

# Appendix F – Aboriginal Heritage Survey Report



**AN ABORIGINAL HERITAGE SURVEY OF  
THE PROPOSED BUNBURY OUTER RING  
ROAD (STAGE 2) AT GELORUP, WESTERN  
AUSTRALIA.**

*A report prepared for GHD Pty Ltd on behalf of  
Main Roads Western Australia*

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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 author does 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 *Report on the Archaeological Survey of the Bunbury Outer Ring Road (Southern Section) Project Area Bunbury Western Australia*, by Mr Thomas O'Reilly, 2012.

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## GLOSSARY OF TERMS

The Proponent – Main Roads Western Australia  
The Consultant - Brad Goode & Associates Pty Ltd  
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 native title claim group

## EXECUTIVE SUMMARY

Main Roads Western Australia (Main Roads) is planning to construct stage 2 of the Bunbury Outer Ring Road (BORR). This road is required to reduce traffic congestion within the city and to complete a bypass link around Bunbury.

Stage 2 of the BORR will be built from where stage 1 of the BORR intersects the South Western Highway near Centenary Road. It will then run south west intersecting Bussell Highway between Woods Road and Calinup Road at Gelorup, a total of 9 km (see map-Appendix 3).

The survey corridor is irregular in shape and varies in width from 50m to 150m.

Several access roads to service the BORR stage 2 were also surveyed. These intersections are at Lillydale Road, at Hastie's Road, at Decan Road, at Jilly Road, Eucalyptus Road and at Woods Road (see map-Appendix 3).

Archival research conducted for this survey, which consisted of a search of the DIA Aboriginal Sites Register by GIS auto download in January 2012, and verified by a search of the DIA web based search engine on 12<sup>th</sup> April 2012) revealed that **no** previously recorded ethnographic sites or places are located within the survey corridor.

The search **did** however **identify** one previously recorded archaeological other heritage place ID 18884 Bunbury Bypass Archaeological Site 1 to be located within the survey corridor at the BORR intersection with Hastie Road. This site has a DIA polygon that predominately affects the ramp connection of the BORR with Hastie Road. The full detail regards the nature, extent and the scientific significance of this site will be detailed within the accompanying archaeological report by Mr Thomas O'Reilly (2012).

In terms of the sites cultural significance to contemporary Nyungar people it has been determined from consultations with 9 members of the GKB native title claim group that the past level of disturbance and the small quantity of material recorded at the place is of little contemporary cultural significance. Support for ministerial consent was given conditional to salvage and relocation to the offset repository used for material from BORR stage 1.

As a result of this survey the following recommendations are made;

As no new ethnographic sites of significance as defined by Section 5 of the Western Australian Aboriginal Heritage Act (1972) were identified to be located along the proposed corridor for Stage 2 of the Bunbury Outer Ring Road, **it is recommended** that the project should proceed as planned.

As a result of the survey it is likely **that** previously recorded archaeological other heritage place ID 18884 Bunbury Bypass Archaeological Site 1 will be affected by the construction of the ramp connection of the BORR with Hastie Road.

As such **it is recommended** that Main Roads make application under Section 18 the Western Australian Aboriginal Heritage Act (1972) for consent to use the land that may contain an Aboriginal site.

As most representatives from Gnaala Karla Booja WC 98/058 Native Title Claim Group who were consulted advised that the sites had little contemporary cultural significance **it is further recommended** that ministerial consent should be given.

Should ministerial consent be given, **it is recommended** that prior to any work commencing that Main Roads in consultation with the above claim group **develop a cultural heritage**

**management plan** whereby the salvage and relocation of the material can occur prior to construction.

In terms of all salvaged archaeological material **it is recommended** that Main Roads provide suitable land as a repository site. Ideally this site would be close by to where the artefacts have come from. However Nyungar community monitors should be able to determine where to place material during the salvage operation. The repository should then be registered and protected under the AHA.

**It is recommended** that Main Roads give due recognition of the Nyungar community as prior owners of the land and as a community willing to accommodate development that affects cultural values. This could be achieved by the naming of roads and bridges with Nyungar names.

