

## A SITE IDENTIFICATION ABORIGINAL HERITAGE SURVEY OF THE PROPOSED KEMERTON INDUSTRIAL PARK IN THE SHIRE OF HARVEY, WESTERN AUSTRALIA

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A report prepared for the South West Aboriginal Land & Sea Council (SWALSC) on behalf of Landcorp

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# **ACKNOWLEDGEMENTS**

The authors would like to thank the following organisations and individuals who helped with the management of the heritage survey:

- Mr Sean O'Hara SWALSC (Future Acts Officer)
- Mr Jonathan Roach Landcorp (Project Manager)
- Ms Angela Tarbotton Brad Goode & Associates Pty Ltd (Ethno Assistant)
- Mr Stuart Johnston Brad Goode & Associates Pty Ltd (Archaeologist)
- Mr Peter Michael Gnaala Karla Booja (Arch Assistant)
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- Mrs Barbara Corbett Stamner Councillor
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## DISCLAIMER

All of the information contained in this report is believed to be correct and accurate at the time it was recorded. The authors do not take responsibility or accept any liability for errors or omissions contained in the report based upon information supplied by others.

\*Note: This report, in terms of its assessment under section 5 of the Western Australian Aboriginal Heritage Act (1972), should be read in conjunction with the archaeological report by Harris.

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## **GLOSSARY OF TERMS**

AHA - Western Australian Aboriginal Heritage Act (1972)
DIA - Department of Indigenous Affairs
ACMC - Aboriginal Cultural Material Committee
SWALSC - South West Aboriginal Land and Sea Council
GKB - Gnaala Karla Booja
KIP - Kemerton Industrial Park
ACHMP – Aboriginal Cultural Heritage Management Plan

# **EXECUTIVE SUMMARY**

Landcorp are proposing to develop the 'Kemerton Industrial Park' (KIP) to become one of the largest heavy industrial areas in the Southwest region of Western Australia. As part of the planning process consideration of environmental, economic, and social issues, are required before development can proceed. As such Landcorp have commissioned Brad Goode & Associates to conduct 'a site identification' Aboriginal heritage survey in order to determine whether any sites of significance, as defined by section 5 of the *Aboriginal Heritage Act (1972)* (AHA), will be affected by this proposal.

Specifically the survey area is located approximately 160 km south of Perth and 17 km northeast of Bunbury within the Shire of Harvey. The total area of the KIP is 7543 hectares (ha) comprising:

- 2019 ha of Industry Core
- 293 ha Support Industry Area
- 5231ha of Buffer Area made up of Inter Industry Buffer (212ha) and Buffer Area (5019ha)

A review of the DIA Aboriginal Sites Register revealed **no previously recorded** ethnographic Aboriginal heritage sites or other heritage places to be located within the survey area.

A review of previous survey reports that relate to the first stage of the KIP has identified that Nyungar people were concerned that industrial development has the potential to pollute creeks and rivers and places (wetlands) where traditional food sources can be obtained. In these surveys the Brunswick and Wellesley Rivers, all creeks, and any drains, that are not cemented were reported to be sacred to Nyungar people. Previous studies reported that it was the general belief amongst Nyungar people that the southwest variant of the Rainbow serpent known as the *Waugal*, resides within these water courses and is responsible for their maintenance (AIC 2003:20, Hame's Consultancy Group 2003, Radcliffe-Brown 1926:19-25).

As a result of these concerns it was recommended that an Aboriginal Cultural Heritage Management Plan (ACHMP) be prepared to outline appropriate protocols in order to protect these areas (AIC 2003, AIC 2005, Amergin 2008). Preparing and implementing an ACHMP also raised awareness of the potential for archaeological material to be found during ground disturbing works and recommended the employment of Aboriginal monitors during these stages of work as a strategy to mitigate potential affects.

As a result of consultations with nominated members of the Gnaala Karla Booja WC 98/58 Native Title Claim group **no ethnographic sites** of significance, as defined by section 5 of the AHA were identified within the area denoted as the Industrial Core area.

During the survey a historical camp occupied by Mr Bob Wallam and his family during the 1960's was recorded to be located within the Inter Industry Buffer area. The Nyungar informants requested that this area be reported as a site of 'special significance' as a 'cultural marker', under section 5a of the AHA (see Appendix 7 – Site Recording Form). It was further requested that the proponents recognise the importance of this place by the provision of a plaque that acknowledges the Wallam family and the social history of the Nyungar community as an agrarian labour force that contributed to the success of the development of agriculture in the region.

During the survey the Nyungar consultants also reported the Wellesley River and the chain of wetlands within the survey area to be significant as places of customary use, as a path of migration, as potential birthing areas, and as places of generalised spiritual value. While it was requested that these areas be reported as sites of significance it is unlikely that they would receive a positive assessment under section 5b of the AHA, as the information was of a generalised nature, no specific myth could be determined and no actual firsthand accounts of these activities were given. Despite these places being unlikely to be sites under the AHA, the

cultural values reported should nevertheless be considered and protected, as these areas are also of considerable environmental value. An Aboriginal Heritage Cultural Management Plan (AHCMP) could detail strategies to protect the cultural values identified outside the parameters of the AHA.

As a result of the survey a number of more general issues were raised and a number of requests were made to mitigate the effects to cultural and environmental values:

- The representatives collectively voiced concern regarding the possibility of polluted effluent entering the chain of wetlands, creeks and rivers, located within the survey area and as such wished all the environmental management plans and studies to be sent to the GKB working party at SWALSC for comment as a condition of support for the project.
- Concerns regarding the increased traffic on the highway to Bunbury were raised. As such it was suggested that traffic studies should be conducted in the interests of public safety and that the proponents prioritize building the proposed rail line to reduce the pressure on the South Western Highway.
- It was requested that Nyungar names be given to the wetlands and roads within the survey area to recognise the 'old Nyungar people' that previously lived, worked and hunted on the land.
- That the entire development be subject to archaeological and Nyungar community monitoring to ensure that any cultural material present is recorded and added to the records in order to preserve this information for future generations of the Nyungar community.
- The GKB advised that the land proposed for the KIP is currently used by Nyungar people to hunt kangaroos and that developing this land will take away more land that can be utilized for hunting. As such an offset hunting zone was requested to be provided, possibly within the Buffer Zone.
- That the GKB representatives be re-consulted when the Subdivision Plan has been finalised and construction of the necessary infrastructure is underway.
- That employment opportunities and apprenticeships for young Nyungar people be written into all tenders for construction of the KIP.

As a result of the survey the following recommendations are made to Landcorp:

As no ethnographic sites of significance, as defined by section 5 of the AHA, were identified within the area denoted as the Industry Core **it is recommended** that the development proceeds within this area as it is currently planned.

**It is recommended** that the proponents avoid disturbance to Bob Wallam's camp as this place is likely to be a site under section 5a of the AHA. Should this not be possible then it is further advised that the proponent will be required to lodge notice under section 18 of the AHA to use the land that may contain an Aboriginal site.

It is further recommended that the proponents avoid a number of places identified to be of cultural value within the survey area:

- The Wellesley River
- All wetlands

Should avoiding these places not be possible, further consultation may be required in order to determine if there is sufficient information for these places to be considered sites under section 5b of the AHA.

Should further information regarding these places be detailed that would lead to a positive assessment under section 5b, then the proponent will then be required to lodge notice under section 18 of the AHA to use the land that may contain an Aboriginal site.

Should development in these areas proceed **it is recommended** that the proponents conduct archaeological and Aboriginal community monitoring in places where cultural material may be present. This recommendation should be enacted upon advice from a suitably qualified archaeological consultant and should be detailed within an AHCMP.

**It is re commended** that the proponents supply the GKB working party at SWALSC all environmental studies relevant to the management of the project, in particular plans that detail the management of storm water and drainage.

It is recommended that the Landcorp gives the following requests due consideration:

- That the GKB representatives be re-consulted when the Subdivision Plan has been finalised and construction of the necessary infrastructure is underway.
- That employment opportunities and apprenticeships for young Nyungar people be written into all tenders for construction of the KIP.
- That Nyungar names be given to the wetlands and roads within the survey area to recognise the 'old Nyungar people' that previously lived, worked and hunted on the land.
- That the importance of Bob Wallam's Camp be recognised by the provision of a plaque that acknowledges the Wallam family and the social history of the Nyungar community as an agrarian labour force that contributed to the success of the development of agriculture in the region
- That the proponent identify an area where Nyungar people can continue to hunt as an offset to the loss of the land within the KIP currently used for this cultural activity.

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# REPORT

# A Site Identification Aboriginal Heritage Survey of the Proposed Kemerton Industrial Park in the Shire of Harvey, Western Australia

## **ISSUE**

Landcorp are proposing to develop the Kemerton Industrial Park (KIP) to become one of the largest heavy industrial areas in the Southwest region of WA. As part of the planning process and consideration of environmental, economic and social issues related to the establishment of an industrial area at Kemerton, Landcorp wish to determine whether any sites of significance, as defined by section 5 of the *Aboriginal Heritage Act (1972)* (AHA) will be affected by this proposal.

## **REPORT OBJECTIVES**

To report on archival research in order to determine if any previously recorded Aboriginal heritage sites will be affected by the above proposal.

To report on consultations held with representatives of the GKB Native Title Claim group as determined by SWALSC in order to determine if any new Aboriginal heritage sites will be affected by this proposal.

To report on the views of the GKB Native Title claimants in regard to the proposal's potential to impact upon Aboriginal heritage sites and their management should the development proceed.

## BACKGROUND

**On 24<sup>th</sup> November 2010,** Mr Sean O'Hara from the SWALSC, acting on behalf of Landcorp, requested that Brad Goode & Associates Pty Ltd provide a budget estimate to conduct 'A Site Identification Aboriginal Heritage Survey' of the proposed KIP in order that the proponent can proceed and remain compliant with the AHA.

Specifically the survey area is located approximately 160 km south of Perth and 17 km northeast of Bunbury within the Shire of Harvey. The total area of the KIP is 7543 hectares (ha) comprising:

- 2019 ha of Industry Core
- 293 ha Support Industry Area
- 5231ha of Buffer Area made up of Inter Industry Buffer (212ha) and Buffer Area (5019ha)

The Buffer Area contains the public purpose area, regional open space, conservation, rural uses, plantations and landfill sites. The Buffer Area is generally not intended to accommodate industry but instead to ensure that the impacts of industries located in the Industry Core do not adversely impact on neighbours beyond the Buffer Area boundary of the KIP (ibid).

Consideration of the planning, environmental, economic and social issues related to the establishment of an industrial area at Kemerton began in the early 1980s. Consequently, the KIP has been the subject of numerous reports and studies over the past twenty five years. The KIP was established in 1985 primarily for major (heavy) industry to provide for downstream processing and value-adding to the region's extensive primary resources, especially its substantial mineral resources, for both export and domestic markets (ibid).

As a relatively young industrial area, the KIP has attracted two major industries and several support industries to date. However, successive State Governments have recognized the strategic significance of Kemerton as a planned, long term major industrial estate. Being some 160 kilometres south of Perth connected by two highways, the KIP is accessible to the metropolitan area and to industrial areas such as Kwinana and East Rockingham which already have some industrial synergies with the KIP. Importantly, the KIP is accessible to the Port of Bunbury by road and a planned rail link and well located in relation to the hinterland of the Southwest region and its substantial primary industries (ibid).

For further information regarding the proposal refer to Appendix 6: Kemerton Strategy Plan 2009.

As components of the Aboriginal Heritage Survey, separate archaeological and ethnographic surveys were conducted by Brad Goode & Associates Pty Ltd.

The archaeological survey was conducted between 26<sup>th</sup> July 2011 - 19<sup>th</sup> September 2011 by Mrs Jacqueline Harris (Senior Archaeologist) and Mr Stuart Johnston (Archaeologist) assisted Mr Peter Michael, Mr Cameron Bennell and Mr Gavin Jetta as representatives of the GKB Native Title Claim Group.

The ethnographic survey was conducted on the 20<sup>th</sup> and 21<sup>st</sup> September by Mr Brad Goode (Anthropologist), Mrs Angela Tarbotton (Ethnographic Assistant) and 10 nominated members of GKB Native Title Claim Group.

The process and findings of these surveys are detailed in the following reports.

# LOCATION

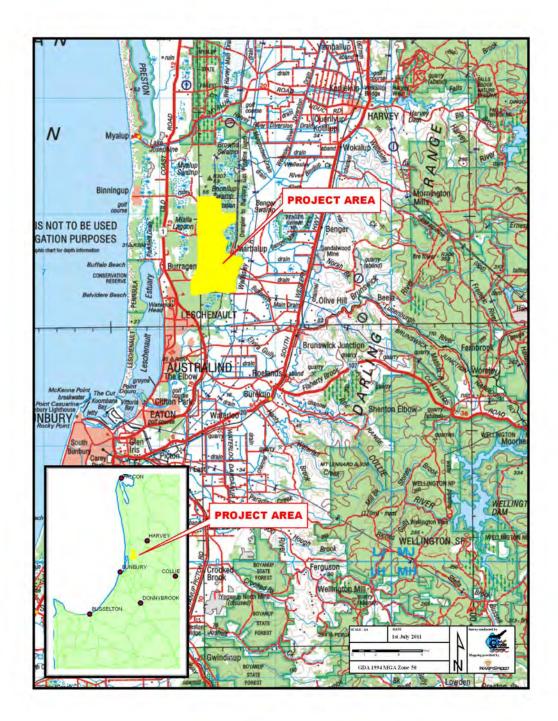


Figure 1: Location of the survey area.

# ETHNOGRAPHIC & HISTORICAL BACKGROUND

## TRADITIONAL NYUNGAR CULTURE

Prior to European settlement Western Australia's southwest was home to thirteen socio-dialectal groups who shared traditions and a common language with local variations. These groups, known collectively as *Nyungar* encompassed a triangle from Jurien Bay in the north to Esperance in the southeast (Berndt 1979, Tindale 1974, Tilbrook 1983). Before linguistic boundaries were formed these people were known by Europeans as the *Bibbulmun* and were said to be 'the finest group in all West Australia' (Bates 1938:59-61). The word Bibbulmun means many breasts, a name derived, perhaps, from the great fertility of the region or the number of women and children among the seventy subgroups.

Tindale (1974) recorded that the *Pindjarup* occupied the area from Pinjarra to Harvey, inclusive of the Leschenault Inlet and the lower reaches of the Murray River. Bates records the *Kunniung* (west) *Bibbulmun* people as having occupied the Bunbury area prior to colonization. Bates records the dialect of the Bunbury region as *Burrong Wongi* (Bates 1985:54).

To the south-east Tindale (1974:244, 260) and Berndt (1979) both record the region as home to the *Kaneang*. To the east were located the *Wilman* people who occupied the territory at Wagin and Narrogin, on the Collie, Hotham and Williams Rivers west of Collie.

Unlike their inland neighbours who employed the 'Old Australian tradition' of circumcision (Berndt & Berndt 1980), Nyungars restricted the physical marks of initiation to nasal septum piercing and cicatrisation. A boy at age nine or ten would be removed from his home camp to live with his maternal uncles for several years. During this time upper body cicatrisation and nasal septum piercing would take place and he would learn the lore of the country before returning to live with his immediate family, having passed into manhood (Bates 1985:151-158).

The two primary social moieties of the Nyungar, the *Manitchmat* (white cockatoo) and *Wordungmat* (crow) were the basis for marriage between a further four semi-moieties or clan groups. The semi-moieties *Tondarup* and *Didarruk* were derivatives of the former and *Ballaruk* and *Nagarnook* derivatives of the latter (Berndt 1979:82, Bates 1985:74). It was strictly forbidden to marry within one's own moiety. In fact, the only lawful marriage was seen to be the cross cousin marriage of paternal aunts 'children to the maternal uncles' children. This form of social organization was identical in tribes across all of Western Australia (Bates 1966:24-25).

The basis for Aboriginal spirituality, land use and ownership lies in their Dreaming. In the Dreaming ancestral beings created the world and all within it thereby defining spiritual, social, moral and territorial division for its inhabitants. The spiritual essence of all ancestral beings not only transformed the landscape but also infused it with living spirit. The beings remained in significant sites and so all generations are linked to the Dreaming and to the eternal spiritual beings (Berndt 1979). The Nyungar held one central creator spirit, the Waugal (after Moore 1842, Berndt 1979; woggal after Bates 1938 & 1985), who created and is still present in all sources of water in the southwest. Bates (1985:219-221) notes that wherever the Waugal stopped or camped was sacred. As a consequence, these places were generally avoided (winnaitch). O'Connor, Quartermaine and Bodney (1989) provide a theoretical explanation of what they term "the ubiquitous Waugal myth." The Waugal, they say, is a water creative spiritual force with a serpentine physical manifestation, which created many of the south west rivers and whose essence remains in such as the Collie and Preston Rivers to this day. The author's state the imputation of religious significance to water sources is at least as old as recorded human history and that it is not surprising that in an arid country such as Australia it occurs in many totemic forms. O'Connor et al note Waugal sites of significance at various locations on the Collie River at Collie, namely Bottoms Pool, Wuridjong Pool, Telfer Pool and Wellington Dam.

Aborigines throughout all of Australia have historically held two distinct and complementary forms of relationship to the land: esoteric (sacred, ritual, mythological and ceremonial) and economic (biographical, historical and habitation). Stanner clarifies their difference by using the terms *estate*, *range and domain*. Estate refers to the home ground or Dreaming place of a particular descent group. Range refers to the tract of country over which the group travelled for hunting and foraging, and included their estate. In short, range gave economic boundaries and estate offered a sense of place and of spiritual meaning for both the individual and the group as a whole. A descent group's domain refers to the combination of both estate and range (Stanner 1965:2). The strength of attachment to a particular place would vary from person to person and/or family to family but the associations with the land were, and remain today, crucial elements of Aboriginal society.

Nyungars employed a mobile lifestyle and movement by local family groups was usually along a series of well-defined tracks or paths (*bidi*) which followed the corridors of easiest movement. The fluidity of the kinship system among Nyungars was recorded in early ethnographic studies as individuals were noted to have moved freely between these family runs (Salvado 1977:130-131).

#### EUROPEAN SETTLEMENT AND ABORIGINAL SOCIAL DISRUPTION

According to Bates (1985:54) the population of the Nyungars before settlement was around 40,000 but more recent research suggests a far lower estimation of around 6,000 (Berndt 1979, Green 1984, Tilbrook 1983) who lived mainly on the coastal plain. Population of the less favourable forest and woodland environments is thought to have been sparse (Anderson 1984, Tilbrook 1983).

During his expedition of 1829, Lieutenant Preston, officer on the HMS Sulphur, was accompanied by naval surgeon Dr Collie and set sail from the Swan River Settlement to examine the south western coast. Passing through the channel between Garden Island and Cape Peron they chartered the water south to Murray River. Following this they travelled on to Port Leschenault and, upon entering the inlet discovered a river about three miles from their camp. They named it the Preston River, after the Lieutenant. On the same day they discovered another river just a few miles downstream of the Preston and named it the Collie River, in honour of the doctor. Collie, the mining town, was also later named in his honour. The explorers reported seeing a group of about 30 Aborigines at the mouth of the Collie River. They found themselves:

In the midst of natives who testified the greatest and most friendly eagerness to be allowed to approach us... carrying green boughs and without any weapons of offence or defence... after a very amicable interview during which we did not admit them close to the tents they returned seemingly very much gratified with what they had seen and with a few trifles which they had gotten (Martinick 1994:15).

