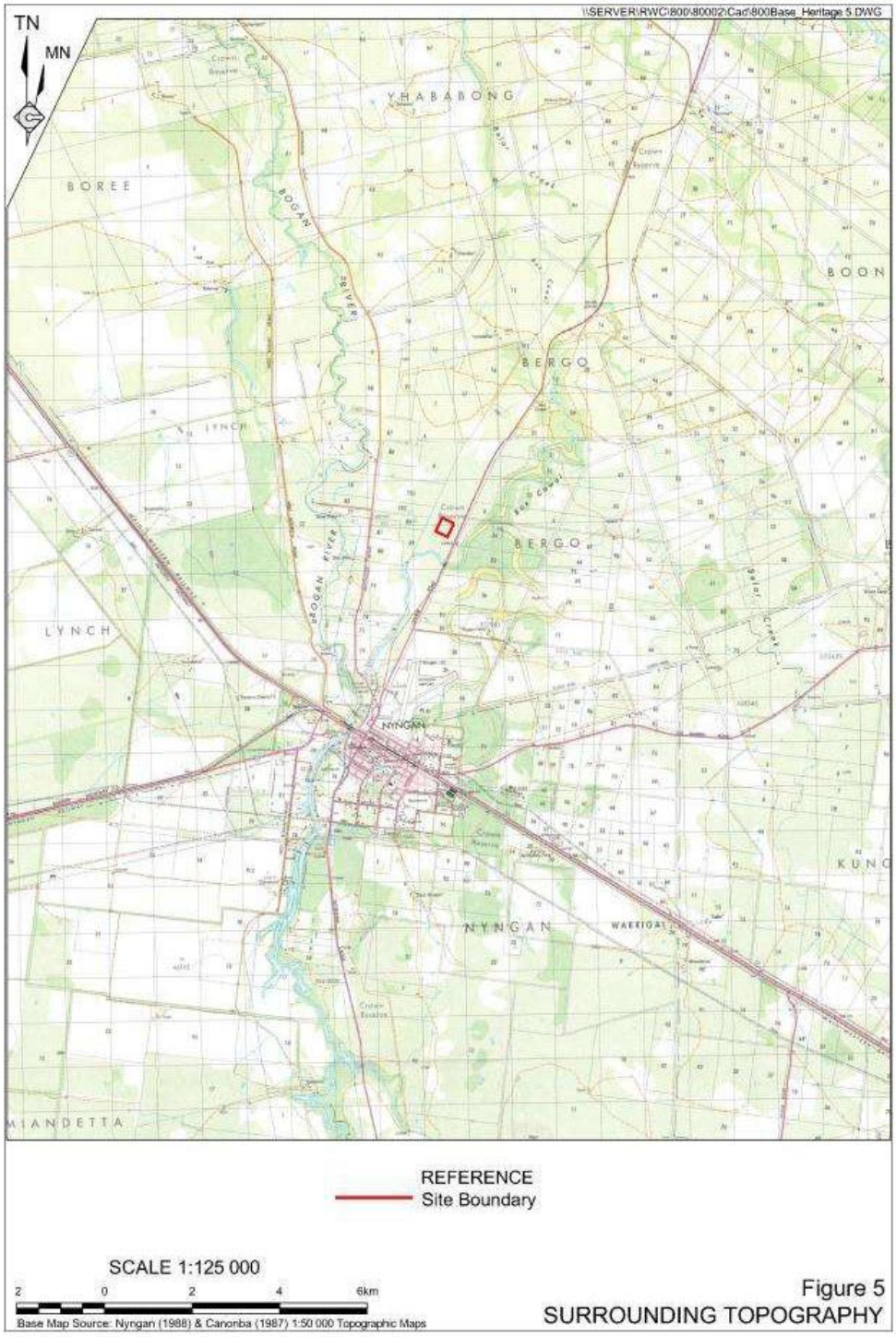
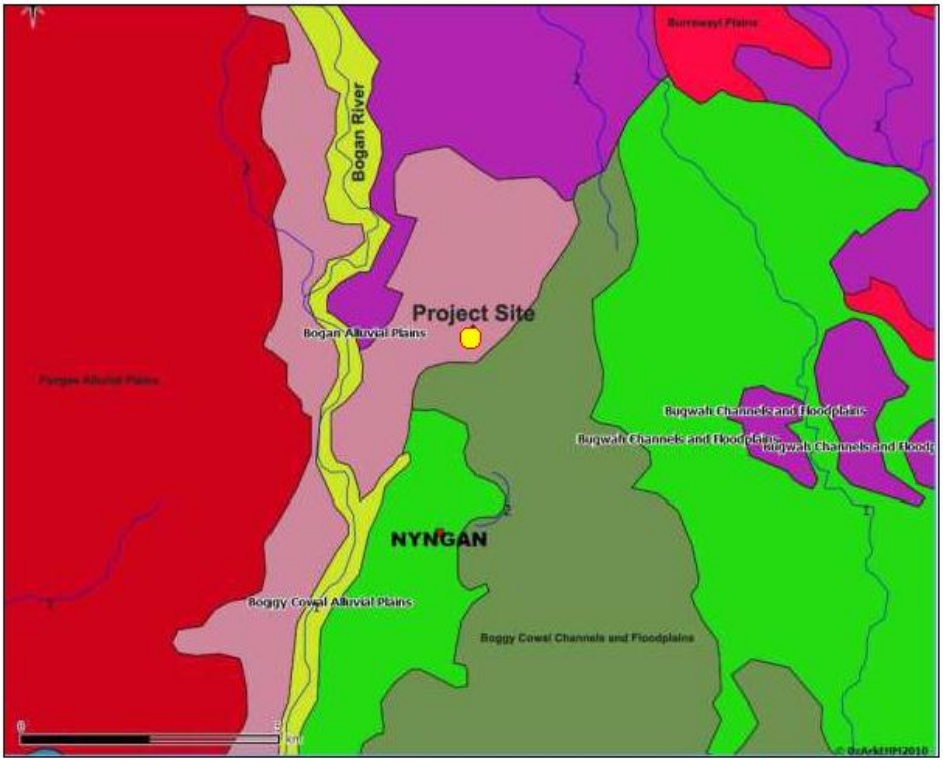


Figure 6: Mitchells Landscapes (V3), showing waterway Strahler Stream Order in the locality.