**It is finally recommended** that Main Roads give due consideration to the use of local native species for rehabilitation and the creation of employment opportunities are considered

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## **REPORT**

### **An Aboriginal Heritage Survey of the Proposed Bunbury Outer Ring Road (Stage 2) at Gelorup, Western Australia**

#### **ISSUE**

Main Roads Western Australia (Main Roads) is planning to construct stage 2 of the Bunbury Outer Ring Road (BORR). This road is required to reduce traffic congestion within the city and to complete a bypass link around Bunbury.

Main Roads wish to ensure that no sites/places of significance as defined by section 5 of the Western Australian Aboriginal Heritage Act (1972). -AHA is affected by this proposal, thereby fulfilling their obligations under the AHA.

#### **REPORT OBJECTIVES**

To report on archival research in order to identify any previously recorded Aboriginal Heritage sites/places located within the proposed survey corridor (see Appendix 3 map).

To determine if any of these previously recorded Aboriginal Heritage sites/places will be impacted upon by the actual road route as it is currently planned.

To report on consultations held with representatives of the Gnaala Karla Booja (WC98/058) Native Title Claim group in order to determine if any new Aboriginal heritage sites/places will be affected by this proposal.

To provide significance assessments for the sites/places determined to be impacted upon by the actual road route and to document the views of the Gnaala Karla Booja (WC98/058) Native Title Claim group in regard to the proposed disturbance of these sites.

To provide management recommendations for any Aboriginal heritage sites/places that may be located within the project area, should the proposal proceed.

#### **BACKGROUND**

**On the 15<sup>th</sup> December 2011**, Mr Neil McCarthy, Environmental Manager for GHD Pty Ltd acting upon behalf of Main Roads, commissioned Brad Goode & Associates Pty Ltd, to conduct a 'Site Identification Aboriginal Heritage survey' to Section 18 standards, of stage 2 of the BORR.

Previously heritage assessments have been commissioned along various stages of the project as planning has evolved over time in response to constraints (see McDonald 1995 & 1997, Goode 2002a).

In November 2009 Brad & Associates Pty Ltd was commissioned to conduct a desktop study of the road planning corridor in order to consolidate all heritage information into one report to assist in planning a road design (see Goode 2009b).

From this study, and in consideration of other issues, Main Roads have now determined a final route selection for stage 2 of the BORR.

Stage 2 of the BORR will be built from where stage 1 of the BORR intersects the South Western Highway near Centenary Road and will run south west to Bussell Highway between Woods Road and Calinup Road at Gelorup, a total of 9 km (see map-Appendix 3).

The survey corridor is irregular in shape and varies in width from 50m to 150m.

Several access roads to service the BORR stage 2 were also surveyed. These intersections are at Lillydale Road, at Hastie's Road, at Decan Road, at Jilly Road, Eucalyptus Road and at Woods Road (see map-Appendix 3).

As a result of the above brief an archaeological survey of the road corridor and access roads was conducted in January 2011 by Mr Tom O'Reilly (Senior Archaeologist) and Stuart Johnston (Archaeologist) with two GKB assistants.

Ethnographic consultations focused were conducted on the 21<sup>st</sup> of February 2012 by Mr Brad Goode (Anthropologist), Mr Colin (Floyd) Irvine (Ethnographer), and nine representatives of the Gnaala Karla Booja WC 98/58 Native Title Claim Group.

Mr Neil McCarthy (Senior Environmental Scientist from GHD Pty Ltd) and Mr Gerry Zoetelief (Project Manager from Main Roads) were also present to provide technical information.

The findings of the archaeological and ethnographic surveys are detailed in the following report.