Surveyor-General Lieutenant Roe followed on from the early surveyors of 1830 to survey the 'very good' land surrounding the Preston and Collie Rivers. He discovered valuable forestland and a range of hills that he named after himself (Sanders 1975:3). During his explorations around the Preston and Collie Rivers, Lieutenant Roe reported no sightings of Aborigines but noted traces of old habitations that were constructed of boughs and grass. It is thought these may have been the remnants of Nyungar's winter camps.

Lieutenant Henry William St Pierre Bunbury formed a post at Pinjarra on the Murray River in 1836 in order to investigate the district and was known for his good relations with the Aborigines. Before his return to England in 1837 he pioneered land exploration between Pinjarra and the emerging district of Vasse. An Aboriginal guide named Monang and others from the Pinjarrup tribe led the party to Leschenault Inlet, where the Collie and Preston Rivers flow into Koombana Bay. Here the Gomborrup people lived well as food was plentiful and the land was rich (Sanders 1975:99). Bunbury reported his encounters with hundreds of people

from differing groups of Aborigines as he travelled from the inlet up the Collie and Preston Rivers and inland from the Preston River (Hallam 1979:69). Interaction between Aborigines and settlers in the Bunbury region was commonplace by 1840 and was said to have been 'a mixture of cordiality, mutual support and yet underlying suspicion and fear' (Barker & Laurie, 1992:8). In the midst of the various perceptions of Nyungar people, Preston and Collie had formed a very different impression and had friendly communications with local Aborigines.

The following passage presents one of the settler's views of the Aborigines of the Murray and Vasse River areas in the early 1840's:

The opinion that they are in a state of starvation is altogether erroneous, for I never saw people more sleek and apparently well fed than they are, expecting indeed some of the women who only get the remains of what the voracious appetite of their husband leaves. In the district within 60 or 70 miles round us there appear to be but four tribes. Our immediate tribe bears the cognomen of the 'Elaap' Tribe, from their headquarters being at 'Elaap', which is the land immediately at the entrance of the Inlet up to the River Preston. They appear to be the least warlike and best disposed of all the tribes we hear of.

The tribe adjoining northwards is the Murray Tribe or 'Pinjarrup' Tribe and are the fiercest and most warlike, but they are at such a distance that we seldom hear of them. To the eastward is the Mountain Tribe who possess the darling Range and they bear a bad character. And to the southward, the 'Undelup' or Vasse tribe who are generally peaceable but they lately speared to death a respectable settler Mr. Layman.

All these tribes are perpetually at war with each other and their customs prevent their increase and will probably lead to their annihilation. When a death occurs in one tribe it is necessary for that tribe to put to death one of another, and this is carried so far that if a child is born dead, the sacrifice of a living person in another tribe is required.

They acquire their wives - for they have sometimes several – by inheritance from deceased brother or from betrothment from birth; but more generally by stealth from another tribe. When this occurs the outrage is avenged by the death, or by severe wounding of one of the offending tribe; and various other equally destructive customs prevail. They have so far a right of property established amongst them, that most of the men have a tract of country which they call theirs: but the right seems to only extend to catching animals or spearing birds upon it for possession of all the country seems common to all the natives who are perpetually wandering about from one part to another attended by their wives and children without any object or pursuit but food which they appear to find in abundance. Flour however is their delight, and the moment a white man pitches his tent they continually surround it, and sit at the fire waiting anxiously the gift of flour.

They seem to have no religion but they are in great fear of an Evil Spirit without the knowledge of a good spirit and their apprehension of danger from the Evil Spirit is such that they scarcely ever move after dark out of their miar - a slender cover from the weather which the women daily make with a few boughs of slight bending shrubs. It is not easy to estimate the total number of a tribe, but I think that amongst whom we dwell does not number more than 150 men, women and children. They are all occasionally visitors to us and we are never without some: once or twice we have had from 45 to 48 with us in the camp at one time, but I have endeavoured to put a stop to this assemblage of them, and to restrict their numbers to 5 or 6, because when numbers are assembled, they dance and become excited, when accidents might almost unintentionally occur.

I have also forbidden them to bring their spears into our village, which after some difficulty I have affected because the men never go without two barbed spears in their hands.

We have hitherto found these poor people perfectly harmless and good natured. In fact their good humour and good temper is most remarkable. They are always laughing and happy and I can always describe them as being good-humoured idle beggars. I have tried various means to make them work and on the whole with better success than I was led to expect, but they will not stick to their work. If I have induced them to work hard one day, in clearing a road, the next day they are all gone leaving word that they are too tired to work and are gone to the shore to eat whale - or to fight the 'Undelap' Tribe - but some amongst them almost dwell around our tents and cut wood, go messages and loiter about till wanted for any large job.

They are in their form well made though small (not by any means of the slender disproportionate make which I had been led to believe) and excessively graceful in their walk as well as shape. They are generally very dark in colour with curling hair (not exactly woolly) but change their appearance by besmearing their faces, hair and bodies with Wiljay or a sort of red ocre and grease. They are acute and intelligent, but I am convinced not capable of civilisation or mental cultivation.

Our intercourse with them has been entirely of a friendly character unclouded by any untoward event. I have endeavoured to prevent their being treated with roughness or derision by any of my people and I am glad to say the best understanding now subsists between them all. I often walk unarmed over all parts of the bush and never have and apprehension of the natives. They rejoice at our being here, as all occasionally benefit by us, and seek our favour and protection on all occasions (M. Waller Clifton 1841 cited in Barnes 2001:33).

Before 1890 the SouthWest region supported only small pockets of agriculture and a young timber industry and both were strained by extreme transport difficulties (De Garis 1993:110). Although deposits of coal were known to exist at Collie in the 1880's mining did not begin until the 1890s. Completion of the Bunbury harbour works in 1907 and further ongoing development of the southwest's railway system opened up greater possibilities for coal export. By the 1920's heavy engines could run coal direct from Collie to Bunbury to be loaded onto ships. The first full cargo of Collie coal bound for South Australia left the Bunbury wharf in 1923 (Barker & Laurie 1992:171-224). The southwest's hardwoods, on the other hand, had already found markets in the eastern colonies and overseas before the 1870's. Before construction of a bridge across the Brunswick River in 1845, milled timber was placed on a lighter (semi submerged raft) and sailed to the port of Bunbury via the Collie River and Leschenault Estuary. A second bridge across the Collie River was built in 1844, and a third over the Preston River in 1848 (Sanders 1975; O'Brien 1996:45).

Amidst ongoing tension as indigenous and colonial people jostled to retain their own cultural practices, farmers across Western Australia regularly employed Aborigines as a convenient and cheap source of labour. Heavily relied upon to support the foundation of European farming techniques, Aborigines were generally offered little if any payment for work and were often given goods such as flour, sugar and tobacco in exchange for farm labour and domestic help (Shann 1926). Their importance was verbally acknowledged when in 1898 John Forrest said 'Colonization would go on with very slow strides if we had no natives to assist us' (Goddard & Stannage 1984). Although some continued to pursue a traditional way of life others worked on homesteads or were involved in the timber industry.

By the turn of the twentieth century over half of the Aboriginal population in the southwest was of mixed race descent (Haebich 1988: 47). Colonial rulers saw children of one British parent as

having potential if they could be trained to live as Europeans and the Industrial Schools Act of 1874 brought their removal to missions where they were prepared for servant-hood or menial apprentice work in the European community. Aboriginal parents of these children were afforded no comment in this process.

The Depression of the 1930's saw unemployed Nyungar's receive a lower sustenance rate than unemployed Europeans. Nyungar people were often employed to clear for farming the land they formerly lived on. Living more or less permanently in fringe camps, seeking out seasonal employment and supplementing their diet with game, fish and some bush tucker was a lifestyle which predominated for many Aboriginal people until late into the 1960's (McDonald et al., 1994).

Governor Stirling originally called Harvey 'Korijekup'. 'Korijekup' was the name given by the Harvey Aborigines to the place of the red tailed black cockatoo. In 1829 Governor Stirling selected 12,800 acres known as Wellington Location 50A and called it the Harvey River Settlement. It is thought that Governor Stirling selected the name 'Harvey' in honour of the commanding officer, Admiral Sir John Harvey, of West Indian Station of the Royal Navy under whom Stirling served in 1817 (www.harvey.wa.gov.au – history of Harvey).

The Wellesley district is located approximately 5km east of the township of Binningup. Binningup was named after its Aboriginal name meaning place of midges, remained relatively unsettled until the post war period (Collard 1996).

## **ARCHIVAL RESEARCH**

Archival research involved an examination of the DIA Sites Register, a review of any relevant site files and a review of unpublished ethnographic reports that relate to the project area.

#### SITES REGISTER SEARCH

The DIA Aboriginal Sites Register categorises places reported to be of importance and significance to Aboriginal people into two separate categories. The first category contains sites classified as **'Registered'**, which have been assessed by the ACMC as meeting the definition of section 5 of the AHA and are fully protected under the AHA. Disturbance to land that contains such sites requires a section 18 application for ministerial consent should proponents wish to use the land that contain these sites.

**'Other Heritage Places'** is the second category which includes reported sites both 'Lodged' and awaiting ACMC assessment, and 'Information Assessed' by the SAG, however awaiting a final decision on the places status by the ACMC. Also there are places where the ACMC have determined there is 'Insufficient' information for these places to be fully 'Registered' under the AHA, however that there is enough information to warrant their temporary protection. Within the category of 'Other Heritage Places' sites that are awaiting assessment or are lodged are protected by the provisions of the AHA, until assessed and their final status determined. Other heritage places that have been assessed and fail to meet the definition of section 5 of the AHA are classified as 'Stored Data'. Places in this category that have been assessed as 'Stored Data' are not sites under the AHA as they have failed to meet the definition of section 5.

In relation to this survey a search of the DIA Aboriginal Sites Register was conducted on the  $22^{nd}$  of September 2011, in order to determine if there were any previously recorded Aboriginal heritage sites that would be affected by the project proposal (see Appendix 1: Sites Register Search).

**No ethnographic sites** were located within the survey area as a result of this search. A number of archaeological sites were previously registered within the KIP. These sites will be detailed in the accompanying archaeological report by Mrs Jacqueline Harris.

#### REVIEW OF RELEVANT ETHNOGRAPHIC REPORTS

 McDonald Hales & Associates (Murphy, A, Edwards, K, Campbell-Smith, S & McDonald,
 E), 1993, Report of an Aboriginal Heritage Survey Proposed Support Industry Area, Kemerton Industrial Park, Western Australia, Prepared for BSD Consultants Ltd.

This report details the results of an Aboriginal Heritage Survey conducted in 1993 by McDonald, Hales & Associates for the proposed first stage of the KIP. The report covers both an archaeological and an ethnographic survey of an area of land of 150ha; of which 45 ha was designated as a conservation buffer zone where no development would take place. The survey area covered land from Marriot Road in the south to Treasure Road in the north. During the survey no archaeological or ethnographic sites were identified. During the ethnographic consultations it was requested that a 30m protective buffer be provided around the Wellesley River, due to its association with the *Waugal*. During these consultations the Nyungar consultants requested financial compensation for loss of hunting lands. As an outcome of the archaeological survey monitoring was recommended in the vicinity of all water courses.

Australian Interaction Consultants (Saum an, D & Lantzke, D), 2003, Archaeological and Ethnographic Site Identification Survey under the Australian Heritage Act (1972) of proposed Industrial Park Power Station at Kemerton, Western Australia, Prepared for ATA Environmental.

AIC was commissioned by ATA Environmental to conduct an Aboriginal Heritage Survey for a proposed power station that Trans-field Services Ltd proposed to construct within the KIP. The archaeological survey located no archaeological material in the survey area and during

ethnographic consultations, held with members of the GKB Native Title Claim group, no ethnographic sites were identified. As a result of this survey, it was recommended that works proceed on Stage One of the proposal and that a Cultural Heritage Management Plan be developed that incorporates employment of Aboriginal monitors during all ground disturbance operations.

#### Hames Consultancy Group 2003, Report of Aboriginal Heritage Aspects of the proposed widening of the Dampier to Bunbury Natural Gas Pipeline Corridor between Kwinana and Bunbury, Prepared for the Department of Industry and Resources

The Hames Consultancy Group conducted an Aboriginal heritage survey for the Dampier to Bunbury Natural Gas Pipeline corridor between Kwinana and Bunbury. The State Government proposed to widen the corridor to 50 metres in an effort to provide a cost effective corridor for future development in the southwest region. The Aboriginal Heritage Survey consisted of archaeological and ethnographic components and was conducted between December 2002 and January 2003. A total of 29 registered sites were located within the study area, with 18 identified as being potentially impacted upon by the corridor. During the ethnographic consultations, no ethnographic sites of significance were identified. Representatives from the Brunswick group noted that "the Brunswick River, the Wellesley River and all rivers and creeks including drains not cemented along the alignment are considered to be occupied by the Waugal and thus sacred to Nyungahs" (AIC 2003:20 cited in Hames Consultancy Group 2003). As a result, concerns were raised about pollutants washing into the rivers and creeks, and the potential impact future development might have on traditional food sources in the area. It was a recommendation of this report that appropriate Heritage Management Agreements be agreed upon prior to the corridor proposal proceeding. It was also recommended that camping areas and trees specifically identified during the survey be protected where possible.

Australian Interaction Consultants 2005, Report of an archaeological and ethnographic survey of the proposed Natural Gas Pipeline at Kemerton, Western Australia, Prepared for Epic Energy.

AIC was commissioned by Epic Energy to complete an ethnographic survey to identify sites of cultural heritage within a 5km section of proposed pipeline to convey natural gas from the Dampier to Bunbury Natural Gas Pipeline to a power station at KIP. Five sites were identified as previously recorded in this area, with one site that was classified as 'stored data' being located in the vicinity of the project area. This site was determined unlikely to be impacted by the proposed pipeline. No new ethnographic sites were located during the survey. Consultations were held with representatives from the GKB Native Title Claim group and concerns were raised regarding the potential for subsurface material to be disturbed that might include skeletal material, and the potential disturbance to flora and fauna. As a result of these concerns it was recommended that Aboriginal monitors be engaged during excavations to supervise works and to ensure that appropriate protocols be followed if any skeletal material is unearthed. It was also recommended that a Heritage Management Plan be prepared prior to the pipeline construction taking place.

#### Amergin Consulting (Coldrick, B, McDonald, E & Thomson, J) 2008, Report of an Archaeological and Ethnographic Aboriginal Heritage Survey of Lot 4 Runnymede Road, Wellesley, Western Australia, Prepared for B & J Catalano Pty Ltd on behalf of Lundstom Environmental.

Amergin Consulting was commissioned by Lundstrom Environmental on behalf of B & J Catalano Pty Ltd to conduct an Aboriginal Heritage Survey of Lot 4 Runnymede Road in Wellesley in relation to the proposed removal of sand that B & J Catalano Pty Ltd planned to use this land for. Two previously recorded sites were found to be intersecting with the proposed extracting area, however it was determined that the archaeological material referred to in the site files were located outside of the survey area, west of Runnymede Road. No ethnographic sites

were reported by the Aboriginal representatives during the consultations and no objections to the proposed extraction program were made. As a result of this survey, it was recommended that the proposal proceed and that an Aboriginal Heritage Management Plan be developed prior to sand removal activities commencing.

# Goode, B 2008, An Aboriginal Heritage Survey of the Eastern Portion of Lot 70 Wellesley Road within the Shire of Harvey, Western Australia, A report prepared for APH Contractors.

Brad Goode & Associates Pty Ltd was commissioned by APH Contractors to conduct an Aboriginal Heritage survey at Lot 70 Wellesley Road in the Shire of Harvey, where APH proposed to conduct sand mining operations on the eastern portion this lot. Searches of the DIA sites register revealed 3 archaeological sites with site extents overlaying the survey area. The archaeological inspection determined that the actual location of these sites was not within the mining operation area however the existence and proximity of these sites to the development area raised the potential for archaeological material to be present. Consultations were held with representatives of the GKB Native Title Claim group and no ethnographic sites of significance were identified during this survey. As a result of this survey it was recommended that APH proceed with their proposal and that consideration be given to employing Nyungar people in the operation of their project.

Goode, B 2010, A Work Area Clearance Aboriginal Heritage Survey of Proposed Drill Holes & Lines within Mining Tenement E70/3294 at Myalup, Western Australia, A report prepared for the South West Aboriginal Land & Sea Council (SWALSC) on behalf of Rocla Quarry Products (WA).

Brad Goode & Associates Pty Ltd was commissioned by Rocla Quarry Products WA (Rocla) to conduct a Work Area Clearance Aboriginal Heritage Survey in relation to geotechnical exploratory drilling that Rocla proposed to perform across the Myalup Pine Plantation within mining tenement E70/3294 at Myalup. Seven archaeological sites were located within the survey area however it was determined that as these sites were classified as 'stored data' they would not impinge on the exploratory drilling proposal. No ethnographic sites of significance were located during the survey and consultations held with the GKB Native Title Claim group advised that the area was clear of sites and no impediments existed. It was requested by this group that access to the area remained open to Nyungar people so that hunting of game could continue to take place.

## OUTCOMES OF ARCHIVAL RESEARCH

A review of the DIA Aboriginal Sites Register revealed **no previously recorded** ethnographic Aboriginal heritage sites or other heritage places to be located within the survey area.

A review of previous survey reports that relate to the first stage of the KIP has identified that Nyungar people were concerned that industrial development has the potential to pollute creeks and rivers and places (wetlands) where traditional food sources can be obtained. In these surveys the Brunswick and Wellesley Rivers, all creeks, and any drains, that are not cemented were reported to be sacred to Nyungar people. Previous studies reported that it was the general belief amongst Nyungar people that the southwest variant of the Rainbow serpent known as the *Waugal*, resides within these water courses and is responsible for their maintenance (AIC 2003:20, Hame's Consultancy Group 2003, Radcliffe-Brown 1926:19-25).

As a result of these concerns it was recommended that an Aboriginal Cultural Heritage Management Plan (ACHMP) be prepared to outline appropriate protocols in order to protect these areas (AIC 2003, AIC 2005, Amergin 2008). Preparing and implementing an ACHMP also raised awareness of the potential for archaeological material to be found during ground disturbing works and recommended the employment of Aboriginal monitors during these stages of work as a strategy to mitigate potential affects.

# **IDENTIFICATION OF SPOKESPEOPLE**

#### THE RIGHT TO SPEAK ON HERITAGE ISSUES

Various authors have discussed the contemporary problem of who in the Aboriginal Community has the authority to speak on heritage issues within an area. O'Connor et al. (1989:51) suggest that when this question is posed to people in Aboriginal Australia, answers are usually framed by such terms as 'the traditional owners', i.e., those people who are defined by place of birth i.e. descent. Myers presents a broader and more contemporary view of 'ownership' based upon descent and association:

An estate, commonly a sacred site, has a number of individuals who may identify with it and control it. They constitute a group solely in relationship to this estate. Identification refers to a whole set of relationships a person can claim or assert between himself or herself and a place. Because of this multiplicity of claims, land holding groups take essentially the form of bilateral, descending kindred. Membership as a recognised owner is widely extended (cited in Machin 1993:22).