4 ABORIGINAL HERITAGE ASSESSMENT: BACKGROUND

4.1 ETHNO-HISTORIC SOURCES OF REGIONAL ABORIGINAL CULTURE

Lying at the eastern margins of the Cobar Peneplain the Study Area is on the eastern boundary of the traditional territory of the Ngiyampaa Wangaaypuwan people, that is the people who speak Nigiyammppa the Wangayypuwan (Wongaibon) way, or people who use the word waangay for 'no' (Harris, *et al* 2000; Beckett, *et al* 2003) (**Figure 7**). To the east of the Study Area, along the upper catchment of the Bogan and along the Lachlan River was the country of the Wiradjuri, who were related neighbours of the Ngiyampaa people.

However, the Aboriginal habitation of the Cobar Peneplain cannot be understood in terms of 'tribal' or clan territories[4]. The delineation of cultural boundaries and the identification of social groups and categories in this region was a complex matter. Here, as in other parts of the country, people identified themselves in various ways, according to the people they were with at the time and the kinds of transactions going on between them. Although people occasionally gathered together in groups of several hundred for ceremonies, they spent most of their lives in small groups, having occasional contact with neighbours.

The Ngiyampaa Wangaaypuwan men took their names from the swamps with which they were associated; calling them out as they entered the ceremonial ground, though there could be several owners. Men tended to live with their wives' people. This suggests matrilocal residence, corresponding to the matrilineal totemic clans. The matri-clans were grouped into two matri-moieties (called Nilpungerra or Kilpungerra and Makungarra), and also into four sections, which sub-divided the moieties on a two generation principle. These social categories organised marriage.

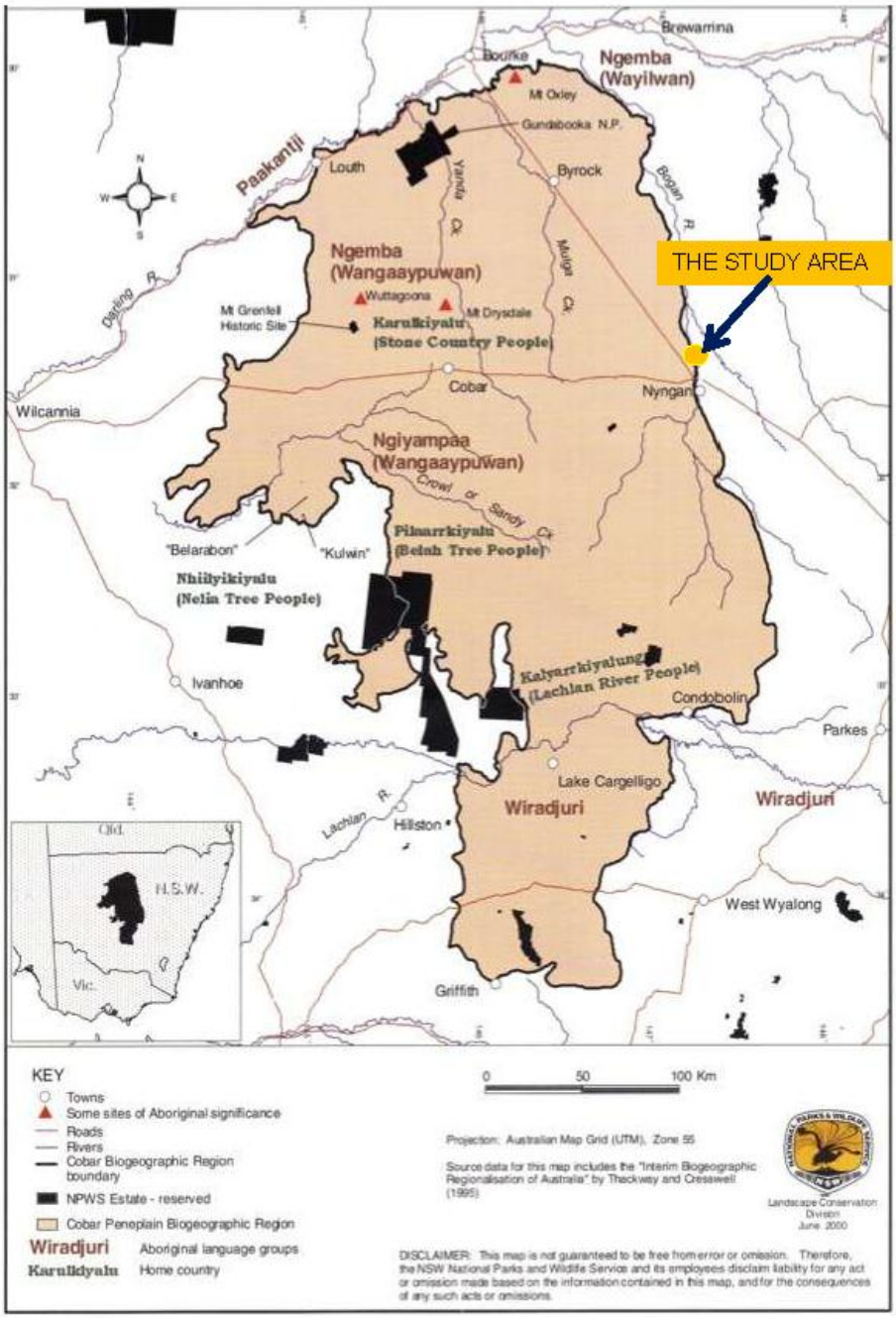
In the hot, low rain fall condition of the peneplain, people moved about a good deal, in search of livelihood, but also to attend ceremonial gatherings. These sometimes large gatherings provided an opportunity for initiating boys, contracting marriages, settling disputes and trade. The distances covered were considerable. Thus in 1871 surveyors described the Cobar water hole '*as a sort of central or meeting ground between the Mossgiel and the Gundabooka blacks, in connection with their religious ceremonies and warlike tendencies.*'