## LOCATION

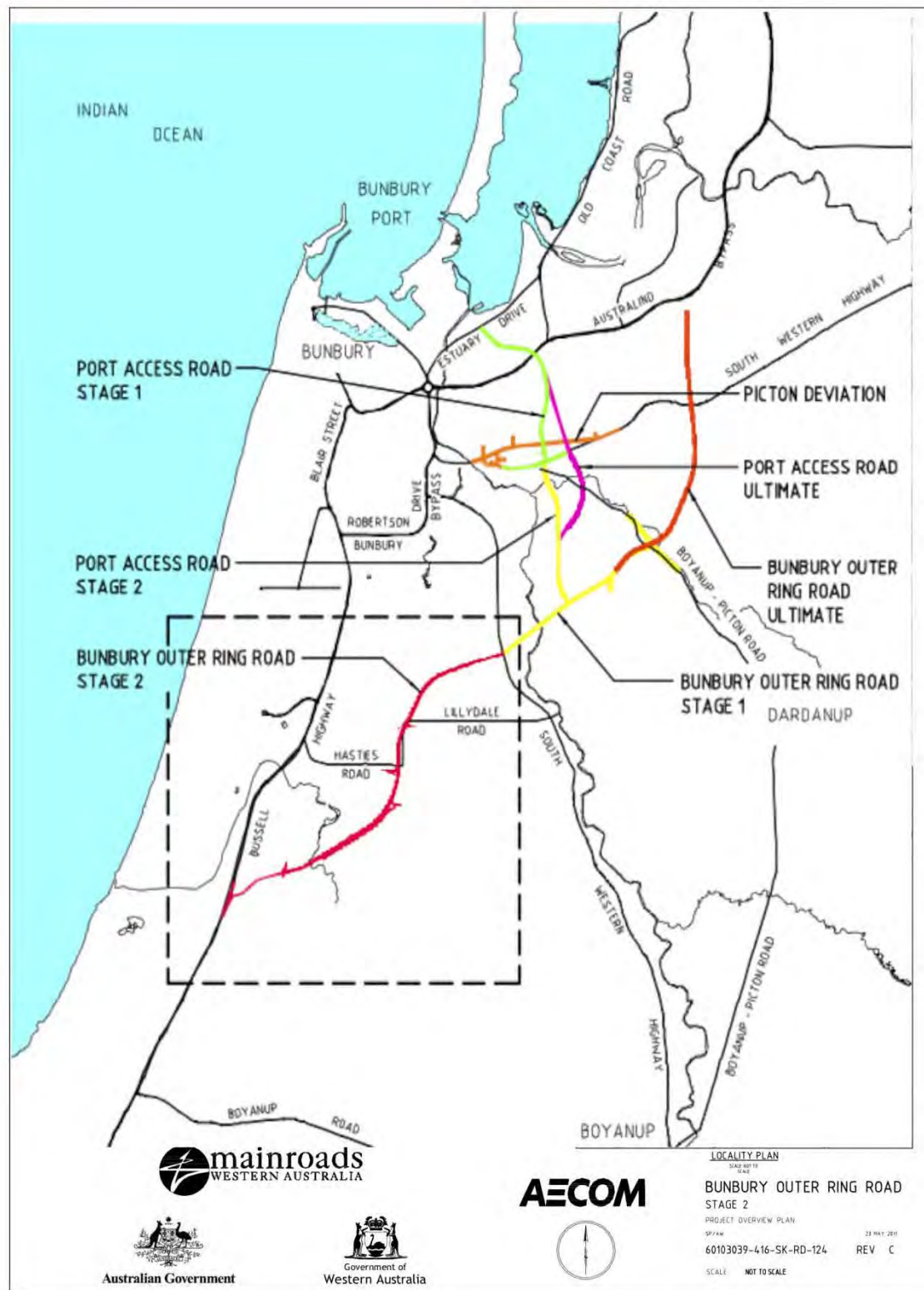


Figure 1: Location of the project area.

## 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 as *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 fertility of the region or the great number of women and children among the seventy subgroups.

Bates records the *Kunniung* (west) *Bibbulmun* people as having occupied the Bunbury/Donnybrook area prior to colonization. She records the dialect of the Bunbury region as *Burrong Wongi* (Bates 1985: 54). Tindale (1974: 244, 260) and Berndt (1979) both record this region as home to the *Kaneang*. Unlike their inland neighbours who employed the 'Old Australian tradition' of circumcision (Berndt & Berndt 1979) Nyungars restricted the physical marks of initiation to nasal septum piercing and cicatrization. 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 cicatrization 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).