Myers then goes on to further clarifies the current perception of 'ownership' when he states:

....such rights exist only when they are accepted by others. The movement of the political process follows a graduated series of links or claims of increasing substantiality, from mere identification and residual interest in a place to actual control of its sacred association. The possession of such rights as recognised by others, called 'holding' (kanyininpa) a country, is the product of negotiation (Ibid.).

While the notion of descent is clearly an important criterion within Myers analysis, it must be seen in terms of the contemporary Nyungar situation. Nyungar tradition in the south west has been seriously eroded since colonisation, lines of descent have been broken and previously forbidden and mixed marriages have interconnected many Nyungar groups who would not have traditionally had a close association (Ibid.). Consequently, in contemporary times the criteria of historical 'association' seem to be important in regards to the 'right to speak' on heritage issues within an area:

Traditional subsistence no longer sufficed to support Aboriginals so they combined this with menial work on farms and over time new relationships to land developed. As a consequence, the more recent history associated with their involvement with European agriculture and labour patterns is often more relevant than the pre-contact mode of attachment to an old way of life and the roots of the identity as original owners of the land. Biographical associations are often tied to post-settlement labour patterns and identification. These can predominate. This is part of a dynamic process of ethnicity, identity and tradition (Machin 1995:11).

O'Connor, et al. (1989) identified several criteria for determining contemporary community spokes people. A spokesperson must have a long-term association with an area, usually as a young person, and had extensive contact with a member or members of the 'pivotal generation of the culture transmitters'; those people whom, as children themselves, had contact with people who could pass on their traditional knowledge. A spokesperson must also demonstrate knowledge of the region's natural resources, its hunting, fishing and camping grounds, its local water sources, and the flora. This is important because a person without this knowledge is unlikely to be seen by their fellow Nyungars as truly being from that country, despite having been born or lived in that area. In some cases, people from outside a specific region have established themselves by political activism. They are accepted by their fellow Nyungar because they may have participated in mainstream white pursuits, such as advanced education, or legal and political careers, that have empowered them within the broader community. As such, these people are a valuable resource to the local Aboriginal Community. The people consulted in this survey fulfil at least one of these criteria.

## NATIVE TITLE CLAIMS OVER THE SURVEY AREA

Currently, there is one registered Native Title application and one unregistered application that overlays the project area, lodged with the Register of Native Title Claims and the Schedule of Applications held by the Commonwealth Native Title Tribunal. The Schedule of Applications includes registered applications, unregistered applications, and applications still undergoing the registration test.

#### • Gnaala Karla Booja WC 98/058

#### Applicants:

Mr. Derrick Smith, Mr. Franklyn Nannup, Mr. Harry Narkle, Mr. Joseph Northover, Mr. Joseph Walley, Mr. Mervyn Abraham, Mr. Peter Michael, Ms. Barbara Corbett Stamner Councillor, Ms. Lorraine Bellotti.

#### • Single Noongar Claim (Area 1) WC03\_006 (unregistered)

#### Applicants:

Anthony Bennell, Alan Blurton, Alan Bolton, Martha Borinelli, Robert Bropho, Glen Colbung, Donald Collard, Clarrie Collard-Ugle, Albert Corunna, Shawn Councillor, Dallas Coyne, Dianna Coyne, Margaret Colbung, Edith De Giambattista, Rita Dempster, Aden Eades, Trevor Eades, Doolan-Leisha Eattes, Essard Flowers, Greg Garlett, John Garlett, Ted Hart, George Hayden, Reg Hayden, John Hayden, Val Headland, Eric Hayward, Jack Hill, Oswald Humphries, Robert Isaacs, Allan Jones, James Khan, Justin Kickett, Eric Krakouer, Barry McGuire, Wally McGuire, Winnie McHenry, Peter Michael, Theodore Michael, Samuel Miller, Diane Mippy, Fred Mogridge, Harry Narkle, Doug Nelson, Joe Northover, Clive Parfitt, John Pell, Kathleen Penny, Carol Petterson, Fred Pickett, Rosemary Pickett, Phillip Prosser, Bill Reidy, Robert Riley, Lomas Roberts, Mal Ryder, Ruby Ryder, Charlie Shaw, Iris Slater, Barbara Corbett Stamner Councillor, Harry Thorne, Angus Wallam, Charmaine Walley, Joseph Walley, Richard Walley, Trevor Walley, William Webb, Beryl Weston, Bertram Williams, Gerald Williams, Richard Wilkes, Andrew Woodley, Humphrey Woods, Dianne Yappo, Reg Yarran, Saul Yarran, Myrtle Yarran, Ken Colbung

#### SELECTION OF SPOKESPEOPLE FOR THIS SURVEY

The selection of spokespeople for this survey was based on assistance given from Mr Sean O'Hara from the SWALSC, who arranged for the GKB Native Title Claim Group to elect the participants for the survey at a working party meeting. There are no named DIA site informants listed within the survey area.

As a result the following Nyungar people were selected to participate in the survey:

*Mr Dennis Hill* was born in Pingelly to parents Mr Charlie Hill and Ms Rachael Abraham. Mr Hills great grandfather is Mr Joseph Hill. Mr Hill attended school at Burekup and since leaving school has worked various jobs including a farm labourer on potato farms in the Bunbury area. Mr Hill was nominated by the GKB Native Title Claim working party to participate in the survey.

*Ms Janine Williams (nee Wallam)* attended the survey in place of her father Mr Les Wallam, who was born in Bunbury the son of Mr Lee Hart and Ms Mabel Wallam. Mr Wallam's grandparents on his father's side were Mr Jack Hart and Ms Tottie Cockie. On his mother's side his grandparents were Mr Bob Wallam and Ms Grace Gillespie. Both Ms Janine Williams and her father Mr Les Wallam are involved with the management and running of Roelands Village. Ms Williams replaced her father who was selected by the GKB Native Title Claim working party to participate in the survey as a representative of the Wallam family.

*Mr Murray Collard* was born in Bunbury to parents Mr Clem Collard (born in Brookton) and Ms Jane Hill (born in Yornaning). Mr Collard's paternal grandparents are Mr James Collard (born in Beverley) and Ms Mabel Bennell (born in Brookton) and his maternal grandparents are Mr Charles Hill (born in Bridgetown) and Ms Rachael Abraham (born in Narrogin). Mr Collard

completed both his primary and secondary education at Bunbury before becoming an Education Assistant at Djidi Djidi Aboriginal School. Mr Collard was nominated by the GKB Native Title Claim working party to participate in the survey.

*Ms Lera Bennell* was born in Pingelly to parents Mr Henry Bennell and Ms Violet Hill. Ms Bennell attended school at Perth Modern, Bunbury Senior High School and Collie Senior High School. Upon completing school, Ms Bennell has worked in the Crown Law Department, Aboriginal Legal Services in the Police Department and has a Bachelor of Science and Masters Degree in Social Policy, Research and Design. Ms Bennell claims traditional ties to the Bunbury area. Ms Bennell was selected to participate in this survey by nomination from the working party of the GKB Native Title Claim.

*Mr Kelvin Quartermaine* was born in Bunbury to Mr Frank Quartermaine (born in Woodanilling) and Ms Mavis Wallam (born in Meekatharra). Mr Quartermaine's paternal grandparents are Mr Elijah Quartermaine (born in Katanning) and 'Warton' - no formal name - (born at Warburton Ranges) and his maternal grandparents are Mr Roely Wallam (born in Manjimup) and Ms Rene Kelly (born at Warburton Ranges). Mr Quartermaine attended Harvey High School up until year 10 then went on to enrol at TAFE to complete his adult education. Mr Quartermaine has since been employed driving trucks for both the Harvey and Busselton Shire Councils, in the viticulture industry undertaking a pruning contract and is currently employed by Roelands Mission conducting contract work. Mr Quartermaine was nominated by the GKB Native Title Claim working party to participate in the survey.

*Mrs Vivian Michael (nee Bennell)* represented her husband, Mr Peter Michael, who was selected by the GKB Native Title Claim working party to attend the survey however was unavailable for the meeting. Mrs Vivian Michael met her husband in Collie but has lived in Bunbury all her life. Mrs Vivian Michael is also a member of the GKB Native Title Claim and being a Bennell has ties to the area.

*Mrs Barbara Corbett Stamner Councillor* is an applicant to the South West Boojarah and GKB Native Title Claim and an executive member for the working party. Mrs Councillor has strong historical ties to the region being the daughter of Mr Frank Corbett and the niece of Mr Dan Corbett who were schooled at the Bussell family's Ellensbrook Mission at the turn of the 19th century. Mrs Barbara Corbett Stamner Councillor was born at Picton and claims traditional blood ties through matrilineal descent to the Southwest region. Mrs Barbara Corbett Stamner Councillor was nominated by the GKB Native Title Claim working party to participate in the survey.

*Mr Maurice Thorne* attended the survey in place of his sister Mrs Joyce Dimer. Mr Thorne was born in Beverly to parents Mr Tom Thorne (born in Williams) and Ms Amy Michael (born in Pingelly). Mr Thorne's paternal grandparents are Mr Bill and Mrs Emily Thorne (both born in Williams) and his maternal grandparents are Mr Jack Michael (born in Meckering) and Ms Ida (Eva) Hume (born in Collie). Mr Thorne attended Williams Primary School and Narrogin High School before starting an apprenticeship as a welder in the metropolitan area. Mr Thorne has since worked as a farm hand/shearer in the region and also held a position at the meat works in Dardanup. Mr Thorne was nominated by his sister Mrs Joyce Thorne who was selected by the GKB Native Title Claim working party to attend the survey in her place.

*Ms Sandra Nebro* was born in York to parents Mr Anderson Nebro (born in Collie) and Ms Rose Ford. Ms Nebro's paternal grandparents are Mr Donald Nebro and Ms Adele Dyer (born in Wagin) and her maternal grandparents are Mr Edward Ford and Ms Stella Garlett (born in Badjaling). Ms Nebro completed both her primary and secondary education at Bunbury before moving to Kalgoorlie to complete training to become an enrolled nurse. Ms Nebro went on to hold positions at Coolgardie and Bunbury Regional Hospitals and is now on the Deaths in Custody Watch Committee at the Bunbury Prison. Ms Nebro was nominated by the GKB Native Title Claim working party to attend the survey.

# **COMMUNITY CONSULTATION**

#### AIMS

- To establish contact with Aboriginal people who retain traditional or current knowledge pertaining to the region.
- To determine if there are any sites of significance, as defined by section 5 of the AHA, within the survey area.
- To record any ethnographic information provided about identified sites.
- To generate consensual recommendations from the Aboriginal community representatives in regards to any Section 18 requests and to record management strategies for identified ethnographic and archaeological sites.

#### METHOD

To arrange this survey the nominated participants were initially contacted by phone followed up by a formal written invitation outlining the details of the onsite meeting. At the commencement of the meeting the participants were briefed as to the details of the project with the aid of the project plans and previously recorded Aboriginal heritage sites overlaid upon a large scale air photo map. The participants then conducted a vehicular inspection of the survey area and pedestrian inspections of areas of particular interest. Ethnographic information was recorded in a notebook and photographs of the survey process were taken. Coordinates of any cultural features were recorded in the field on a Garmin CX 60's handheld GPS (datum GDA 94) and data was then transferred to Arc-GIS V9 where final maps were produced.

#### COMMUNITY CONSULTATION PROCESS

**On the 20<sup>th</sup> September 2011** the consultants; Mr Brad Goode (Anthropologist) assisted by Mrs Angela Tarbotton met with a representative for Landcorp; Mr Jonathan Roach (Project Manager) and representatives for the GKB Native Title Claim; Mr Dennis Hill, Ms Janine Williams, Mr Murray Collard, Ms Lera Bennell, Mr Maurice Thorne, Mr Kelvin Quartermaine, Mrs Vivienne Michael, Mrs Denis Jetta, Mrs Barbara Corbett Stamner Councillor and Ms Sandra Nebro. All participants met at the intersection of Treasure Road with Wellesley Road, which roughly depicts the centre of the survey area.

The survey commenced with the necessary introductions and a detailed briefing of the proposed KIP by Mr Jonathan Roach, aided by a large aerial photograph of the survey area, a Structure Plan outlining the main components of the proposal (see Appendix 4) and a map outlining the tenure of the survey area (see Appendix 5). Mr Roach explained the background and history of the proposal to date and the process that is to be undertaken in order to get the proposal to the construction phase. Mr Roach explained that the following studies are currently being undertaken in order to analyse the environmental, economic and social issues related to the establishment of an industrial area at Kemerton:

- Aboriginal Heritage Management Plan
- Environmental Management Plan
- Acid Sulphate Soil Management Plan
- Wetland Management Plan
- Ecological Management Plan
- Waste Management Strategy
- Air and Noise Monitoring Strategy
- Local Water Management Strategy
- Air, Noise and Risk Modelling

- Local Structure Plan
- Shire of Harvey Scheme Rezoning
- Greater Bunbury Region Scheme Rezoning
- Rail Corridor Planning
- Infrastructure Master Plan
- Transport Master Plan
- Earthworks Modelling Plan
- Development Staging Plan

Mr Roach explained that the total area of the KIP is 7543ha comprising of 2019ha of Industry Core. As the KIP is catering for heavy industry a Buffer Area is proposed to ensure that the impacts of industries located within the Industry Core do not adversely impact on neighbours.

The total Buffer Area (5231ha) consists of Inter Industry Buffer (212ha) and Buffer Area (5019ha). This area is managed by the Department of Environment & Conservation (DEC).

The development of the Industry Core involves the construction of a new road, 'Kemerton Road', running north south through the survey area, the construction of a rail link from Marriot Road to the existing rail line on the South Western Highway which will link the KIP to the Bunbury Port and installation of all services. Landcorp are negotiating with the Water Corporation/Harvey Water to use water from Benger to service the KIP. The water is not a potable standard however it is proposed for each industry to have its own plant to purify water to a potable standard if it is required. Landcorp are also looking at using water from the Water Corporation Waste Water Treatment Plant located to the south west of the Industry Core Area which is currently looking into pumping surplus water out to the sea for disposal. Mr Roach commented that Landcorp would like to make use of this surplus water if it is feasible.



Figure 2: Mr Jonathan Roach (Project Manager for Landcorp) briefing the consultants and GKB Native Title Claim representatives regarding the proposed KIP. View to the west along Treasure Road.

Struck by the scale and enormity of the proposal Ms Lera Bennell queried the history of consultation regarding the proposal with the Nyungar community - who was consulted, when and what were the outcomes. Mr Roach replied that a presentation was made to the GKB working party approximately 12 months ago, and previous to that people were consulted in roughly 1990 when the initial stage of the KIP was first established. Mr Roach could not detail the people consulted or what the outcomes of the consultation were.

The group asked about the findings of the environmental studies conducted, particularly relating to flora and fauna. Mr Roach replied that rare orchids have been identified in the northern portion of the survey area and that all areas determined to be of high environmental value, inclusive of wetlands, will be preserved. Landcorp plan to focus the development on areas already cleared for farming or pine plantation. Mr Roach further explained that the area has also been established as habitat for the protected Baudin's and Carnaby's Black Cockatoos and that an application is required to be submitted prior to development in order for the impact on the Cockatoos to be thoroughly assessed.

The GKB representatives collectively voiced concern regarding the possibility of polluted effluent entering the chain of wetlands located within the survey area and asked how Landcorp could ensure that they would not be adversely affected. Mr Roach replied that a Wastewater

Management Strategy is in the process of being finalised. Currently it is proposed that each lot will have its own drainage catchment which will contain all runoff/waste water within the lot. Mr Roach explained that large drainage basins are proposed and have been strategically positioned to contain all water within the boundary of the KIP in the case of a 1 in 100 year flood. Mr Roach assured the GKB representatives that the wetlands will not be impacted upon by the development.

Ms Lera Bennell requested that the final Wastewater Management Strategy and any other reports regarding pollution and runoff management be made available for the GKB working party in order for the findings to be further scrutinized. Mr Roach replied that this would not be a problem.

To round up the briefing Mr Roach stated that once all individual studies are complete and the reports finalized then the necessary clearances will be sought and preparation of the Subdivision Plan will commence. The Subdivision Plan, inclusive of lot boundaries, access points etc. will generally be governed by the type of industry that shows interest in locating to the KIP. Mr Roach could not estimate when development would commence.

Mrs Barbara Corbett Stammer Councillor voiced concern that younger members of the Nyungar community "that are a full bottle on these environmental issues" were not involved in assessing the possible impacts of the KIP.

Ms Janine Williams raised concerns regarding the increased traffic on the highway to Bunbury, particularly heavy haulage that will result from the proposal.

Ms Lera Bennell voiced her opinion that the development will happen, without a doubt and whether we like it or not, however questioned what is in it for Nyungar people stating "It's a big development - we need big compensation." Ms Janine Williams suggested naming the wetlands within the survey area and possibly the roads within the KIP Industry Core too. Ms Williams added that the old Nyungar people that previously lived and worked and hunted on the land, like the Wallam's, should be recognised when selecting names. Other GKB representatives recommended names such as the Hill, Bennell, Wallam and Michael families that should be recognised in association with the subject land. Mr Roach replied that Landcorp can recommend road names when the subdivision plans are submitted however it is not guaranteed that the recommendations will be accepted.

Ms Bennell suggested that something for the future generation would be more appropriate, like employment opportunities and apprenticeships for young Nyungar people; noting that at least this form of compensation would have a lasting effect as opposed to merely naming roads. Mr Roach replied that contractors will be doing the actual development so it is out of Landcorp's hands; however Landcorp can look at making Nyungar employment opportunities a condition of the tendering process.

Ms Bennell also requested that the entire development be monitored by Nyungar people. Mr Goode explained monitoring for the benefit of Mr Roach and also the GKB representatives not familiar regarding the practice. Mr Goode outlined that there are two purposes for monitoring; one to monitor for physical evidence from the past that may be unearthed by earthworks and the second, as a custodial responsibility, to monitor the affects that development may have, and if necessary to conduct propitiatory ritual in order to appease the spirits. Mr Roach asked if it was necessary for the entire Industry Core Area to be monitored. Mr Murray Collard and Ms Bennell replied that the entire area required monitoring - from the start of construction to end to make sure that if any material associated with the traditional life of Nyungar people is unearthed then it is properly recorded and treated with respect.

With the use of the air photo map of the Industry Core Area marked with the previously Aboriginal heritage sites, Mr Goode explained that no ethnographic sites have been previously recorded and that the sites marked on the map are all archaeological. Mr Goode briefly explained the archaeology within the survey area and the findings of the archaeological survey conducted for the KIP. The previously recorded sites were revisited with only one artefact located at one of the sites. No further material was located within the survey area to date as a result of the survey.

Ms Bennell also suggested that the GKB representatives be re-consulted when the Subdivision Plan has been finalised and construction of the necessary infrastructure is underway. Ms Bennell believed that it is necessary for the group to monitor the disturbance and impact to the wetlands, native bushland, flora and fauna located within the Inter Industry Area and to ensure that Landcorp are sticking to their word.