As elsewhere in the western division of New South Wales, early European settlement within the study area took the form of pastoralism which was supported by developing service centres. As long as pastoralists stayed on the river frontages, including the Bogan, the Ngiyampaa Wangaaypuwan could live as they had always done in the back country. However, as pastoralism began to push into the interior, transforming the landscape as it went, this ceased

[4] The following is edited from Beckett 2003.

to be an option. Ultimately pastoral settlement disrupted Aboriginal relationships with the environment and undermined their former way of life (Hope, 2004).

Figure 7: Location of Study Area relative to traditional lands of the Ngiyampaa Wangaaypuwan people of the Cobar Peneplain (Source: NSW National Parks & Wildlife Service, 2002)



Virtually the only recourse open to the Ngiyampaa was to become dependent on the settlers, providing whatever services were required. The large stations of the early years maintained Aboriginal camps, which provided a reserve of cheap labour, particularly during the times when white stockmen absconded to the gold diggings. The Aborigines received basic rations and blankets (subsidised by the government).

As holdings became smaller, the pastoralists could no longer afford to maintain an Aboriginal camp; nor did they need its services. Thereafter, Aboriginal families had to move about from station to station in search of work, between jobs squatting on the edge of small towns such as Ivanhoe, Mossgiel, Louth, Bourke, Nyngan and Cobar. Possibly because of the attitude of the miners, they seemed not to have found work in the mines. The same processes seem to have been at work south of Cobar, but Ngiyampaa Wangaaypuwan people seem to have lived on stations such as Marfield, Keewong, Paddington and Trida into the 1920s.

After World War II there was another round of movement in the region. In 1949, the inhabitants of the Menindee Government Station were moved once again to Murrin Bridge on the Lachlan, near Lake Cargelligo. However, the post-war labour market offered more opportunities than it had during the Depression, and the governments placed fewer restrictions on where people moved and resided. Some Ngiyampaa Wangaaypuwan people were able to work on the properties where they or their parents had been born.

In the 1970s, following another depression in the far west pastoral industry, the government began relocating Aboriginal people outside the region. Wangaaypuwan people are now widely distributed, not only within the region but beyond it, in Dareton, Wilcannia, Broken Hill, Griffith, Albury, Wagga Wagga and Parkes.

4.2 REGIONAL ARCHAEOLOGICAL CONTEXT

Late Pleistocene occupation of the semi-arid and arid regions of New South Wales by ancestral Aboriginals is confirmed by a number of dated archaeological sites. One of the earliest dated archaeological sites is situated near Lake Yantara some. 250 kms north of Broken Hill where a hearth has been carbon dated to 26,200±1,110 BP (Dury and Langford-Smith 1970 as report in Barton [Austral] 1999: 4). Along the Darling River dated archaeological sites ranging from 27,000 BP to the present indicate extensive and enduring occupation of this area, with older dates from the Lake Mungo area, ranging between 24,000-33,000 BP extending this occupation at least as far into the late Pleistocene as the technique of radiocarbon dating will allow (Barton in Austral 1999: 4). Panaramitee style pecked engravings at Sturts Meadow may also date to the final phase of the Pleistocene era.

Some of the earliest documentation of archaeological sites within the Cobar Peneplain focused on rock art assemblages (e.g Black 1943). It remains to date that the only systematic archaeological studies conducted at a regional scale within the area have focused on rock art

assemblages and associated sites (McCarthy, 1976; Gunn, 1983). These assemblages occur within the stone ridge country (e.g. at Gundabooka, Mt Grenfell and Sturts Meadow) well to the west of the Study Area. Nevertheless archaeological research undertaken elsewhere in the semi-arid to arid region of New South Wales has provided a fundamental scientific understanding of the broad range of site types that may occur; as well as measures of the actual and likely frequency and distribution of such sites across the landscape (e.g. Koettig, 1985; OzArk, 2008a; Holdaway *et al* 2002; Purcell, 2002; Martin, 2006).

In addition to this research a small number of archaeological surveys conducted for Environmental Impact Assessment purposes have occurred within the recognised mineral provinces of the Cobar Peneplain to the south and west of the Study Area. A brief summary of some of these studies is provided below:

Appleton (2004) conducted surveys for Triako Resources at Hera (*c*. 130km southwest of the Study Area); the Outflow project at Bobadah (*c*.100km south of the Study Area) and at "Fountain Dale" north of Mineral Hill (c.. 115km south of the Study Area). At Hera, Appleton did not record any Aboriginal sites. At Bobadah, Appleton recorded seven artefact scatters, all outside the area of immediate potential impact. At "Fountain Dale" Appleton recorded 13 sites: 11 isolated artefacts and two scatters of two artefacts each.