## WATER AND ABORIGINAL SIGNIFICANCE

There is no doubt that water, especially fresh water, was of vital importance to traditional Aboriginal people right across Australia. The rivers, pools and wetlands link campsites along walk tracks and are places of mythological and spiritual significance. In the case of the Southwest, rivers also defined the territories or estates of the Nyungar people (Dortch 2002, Hallam 1979).

Various authors, in various regions have recorded specific narratives (Goode 2000b, Jackson and de Gand 1996, Toussaint et al 2005) and generalised narratives (O'Connor 1989, 1995, Villiers 2002, Goode 2003) with regards to the importance and significance of water sources from both a mundane and spiritual position.

In a mundane sense, rivers, wetlands, springs and soaks are seen by both traditional and contemporary Nyungar people as important places to camp, fish, hunt, and gather food and resources that are made plentiful by the supply of fresh running water (O'Connor 1989, 1995, Goode 2008c).

In regard to the spiritual significance of water across Aboriginal Australia, the Rainbow Serpent is generally deemed as being responsible for both the creation and the ongoing maintenance of the water cycle. The Rainbow Serpent as a spirit creature is believed to have excavated and created the beds of the rivers during its travels throughout Australia. It is often the belief that it had reached down from the sky to the waterholes and pools, bringing water to the earth (Jackson 2004). Throughout Arnhem Land and the Kimberley the Rainbow Serpent is associated with other myths regarding fertility and is sometimes regarded as male and at others as female. Ceremonies and rituals are performed in order to renew species that are associated with Rainbow serpents (Reed 2001).

Throughout Western Australia, the Rainbow Serpent is known by various different names by various Aboriginal groups, for example; the *Waugal* (Southwest), the *Beemarra* (Midwest), the *Warlu* (Pilbara), the *Mardjit* (South Coast), *Marghet* (Great Southern) and the *Norm* (Esperance).

There also exist specific creation myths attesting to other ancestral beings in relation to the creation of water sources that is not related to the rainbow serpent mythology. The Margaret River is an example of this where *Wooditch*, an evil medicine man who wished to abduct the daughter of a rival, had cast a magic stick between himself and his adversary which was responsible for the creation of the Margaret River (Buller-Murphy 1958).

Historically, Bates (1966) recorded that in the Southwest: “Their only deity was a *Waugal* or serpent god that dominated the earth, the sky, the sea, and punished evil doers”.

“All permanent native waters have legends attached to them, legends of the ‘dream’ time, which go back to the days when birds and animals possessed human attributes, or were human beings, or were groups of which the bird or animal was representative, or were magic animals and birds possessing the power of human speech. The natives cannot say that the ‘founders’ of the various permanent waters were altogether human, although birds or beasts, or half bird half human, but the bird or animal name only is always given in the legend never a human name.” (Bates 1966:157)

Bates (1985:221) also reports that the “*Waugal* made all the big rivers of the Southwest and that wherever it travelled it made a river.” Bates (1985:219) stated that the *Waugal* was not just seen as responsible for the creation of waterways but also created hills and other features of the landscape. The *Waugal* as a mythic creature was revered and often feared by Nyungar people who would have to offer articles of food or sing and throw sand when approaching pools or places where it was known to live as a form of propitiatory ritual in order that no harm would befall those who approached.

In regards to the current study area Mr Joe Northover, and other members of the Gnaala Karla Booja Native Title Claim group, have provided a modern, contextualized narrative with regards to the creation of the Collie River system (inclusive of the Leschenault Inlet, the Preston, Ferguson, Harris and Brunswick Rivers) in regard to a Dreamtime ancestor known as ‘*Ngarnjungudditj Walgu*’; the hairy faced rainbow serpent.

“The ‘*Ngarnjungudditj Walgu*’ came from the north east of Collie where he travelled forming the rivers and creeks resting along the way making waterholes...