The GKB representatives advised that the land proposed for the KIP is currently used by Nyungar people to hunt kangaroos and that developing this land will take away more land that can be utilized for hunting. Mr Goode asked Mr Roach if the DEC managed Buffer Area could be made available for Nyungar people to hunt. Mr Roach replied that the obvious safety issues with hunting (using firearms) near industry would likely not be permitted and that DEC would have to be approached regarding access for hunting.

After this lengthy briefing and discussion regarding the proposal the GKB representatives requested they inspect the general area with focus on the wetlands and areas to be developed within the Industry Core Area. Mr Kelvin Quartermaine advised that Mr Bob Wallam and his family camped near the Wellesley Bridge and that the group should also visit the camp. All agreed.

The vehicular inspection commenced by travelling north along Wellesley Road to the northern boundary of survey area. The group then backtracked along Wellesley Road before bearing east on Rhodes Road, then north on an unnamed track to the Kemerton Power Station which is located in the north eastern portion of the survey area.



Figure 3: The ethnographic survey participants at the Kemerton Power Station, located in the north eastern portion of the survey area. View to the north.

Ms Lera Bennell noticed some exotic species of plants growing around the perimeter of the power station and requested that all revegetation conducted as part of the KIP development use only vegetation that is native to the area. Ms Bennell further added that the revegetation could be conducted by Nyungar people from the Roelands Mission who are endeavouring to undertake such contracts. Ms Bennell recommended that it would be preferred if Nyungar people were employed to undertake such work. Mr Goode asked if there were any mechanisms

for prioritizing Nyungar employment. Mr Roach replied that this type of specification could be written into contracts and that it has been done in the past.

The survey participants then accessed the north western portion of the survey area via Ridgeview Way and Papilla Court where rural residential properties are located within native bushland. Mr Roach advised that this portion of the survey area would be preserved as part of the Buffer Area. The GKB representatives were pleased to hear that this portion of native bushland would remain undisturbed.

Following a break for lunch Mr Kelvin Quartermaine lead the group south the location of the camp formerly used by Mr Bob Wallam and his family (Bob Wallam is Mr Quartermaine's grandfather's brother). The camp was located in the south eastern portion of the survey area, approximately 130m south west of the intersection of Wellington Road with Wellesley Road. The group accessed the location via a sand track through thick Teatree scrub. Mr Quartermaine pinpointed the location of Bob Wallam's former camp at 385963mE 6325522mN (GDA 94) and allocated a circular area with of diameter of approximately 20m as the camps extent. Using his age as an indicator, Mr Quartermaine estimated that the camp was occupied approximately 48 years ago by Bob Wallam, his wife Grace Gillespie and their children Robert, Mervin and Steve.



Figure 4: Mr Kelvin Quartermaine, Ms Lera Bennell, Mr Murray Collard, Mrs Barbara Corbett Stamner Councillor, Mrs Vivienne Michael and Mrs Janine Williams (nee Wallam) at the location of Bob Wallam's former camp.

Mr Quartermaine advised that the location of the camp would have been selected for its proximity to seasonal work (Bob cut bean sticks from the surrounding Teatree within the Partridge families farm) and for the good hunting and water available at a nearby spring/well located approximately 180m to the north west near two large date palms that are visible from Wellesley Road. Mr Quartermaine estimated that the Wallam family would have occupied the camp for approximately 2-3 months during winter when 'stick picking' was generally undertaken. The camp consisted of a cleared area with a small shack made of tin and wooden boards for shelter and a fire for warmth. Currently there are no physical remains of the camp left and the area is strewn with building rubble, which the informants said was not related to the former camp (see Appendix 3 map of Bob Wallam's camp in relation to KIP).

Mr Goode asked the GKB representatives what was important and significant about the location of the camp to Nyungar people now. Mr Quartermaine replied that it was important for the fact that it was where 'Pop Chocó' (Bob Wallam) camped and we all respect that because he was such a liked man - tall, strong and known as a good boxer. Mrs Janine Williams said "it is important history for Nyungar people" and Ms Lera Bennell remarked that this history shows the impact of colonisation on Nyungar people, "we were forced out to places like this to work for Wadjelas". Ms Bennell also advised that the camp is important for teaching their children the history of their family and their culture.

Mr Roach advised the group that this location would not be affected by the proposed KIP development as it was part of the planned Inter Industry Buffer. Ms Bennell suggested that a plaque be erected to acknowledge the camp and the associated history. Mr Quartermaine suggested that Mr Les Wallam (Bob Wallam's grandchild) be contacted regarding the wording on the plaque.

The group then travelled further along Wellesley Road and west onto Marriot Road stopping at the an area to the north of Marriot Road which Mr Roach advised to be a Wetland Habitat Restoration Site which will be preserved as part of the Inter Industry Buffer. The survey participants inspected an area of wetland which has been fenced off to minimise disturbance and which has undergone the initial stages of rehabilitation.



Figure 5: The survey participants entering a restricted area to inspect a wetland which will be preserved and maintained as part of the Inter Industry Buffer within the KIP.

Mr Roach advised that the wetlands located within the Inter Industry Buffer will be managed by the Leschenault Catchment Council and maintained to a standard at which they consider healthy.

Mr Goode asked the GKB representatives to explain the significance of water bodies to Nyungar people and the importance of preserving them in a healthy and natural state. Ms Bennell replied that "water is life, food - without water there would be no food". Mrs Barbara Corbett Stamner Councillor commented that "it is peace, tranquillity.....the core values of Nyungar people are focussed around water".

The GKB representatives voiced that they are not satisfied that the wetlands will be protected from the possible ill effects of the KIP development, particularly pollution. Also that Nyungar

people are not being involved to care for their country and that organisations like the Leschenault Catchment Council, are being left to manage their country without their input. Mr Roach advised that Nyungar people could be involved with the Leschenault Catchment Council to manage the wetlands to a standard that they consider appropriate. Mr Roach further advised that there is no development planned in the immediate vicinity and that the only ill effects that could impact on the wetland is a possible small amount of air pollution. The Water Management Strategy will ensure that no contaminated runoff will enter the wetlands. Mr Roach again showed the GKB representatives a map depicting the location of large drainage basins, where all runoff from the KIP will be directed for it to either evaporate or leach into the ground at this location. Mr Roach finally advised that Landcorp have undertaken water monitoring studies to ensure that the locations of these drainage basins are suitable and safe.

The group asked if a procedure has been adopted to deal with the occurrence of an emergency such as a spill or a fire with in KIP. Mr Roach recognised the risk associated with heavy industry and advised that an Emergency Response Plan will be in place and that the details of such a plan will really depend on the type of industry. Mr Roach advised that the responsibly of such an occurrence will lie with both the industry present within KIP and Landcorp.

**The following day, 21<sup>st</sup> September 2011**, the consultants met with the GKB representatives at the intersection of Treasure Road and Wellesley Road. Mr Roach was not available to attend the meeting. Collectively the survey participants decided to inspect the portion of the KIP proposed for Core Industry, which will subsequently be cleared and developed.

Following the inspection the survey participants stopped at a location within pine plantation to further discuss the proposal and its potential impact on the Nyungar cultural values that are extant with the survey area.



Figure 6: The GKB representatives discussing the proposed KIP and the potential effects that could result on the Nyungar cultural values that are present.

The GKB representatives identified the loss of hunting grounds as a major affect resulting from the proposal. Mr Kelvin Quartermaine explained the importance of hunting in contemporary times, stating that "it's not traditional, as in the tools we use, however it's the time spent together undertaking a cultural practice" and "it's an opportunity to teach our custom to the grandchildren - how to skin & butcher a roo". Mr Quartermaine added that it is also significant knowing that our forefathers used this same country to hunt, "it's not just about obtaining food....taking this land will further diminish our hunting land". All the GKB representatives present agreed with the sentiment expressed by Mr Quartermaine.

The GKB representatives also identified the Wellesley River (a tributary of the Brunswick River - site ID 17776 which is located along the eastern perimeter of the survey area) to be of importance and significance to Nyungar people. When asked by Mr Goode to comment on the significance of the Wellesley River various comments were made by the GKB representatives.

Mr Kelvin Quartermaine stated that "it is part of the life line that runs back to the ocean. Flow of water is life - we depend on it....we are responsible for it. Rivers are maps too - important landmarks". Ms Lera Bennell advised that rivers were birthing places for Nyungar women and that the Wellesley River would have been used for this purpose. Mr Quartermaine added in final that "we swam, played, fished and marroned here". No recommendations regarding the KIP in association with the Wellesley River were made by the GKB representatives.

No further issues regarding the proposed KIP were raised by the GKB representatives. All necessary paperwork was completed and the meeting closed.

## COMMUNITY CONSULTATION OUTCOMES

As a result of the above ethnographic survey **no ethnographic sites** of significance, as defined by section 5 of the AHA, were identified to be located within the area designated as the industrial core.

During the survey a historical camp occupied by Mr Bob Wallam and his family during the 1960's was recorded to be located within the Inter Industry Buffer area. The Nyungar informants requested that this area be reported as a site of 'special significance' as a 'cultural marker', under section 5a of the AHA (see Appendix 7 – Site Recording Form). It was further requested that the proponents recognise the importance of this place by the provision of a plaque that acknowledges the Wallam family and the social history of the Nyungar community as an agrarian labour force that contributed to the success of the development of agriculture in the region.

During the survey the Nyungar consultants also reported the Wellesley River and the chain of wetlands within the survey area to be significant as places of customary use, as a path of migration, as potential birthing areas, and as places of generalised spiritual value. While it was requested that these areas be reported as sites of significance it is unlikely that they would receive a positive assessment under section 5b of the AHA, as the information was of a generalised nature, no specific myth could be determined and no actual firsthand accounts of these activities were given. Despite these places being unlikely to be sites under the AHA, the cultural values reported should nevertheless be considered and protected, as these areas are also of considerable environmental value. An Aboriginal Heritage Cultural Management Plan (AHCMP) could detail strategies to protect the cultural values identified outside the parameters of the AHA.

As a result of the survey a number of more general issues were raised and a number of requests were made to mitigate the effects to cultural and environmental values:

- The representatives collectively voiced concern regarding the possibility of polluted effluent entering the chain of wetlands, creeks and rivers, located within the survey area and as such wished all the environmental management plans and studies to be sent to the GKB working party at SWALSC for comment as a condition of support for the project.
- Concerns regarding the increased traffic on the highway to Bunbury were raised. As such it was suggested that traffic studies should be conducted in the interests of public safety and that the proponents prioritize building the proposed rail line to reduce the pressure on the South Western Highway.

- It was requested that Nyungar names be given to the wetlands and roads within the survey area to recognise the 'old Nyungar people' that previously lived, worked and hunted on the land.
- That the entire development be subject to archaeological and Nyungar community monitoring to ensure that any cultural material present is recorded and added to the records in order to preserve this information for future generations of the Nyungar community.
- The GKB advised that the land proposed for the KIP is currently used by Nyungar people to hunt kangaroos and that developing this land will take away more land that can be utilized for hunting. As such an offset hunting zone was requested to be provided, possibly within the Buffer Zone.
- That the GKB representatives be re-consulted when the Subdivision Plan has been finalised and construction of the necessary infrastructure is underway.
- That employment opportunities and apprenticeships for young Nyungar people be written into all tenders for construction of the KIP.

## RECOMMENDATIONS

As a result of the survey the following recommendations are made to Landcorp:

As no ethnographic sites of significance, as defined by section 5 of the AHA, were identified within the area denoted as the Industry Core **it is recommended** that the development proceeds within this area as it is currently planned.

**It is recommended** that the proponents avoid disturbance to Bob Wallam's camp as this place is likely to be a site under section 5a of the AHA. Should this not be possible then it is further advised that the proponent will be required to lodge notice under section 18 of the AHA to use the land that may contain an Aboriginal site.

It is further recommended that the proponents avoid a number of places identified to be of cultural value within the survey area:

- The Wellesley River
- All wetlands

Should avoiding these places not be possible, further consultation may be required in order to determine if there is sufficient information for these places to be considered sites under section 5b of the AHA.

Should further information regarding these places be detailed that would lead to a positive assessment under section 5b, then the proponent will then be required to lodge notice under section 18 of the AHA to use the land that may contain an Aboriginal site.

Should development in these areas proceed **it is recommended** that the proponents conduct archaeological and Aboriginal community monitoring in places where cultural material may be present. This recommendation should be enacted upon advice from a suitably qualified archaeological consultant and should be detailed within an AHCMP.

**It is re commended** that the proponents supply the GKB working party at SWALSC all environmental studies relevant to the management of the project, in particular plans that detail the management of storm water and drainage.

It is recommended that the Landcorp gives the following requests due consideration:

- That the GKB representatives be re-consulted when the Subdivision Plan has been finalised and construction of the necessary infrastructure is underway.
- That employment opportunities and apprenticeships for young Nyungar people be written into all tenders for construction of the KIP.
- That Nyungar names be given to the wetlands and roads within the survey area to recognise the 'old Nyungar people' that previously lived, worked and hunted on the land.
- That the importance of Bob Wallam's Camp be recognised by the provision of a plaque that acknowledges the Wallam family and the social history of the Nyungar community as an agrarian labour force that contributed to the success of the development of agriculture in the region
- That the proponent identify an area where Nyungar people can continue to hunt as an offset to the loss of the land within the KIP currently used for this cultural activity.

#### **BIBLIOGRAPHY**

- Amergin Consulting (Coldrick, B, McDonald, E & Thomson, J) 2008, Report of an Archaeological and Ethnographic Aboriginal Heritage Survey of Lot 4 Runnymede Road, Wellesley, Western Australia, Prepared for B & J Catalano Pty Ltd on behalf of Lundstom Environmental.
- Anderson, J 1984, *Between Plateau and Plain*, Occasional Papers in Prehistory: No. 4 A.N.U. Canberra.
- Australian Interaction Consultants (Sauman, D & Lantzke, D) 2003, Archaeological and Ethnographic Site Identification Survey under the Australian Heritage Act (1972) of proposed Industrial Park Power Station at Kemerton, Western Australia, Prepared for ATA Environmental.
- Australian Interaction Consultants 2005, Report of an archaeological and ethnographic survey of the proposed Natural Gas Pipeline at Kemerton, Western Australia, Prepared for Epic Energy.
- Barker, A J and Laurie, M 1992, *Excellent Connections, A History of Bunbury 1836 1990*, City of Bunbury: Bunbury WA.
- Barnes, P 2001, Marsden Hill and all that, Self Published
- Bates, D 1938, *The Passing of the Aborigines A Lifetime Spent Among the Natives of Australia*, Butler and Tanner: London.
- Bates, D 1966, The Passing of the Aborigines, John Murray: London
- Bates, D 1985, *The Native Tribes of Western Australia*, I. White (Ed.) National Library of Australia: Canberra.
- Berndt, R M (Eds) 1979, *Aborigines of the West, Their Past and Present,* University of Western Australia Press: Perth.
- Berndt, R M and Berndt, C H (Eds) 1980, *Aborigines of the West: Their Past & Their Present*, University of Western Australia Press: Perth.
- Crook, A 1989, *Binningup, The History*, compiled by Alice Crook: Binningup, Western Australia.
- deGaris, B K 1993, Portraits of the South West, Aborigines, Women and the Environment, University of Western Australia Press: Perth
- Goddard, E and Stannage, T 1984, John Forrest and the Aborigines, In Reece, B and Stannage, T (Eds), European – Aboriginal relations in Western Australian history, Department of History, University of Western Australia Press: Nedlands.
- Goode, B 2003, A Desktop Preliminary Aboriginal Heritage Survey for Water Corporations proposed Development of the Yarragadee Aquifer in the Lower South West corner of Western Australia, Unpublished report for Gutteridge Haskins and Davey.
- Goode, B 2008, An Aboriginal Heritage Survey of the Eastern Portion of Lot 70 Wellesley Road within the Shire of Harvey, Western Australia, A report prepared for APH Contractors.

- Goode, B 2010, A Work Area Clearance Aboriginal Heritage Survey of Proposed Drill Holes & Lines within Mining Tenement E70/3294 at Myalup, Western Australia, A report prepared for the South West Aboriginal Land & Sea Council (SWALSC) on behalf of Rocla Quarry Products (WA).
- Haebich, A 1988, For Their Own Good: Aborigines and Government in the South West of Western Australia 1900 1940, University of Western Australia Press: Nedlands.
- Hallam, S J 1979, Fire and Hearth: a study of Aboriginal usage and European usurpation in south-western Australia, A.I.A.S. Canberra.
- Hallam, S J 1986, *Prehistoric Aboriginal populations on the Swan Coastal Plain, Western Australia,* Final Report on the Project: Australian Research Grants Scheme.
- Hames Consultancy Group, 2003, *Report of Aboriginal Heritage Aspects of the proposed* widening of the Dampier to Bunbury Natural Gas Pipeline Corridor between Kwinana and Bunbury, Prepared for the Department of Industry and Resources
- Machin, B 1993, *Ethnographic Survey: Dunsborough Pipeline*, An unpublished report prepared for the Western Australian Water Authority
- Machin, B 1995, *Ethnographic Survey: Jangardup Project*, Unpublished report prepared for Main Roads Western Australia.
- Martinick, W G & Associates 1994, *The Wellington Forest Archaeological Survey and Historical Research Project*, Unpublished report for The Wellington Forest Advisory Group.
- McDonald, Hales & Associates (Murphy, A, Edwards, K, Campbell-Smith, S & McDonald, E), 1993, *Report of an Aboriginal Heritage Survey Proposed Support Industry Area, Kemerton Industrial Park, Western Australia*, Prepared for BSD Consultants Ltd.
- McDonald, Hales and Associates 1994, National Estates Grants Programme. Aboriginal Heritage sites in the Lower Southwest Heritage study, Unpublished report prepared for the Gnuraren Aboriginal Corporation.
- Moore, G F 1842, A Descriptive Vocabulary of the Language in Common Use Amongst the Aborigines of Western Australia, Orr: London.
- Myers, F 1986, Pintupi country, Pintupi self: sentiment, place and politics among Western Desert Aborigines, Washington/Canberra: Smithsonian Institution and Australian Institute of Aboriginal Studies, cited in Machin, B 1993, Ethnographic Survey: Dunsborough Pipeline, An unpublished report prepared for the Western Australian Water Authority.
- O'Brien, T N 1996, *Some Abridged History of Bunbury 1658 1995.* Leslie O'Brien Publishing: Garran ACT.
- O'Connor, R, Quartermaine, G & Yates, A 1995, An Investigation into the Aboriginal Significance of Wetlands and Rivers in the Busselton Walpole Region, Prepared for Water Authority of Western Australia.
- O'Connor, R, Quartermaine, G and Bodney, C 1989, Report on an Investigation into the Aboriginal Significance of Wetlands and Rivers in the Perth Bunbury Region, Western Australian Water Resources Council.

- Radcliffe-Brown, A R 1926, *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*, Vol 56 (1926) 19:25.
- Salvado, R 1977, *The Salvado Memoirs* (Translated and edited by E.J. Stormon), University of Western Australia Press: Perth
- Sanders, T 1975, Bunbury, Some Early History, Union Offset: A.C.T.
- Shann, E O G 1926, Cattle Chosen, Westminster Press: London.
- Stanner, W 1965, Aboriginal Territorial Organization: Estate, Range, Domain and Regime, Oceania, 33(1).
- Thompson McRobert Edgeloe, Coffey Environments, William James Landscape Architect, 2009, *Kemerton Industrial Park Strategy Plan*, prepared for Landcorp, Department of State Lands.
- Tilbrook, L 1983, Nyungar Traditions, University of Western Australia Press: Nedlands.
- Tindale, N B 1974, Aboriginal Tribes of Australia, Australian National University Press: Canberra.

www.harvey.wa.gov.au - historical details of Harvey and Binningup.