OzArk 2008b conducted a heritage survey at the location for the expansion of the Parkers Hill open cut mine at Mineral Hill (c. 115 km southwest of the current Study Area). The assessment identified 14 Aboriginal sites consisting of five open sites and nine modified (scarred) trees. The open sites ranged in size and complexity from low density sites with between 4 and 10 artefacts recorded, to larger more complex sites such as MH2-OS4 and MH2-OS5. The modified trees were all recorded adjacent to ephemeral unnamed drainage features.

An Aboriginal heritage assessment of Endeavour Mine (situated approximately 47km northwest of Cobar) was undertaken by OzArk in 2009. This survey recorded one Indigenous site (open site E-OS1) comprising two pale grey silcrete artefacts found 9m apart approximately 35m north of the existing mine track.

OzArk 2010a conducted a heritage survey for YTC Resources Ltd at the proposed Hera Gold Deposit. This survey supplemented Appleton's 2004 survey that had covered the northern area of the mine lease site, the OzArk 2010 survey focused on the southern portions. No Aboriginal sites were recorded as a result of the 2010 survey.

OzArk 2010b conducted an Aboriginal heritage study for the Wonawinta Silver Project in the Bedooba State forest area, approximately 140 km southwest of the study area (& 55 km north west of the Hera Gold deposits). A total of 25 Aboriginal sites were recorded during the Indigenous heritage component of the assessment across all Study Areas. The Aboriginal sites consisted of: eight open sites consisting of low to moderate density artefact scatters, ten

isolated finds and seven culturally modified (scarred) trees. A previously recorded art site was relocated; although not at the map coordinates obtained from the Aboriginal Heritage Information Management System (AHIMS).

An assessment undertaken 7 kms due west of Nyngan for a proposed solar power plant (OzArk 2010b), recorded three Aboriginal sites, all isolated stone artefact finds. The Study Area for this project was predominantly cleared agricultural land and the finds were all of chert.

4.3 LOCAL ARCHAEOLOGICAL CONTEXT

A search of the Aboriginal Heritage Information Management System (AHIMS) within a 3 x 3 km area of the Project Site revealed no sites. However, a 10 x 10 km search revealed an open site in the form of an artefact scatter and a modified Tree (**Appendix 1**). These and other searches are recorded in Section 2.5 as well as Appendix 2.

4.4 PREDICTIVE MODEL FOR SITE LOCATION

Across Australia, numerous archaeological studies in widely varying environmental zones and contexts have demonstrated a high correlation between the permanence of a water source and the permanence and/or complexity of Aboriginal occupation in that same watered area (e.g. Jo McDonald CHM, 1997, Pardoe, 2003). This is generally reflected in a higher frequency and/or greater complexity in the lithic assemblages from sites close to permanent water relative to those near ephemeral water sources. In almost all archaeological studies that have been undertaken in the semi-arid to arid parts of New South Wales this same correlation between increasing artefact density and proximity to water has been confirmed [see for example studies by: Silcox (1986) in the West Wyalong region; Brayshaw (1993) north of Parkes; Paton (1989) and Cane (1994) in the Lake Cowal area; Koettig (1985) in the environs of Dubbo; and Pearson (1981) to the east of Dubbo].

The greater density and diversity of artefact types and raw material types in those sites adjacent to permanent water has led archaeologists to suggest that a diverse range of activities (e.g. tool use, manufacture and maintenance, food processing and quarrying) have occurred in these areas. In contrast, sites near ephemeral water sources often have less diverse lithic assemblages and are more likely to contain evidence suggestive of with one-off occupation and/or random traverse (e.g. isolated knapping floors or tool discard). The confluence points of rivers and minor creeks often also contain sites with complex lithic assemblages, and this is generally interpreted as demonstrating that these water points were also focal points for Aboriginal occupation. This interpretation however requires close scrutiny of the local geomorphic context and sedimentation regimes since fluvial processes may entrap, re-work and re-deposit stone artefacts in stream convergence points some considerable distance down - stream from their original manufacture and/or discard point.

Site location is also affected by the availability of and/or accessibility to a range of other natural resources including: plant and animal foods; stone and ochre resources and rock shelters; as well as by their general proximity to other sites/places of cultural/mythological significance Consequently sites tend to be found along permanent and ephemeral water sources, along access or trade routes or in areas that have good flora/fauna resources and appropriate shelter.

In formulating a predictive model for Aboriginal archaeological site location within any landscape it is also necessary to consider post-depositional influences on Aboriginal material culture. In all but the best preservation conditions very little of the organic material culture remains of ancestral Aboriginal communities survives to the present. Generally it is the more durable materials such as stone artefacts, stone hearths, shell, and some bones that remain preserved in the current landscape. Even these however may not be found in their original depositional context since these may be subject to either (a) the effects of wind and water erosion/transport both over short and long time scales or (b) the historical impacts associated with the introduction of European farming practices including: grazing and cropping; land degradation associated with exotic pests such as goats and rabbits and the installation of farm related infrastructure including water storages, utilities, roads, fences, stockyards and residential quarters. Scarred trees may survive for up to several hundred years but rarely beyond.

It is of relevance to this discussion to note that Johnston & Witter (1996) have used expert system forecasts, archaeographic modelling based on groups of land systems and their margins; and in-field reliability testing to develop a predictive model of the character and distribution of Aboriginal archaeological material across semi-arid to arid New South Wales.

The three fundamental elements of this predictive model are:

1. Occupation can be expected near to water; and the abundance of archaeological evidence should be proportional to the quality of the water source, considering factors such as reliability, salinity and production of vegetation;
2. Occupation can be expected to focus on ecotonal boundary areas; people prefer to occupy certain environmental types which need to be ranked with regard to factors such as the presence of ephemeral water, food resource abundance and food resource diversity; and
3. Where stone sources are known to exist artefacts can be expected in extreme abundance within a radius of two kilometres and in increased numbers within a radius of twenty kilometres.