... ‘He came through what we know today as Collie forming the Collie River and as he moved he created hills visiting places in and around Collie he moved towards the coast and came out where Eaton is today as he came to the end he turned his body creating what is the estuary today, as he turned he pushed the land out and then he travelled back up the Collie River he travelled about the Collie area finally he rests at Mininup a well known swimming place on the Collie River...

...The old people used to say you can see his spirit in the water late at night during the full moon and his long silvery beard’...

...It is also said that if a stranger to the area comes and wishes to swim in the Collie River or fish he must wipe his armpit and then pick up some sand in the same hand and then throw the sand in the water for the spirit to smell this and he would not be harmed in any way or if he is not welcomed the water will become rough and the weather might change” (Joe Northover per comm. 2000)

Comparative studies of serpent mythologies and the significance of water have been conducted in the Northern Territory and other regions of Australia. In these studies water bodies have almost always had mythic dimensions. Studies by Barber and Rumley (2003), Langton (2002), Toussaint *et al* (2001) and Yu (2000), state that Aboriginal people, as they do with the land, conceptualize that water sources (rivers, lakes and wetlands) have derived from the Dreaming. These studies emphasise the importance of stories about the actions of mythic beings in the origin and maintenance of such water sources. In these stories cultural affiliations to water are expressed in many ways, through social etiquette, narratives about places, rituals and practices of such rituals. Water is described as the “living element that both creates and defines the shape and character of the country” and gives it sacredness and identity (Jackson 2004).

Modern Nyungar people believe that that as the custodians of the land it is their jural responsibility to “look after water” and not to allow the region’s water sources to be “mucked up by man”. This view of jural responsibility is tied to the view that the *Waugal* will punish Nyungars who do not respect water and who allow the natural order of things to be changed. Nyungar people from the region take the view that water is there for all the organisms that depend upon it for survival, and that it is not there just for man to use irresponsibly. Failure to respect these core values will ultimately lead to sickness in the Nyungar community (Goode 2008c, 2009, McDonald 2002).

In previous surveys conducted upon the Collie and other southwest rivers (Goode 2002d, 2005, 2008c, 2009a) it has been determined that various activities threaten these Aboriginal cultural values that relate to water sources. Nyungar people have consistently voiced concerns that are in keeping with the findings of research conducted by Villiers (2002) regarding the Swan & Canning Rivers. Villiers found that sites known to contain the *Waugal* can be threatened by: any below ground work, any work likely to pollute or dirty the water and loud noises or vibrations of the earth. Conditions attached to Section 18 applications which impact directly on the rivers tend to be concerned with: ensuring that the river’s flow is not impeded in any way; ensuring that the river bed and embankments are not damaged; ensuring the area is revegetated with the appropriate local native species and that any run-off or drainage water flowing into the rivers is appropriately filtered in order to minimise pollution of the river.

Proponents of development which impacts on rivers in the Southwest can use this research to inform themselves regarding strategies to minimise the potential affects that their development can have on the cultural values held by Nyungar people for these rivers.

## 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 this first party in 1930 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 Nyungars 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). Although many settlers perceived them as "unattractive and dirty", Preston and Collie formed a very different impression and had friendly communications with local Aborigines.

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 1890's. 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 Nyungars 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).

## ARCHIVAL RESEARCH

Archival research involved an examination of the Department of Indigenous Affairs (DIA) Sites Register, a review of any relevant site files and a review of any ethnographic Aboriginal heritage survey reports that relate to the survey 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 in law. 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 within the Aboriginal sites register. This category includes reported sites both ‘Lodged’ and awaiting ACMC assessment, and ‘Information Assessed’ by the ACMC, however awaiting a final decision on the places status. 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 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 by GIS auto down load in January 2012, and verified (12<sup>th</sup> April 2012) prior to reporting by a search of the DIA web based search engine. The searches were required in order to identify if any previously registered sites or places will intersect the road corridor (see Appendix 1: Sites Register Search).

As a result of these searches there are **no** previously recorded ethnographic sites or places within the survey corridor.

The search **did** however **identify** one previously recorded archaeological other heritage place ID 18884 Bunbury Bypass Archaeological Site 1 to be located within the survey corridor at the BORR intersection with Hastie Road. This site has a DIA polygon that predominately overlays the ramp connection of the BORR with Hastie Road. As the places is archaeological the full details regards the nature, significance and extent of this place will be provided in the accompanying archaeological report by O’Reilly and Johnston 2012.