Yates, A 2008, Report on a Desktop Review of Registered Aboriginal Sites and Previous Site Surveys Binningup Beach, Shire of Harvey, Report prepared for Mirvac Pty Ltd.

# REPORT ON AN ARCHAEOLOGICAL SURVEY OF KEMERTON INDUSTRIAL PARK, NORTH EAST OF AUSTRALIND



A report prepared for South West Aboriginal Land and Sea Council on behalf of Land Corp

## NOVEMBER, 2011

## Jacqueline Harris and Stuart Johnston

# **EXECUTIVE SUMMARY**

An archaeological survey for Aboriginal heritage sites was commissioned by South West Aboriginal Land and Sea Council (SWALSC) on behalf of Landcorp at Kemerton Industrial Park, northeast of Australind. Landcorp are proposing to expand the industrial area from its present state.

Kemerton Industrial Park is located 160 kilometres south of Perth in the Shire of Harvey, some 17 kilometres north east of Bunbury. It is positioned 2.75kms east of Old Coast Road. The project area comprises an irregular polygon measuring some 8 kms NS and 3.5km EW, an area of about 2000 ha at its widest points. Marriott Road and Devlin Road sit near its southern boundary, Wellesley Road close to its eastern boundary which changes direction to a diagonal axis through the centre and Treasure Road bisects the northern portion. Wellesley River forms an eastern border for the southern section. Chains of wetlands run along both the eastern and western boundaries.

Fieldwork commenced on 26 July 2011 and continued till 2 August with an additional field day on 19 September 2011. The survey was conducted by archaeologists, Jacqueline Harris, senior archaeologist, Stuart Johnston, archaeologist, Peter Michael and Cameron Bennell, Aboriginal consultants representing Gnaala Karla Booja NT Group and Gavin Jetta.

The survey design was formulated using a combination of predictive, systematic and opportunistic transects throughout the project area with particular emphasis on de-vegetated locations, water sources and areas with greater visibility. The systematic sample survey designed to identify any potential archaeological sites incorporated four persons walking transects spaced at 50m in woodland to 100m apart in open pasture depending upon the degree of visibility. Particular attention was undertaken along the banks of Wellesley River and the surrounds of any defined swamp. In two sections where semi-rural housing blocks were present, an opportunistic methodology was adopted. It is estimated that the overall sampling percentage of the project area was around 40%. Ground visibility within the open woodland was 50% but decreased in wetlands to 5% and dense forest 10%.

The project area was largely composed of a river demarcating the lower south eastern section with a wetland/swampland running down the eastern half of the project area and a dunal ridge running down the western perimeter. A large percentage of the land stretching down the middle to eastern sector of the project area has been utilized as pine plantations, much of it now logged with the remains totally camouflaging the ground surface. Two distinct areas contain semi-rural properties, one in the southeast corner north of Wellesley Road and the other in the mid-western section north of Treasure Road. Several areas within the project area have been used in the past as farms to stock animals. A large sand pit has been mined in the northwestern sector. The remains of several old windmills in association with ruins of houses, stables and sheds are present.

Several transmission lines with accompanying access tracks run through the project area. A number of roads transect the area including Marriott, Wellesley, Treasure, Devlin and Rosamel Roads as well as unnamed tracks and firebreaks. In addition several artificial drains dissect the area. Where woodlands are present these have been selectively and/or heavily logged and/or cleared. Many large areas of land contain dense regrowth particularly near swamp areas. Excluding the western ridgeline which remains in reasonable condition, the remainder of the area has been severely degraded. The entire area was flat and low-lying excepting a narrow strip in the western border where a high undulating sand ridge was present. The soils consisted of white/grey unconsolidated sands.

An online search of the site register of Heritage and Culture Division, Department of Indigenous Affairs (DIA), was undertaken within the study area on 13 June 2011 in order to determine if there were any previously recorded Aboriginal Heritage sites that would be affected by the proposed development. The search indicated that one archaeological site and three heritage places lay within or in close proximity of the project area.

Of these, three heritage places have been reclassified as 'stored data' as they do not fit the criteria of a site because of their small content of one to three artefacts and lack of detail in regard to location. These are **DIA 5807 Harvey 55/Brunswick Junction Road, DIA 5809 Brunswick Junction Road 57** and **DIA 5810 Brunswick Junction Road 58**.

One site, **DIA 4887 Marriott Road**, is registered as a site. When it was originally located in 1983, it consisted of 10-30 quartz and chert flaked artefacts. It is located at the junction of Wellesley River and Devlin Road. McDonald Hales in 1993 revisited the site and noted a large number (exact number not stated) of artefacts of quartz, mylonite, silcrete and chert. In the present examination only two artefacts were noted despite an intensive search on the cuttings either side of the river. The artefacts located were on the south-western side of the river in an exposed yellow sandbank.

These were located 40m west of the road bridge and 70m west of the river. DIA maps the extent of the site as a 500m in diameter circle which includes a buffer zone. Pierce states in the site form that the artefacts extend for 200m but in the report he writes that they extend for about 50m on each bank. The present writer presumes he was adding a buffer zone and/or error factor of 50m extra each side. Therefore to avoid impacting the site the developer would have to stay 100m off the road bridge on the western side both north and south of the road. The development boundary culminates at the river and therefore the eastern side of the river is irrelevant to this study as it is outside the project area.

While the artefact scatter is small and mundane few similar sites remain in existence. The fact that only two artefacts were noted at the time of survey exemplifies the dynamic nature of archaeological sites where cultural material may be camouflaged, yet reappear when suitable conditions prevail. It is highly likely there is subsurface deposit within the banks alongside the river. It is considered that the site contains similar integrity to when it was originally located in that it was found in a road cutting. Subsequently there has been greater use of Devlin Road as a result of people commuting to the industrial estate.

Throughout the course of the field survey, no new archaeological sites, as defined by Section 5 of the *Aboriginal Heritage Act 1972*, were located within or in close proximity to the project area. One isolated artefact was found during the field survey.

No archaeological sites were located on the ground surface within or in close proximity to the project area during the course of the field survey. One previously recorded archaeological site **DIA 4887 Marriott Road** is registered within the project area. Therefore, pursuant to **DIA 4887 Marriott Road**, there are no other archaeological impediments to prevent the industrial estate proceeding.

It is recommended that Landcorp avoid the small mundane artefact scatter **DIA 4887 Marriott Road.** Because of the low number of sites located in Kemerton the artefact scatter is endowed with greater significance. If Landcorp are unable to avoid disturbing the site, an application should be sought under Section 18 of the AHA to the Minister of Indigenous Affairs seeking permission to disturb the site. It is recommended that if permission is granted, it is conditional on a test pit being undertaken to examine the research potential of the subsurface.

The most likely areas where archaeological sites, in particular, artefact scatters or burials, may occur are banks of rivers, creeks, swamps and exposed sandy deposits. The removal or

excavation of large quantities of sediment increases the risk of disturbing archaeological sites that may lie beneath the ground surface. Because artefact scatters have been reported along the banks of Wellesley River in the wider region, it is recommended that Aboriginal custodians be appointed to monitor ground disturbance for artefactual material should any be present on or beneath the ground surface when clearing of vegetation or removal of sediment is undertaken on the western bank. It is recommended that by Landcorp inform any project personnel of their obligation to report any archaeological material, should this be encountered during earthmoving, as outlined under Section 15 of the *Aboriginal Heritage Act 1972*.

Should Landcorp locate an archaeological site during the process of survey or ground excavation, it is recommended that work cease in the immediate area. Any skeletal material should be reported to Department of Indigenous Affairs and the Western Australian Police Service. Any artefactual material should be reported to Heritage and Culture Division, Department of Indigenous Affairs.

## INTRODUCTION

#### PURPOSE

An archaeological survey for Aboriginal heritage sites was commissioned by South West Aboriginal Land and Sea Council (SWALSC) on behalf of Landcorp at Kemerton Industrial Park, northeast of Australind. Landcorp are proposing to expand the industrial area from its present state. The Kemerton Industrial Park (KIP) was established in 1985 primarily for major (heavy) industry to provide for downstream processing and value-adding to the South West region of Western Australia's extensive primary resources.

The scope of services was provided in a written document to Brad Goode & Associates Pty Ltd by Sean O'Hara, Future Acts Officer, South West Aboriginal Land and Sea Council. The objective of the investigation was to establish if any archaeological sites were located in the vicinity of the proposed study area and determine any effects the proposal may have over such sites. A report was required after completion of fieldwork.

To achieve an overview, data was assembled from previous work in the region, including information from Heritage and Culture Division at the Department of Indigenous Affairs, site files, previous survey reports, maps and environmental descriptions.

#### STUDY AREA

Kemerton Industrial Park is located 160 kilometres south of Perth in the Shire of Harvey, some 17 kilometres north east of Bunbury. It is positioned 2.75kms east of Old Coast Road. The project area comprises an irregular polygon measuring some 8 kms NS and 3.5km EW, an area of about 2000 ha at its widest points.

The proposed study area has few immediate road boundaries. Marriott Road and Devlin Road sit near its southern boundary, Wellesley Road close to its eastern boundary which changes direction to a diagonal axis through the centre and Treasure Road bisects the northern portion. Wellesley River forms an eastern border for the southern section. The Wellesley River acts as a perennial drain for the local groundwater system within the KIP. Chains of wetlands run along both the eastern and western boundaries. The Kemerton Industry Core is relatively flat and the water table occurs very near the surface all year round (Thompson McRobert Edgeloe et al 2009).

#### ENVIRONMENT

#### Climate

The study area is located within the Southwest region of Western Australia. The region is distinguished as having a Mediterranean climate, consisting of hot dry summers and cool wet winters (Beard 1981). The average annual rainfall varies with an overall mean of 874.24mm. The highest monthly rainfall occurs in the month of June. The hottest months of the year are January and February, both with a mean maximum temperature of  $30.9^{\circ}$ . The coolest month of the year is July with a mean minimum temperature of  $7.5^{\circ}$  (Bureau of Meteorology).

The following descriptions are extracted from the strategy plan produced by the developers on Kemerton Industrial Park by Thompson McRobert Edgeloe et al (2009).

#### Geology

The underlying geology consists of superficial sands, resting on the Leederville Formation, overlying the Yarragadee Formation or the Cattamarra Coal Measures. The Leederville Formation underlies the superficial sands across the entire Coastal Plain, whereas the

Yarragadee Formation is only present in the southern part of the KIP (and further south towards Bunbury), where it overlies the Cattamarra Coal Measures.

The superficial formation (Quaternary) consists of sand, limestone, silt and clay units of the Guildford Formation, Bassendean Sand, Tamala Limestone and Spearwood Sand. Peaty sand deposits can also occur associated with swamps and wetlands (Thompson McRobert Edgeloe et al 2009).

#### Topography

A dunal main ridge runs generally north/south along the western edge of the Industry Core and across the northern part of the Industrial Core. The soils of the KIP belong to the Spearwood and Bassendean Dune Systems and the Pinjarra Alluvial Plain. There is also the occasional occurrence of peaty sand deposits associated with wetlands.

The vegetated areas in the western parts of the Buffer Area cover the Spearwood System while the Industry Core and eastern buffer are found mainly in the Bassendean System. The area around the Wellesley River is found in the Pinjarra Alluvial Plain. The Spearwood Dune System is a low relief dune and plain system, with well-drained siliceous yellow brown sands.

The Bassendean Dune System forms the eastern most coastal dune system which runs parallel to the coast. It forms a gently undulating landscape. Much of the landscape consists of broad low rises with intervening low-lying poorly drained areas. The sands are typically fine to medium grained, well-drained grey to off-white in colour at the surface and pass through cream to yellow layers at depth.

The Pinjarra Plain is basically an alluvial plain, consisting also of river terraces and stream deposits, swamps and drainage areas. The soils are moderate to poorly drained sandy clays (duplex soils), mainly of alluvial origin, as well as uniform fine textured soils with a clay surface. Peaty sand deposits are associated with the numerous seasonal and permanent wetlands throughout the KIP. They originate from many years of accumulated organic matter which has settled within wetland basins and subsequently decomposed.

The Wellesley River forms the only significant water course in the near vicinity of the KIP. It flows into the Brunswick River, which merges with Collie River prior to discharging into the Leschenault Inlet. Several permanent, seasonal and ephemeral wetlands occur within the KIP, predominantly over the western and eastern margins. Several permanent, seasonal and ephemeral wetlands occur within the KIP, predominantly over the western and eastern margins. The majority of the wetlands are either groundwater fed basins or part of the seasonally waterlogged palus plain (Thompson McRobert Edgeloe et al 2009).

#### Vegetation

The central or ridge portion of the KIP, which is immediately to the west of the Industry Core, is dominated by the Karrakatta Complex – Central and South, with Karrakatta yellow phase sands with Tuart, over Peppermint, Bull Banksia (*Banksia grandis*), Jarrah (*Eucalyptus marginata*) and Marri (*Corymbia calophylla*), with Tuart completely replaced by Jarrah on the deeper sands and Marri becoming more frequent on the localised moister areas.

The most prominent complex associated with the KIP is the Bassendean Complex – Central and South, which extends from the central ridge east towards the Wellesley River. The complex includes Jarrah/Banksia dominated woodland, with *Elaleuca preissiana/M. rhaphiophylla, Eucalyptus rudis* fringing damplands and moister area and substantial areas of species rich damplands including *Pericalymma ellipticum/Kunzea ericifolia/Hypocalymma angustifolium/Astartea fascicularis* overlying the eastern fringe of the KIP.

The majority of the wetlands occur on the western side of the KIP and is predominantly Swamp Paperbark (*Melaleuca rhaphiophylla*) and/or Moonah (*Melaleuca preissiana*) fringed wetland, often with sedgelands of *Baumea articulate* or *Juncus pallidus*.

Small areas of Vasse Vegetation Complex occur in the northwestern portion of the KIP, with wetlands dominated by a mixture of closed scrub of *Melaleuca* spp., occasionally with fringing woodland of Flooded Gum (*Eucalyptus rudis*) and *Melaleuca* spp (Thompson McRobert Edgeloe et al 2009).

## **ARCHAEOLOGICAL RESEARCH**

#### DESKTOP STUDY

An online search of the site register of Heritage and Culture Division, Department of Indigenous Affairs (DIA), was undertaken within the study area on 13 June 2011 in order to determine if there were any previously recorded Aboriginal Heritage sites that would be affected by the proposed development. The search indicated that one archaeological site and three heritage places lay within or in close proximity of the project area and these were marked for further investigation in the field.

Table 1: Summary of archaeological Aboriginal Heritage Sites and Heritage Places within the vicinity of the
project area

Site ID.	Name	Status	Access	Restriction		ation Zone 50)* North	Site Type
4887	Marriott Road	R	0	Ν	385929mE	6323198mN	Artefact
5807	Harvey 55/Brunswick Junction Rd	S	0	N	384639mE	6330648mN	Artefact
5809	Brunswick Junction 57	S	0	Ν	386639mE	6326648mN	Artefact
5810	Brunswick Junction 58	S	0	Ν	386639mE	6326648mN	Artefact

\* Please note: Coordinates are indicative locations that represent the centre of sites as shown on maps produced by the DIA – they may not necessarily represent the true centre of all sites. S – Stored Data, O – Access Open, N – File Not Restricted, R- Registered Site.

All the site files were open to view and as a consequence each of the sites files was searched for relevant data. A synopsis of the site file data is presented below.

#### Marriott Road S01844

DIA 4887 was reported to be an artefact scatter. It consisted of 10-30 quartz and chert flaked artefacts. R Pearce located the artefacts in 1983 during a survey at Kemerton for Kinhill Stearns. It was located on (what was then) Marriott Road, 5kms east of Old Coast Road and at the junction of Wellesley River and Marriott Rd. The artefacts were distributed in the road cutting on the east and west side of the river within yellow sand. The artefacts extended for 200m. The site details have been deemed insufficient to determine the accurate location of the site. The ACMC have determined that it is a registered site under 5a and 39.2c of the Aboriginal Heritage Act 1972 under resolution decision ID 4350, No 123, Meeting ID 484 on 8/8/00.

#### Harvey 55/Brunswick Junction Road S00354

DIA 5807 was reported to be an artefact scatter. It consisted of a single quartz flake. Vera Novak, Peter Yu and Brian Blurton located the artefact in 1975. The site was located in yellow sand of a road cutting, 39.35 miles south of Dawesville along Brunswick Junction Road on the north side of the road. The site details have been deemed insufficient to determine the accurate location of the site. The ACMC have determined that the isolated artefact is not a site under the Aboriginal Heritage Act 1972 and it is therefore recorded as stored data on the DIA register under resolution decision ID 4350, No 123, Meeting ID 484 on 8/8/00.

#### Brunswick Junction Road 57 S00356

DIA 5809 was reported to be an artefact scatter. It consisted of two quartz flakes and one fossiliferous chert flake. Vera Novak, Peter Yu and Brian Blurton located the artefacts in 1975. It was located 42.85 miles south of Dawesville, along Brunswick Junction Road in yellow in the southern upper level of a large sand pit. The site details have been deemed insufficient to determine the location of the site. The ACMC have determined that the isolated artefacts are not considered a site under the Aboriginal Heritage Act 1972 and it is therefore recorded as stored data on the DIA register under resolution decision ID 4350, No 123, Meeting ID 484 on 8/8/00.

#### Brunswick Junction Road 58 S00357

DIA 5810 was reported to be an artefact scatter. It consisted of a single quartz flake. Vera Novak, Peter Yu and Brian Blurton located the artefact in 1975. The site was located in a road cutting of white leached sand at 43.25miles south of Dawesville along Brunswick Junction Road on the left side of the road. The site details have been deemed insufficient to determine the location of the site. The ACMC have determined that the isolated artefact is not a site under the Aboriginal Heritage Act 1972 and it is therefore recorded as stored data on the DIA register under resolution decision ID 4350, No 123, Meeting ID 484 on 8/8/00.

#### **REVIEW OF HERITAGE SURVEY REPORTS**

Novak, V 1975, *Report of Aboriginal Sites of the Lake Peel-Preston Lakelands*, Unpublished report for the Department of Aboriginal Sites, Western Australian Museum.

The survey was conducted on Lake Peel - Preston Lakelands bounded by Mandurah in the north, Indian Ocean to the west, Wellesley Road to the south and the western shore of Peel Inlet and Harvey estuary, Harvey River, Harvey River Flats and Wellesley National Park to the east.

The survey methodology was based on accessibility. Roads and tracks were used for access and followed. Specific emphasis of the investigation was placed on areas where vegetation had been stripped, such as road cuttings, sandpits, drainage trenches, firebreaks, dams and dune blowouts. Sixty sites were located during the survey while six sites had previously been recorded. A total collection was made at each site newly recorded.