This predictive modelling along with the archaeological and environmental contexts analysed in this section and **Section 3** allow the following predictive statement to be made for the Aboriginal archaeological remains expected:

The minimal available resources and other landscape factors within the Project Site and immediate surrounds indicate that it was unlikely to host intensive and ongoing occupation by Aboriginal peoples. The Leopardwood and Windmill grass offer some resources and some hunting may have occurred, however, permanent water sources are at least a kilometre distant, meaning that better candidates for settlement were available. A lack of stone suitable for tool-making further removes practical reasons for people to spend time in the vicinity. Aboriginal people would have been more likely to pass through this area.

Only limited archaeological investigation has previously been undertaken in the local area. Regional investigations and ethnographic observations suggest that the subject area is unlikely to contain substantial evidence of Aboriginal occupation, but that nearby areas such as the Bogan River would have attracted more intensive activity. Although possible relics over the Project Site may include isolated stone artefacts or scarred trees, land clearing would have removed evidence of the latter.

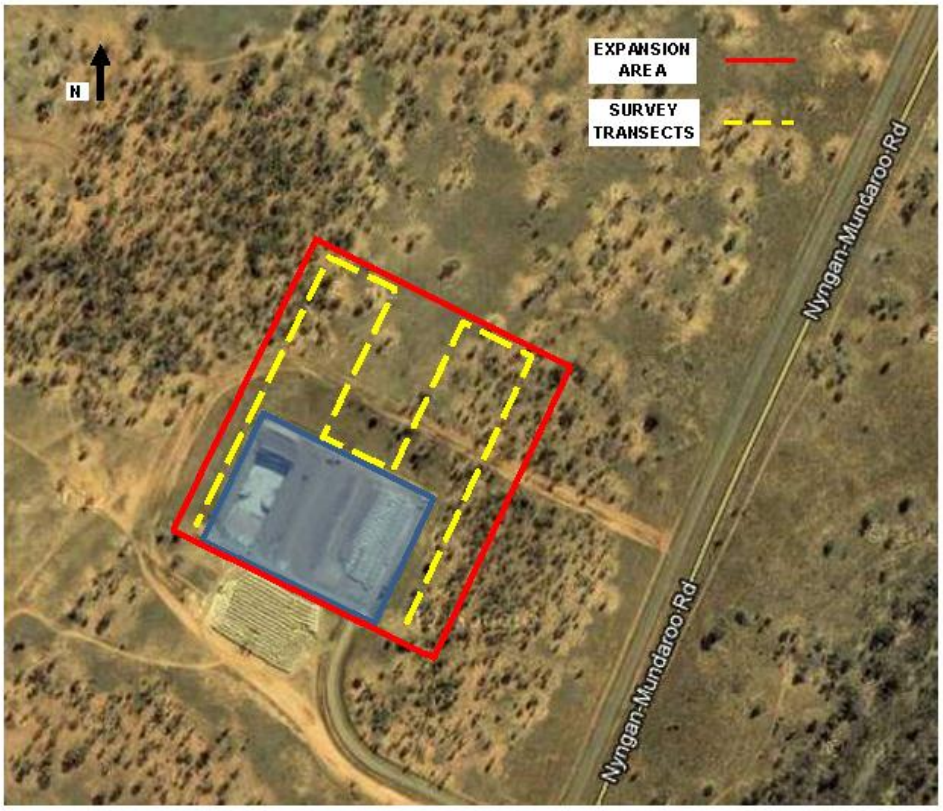
4.5 FIELD METHODS

The size of the Project Site and initial determination of archaeological potential was such that two people were able to survey the area over a period of four hours. The survey was undertaken by one archaeologist from OzArk and one representative from Nyngan LALC.

It was determined that a pedestrian surface survey was sufficient to assess the archaeological potential of the area. The boundary of the site was walked as well as two (lengthways) transects within the Project Site. The immediate surrounds of the expansion area as well as the existing facility were also casually investigated. The possibility of more intensive survey was available but was not utilised due to the combination of good visibility with no archaeological sites found and a low predicted potential.

The survey transects were recorded using a GPS (**Figure 8**). Photographs were taken and a written recording of the survey was also made (**Plates 1-5**).

Figure 8: Transects walked within the Project Site.



5 RESULTS OF ABORIGINAL HERITAGE ASSESSMENT

5.1 EFFECTIVE SURVEY COVERAGE

The two personnel conducting the surveys were spaced on average five metres apart with two to three metres either side within visual range. This was effectively a ten metre-wide strip for each of the transects. Within the Project Site c.1360 m was walked, covering an area of 13,600 square metres. This was a little over 13% of the total area.

Areas of exposure ranged from as low as 5% in thick grass areas to 70% under trees. Taking visibility and exposure into account, the Effective Coverage Area was 3672 sq m or 3.6% of the total Survey Unit Area.

Table 3: Survey coverage data.

Survey Unit	Survey Unit Area (sq m)	Portion of Unit Area Surveyed %	Survey Area (sq m)	Visibility %	Exposure %	Effective Coverage Area (sq m) (= Survey Area x Visibility % x Exposure %)	Effective Coverage % (= Effective Coverage Area / Survey Area x 100)
entire Project Site	102000	13.3	13600	90	30	3672	3.6

5.2 ABORIGINAL SITES RECORDED

No Aboriginal sites were recorded in the survey.

5.3 ABORIGINAL COMMUNITY INPUT

Discussions during survey did not include any specific cultural information relevant to the Project Site. A letter from Lesly Ryan of Nyngan LALC is attached to this report (**Appendix 1**).