**Table 1: Summary of Aboriginal heritage sites/places located within the search area**

Site ID	Name	Status	Access	Restriction	Location (GDA94 Zone 50)* mE                      mN		Site Type
Reported Other Heritage Place							
18884	Bunbury Bypass Archaeological site 1	L	O	N	375149	6302418	Artefacts Scatter

\* 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.

#### LEGEND

**R** – Registered Site, **I** - Insufficient Information, **S** - Stored Data, **L** - Lodged awaiting assessment, **IA** - Information Assessed, **O** – Access Open, **C** - Closed Access, **N** – File Not Restricted.

\* 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.

## REVIEW OF RELEVANT ETHNOGRAPHIC SITE FILES

As there are no ethnographic sites or places affected by the road corridor, there are no files to review.

## REVIEW OF RELEVANT ETHNOGRAPHIC REPORTS

**Goode, B 2002a**, *Ethnographic Survey of the proposed Bunbury Outer Ring Road and the Bunbury Port Access Road, Bunbury Western Australia*, A report prepared for Halpern Glick Maunsell on behalf of Main Roads WA.

Brad Goode and Associates Pty Ltd were commissioned to conduct an ethnographic survey of the proposed BORR and the PAR. Two previous surveys had been conducted for the proposals; McDonald, Hales & Associates 1995 and 1997.

In October 2001 Halpern Glick Maunsell (acting on behalf of Main Roads) received advice from the DIA that they were unable to process the Section 18 applications recommended with the McDonald 1995 & 1997 reports as it is DIA policy that ethnographic surveys are current for five years only.

The following recommendations were made by the Aboriginal community regarding the archaeological sites located on or within 300 meters of the proposed road routes:

- An archaeologist acting under a Section 16 permit with Aboriginal community representatives assisting to locate and salvage artefact material from the sites located on the proposed road route (sites ID 4880 Bunbury 20, ID 5168 Natgas 262 and ID 4875 Bunbury 14) prior to construction of the roads and that salvaged materials are to be dealt with in a manner that is consistent with the community's wishes.
- That the other archaeological sites identified to be located within 300 meters of the road works are marked by an archaeologist in order that contractors working for Main Roads WA do not disturb these sites.
- That the contractors are to be made aware of their obligations with regards to these sites.
- That archaeological monitoring is to be carried out during construction of the Bunbury Port Access Road and the sections of the BORR from Hines Road to the intersection with the PAR.

The following recommendations were made by the Aboriginal community regarding ethnographic sites located on or within 300 meters of the proposed road routes:

- That bridging the Ferguson and Preston Rivers does not affect the flow of the water and that the impact on the banks does not take place within 30 meters of the water (span bridges are the preferred option).
- That during the bridging of the Preston and Ferguson Rivers and during road works at the Boyanup Picton Road Camps Aboriginal community monitors should be present.
- That the heritage values of these rivers and camps are to be acknowledged by Main Roads WA in the form of an interpretive plaque placed at these locations.

Relevance: The 2002a proposed routes for the BORR and PAR are different to that of the current proposal; however the bridging of the Ferguson and Preston rivers remains a common issue. The recommendations made by the Aboriginal community are consistent with those made in other reports regarding the disturbance of rivers in the Southwest and are expected to be expressed regarding the current proposal. The recommendations made regarding the affected archaeological sites and archaeological salvaging/monitoring are also consistently expressed.

**Goode, B 2009b**, *A Desktop Aboriginal Heritage Survey of the Proposed Bunbury Outer Ring Road, Western Australia*, A report prepared for GHD Pty Ltd on behalf of Main Roads Western Australia.

In November 2009 Brad Goode & Associates Pty Ltd was commissioned to conduct a desktop study of the BORR and PAR road planning corridor in order to consolidate all heritage information into one report to assist in planning a road design.

Research identified 16 previously recorded Aboriginal heritage sites that overlay the wider project development.