The majority of sites located during the survey were considered occupation sites. These were located on faces of road cuttings, in piles of soil around dams, at the bottom of sand pits and drainage trenches, in firebreaks and ocean front blowouts. Many of the sites were located in yellow and grey sands along the eastern margin of the Spearwood Dune System particularly along Old Coastal Road and no doubt due to an increased exposure by road cutting. The low rises fringing the swamps of the Bassendean Sands were also rich in sites. Artefact assemblages comprised generally flakes, chips and debitage and were manufactured from quartz, fossiliferous chert, basalt, sandstone, porcelain and silcrete. The majority of the sites fitted into the late phase of the Holocene. The small assemblages indicate the sites were transitory and used by a small group of people.

#### Pearce, R H & Mulvaney, K 1983, Report on an archaeological survey at Kemerton, Prepared for Kinhill Stearns.

The area of survey concerned 5 square kms of proposed industrial land extending from 2.2 to 3.6kms east of Old Coast Road to Treasure Road. The land was covered in a light to moderate woodland or cleared for pasture. The survey strategy comprised transects spaced at 200m apart and along cleared fire breaks.

No sites were found within the project area due to the lack of permanent sources of surface water on the sandy land on elevated land. Several artefacts and a site were located outside the area. Road verges along Old Coast Road were inspected and a few quartz fragments were found eroding from yellow sand 30cm below the soil on three occasions as well as an isolated quartz flake on a firebreak fence line on the southern boundary of Treasure Road. The site located was at the intersection of Wellesley River and Marriott Road in yellow sand of the banks on either side of the river that have been exposed by road cutting. The authors suggest the likely occupation areas would be the eastern border of Leschanault Inlet, the edges of large swamps and river banks.

# McDonald Hales 1993, Report of an Aboriginal heritage survey proposed support industry area, Kemerton Industrial Park, Western Australia, Prepared for BSD Consultants Ltd.

The survey area comprised 150ha of which 45 ha has been set aside for wetland conservation and protection of flora and fauna. Two survey strategies were adopted. North of Wellesley Road heavy regrowth of melaleuca/banksia saplings hampered access and visibility, therefore survey was restricted to firebreaks and sandy tracks. The southern portion was cleared of native vegetation and covered in pasture. In this sector systematic traverses were conducted at 50m intervals.

No sites were found within the project area which may reflect the character and intensity of Aboriginal land use patterns. Previous research has identified subsistence/settlement patterns as having a riverine and wetland focus. The large water bodies would have provided conditions for long term or intensive occupation resulting in large and high density artefact scatters. Small clusters would be expected at smaller wetlands and drainage features.

Comparing the regional database within a 10km radius, 16 sites were recorded and some five were adjacent to the Wellesley River. The author notes that the assemblages in these sites were similar and thus concludes that the study area was less intensively utilized. Murphy concludes that the project area was a marginal area despite the presence of wetlands and Wellesley River. Further south the braided rivers of Ferguson and Collie would have provided permanent pools and more secure wetlands created by cut off meanders and retreats of winter floods.

It is unlikely that the wetlands were not used by Aboriginal groups in the region usage may have been of an ephemeral nature resulting in an undetectable archaeological signature. While sandy ridges that typically contain sites do not exist along Wellesley River there remains potential for sites to be located alongside it.

# **Coldrick, B, McDonald, E and Thom** pson, J 2008, *Report of an archaeological and ethnographic Aboriginal heritage survey of Lot 4 Runnymede Road, Wellesley, Western Australia*, Prepared for B & J Catalano Pty Ltd.

The area of survey concerned a plot of land measuring 550m long x 330m wide at the intersection of Runnymede Road and Wellesley Road where sand mining is proposed. The survey area consisted of a large flat open paddock on an elevated sand plain above Myalup swamp. Ground surface comprised quartz sand with scattered limestone gravel. Surface integrity was low as a result of land clearing and presence of livestock. While two isolated

artefacts were located in a preliminary survey these were not relocated. The survey strategy used a systematic transect methodology using 50 parallel transects in an east west direction spaced at 7.5m apart. No archaeological sites were located.

The archaeological model for the region is that sites are located on sandy well-drained dunes and within 350m of a potential water source. Sites have been located on low ridges adjacent to Myalup Swamp with similar site clusters along the route of the Old Coast Road east of Leschanault Estuary and on high ground overlooking Wellesley River. The present project area held potential as it overlooked Myalup Swamp. Factors however that can affect the location of cultural material are the level of intensity of survey, conditions of a survey, sampling techniques, ground surface visibility and ground surface integrity. In this case the survey was intensive, visibility was good but land integrity was poor from use of machinery to clear paddocks, presence of livestock and environmental processes such as alluvial and elluvial movement of sand dunes.

#### ARCHAEOLOGICAL CONTEXT

During the 1980s a flood of industrial activity took place in the coastal plain and jarrah forest region and as a result many archaeological and ethnographic consultancy surveys and excavations were undertaken.

Pearce (1982) conducted a systematic survey over a large area of jarrah forest extending 70 kilometres north-south by four kilometres east-west. His results found an average of one site per kilometre similar to Hallam's survey on the Swan coastal plain (1986). The most repeated site was a small quartz artefact scatter with the occasional large piece of dolerite. Assemblages consisted generally of less than 50 artefacts with a few large sites containing thousands of artefacts over a wide area, suggesting regular use over time. Sites generally occurred near watercourses or swamps on gently sloping areas of sandy gravel near upper reaches of valleys. Frequently sites were located on disturbed ground such as tracks or roadsides.

A survey at Harris Dam by Veth, Ward & Zlatnik (1983) resulted in a density of five sites per square kilometre which exceeded previous findings, despite the fact that sites were only considered if they contained two or more artefacts. As expected, the majority of sites were located around the major drainage channel of the valley system on flat ground, with the largest sites lying adjacent to swamps on laterite surfaces. The majority of the stone tool assemblages suggest a temporal framework of mid to late Holocene.

Excavations were undertaken in jarrah forest by Pearce (1982) and Anderson (1984) from which datable organic material was recovered. A sandy site on the edge of a swamp at Collie established occupation at  $5810 \pm 330$ BP in the deepest part of the forest; a cave at Boddington yielded a date of  $3230 \pm 170$  BP (Pearce 1982); while Anderson recovered a date of  $1280 \pm 80$  BP at North Dandalup.

A large data base on site locations and assemblages exists as a result of a systematic study of the Swan Coastal Plain undertaken by Hallam (1986) in the 1970s and early 1980s. Hallam's objective was to explain the changing occupation patterns of prehistoric Aboriginal populations. Using numbers and types of sites within ecological zones as a means of comparison, Hallam describes the patterning and nature of archaeological assemblages from the littoral zone, through the coastal sand plain to the foothills and Darling Scarp.

She concludes that Aboriginal occupation was focused around lakes and swamps of the Bassendean Sands and Pinjarra Plains and these occupation sites double numerically in the last few hundred years before European contact. A broad chronology was developed based on the the presence of certain indicators within the assemblage. The presence of fossiliferous chert

indicates the Early Phase, backed pieces and flat adzes the Middle Phase, quartz chips the Late Phase and glass or ceramic, the Final Phase. Schwede (1990), in a more recent analysis of quartz debitage, finds these chronological markers problematic, in particular, the Late Phase. She concludes that all phases were rich in quartz assemblages.

Of particular relevance to this survey, Anderson (1984) proposed a land-use model for prehistoric exploitation of the Swan Coastal Plain, and its hinterland, based on regional research into the relative proportions of surface artefact scatters and their associated artefact densities. This model suggests that, due to the variation in resources available in the three different environmental zones investigated, there was more intensive use of the coastal plain than either the adjacent forest or open woodland plateau. Pearce's (1982) study in jarrah forest around Collie supports Anderson's model of a low density of small camps suggesting highly mobile hunting groups exploiting the uplands.

Previous archaeological excavations within Hallam's geomorphic units have revealed Pleistocene dates of occupation around 38,000 years B.P. at Upper Swan (Pearce & Barbetti 1981), 29,000 B.P. years at Helena River (Schwede 1990) in the Pinjarra Plains and a more recent late Holocene date of 2,200 B.P. years (Pearce 1978) within the Bassendean Sands.

A variety of ethno-historical sources describe the activities of Aboriginal people on the coastal plain, their subsistence techniques and semi-permanent camps about wetlands during summer. Several sources mention that Aboriginal people dispersed in winter and hunted in the forested uplands. Based on these accounts Hallam (1979) has proposed that the forest was little exploited and the less dense woodland further inland was targeted.

From such research, predictive models of site location can be projected. There is a high probability that any sites located will be scatters of less than 10 artefacts and manufactured from quartz. These sites will occur adjacent to a water source and be situated on or near tracks or cleared areas. However, it is necessary to take into account the high level of disturbance caused by intensive use by European colonists in the forest and woodlands which may have largely obliterated archaeological sites.

#### SITE SIGNIFICANCE

The significance of an archaeological site is determined by its ability to address regional and site-specific research questions and by its representativeness (Bowdler 1984). Significance is a mutable quality, changing as more sites are recorded, research questions are answered or new research directions arise. Research questions that sites in the Southwest may address include:

- a) the antiquity of colonisation of the southwest zone;
- b) social and technological changes that may have occurred in the mid-Holocene;
- c) specific patterns of occupation in regional zones; and
- d) dating of industrial sequences in the region.

## SURVEY METHODOLOGY

The field survey was conducted using a Garmin GPS map 60CSx with datum GDA, 1:50,000 cadastral map and A1 size 1:500 aerial maps with grid references defining the proposed project area. Fieldwork commenced on 26 July 2011 and continued till 2 August with an additional field day on 19 September 2011. The survey was conducted by archaeologists, Jacqueline Harris, senior archaeologist, Stuart Johnston, archaeologist, Peter Michael and Cameron Bennell, Aboriginal consultants representing Gnaala Karla Booja NT Group and Gavin Jetta. After the field survey was complete, Mr Brad Goode conducted an ethnographic investigation.

The survey design was formulated using a combination of predictive, systematic and opportunistic transects throughout the project area with particular emphasis on de-vegetated locations, water sources and areas with greater visibility. The systematic sample survey designed to identify any potential archaeological sites incorporated four persons walking transects spaced at 50m in woodland to 100m apart in open pasture depending upon the degree of visibility. Predictive transects were conducted at any other area of site potential. Particular attention was undertaken along the banks of Wellesley River and the surrounds of any defined swamp. Using this method the entire project area was sampled. In two sections where semi-rural housing blocks were present, an opportunistic methodology was adopted. At the Treasure Road sector, many if not all homeowners owned one or more large dogs that were not necessarily contained, and therefore caution was taken as to which properties were inspected with systematic pedestrian transects.

It is estimated that the overall sampling percentage of the project area was around 40%. Ground visibility within the open woodland was 50% but decreased in wetlands to 5% and dense forest 10%.

#### SURVEY AREA

The project area was largely composed of a river demarcating the lower south eastern section with a wetland/swampland running down the eastern half of the project area and a dunal ridge running down the western perimeter. A large percentage of the land stretching down the middle to eastern sector of the project area has been utilized as pine plantations, much of it now logged with the remains totally camouflaging the ground surface. Several plantations of blue gum are present in the northern sector. Two distinct areas contain semi-rural properties, one in the southeast corner north of Wellesley Road and the other in the mid-western section north of Treasure Road. The former are smaller properties containing vegetable gardens, stables, etc while the latter are long, larger blocks with minimal development. Several areas within the project area have been used in the past as farms to stock animals. A large sand pit has been mined in the northwestern sector. The remains of several old windmills in association with ruins of houses, stables and sheds are present.

Several transmission lines with accompanying access tracks run through the project area. A number of roads transect the area including Marriott, Wellesley, Treasure, Devlin and Rosamel Roads as well as unnamed tracks and firebreaks. In addition several artificial drains dissect the area. Where woodlands are present these have been selectively and/or heavily logged and/or cleared. Many large areas of land contain dense regrowth particularly near swamp areas. Excluding the western ridgeline which remains in reasonable condition, the remainder of the area has been severely degraded. Nevertheless the area abounds in wildlife as evidenced during survey where kangaroos, emus and birds flock. Numerous swamplands contained dense growth surrounding them, some of which were impenetrable.

The entire area was flat and low-lying excepting a narrow strip in the western border where a high undulating sand ridge was present. The soils consisted of white/grey unconsolidated sands.

## FIELD SURVEY RESULTS

The archival survey established that four previously recorded archaeological sites and heritage places lie within the proposed development area. Of these, three heritage places have been reclassified as 'stored data' as they do not fit the criteria of a site because of their small content of one to three artefacts and lack of detail in regard to location. These are **DIA 5807 Harvey 55/Brunswick Junction Road, DIA 5809 Brunswick Junction Road 57** and **DIA 5 810 Brunswick Junction Road 58**.

One site, **DIA 4887 Marriott Road**, is registered as a site. When it was originally located in 1983, it consisted of 10-30 quartz and chert flaked artefacts. It is located at the junction of Wellesley River and Devlin Road. McDonald Hales in 1993 revisited the site and noted a large number (exact number not stated) of artefacts of quartz, mylonite, silcrete and chert. In the present examination only two artefacts were noted despite an intensive search on the cuttings either side of the river. The artefacts located were on the south-western side of the river in an exposed yellow sandbank.



Figure 7: DIA 4887 Marriot Road at the junction of Wellesley River and Devlin Road.

Details of the two quartz flakes are:

- Longitudinally Broken Flake at MGA50 385958 6323178 Quartz Crystal. 19mm long x 12mm wide x 4mm thick with a flat striking platform measuring 5mm x 3mm that was stepped. Cortex was 5%. There was one dorsal scar and the termination was broken.
- Complete Flake at MGA50 385958 6323181 –Vein Quartz. 12mm long x 16mm wide x 8mm thick with a crushed striking platform measuring 4mm x 3mm. Cortex was 50%. There were two dorsal scars and the termination was feather.

These were located 40m west of the road bridge and 70m west of the river. DIA maps the extent of the site as a 500m in diameter circle that includes a buffer zone. Pearce states in the site form that the artefacts extend for 200m but in the report he writes that they extend for about 50m on

each bank. The present writer presumes he was adding a buffer zone and/or error factor of 50m extra each side. Therefore to avoid impacting the site the developer would have to stay 100m off the road bridge on the western side both north and south of the road. The development boundary culminates at the river and therefore the eastern side of the river is irrelevant to this study as it is outside the project area.

While the artefact scatter is small and mundane few similar sites remain in existence. The fact that only two artefacts were noted at the time of survey exemplifies the dynamic nature of archaeological sites where cultural material may be camouflaged, yet reappear when suitable conditions prevail. It is highly likely there is subsurface deposit within the banks alongside the river. It is considered that the site contains similar integrity to when it was originally located in that it was found in a road cutting. Subsequently there has been greater use of Devlin Road as a result of people commuting to the industrial estate.

Throughout the course of the field survey, no new archaeological sites, as defined by Section 5 of the *Aboriginal Heritage Act 1972*, were located within or in close proximity to the project area. One isolated artefact was found during the field survey. Details of the IF1 are:

• Quartz single platform core: 13mm long x 11mm wide x 12mm thick. Cortex was 10% and there were two flake scars. The location was MGA50 383839 6331280 in a disturbed context at the northern edge of a large sand quarry containing white sand and 3m from a fence line.

The presence of isolated artefacts indicates Aboriginal hunting and gathering forays in the region. Isolated artefacts per se are generally of limited scientific significance as they represent a solitary event and do not constitute a site. It is considered that the survey techniques employed in the field survey were sufficient to have located any major archaeological site present on the surface.

## CONCLUSIONS

#### DISCUSSION

An archaeological survey was conducted at Kemerton Industrial Park for Landcorp. The proposed development area extends approximately eight kms north south and three kms east west. The proposed development is bounded by a high ridge in the west running north south and Wellesley River running north south in the east with swampland and wetland extending down the mid-east section.

Three previous surveys, Novak et al (1975), Pearce & Mulvaney (1983) and Macdonald Hales (1993) have been conducted within a portion of the project area and one survey on the outskirts by Coldrick et al (2008). Several other surveys have occurred along transmission lines and gas pipelines by Quartermaine (1987), Hames Consultancy Group (2003) and Australian Interaction Consultants (2005) amongst others. Accepting Novak et al (1975), who found several isolated artefacts and Pearce & Mulvaney (1983), who found one artefact scatter beside the river, no other archaeological sites or isolated artefacts have been located.

Survey findings could be said to be the result of survey intensity and sampling techniques. Different strategies however were undertaken by each of the survey teams that discount this notion. Novak et al (1975) concentrated on accessibility such as roads and tracks, road cuttings, sandpits, drainage trenches, firebreaks, dams and dune blowouts. Pearce & Mulvaney (1983) surveyed the area at 200m spaced transects. Macdonald Hales (1993) used transects spaced at 50m interval or followed tracks in areas of low visibility. Coldrick et al (2008) surveyed a small area at 7.5m transect intervals. The present survey used transects spaced at 50-100m intervals and walked transects along many of the cleared tracks.

Novak et al (1975) described the lack of substantial sites beyond isolated artefacts as indicative of the area being used as a transitory place by small groups. Pearce & Mulvaney (1983) state that no sites were found within the project area due to the lack of permanent sources of surface water on the sandy land and on elevated land suggesting the likely occupation areas would be the eastern border of Leschenault Inlet or the edges of large swamps and river banks. McDonald Hales (1993) note that the area was marginal despite the presence of wetlands and Wellesley River and that the braided rivers of Ferguson and Collie further south would have provided permanent pools and more secure wetlands. They add that it is likely that the wetlands were used by Aboriginal groups in the region but usage may have been of an ephemeral nature. However, while sandy ridges do not exist along Wellesley River they suggest there remains potential for sites to be located alongside it.

Based upon these findings and the present survey which was also not fruitful, the author concludes that because a large portion of the area is low-lying swamp area spread over a wide area with the water table just beneath the surface (i.e. subject to flooding) that these conditions were not conducive to long or short term camping but moreover brief hunting and gathering episodes. More suitable surroundings not present within the project area would be high dunes overlooking swamps and rivers where protection from insects, sun and prevailing winds could be achieved. The other factor that may contribute in a large way to the lack of sites located is the wholesale degradation of the land from clearing, logging, pine plantations, small and large semi- rural housing, industry, farming and infrastructure.

The archaeological signature of the area does appear to be the occasional isolated artefact as a result of hunting and gathering forays from small groups of Aboriginal people as Novak et al described in the first archaeological survey of the area in 1975. Despite the lack of sand dunes however there may be further potential for sites alongside Wellesley River that are presently camouflaged beneath dense ground cover. It is perhaps incongruous that despite the lack of artefactual material located at Kemerton both independent Aboriginal consultants in the survey team were very familiar with the tracks and land divisions in the survey area, having hunted and gathered with their families throughout their lives.

## RECOMMENDATIONS

No archaeological sites were located on the ground surface within or in close proximity to the project area during the course of the field survey. One previously recorded archaeological site **DIA 4887 Marriott Road** is registered within the project area. Therefore, pursuant to **DIA 4887 Marriott Road**, there are no other archaeological impediments to prevent the industrial estate proceeding.