5.4 DISCUSSION

The findings of the survey matched the prediction based on the landscape and archaeological contexts in conjunction with the predictive modelling. Sufficient area was covered to ascertain that no archaeological remains were likely in the areas not covered by the survey.

5.5 LIKELY IMPACTS TO ABORIGINAL HERITAGE FROM THE PROPOSAL

As no Aboriginal sites were identified, there will be no impacts to Aboriginal cultural heritage as a result of the NWRMF development. Other assessment provided in Sections 3 and 4 of this report support the findings from the survey.

6 MANAGEMENT AND MITIGATION: ABORIGINAL HERITAGE

6.1 GENERAL PRINCIPLES FOR THE MANAGEMENT OF ABORIGINAL SITES

Appropriate management of cultural heritage items is primarily determined on the basis of their assessed significance as well as the likely impacts of the proposed development. The following management options are general principles, in terms of best practice and desired outcomes, rather than mitigative measures against individual site disturbance.

- Avoid impact by altering the development proposal or in this case by avoiding impact to a recorded Aboriginal site. If this can be done, then a suitable curtilage around the site must be provided to ensure its protection both during the short-term construction phase of development and in the long-term use of the area. If plans are altered, care must be taken to ensure that impacts do not occur to areas not previously assessed.
- If impact is unavoidable then an Aboriginal Heritage Impact Permit (AHIP) may be applied for from the NSW Office of Environment and Heritage (OEH) and approval will depend on many factors including the site's assessed significance. To obtain an AHIP Aboriginal community consultation will need to occur following the OEH *Aboriginal Cultural Heritage Consultation Requirements* (ACHCRs). If granted, the local Aboriginal communities may wish to collect or relocate any evidence of past Aboriginal occupation (Aboriginal object), whether temporarily or permanently, if necessary[4].

6.2 MANAGEMENT AND MITIGATION OF RECORDED ABORIGINAL SITES

No Aboriginal sites were identified in the survey or were previously recorded, hence no management or mitigation in respect of Aboriginal heritage is required.

6.3 RELEVANT LEGISLATION

6.3.1 Commonwealth legislation

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

Amendments in 2003 established the National Heritage List and the Commonwealth Heritage List, both administered by the Department of Sustainability, Environment, Water, Population and Communities under the EPBC Act. Ministerial approval is required for proposals involving significant impacts to National or Commonwealth heritage places. Additionally, the Australian Heritage Council maintains the Register of the National Estate although this listing is now superseded and carries no statutory control.

Application to the Subject Area – Commonwealth Listings

No heritage items on commonwealth heritage listings are located within the Subject Area. The EPBC Act is not applicable to the Subject Area.

6.3.2 State legislation

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

On 1 October 2011, Part 3A of the EP&A Act was repealed and replaced by new provisions in the EP&A Act, which create an environmental assessment framework for two new categories of development: State significant development (SSD) and State significant infrastructure (SSI).

The classes of development that are SSD or SSI are set out in the State Environmental Planning Policy (State and Regional Development) 2011 which also commenced on 1 October 2011.

The procedures for SSD are set out in Division 4.1 of Part 4 of the EP&A Act.

The Minister for Planning is the consent authority for SSD – however this determination role has been delegated to the PAC or senior officers of the Department of Planning & Infrastructure in certain circumstances. A development application (DA) for SSD is to be accompanied by an EIS. Applicants for SSD will need to seek the Director-General's requirements (DGRs) for the EIS prior to lodging a DA.

Section 79C of the EP&A Act applies to SSD, therefore, all relevant planning controls contained in any environmental planning instruments will need to be considered, including local environmental plans. However, development control plans do not apply to SSD.

Concurrence or subsequent approvals are not required in respect of SSD, including in relation to heritage, bushfire and threatened species. Input from relevant agencies will occur at DGR stage.

DAs for SSD must be exhibited for 30 days.

Application to the Subject Area

This development falls under Part 4 of the Act.

The National Parks and Wildlife Act 1974

Amended during 2010, the *National Parks and Wildlife Act 1974* provides for the protection of Aboriginal objects (sites, objects and cultural material) and Aboriginal places. Under the Act (S.5), an Aboriginal object is defined as: any deposit, object or material evidence (not being a handicraft for sale) relating to indigenous and non-European habitation of the area that comprises New South Wales, being habitation both prior to and concurrent with the occupation of that area by persons of European extraction, and includes Aboriginal remains.

An Aboriginal place is defined under the *National Parks and Wildlife Act 1974* as an area which has been declared by the Minister administering the Act as a place of special significance for Aboriginal culture. It may or may not contain physical Aboriginal objects.

As of 1 October 2010, it is an offence under Section 86 of the *National Parks and Wildlife Act 1974* to 'harm or desecrate an object the person knows is an Aboriginal object'. It is also a strict liability offence to 'harm an Aboriginal object' or to 'harm or desecrate an Aboriginal place', whether knowingly or unknowingly. Section 87 of the Act provides a series of defences against the offences listed in Section 86, viz.:

The harm was authorised by and conducted in accordance with the requirements of an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the Act;

The defendant exercised 'due diligence' to determine whether the action would harm an Aboriginal object; or

The harm to the Aboriginal object occurred during the undertaking of a 'low impact activity' (as defined in the regulations).

Under Section 89A of the Act, it is a requirement to notify the DECCW Director-General of the location of an Aboriginal object. Identified Aboriginal items and sites are registered with the NSW DECCW on the Aboriginal Heritage Information Management System (AHIMS).

Application to the Study Area

No sites were recorded as part of the current assessment and hence no permits are required under the NPW Act.