Examination of the DIA site files has revealed that 2 sites, ID 19795 Preston River and ID 19796 Ferguson River, would be directly affected where the proposed roads intersect them.

6 archaeological sites would require further archaeological investigation to determine their actual locations and extents and the remaining 8 archaeological sites were determined to not be affected.

As a result of this report the following recommendations were made:

In regard to the two sites determined to be directly affected, ID 19795 Preston River and ID 19796 Ferguson River, it was recommended that once the bridge locations and bridge designs are determined, that consultation takes place with the sites informants prior to Main Roads lodging notice pursuant to Section 18 of the AHA.

In relation to bridge design it was further recommended that Main Roads identify a bridge design that will minimise affects to the bed and embankments of the Preston and Ferguson rivers. Bridges that span the watercourse and minimise obstruction to the water flow are always the culturally preferred option.

In regard to the identified archaeological sites it was recommended that Main Roads conduct an archaeological inspection to located and rerecord these sites to Section 18 standards, in order for Main Roads to lodge an application under Section 18 of the AHA for consent to disturb the sites, if it is determined that they are to be affected by the proposed project.

It was finally recommended that Main Roads conduct a comprehensive archaeological survey along the specific road corridor, once it is determined, as previous researches have expressed a likelihood of further, yet to be discovered, archaeological material to exist.

Relevance: The above recommended action has been put to practice within the current ethnographic and archaeological surveys.

**Goode, B, Harris, J & Johnston, S 2010**, *An Aboriginal Heritage Survey of the Proposed Bunbury Outer Ring Road (Stage 1) and the Port Access Road (Stage 2) at Picton, Western Australia*, A report prepared for GHD Pty Ltd on behalf of Main Roads Western Australia.

This report considered Stage 1 of the BORR and stage 2 of the PAR.

Resulting from the survey it was determined that two ethnographic sites, **Sites ID 19795 Preston River and ID 19795 Ferguson River will be directly affected** where the road routes bridge the rivers and creeks.

Ministerial consent conditional to the performance of propitiatory rituals and archaeological monitoring was recommended to mitigate site disturbance should Main Roads proceed under a section 18 notice.

During the survey up to seven archaeological sites were located along Moore Road within the survey corridor between the PAR and where Moore Road intersects with and Boyanup Picton Road.

Up to four of these sites **were to be directly affected** by the road construction with the others likely affected by ancillary works.

**It was recommended** that ministerial consent under section 18 of the AHA be sought to salvage and relocate all archaeological material from these sites to a block of land acquired by Main Roads as an offset for clearing where they would be reburied by nominated Nyungar Elders under supervision of an archaeologist.

Based upon the report a heritage Management Plan was developed to implement all these recommendations and any further conditions set as a requirement by the minister following consent.

Relevance: This report considers stage 1 of the project to the north. The above recommended action resulting from this survey may also be relevant to the current road proposal.

## OUTCOMES OF ARCHIVAL RESEARCH

Searches of the DIA Sites Register were conducted in order to determine the Aboriginal Heritage sites that would be affected by the proposal (see Appendix 1: Site Register Searches).

As a result of these searches there are **no** previously recorded ethnographic sites or places within the survey corridor.

The search **did** however **identify** one previously recorded archaeological other heritage place ID 18884 Bunbury Bypass Archaeological Site to be located within the survey corridor at the BORR intersection with Hastie Road. This site has a DIA polygon that predominately affects the ramp connection of the BORR with Hastie Road.

If Main Roads are required to affect this place then they **will be required** to seek ministerial consent pursuant to making application under section 18 of the AHA for consent to use the land that may contain an Aboriginal site should they wish to proceed.

As the heritage place is archaeological the full details regarding the nature, significance and extent of this place will be provided in the accompanying archaeological report by O'Reilly and Johnston 2012.

The archaeologist will determine if the site actual extent will be affected.

## 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 clarify 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' seems 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 and one unregistered Native Title Claim 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.