It is recommended that Landcorp avoid the small mundane artefact scatter **DIA 4887 Marriott Road.** Because of the low number of sites located in Kemerton the artefact scatter is endowed with greater significance. If Landcorp are unable to avoid disturbing the site, an application should be sought under Section 18 of the AHA to the Minister of Indigenous Affairs seeking permission to disturb the site. It is recommended that if permission is granted, it is conditional on a test pit being undertaken to examine the research potential of the subsurface.

The most likely areas where archaeological sites, in particular, artefact scatters or burials, may occur are banks of rivers, creeks, swamps and exposed sandy deposits. The removal or excavation of large quantities of sediment increases the risk of disturbing archaeological sites that may lie beneath the ground surface. Because artefact scatters have been reported along the banks of Wellesley River in the wider region, it is recommended that Aboriginal custodians be appointed to monitor ground disturbance for artefactual material should any be present on or beneath the ground surface when clearing of vegetation or removal of sediment is undertaken on the western bank. It is recommended that by Landcorp inform any project personnel of their obligation to report any archaeological material, should this be encountered during earthmoving, as outlined under Section 15 of the *Aboriginal Heritage Act 1972*.

Should Landcorp locate an archaeological site during the process of survey or ground excavation, it is recommended that work cease in the immediate area. Any skeletal material should be reported to Department of Indigenous Affairs and the Western Australian Police Service. Any artefactual material should be reported to Heritage and Culture Division, Department of Indigenous Affairs.

### **BIBLIOGRAPHY**

- Anderson, J 1984, Between Plateau and Plain: Flexible Responses to Varied Environments in Southwestern Australia, Occasional Papers in Prehistory, No. 4, Australian National University, Canberra.
- Australian Interaction Consultants 2005, *Report of an archaeological and ethnographic survey* of the proposed natural gas pipeline project at Kemerton, Western Australia, Prepared for Epic Energy.
- Beard, J S 1981, *The vegetation of the Swan area*, Vegetation survey of Western Australia: explanatory notes to sheet 7 Swan, University of Western Australia Press, Crawley.
- Bowdler, S 1984, Archaeological significance as a mutable quality, In S Sullivan & S. Bowdler (eds) *Site Survey and Significance Assessment in Australian Archaeology* R.S.P.S., A.N.U. Canberra: 1-9
- Bureau of Meteorology, http://www.bom.gov.au/climate/data/
- Coldrick, B, McDonald, E and Thompson, J 2008, *Report of an archaeological and ethnographic Aboriginal heritage survey of Lot 4 Runnymede Road, Wellesley, Western Australia*, Prepared for B & J Catalano Pty Ltd.
- Hallam, S J 1979, Fire and Hearth: a study of Aboriginal usage and European usurpation in southwestern Australia, Australian Institute of Aboriginal Studies, Canberra.
- Hallam, S J 1986, *Prehistoric Aboriginal populations on the Swan Coastal Plain, Western Australia,* Final Report on the Project: Australian Research Grants Scheme.
- Hames Consultancy Group 2003, *Report of Aboriginal heritage aspects of the proposed widening of the Dampier to Bunbury Natural Gas Pipeline corridor between Kwinana and Bunbury*, Prepared for the Department of Industry and Resources.
- McArthur, W M & Bettenay, E 1960, Development and distribution of soils on the Swan Coastal Plain, *Western Australian Naturalist*, Vol. 11, pp. 25-39.
- McDonald Hales 1993, Report of an Aboriginal heritage survey proposed support industry area, Kemerton Industrial Park, Western Australia, Prepared for BSD Consultants Ltd.
- Novak, V 1975, *Report of Aboriginal Sites of the Lake Peel-Preston Lakelands*, Unpublished report for the Department of Aboriginal Sites, Western Australian Museum.
- Pearce, R H 1978, A dated sequence from Walyunga, Western Australia, *Journal of the Royal Society of Western Australia*, 61:1-10.
- Pearce, R H 1982, Archaeological sites in the jarrah forest at Southwestern Australia, *Australian* Archaeology No. 14, 18-24
- Pearce, R H & Barbetti, M 1981, A 38,000 year old archaeological site at Upper Swan, Western Australia, *Archaeology in Oceania*, Vol. 16, pp. 173-178.
- Pearce, R H & Mulvaney, K 1983, *Report on an archaeological survey at Kemerton*, Prepared for Kinhill Stearns.

- Quartermaine, G 1987, From Perth on Harvey to Kwinana 330kv transmission line Appendix c Archaeology (Dam), Prepared for Dames & Moore.
- Schwede, M 1990, *Quartz, the multifaceted stone: a regional prehistory of the Helena River Valley on the Swan Coastal Plain of Southwestern Australia*, Unpublished PhD thesis, University of Western Australia: Nedlands.
- Thompson McRobert Edgeloe, Coffey Environments, William James Landscape Architect, 2009, *Kemerton Industrial Park Strategy Plan*, Prepared for Landcorp, Department of State Development.
- Veth, P & Moore, P 1989, *Report on an archaeological and ethnographic survey near Beenup, Augusta, W.A.*, Prepared for Lewis Environmental Consultants.

## **APPENDIX 1: ABORIGINAL SITES REGISTER SEARCH**



## Aboriginal Heritage Inquiry System

Aboriginal Sites Database

#### Search Criteria

4 sites in a search polygon. The polygon is formed by these points (in order):

MGA Zone 50							
Northing	Easting						
6331521	383221						
6331572	387296						
6323088	387202						
6322882	382605						
6324310	382510						



## Aboriginal Heritage Inquiry System

Aboriginal Sites Database

#### Disclaimer

Aboriginal sites exist that are not recorded on the Register of Aboriginal Sites, and some registered sites may no longer exist. Consultation with Aboriginal communities is on-going to identify additional sites. The AHA protects all Aboriginal sites in Western Australia whether or not they are registered.

#### Copyright

Copyright in the information contained herein is and shall remain the property of the State of Western Australia. All rights reserved. This includes, but is not limited to, information from the Register of Aboriginal Sites established and maintained under the Aboriginal Heritage Act 1972 (AHA).

#### Legend

Rest	triction	Acce	ss	Coordinate A	ccuracy
Ν	No restriction	С	Closed	Accuracy is s	hown as a code in brackets following the site coordinates.
М	Male access only	0	Open	[Reliable]	The spatial information recorded in the site file is deemed to be reliable, due to methods of capture.
F	Female access	V	Vulnerable	[Unreliable]	The spatial information recorded in the site file is deemed to be unreliable due to errors of spatial data capture and/or quality of spatial information reported.

#### Status

L - Lodged		IA - Information Assessed		ACMC Decision Made	*Explanation of Assessment Sites lodged with the Department are assessed under the direction of
Information lodged,		Information Awaiting ACMC		R - Registered Site	the Registrar of Aboriginal Sites. These are not the final assessment.
awaiting assessment	_	Decision Assessment Only	-	I - Insufficient information S - Stored Data	Final assessment and decisions will be determined by the Aboriginal Cultural Material Committee (ACMC).

#### Spatial Accuracy

Index coordinates are indicative locations and may not necessarily represent the centre of sites, especially for sites with an access code "closed" or "vulnerable". Map coordinates (Lat/Long) and (Easting/Northing) are based on the GDA 94 datum. The Easting / Northing map grid can be across one or more zones. The zone is indicated for each Easting on the map, i.e. '5000000:Z50' means Easting=5000000, Zone=50.

#### Sites Shown on Maps

Site boundaries may not appear on maps at low zoom levels

Aboriginal Sites Database

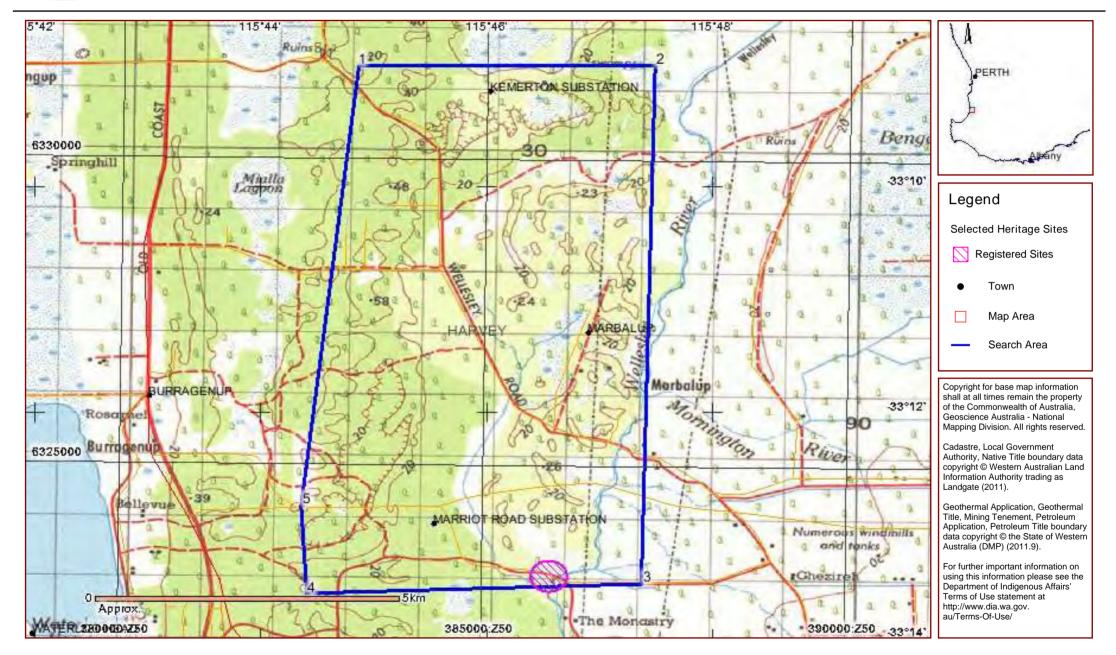
## List of 1 Registered Aboriginal Sites with Map

Site ID	Status	Access	Restrictio	n Site Name	Site Type		Additional Info	Informants	Coordinates	Site No.
4887	R	0	Ν	Marriott Road	Artefacts / S	Scatter			385929mE 6323198mN Zone 50 [Reliable]	S01844



## Aboriginal Heritage Inquiry System

Aboriginal Sites Database





Aboriginal Sites Database

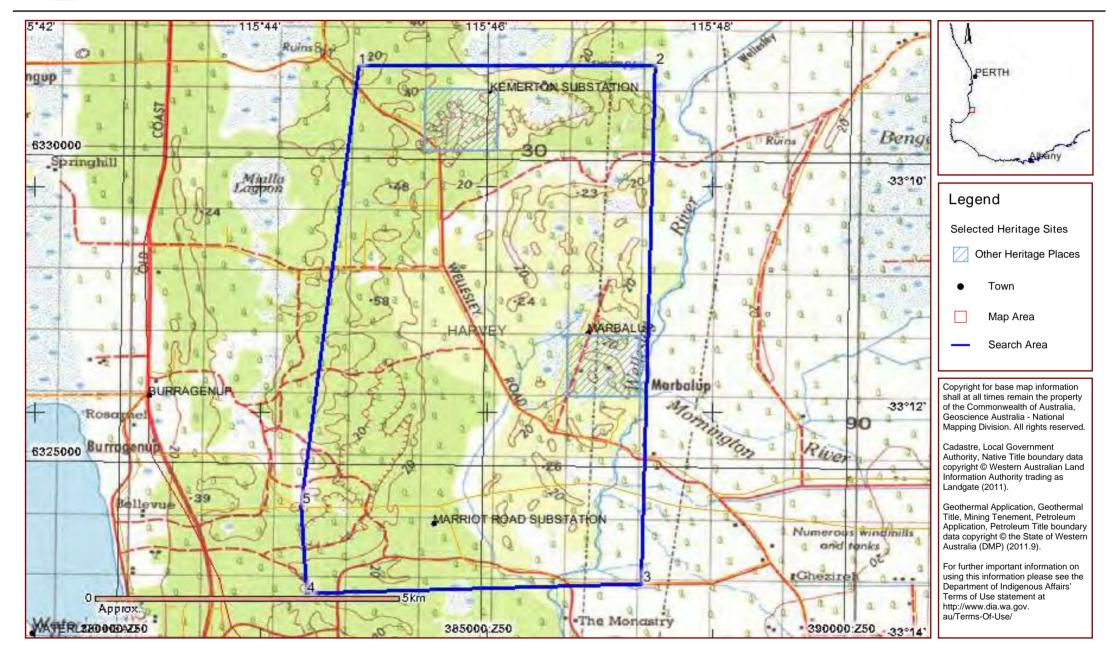
## List of 3 Other Heritage Places with Map

Site ID	Status	Access	Restriction	Site Name	Site Type	Additional Info	Informants	Coordinates	Site No.
5807	S	0	Ν	Harvey 55/brunswick Jun.Rd.	Artefacts / Scatter	Camp, [Other: ?]		384639mE 6330648mN Zone 50 [Unreliable]	S00354
5809	S	0	Ν	Brunswick Junction 57.	Artefacts / Scatter	Camp, [Other: ?]		386639mE 6326648mN Zone 50 [Unreliable]	S00356
5810	S	0	Ν	Brunswick Junction 58.	Artefacts / Scatter	Camp, [Other: ?]		386639mE 6326648mN Zone 50 [Unreliable]	S00357



## Aboriginal Heritage Inquiry System

Aboriginal Sites Database



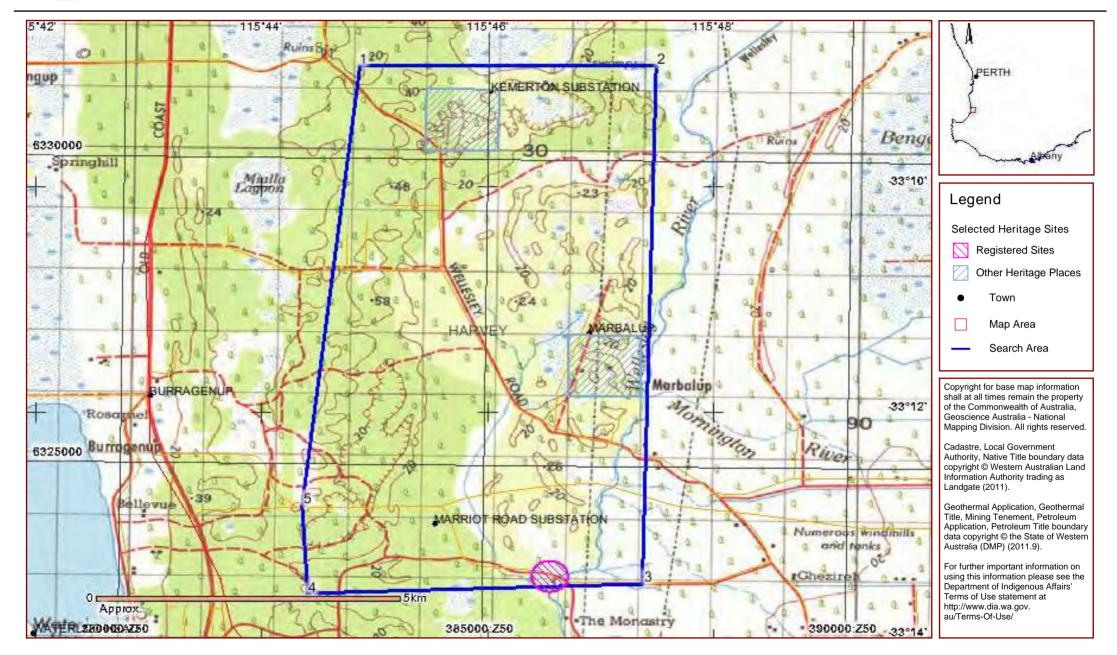


Map Showing Registered Aboriginal Sites and Other Heritage Places



## Aboriginal Heritage Inquiry System

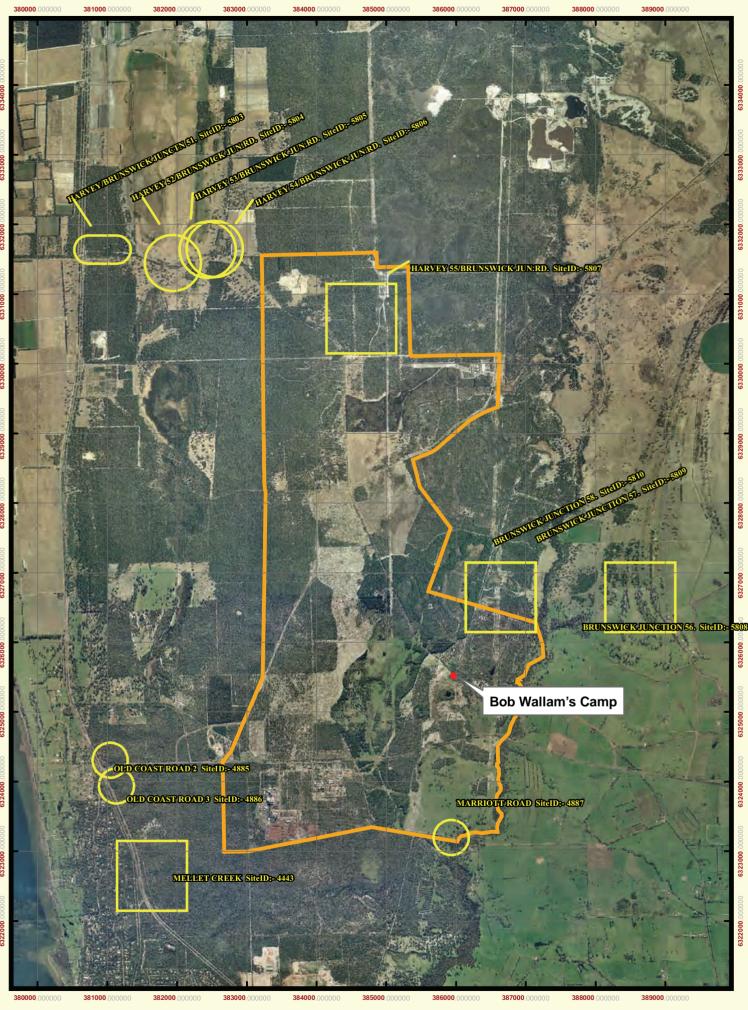
Aboriginal Sites Database



## **APPENDIX 2: LETTER OF ADVICE**

Consulting Anthropologist Heritage Assessments	79 Naturaliste Terr DUNSBOROUGH WA 6 (08) 9755 3 bradnlee@westnet.com ACN: 134 732 ABN: 41 134 732	
21 <sup>st</sup> September 2011		
of SWALSC for Landcorp i	n regard to the pro ing recommendat	by Brad Goode & Associates, acting on bel oposed Kemerton Industrial Estate. We wo cions in relation to the Western Austral
× Group with pallution dent to × Funder se	ship to nist swithsc meut one	have environmental d management reports upgment reports
and dist	ALLIV SI	material bound dist
× Hudralog	a trouving	to be condition of Suppo
× Hudralog	a training	to be condition of Suppo
× Hudralog	a training	Claim (WC98/58) representatives Signature
X H Jahalo gep X Employment Copp Guada Karla	Booja Native Title	Claim (WC98/58) representatives
X H salvalo gran X Employment Copp Gnaala Karla Name	Booja Native Title	Claim (WC98/58) representatives
X H schologop X Employment Copp Gnaala Karla Name Dennis Hill	Booja Native Title Date 21.9.2011	Claim (WC98/58) representatives
X H schologep X Employment Opp Gnaala Karla Name Dennis Hill Les Wallam	Booja Native Title Date 21.9.2011 21.9.2011	Claim (WC98/58) representatives
X H schologep X Employment Opp Gnaala Karla Name Dennis Hill Les Wallam Murray Collard	Booja Native Title Date 21.9.2011 21.9.2011 21.9.2011	Claim (WC98/58) representatives
X H Schology X Employment Opp Gnaala Karla Name Dennis Hill Les Wallam Murray Collard Lera Bennell	Booja Native Title Date 21.9.2011 21.9.2011 21.9.2011 21.9.2011 21.9.2011	Claim (WC98/58) representatives
X Employment Copp Gnaala Karla Name Dennis Hill Les Wallam Murray Collard Lera Bennell Richard Bennell	Booja Native Title Date 21.9.2011 21.9.2011 21.9.2011 21.9.2011 21.9.2011 21.9.2011	Claim (WC98/58) representatives
X Employment Copp Gnaala Karla Name Dennis Hill Les Wallam Murray Collard Lera Bennell Richard Bennell Maurice Thorne	Booja Native Title           Date           21.9.2011           21.9.2011           21.9.2011           21.9.2011           21.9.2011           21.9.2011	Claim (WC98/58) representatives
X Employment Constant of the second of the	Booja Native Title         Date         21.9.2011         21.9.2011         21.9.2011         21.9.2011         21.9.2011         21.9.2011         21.9.2011         21.9.2011         21.9.2011	Claim (WC98/58) representatives