7 RECOMMENDATIONS

The following recommendations are made with regard to:

- Legal requirements under the terms of the National Parks and Wildlife Act 1974 (as amended) whereby it is illegal to damage, deface or destroy an Aboriginal place or object without the prior written consent of the Director of the NSW Environment Protection Authority;
- The findings of the current investigations undertaken within the Subject Area; and
- The interests of the Aboriginal community.

As no Aboriginal sites were recorded or are to be impacted as a result of the current assessment, the recommendations from this assessment are as follows.

1. All land-disturbing activities must be confined to within the assessed Project Site. If site layout plans are altered, care must be taken to ensure that impacts do not occur beyond the assessed area.

2. In the unlikely event that objects are encountered that are suspected to be of Aboriginal origin (including skeletal material), the unanticipated finds protocol in this report (**Appendix 3**) should be followed.

3. One copy of this report should be sent to:
   AHIMS, Office of Environment and Heritage
   Central Environment Protection and Regulation Division
   PO Box 1967
   HURSTVILLE NSW 2221

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9 PLATES

Plate 1: View north across survey area with hoof prints in the foreground.

Plate 2: Example of a large exposure along the western fringe of the Project Site. Lesly Ryan is pictured.

Plate 3: Typical sample of the vegetation and visibility in the Project Site. View is to the northeast from the centre-east of the site.

Plate 4: View south-southwest along the western side of the facility.

Plate 5: View south-southwest along the eastern side of the facility.

APPENDIX 1: ABORIGINAL COMMUNITY CONSULTATION

Letter to Nyngan LALC

OzArk Environmental & Heritage Management P/L
145 Wingewarra St / PO Box 2069 DUBBO NSW 2830
WEB: www.ozarkehm.com.au
ABN: 59 104 582 354

15th November, 2012

Members: Nyngan LALC
c/- Ms V Ryan
PO Box 43
Nyngan NSW 2825
e: <nynganlalc@bigpond.com

Dear Veneta

Re: Aboriginal Heritage Assessment for the proposed extensions to the Nyngan Waste Management facility, NSW.

OzArk Environmental & Heritage Management P/L has been commissioned by RW Corkery to assess Indigenous heritage associated with the proposed extensions to the Nyngan Waste Management facility in Nyngan, NSW. The Proposal is to extend the landfilling operations approximately 190m to the northeast of the existing facility, thereby increasing the landfilling operational area to approximately 10.2ha and the life by approximately 16 years.

We propose to carry out a field reconnaissance to identify locations in the Study Area where Aboriginal objects or places may remain intact. Physical assessment of the Study Area will include;

- Pedestrian survey of areas considered to have potential and / or good ground surface visibility (GSV).
- With agreement of Community and Archaeologists some areas may not be physically surveyed if considered to be too disturbed or to have very low likelihood of sites.

Cultural Knowledge

We are keen to consult with Aboriginal cultural knowledge-holders so that we gain a better understanding of the cultural values of the project area. If your organisation wishes to share any cultural information relevant to the proposed project area, we welcome this input to improve our assessment outcomes and to assist in determination of the cultural significance of the study area. Please contact our office if you wish to discuss relevant cultural heritage knowledge so that we can incorporate this information into the assessment process.

Field Assessment:

OzArk would like to invite a Site Officer from Nyngan LALC to participate in the field assessment, scheduled for **Tuesday 20th November, 2012.** Your representative is asked to meet the OzArk archaeologist at **10.00 am at the Nyngan LALC Office – 102 Pangee Street, Nyngan.** Transport to and from the site will be provided by OzArk.

Tel: 6882 0118; Fax: 6882 0630; Mob: 0403 763 504 / 0423 198 898
E-mail: jodie@ozarkehm.com.au / phil@ozarkehm.com.au / cheryl@ozarkehm.com.au

Confirmation of Survey Results from NLALC

BOGAN ABORIGINAL CORPORATION
ABN: 98 630 628 157
ICN: 247

PO Box 345
46 Nymagee Street
NYNGAN NSW 2825
Email boganac@netxp.com.au

Phone 0268321750
Fax 0268322750
Mobile 0419418851
0427321750

23rd November 2012

Ms Cheryl Burke
OZARK EHM P/L
PO Box 2089
Dubbo NSW 2830

On 20th November 2012 I accompanied archaeologist Mr Nick Harrop, who under took a Cultural heritage assessment associated with the Nyngan Waste Management Project. The fieldwork was carried out and there were no traces of Aboriginal sites to be located on the proposed area.

The area consisted of much Leopard Wood, this tree was used for toothache and the gum can be eaten as toffee. Some grasses that could be used in weaving were also evident and would have been harvest in the area. These trees & grasses were growing in the fifty (50) metre buffer zone. The proposed area that is to be cleared has no evidence of anything relevant to Aboriginal only that they may have travelled through the area to reach the river.

The area has Galvanised Burr, Harlequin Fuchsia Bush, Australia Boxthorn and Canegrass. The soil consists of mainly clay and is evident of water lying for some periods.

There were also Kangaroos and Emus crossing the plains. There was no other wildlife about.

For further information I may be contacted anytime on the above numbers.

Yours faithfully

Lesly Ryan
CEO/Sites Officer
Bogan Aboriginal Corporation

Community Consultation Log

Date	Organisation	Contact Name	Comment
12.11.12	Nyngan LALC	Veneta ph: 02 6832 2639 e: nynganlalc@bigpond.com	emailed requesting notice of availability of a site officer to participate in a survey Tuesday 20th November.
13.11.12	Nyngan LALC	Veneta ph: 02 6832 2639	left detailed message on answerphone advising date again and requesting response, will send through a formal letter with all information when confirmed if NLALC have a site officer available.
13.11.12	Nyngan LALC	Veneta ph: 02 6832 2639	left second detailed message on answerphone advising date again and requesting response
14.11.12	Nyngan LALC	Veneta ph: 6832 2639	Veneta phoned to advise that she had passed the message to Lesley Ryan and that Lesley would be available for the survey. NLALC have been working in conjunction with the Bogan Aboriginal Corp. to employ site officers on different projects. Veneta said she had also forwarded the email to Lesley and that Lesley will be in touch.
14.11.12	Nyngan LALC	Lesly Ryan ph: 6832 1750	phoned Lesly, spoke to Tom as Lesly was not home. Said I would phone back and would have details for the survey.
14.11.12	Nyngan LALC	Lesly Ryan ph: 6832 1750	phoned Lesly, asked if she could phone back as only Tom was available.
29.11.12	Nyngan LALC	No specific individual, nynganlalc@bigpond.com	e-mail sent to Nyngan LALC confirm results of survey and extensive AHIMS search was attached
30.11.12	Nyngan LALC	Lesly Ryan ph: 6832 1750	Lesly sent a letter to confirm the results of the survey.

APPENDIX 2: AHIMS SEARCH RESULTS

AHIMS Search: Lot 107

Office of Environment & Heritage NSW

AHIMS Web Services (AWS)
Search Result

Your Ref Number : 807
Client Service ID : 85514

OzArk Cultural Heritage Management
PO Box 2069
Dubbo New South Wales 2830
Attention: Cheryl Burke
Email: cheryl@ozarkehm.com.au

Date: 16 November 2012

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 107, DP:DP822472 with a Buffer of 50 meters, conducted by Cheryl Burke on 16 November 2012

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

0	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) 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.

PO BOX 1967 Hurstville NSW 2220
43 BridgeStreet HURSTVILLE NSW 2220
Tel: (02)9585 6345 (02)9585 6741 Fax: (02)9585 6094

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au

AHIMS Search: Lot 7301

Office of Environment & Heritage NSW

AHIMS Web Services (AWS)
Search Result

Your Ref Number : 807A
Client Service ID : 85515

OzArk Cultural Heritage Management
PO Box 2069
Dubbo New South Wales 2830
Attention: Cheryl Burke
Email: cheryl@ozarkehm.com.au

Date: 16 November 2012

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 7301, DP:DP1161404 with a Buffer of 50 meters, conducted by Cheryl Burke on 16 November 2012

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

2	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) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

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- 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.

PO BOX 1967 Hurstville NSW 2220
43 BridgeStreet HURSTVILLE NSW 2220
Tel: (02)9585 6345 (02)9585 6741 Fax: (02)9585 6094

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au

AHIMS Search: 10 x 10 km

Office of Environment & Heritage NSW

AHIMS Web Services (AWS)
Search Result

Your Ref Number : 807
Client Service ID : 85518

OzArk Cultural Heritage Management
PO Box 2069
Dubbo New South Wales 2830
Attention: Morgan Wilcox
Email: morgan@ozarkehm.com.au

Date: 16 November 2012

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : 147.14985, -31.55622 - Lat, Long To : -31.48053, 147.27621 with a Buffer of 50 meters, conducted by Morgan Wilcox on 16 November 2012

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

2	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) 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.

PO BOX 1967 Hurstville NSW 2220
43 BridgeStreet HURSTVILLE NSW 2220
Tel: (02)9585 6345 (02)9585 6741 Fax: (02)9585 6094

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au

AHIMS Search: Extensive Results

Office of Environment & Heritage

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

Your Ref Number : 807
Client Service ID : 85518

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
27-4-0001	Nyngan;	AGD	55	517965	6506969	Open site	Valid	Artefact : -	Open Camp Site	
	Contact	Recorders	P Gresser					Permits		
27-4-0234	Land Claim 7397	GDA	55	517000	6506815	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	Recorders	Nyngan Local Aboriginal Land Council					Permits		

Report generated by AHIMS Web Service on 16/11/2012 for Morgan Wilcox for the following area at Lat, Long From : 147.14985, -31.55622 - Lat, Long To : -31.48053, 147.27621 with a Buffer of 50 meters.Additional Info : Aboriginal Heritage Assessment. Number of Aboriginal sites and Aboriginal objects found is 2

This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

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APPENDIX 3: UNANTICIPATED FINDS PROTOCOL

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

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

Protocol to be followed in the event that previously unrecorded or unanticipated Aboriginal object(s) are encountered:

1. All ground surface disturbance in the area of the finds should cease immediately the finds are uncovered.
    a) The discoverer of the find(s) will notify machinery operators in the immediate vicinity of the find(s) so that work can be halted; and
    b) The site supervisor will be informed of the find(s).
2. If there is substantial doubt regarding an Aboriginal origin for the finds, then gain a qualified opinion from an archaeologist as soon as possible. This can circumvent proceeding further along the protocol for items which turn out not to be archaeological. If a quick opinion cannot be gained, or the identification is positive, then proceed to the next step.
3. Immediately notify the following authorities or personnel of the discovery:
    a) OEH (Dubbo Office);
    b) the Nyngan LALC;
4. Facilitate, in co-operation with the appropriate authorities:
    a) The recording and assessment of the finds;
    b) Fulfilling any legal constraints arising from the find(s). This will include complying with OEH directions; and
    c) The development and conduct of appropriate management strategies. Strategies will depend on consultation with the Nyngan LALC and other stakeholders and the assessment of the significance of the find(s).
5. Where the find(s) are determined to be Aboriginal Objects, any re-commencement of construction related ground surface disturbance may only resume in the area of the find(s) following compliance with any consequential legal requirements and gaining written approval from OEH (as required).

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