## APPENDIX 3: MAP OF THE SURVEY AREA IN RELATION TO ABORIGINAL HERITAGE SITES



**KEMERTON INDUSTRIAL PARK** 

Legend

KIP\_Subject\_AreaPOLY DIA\_Site\_Extents Bob\_Wallam\_Camp

DATE 13th July 2011

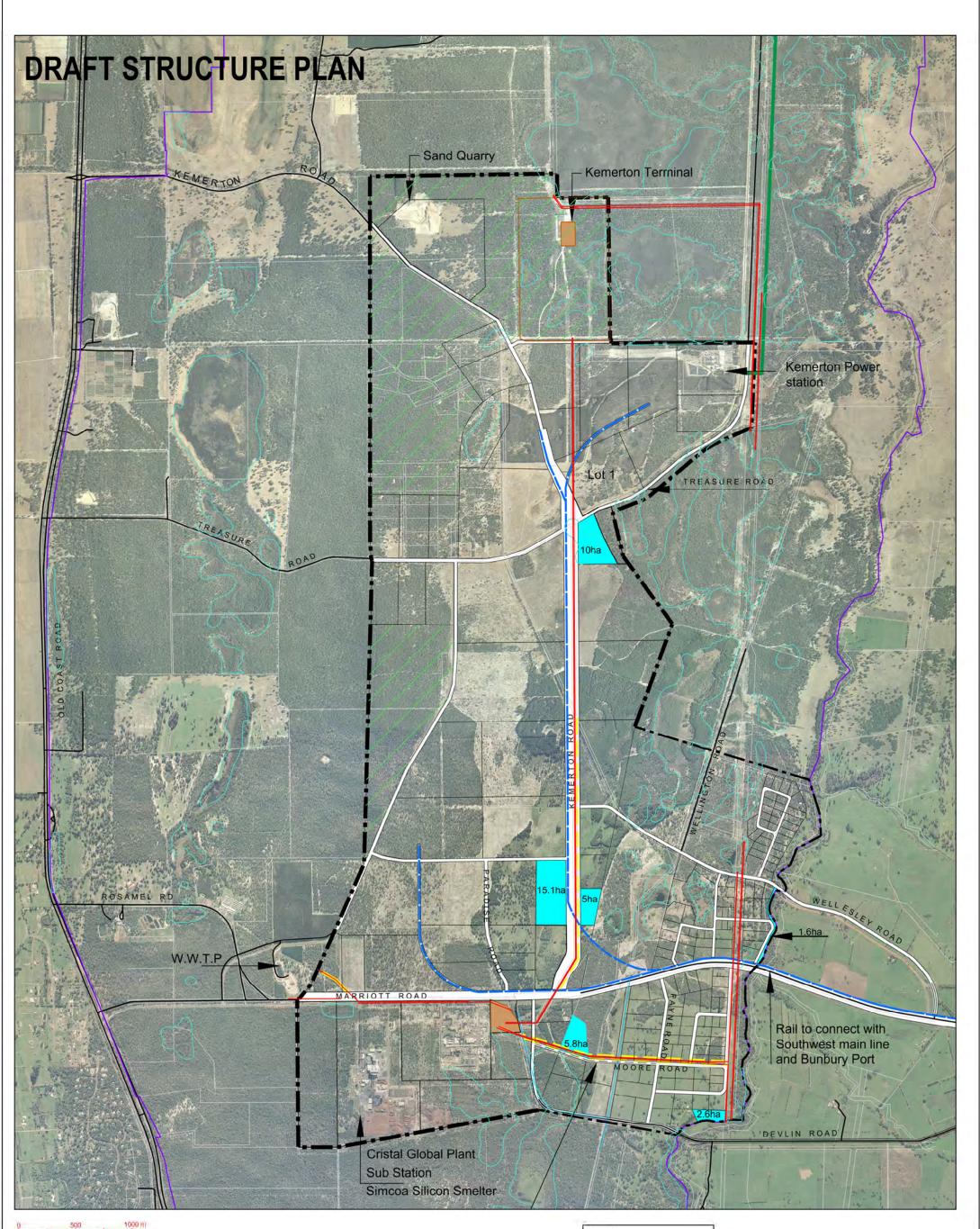
SCALE - at A4 1:54,224



Survey conducted by BRAD GOODE & Assoc. - 79 Naturaliste Tce, DUNSBOROUGH WA 6281 Mapping provided by WARPSPEED GIS - P.O. BOX 147, VASSE WA 6280

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## **APPENDIX 4: KIP STRUCTURE PLAN**



This concept has been prepared for the purpose of meeting client specifications. The drawing closs not constitute an invitation agreement or contract (or any part thereof) of any kind whatsoever.

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Although care has been taken in the complicition of this drawing by The Pranning Group WA Pty Ltd, all parties associated with the propeed property dweigherment disclaim all responsibility for any errors or omissions. The right is reserved to change the plan at any time.

Liability is expressly disclaimed by The Planning Group WA Pty Lid for any loss or damage which may be suslained by any person acting on any visual impression gained from this drawing.



#### Kemerton Industrial Park Concept Structure Plan

Designer: MR Date: 30th August 2011 Scale 1: 30 000 /m A3 Drawn: PR Drawing No. 710-065 ST1 (PCG94) 300811.pdf

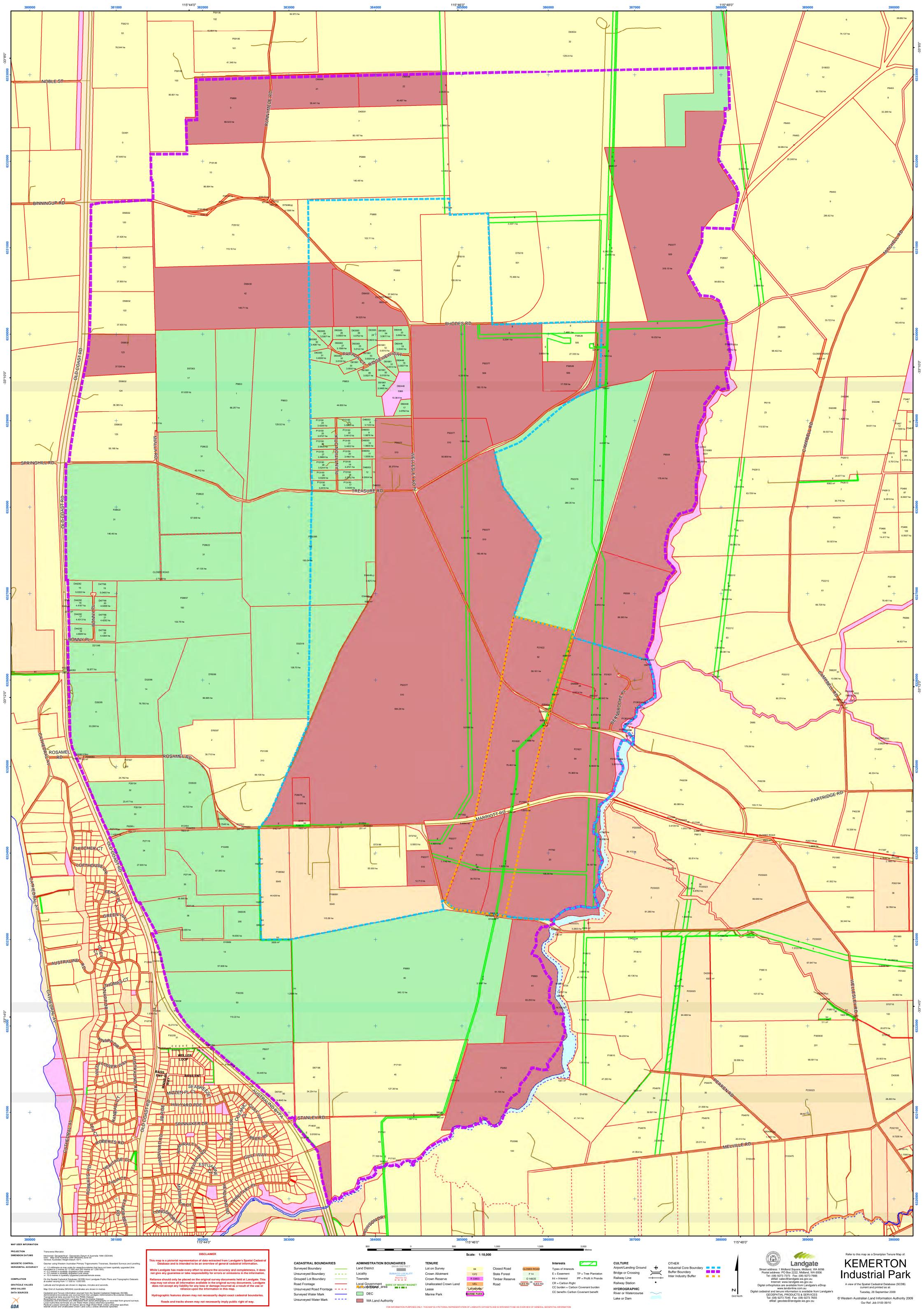


Level 7, 182 St Georges Terrace Perth Western Australia 6000 PO Box Perth Wi m Australia 6850 Telephone +61 08 9289 8300 Facsimile +61 08 9321 4786

The Planning Group ABN 36 097 273 222

C The Planning Group WA Pty Lis

## **APPENDIX 5: TENURE MAP**



## **APPENDIX 6: KEMERTON STRATEGY PLAN**





# Kemerton Industrial Park STRATEGY PLAN













Gove Depa

Government of Western Australia Department of State Development

WILLIAM JAMES LANDSCAPE ARCHITECT



## **APPENDIX 7: SITE RECORDING FORM**





	Site ID:		Duplicate Site ID:			Date Received:			
	Date Registered:		Complex Number:			Received by:			
	· ·	Name of Site       If previously recorded:         Site Name (Aboriginal name if appropriate):       BOB WALLAM'S CAMP       If previously recorded:         Field code/number:							
	Recorder Name: B								
		9 Naturaliste Ter Junsborough WA	•			55 3716 lee@westnet.com.a	u		
	Have you cont	acted the informar	t(s)?	10					
Ĺ	Contact details	s of informant(s):							
	1 Name:	Kelvin Quart Williams	ermaine and Ms Jani	ne		n Contact: Gnaala Ka C98/58) Native Title	-		
	Addres	311/1230	Hwy, Cannington 61	.07	Phone: (08	3) 9358 7400			
	2 Name:				Organisation	n Contact:			
	Addre	55:			Phone:				
	If more than tw	vo informants plea	se attach details.						
	I acknowledge t form and all we the contents of (including conv to communicate	orks comprised in th any attachment subm erting it into differer	submitted, the Departme is form. I license the Dep nitted with this form, for at formats), and, unless an e public (including via a p	partm any j n attac	nent of Indigeno purpose, to repr chment is mark	ous Affairs and its repre roduce, modify and adap ed as "closed" under par	esentatives to use of the attachment t 14 of this form,		
	Signature: Name:Bra	d Goode	book			Date: <u>10/11/2</u>	2011		
	Date of Field I	Recording: 20/9/2	011	-	<b>gnature</b> : (At t d correct.)	he time of recording the	his record is true		
	dures Manual at h	ttp://www.dia.wa.gov.	s form please go to the Stand au/Heritage/HeritageManual be obtained from: http://ww	l/defa	ult.aspx Or Cont	tact the Registrar of Aborig			





7 8	Type of Site (Tick appropriate)       Grinding Patches/Grooves       Mythological         Artefacts       Historical       Painting         Mythological       Man-made Structure       Quarry         Engraving       Midden       Repository/Cache         Fish Trap       Modified Tree       Skeletal Material/Burial         The type of site identified must be explained in Part 9.       Supporting Information (This information is designed to further describe the place or object as a site.)
	Archaeological Deposit       Meeting Place       Plant Resource         Birthplace       Mission       Reserve         Camp       Named Place       Rockshelter         Dated Evidence       Natural Feature       Shell         Hunting Place       Ochre       Water Source         Massacre       Other       The supporting information identified should be explained in Part 9.
9	Site Description & Statement of Importance and Significance (Further information can be obtained at http://www.dia.wa.gov.au/Heritage/SiteRecordingFormGuidelines/Part9.aspx). See attached extract and map from Goode 2011:23-24
	Describe each type of site identified in Part 7. Add additional pages and photographs as appropriate.
10	Recorder's Assessment of Site Significance (Tick Appropriate) (As observed in the field and described in Part 9 recorders are required to provide a suggested evaluation of the importance and significance of the site within the meaning s5 of the <i>Aboriginal Heritage Act 1972</i> . In doing so Recorders should have regard to the matters set out in s39(2) & (3). This information may provide assistance to the Aboriginal Cultural Material Committee, which is charged with the responsibility for evaluating the importance and significance of places and objects under the AHA.)         ✓       Section 5(a)       Section 5(b)       Section 5(c)       Section 5(d)         ✓       Not a Site within the meaning of s5 of the <i>Aboriginal Heritage Act 1972</i> .





SITE LOCATION MAP	Provide a sketch or GIS map of photocopy of a published map and a written description of how to locate the site. Add additional pages and attach photographs as appropriate:
Map Prompts Mark the locations of: Coordinates to locate site (MGA preferred) Major location features (eg, roads, fences, rivers, hills, windmills, buildings) Survey marks (survey pegs) Scale Distances (in metres) North point Nearest named place Land Tenure Mining tenement Lot Number Street Number Reserve Number Survey area Legend	See attached extract and map from Goode 2011:23-24
SITE PLAN	Provide a detailed layout plan of the site. Add additional pages and attach photographs where appropriate:
<b>Plan Prompts</b> Mark the locations of: Coordinates to locate site (MGA preferred) Coordinates indicating extent of site boundary Major features (eg, trees, sample squares, transects, concentration zones, rocks, engraving locations) Coordinates indicating locations from which photographs were taken. Scale Distances (in metres) Dimensions (NS / EW) Radius (in metres) North point Legend	See attached extract and map from Goode 2011:23-24





Site Location, Da How was the loca		-	·		Map Reference Describe
	1:250000 map)	GD/ WG AGI AGI	rid (* Preferred) A94/MGA94* S84/MGA94* D84/AMG84 D66/AMG66 er	Zone or Latitu	
Access to the <b>Site</b>	File Informatio	<b></b>			
All Information	Descriptiv Informatic	ve	Location Information		Reason(s) for 'Closed' Status (eg, for cultural reasons, gender restric- tions, physical danger of site, condi-
Open	Open Open	<ul> <li>✓</li> </ul>	Open		tion of site).
Closed	Closed		Closed		
Access to	Acces	s to	Access to		
Males only	Males only		Males only		
Females only	Females o	nly	Females only		Person(s) to be consulted regarding
Only initiated persons	Only initia persons	ated	Only initiated persons		authorisation of access to 'Closed' information:
All persons	All person	IS 🔽	All persons		
Details of Other A         Access to the Site         ritual activities, gended	e (Please provide a			tocols or a	ctions regarding physical access to the site, eg,
Reference for Abo Goode B & Harris J <i>Kemerton Industric</i> South West Aborig	, 2011, A Site Ide al Park in the Shir	ntification Ab e of Harvey, V	• original Heritage S Vestern Australia, 1	urvey of t A report p	he Proposed Report ID
Additional Refer graphs as appropriate		of Attached	<b>l Documents</b> (Ple	ase use Ha	rvard format. Add additional pages and photo-
	isters Square, V				errace, Perth, WA 6000. v.au Web: http://www.dia.wa.gov.au/

#### Extract from Goode & Harris 2011 (pg 23-24)

Following a break for lunch Mr Kelvin Quartermaine lead the group south the location of the camp formerly used by Mr Bob Wallam and his family (Bob Wallam is Mr Quartermaine's grandfather's brother). The camp was located in the south eastern portion of the survey area, approximately 130m south west of the intersection of Wellington Road with Wellesley Road. The group accessed the location via a sand track through thick Teatree scrub. Mr Quartermaine pinpointed the location of Bob Wallam's former camp at 385963mE 6325522mN (GDA 94) and allocated a circular area with of diameter of approximately 20m as the camps extent. Using his age as an indicator, Mr Quartermaine estimated that the camp was occupied approximately 48 years ago by Bob Wallam, his wife Grace Gillespie and their children Robert, Mervin and Steve.



Figure 1: Mr Kelvin Quatermaine, Ms Lera Bennell, Mr Murray Collard, Mrs Barbara Councillor, Mrs Vivienne Michael and Mrs Janine Williams (nee Wallam) at the location of Bob Wallam's former camp.

Mr Quartermaine advised that the location of the camp would have been selected for its proximity to seasonal work (Bob cut bean sticks from the surrounding Teatree within the Partridge families farm) and for the good hunting and water available at a nearby spring/well located approximately 180m to the north west near two large date palms that are visible from Wellesley Road. Mr Quartermaine estimated that the Wallam family would have occupied the camp for approximately 2-3 months during winter when 'stick picking' was generally undertaken. The camp consisted of a cleared area with a small shack made of tin and wooden boards for shelter and a fire for warmth. Currently there are no physical remains of the camp left and the area is strewn with building rubble, which the informants said was not related to the former camp (see Appendix 3 map of Bob Wallam's camp in relation to KIP).

Mr Goode asked the GKB reps what was important and significant about the location of the camp to Nyungar people now. Mr Quartermaine replied that it was important for the fact that it was where 'Pop Chocó' (Bob Wallam) camped and we all respect that because he was such a liked man - tall, strong and known as a good boxer. Mrs Janine Williams said "it is important history for Nyungar people" and Ms Lera Bennell remarked that this history shows the impact of colonisation on Nyungar people, "we were forced out to places like this to work for Wadjelas". Ms Bennell also advised that the camp is important for teaching their children the history of their family and their culture.