- **Single Noongar Claim (Area 2) WC03/7 (awaiting registration)**

Applicants: Anthony Bennell, Alan Blurton, Alan Bolton, Martha Borinelli, Robert Bropho, Glen Colbung, Ken 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, Robert Riley, Lomas Roberts, Bill Reidy, Mal Ryder, Ruby Ryder, Charlie Shaw, Iris Slater, Barbara Stamner-Corbett, Harry Thorne, Angus Wallam, Charmaine Walley, Joseph Walley, Richard Walley, Trevor Walley, William Warrell, William Webb, Beryl Weston, Bertram Williams, Gerald Williams, Richard Wilkes, Mervyn Winmar, Andrew Woodley, Humphrey Woods, Dianne Yappo, Reg Yarran, Saul Yarran, Myrtle Yarran.

- **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-Stammner, Ms Lorraine Bellotti.

## SELECTION OF SPOKESPEOPLE FOR THIS SURVEY

The selection of spokespeople for this survey was based on initial advice given from Mr Kevin Fitzgerald of the South West Aboriginal Land and Sea Council (SWALSC) who represent the Gnaala Karla Booja WC 98/058 with regards to Native Title/heritage issues in the region.

Prior to this survey Mr Sean O'Hara at SWALSC was again contacted regards the suitability of the survey team previously selected for stage 1 being appropriate to be consulted for stage 2. Mr O'Hara advised that SWALSC was comfortable with those previously selected for stage 1 being consulted for stage 2.

The consultant has a vast knowledge of the Nyungar consultants in the region having conducted consultations in the south west for over a decade and participated in the selection of spokespeople for this survey.

As a result of this pre-consultation process, the following Nyungar people were selected to participate in the survey:

**Mr Joe Northover** was born in the Collie region to parents Joe Northover Snr and Kathleen Mears. Mr Joe Northover's grandparents on his mother's side are Phoebe Newell (Collie /Badjaling area) and Jack Mears (Roebourne). Phoebe Newell's parents were Rosie Mippy (Collie) and Jack Newell (Wadjela's from Collie). Mr Joe Northover's grandparents on his father's side is Percy Riley (Dumbleyung) and Bella Kelly (Collie). Mr Joe Northover is an applicant to the Gnaala Karla Booja Native Title Claim is the former chairperson of the Ngalang Booja Council of Collie and was formerly employed as an Aboriginal Heritage Officer with the

Department of Indigenous Affairs in Bunbury. Mr Northover is widely recognised as the primary informant of the 'Ngarnjungudditj Walgu' mythology regarding the creation of the Collie River.

**Mr Peter Michael** is an applicant of the Gnaala Karla Booja Native Title Claim group and the chairperson of the Bunbury Nyungar Employment Education Development Aboriginal Corporation (NEEDAC). Mr Michael was born in Collie and has spent most of his life in Bunbury where he currently resides. Mr Michael has a long history in being active in heritage circles and is a current member and co-ordinator of the Bunbury Elders Heritage Committee that has formed in order to speak on heritage matters that affect Bunbury and the surrounding region.

**Mr James Khan** was born in the Narrogin to parents James Khan Snr (Quindanning) and Irene Hart (Narrogin). James Khan's grandparents on his mother's side were Melbourne Hart (Collie) and Lula Flox's (Lake Yealering). James Khan's grandparents on his father's side were John Regan (Bridgetown) and Alice Mary Bolton (Narrogin). The Khan name came from Phatta Khan who was an Afghan that was legally married to Alice Bolton. Mr James Khan is a member of the Gnaala Karla Booja Native Title Claim group and sits on the working party at SWALSC. Mr Khan is the vice chairperson of Ngalang Booja Council in Collie. Mr Khan is also the treasurer of South West Aboriginal Medical Service (SWAMS) and was an Aboriginal Education Officer at the Collie Senior High School.

**Ms Marie Khan** was born in Collie to Mrs Gloria (Sima) Khan-White (deceased). Mrs Khan-White was born in Duranillin to parents Mr Simon Kelly and Ms Bessie Hart, her paternal Grandparents were Mr Tim Kelly and Ms Sarah Narkle, and her maternal Grandparents were Mr Melbourne Hart (Collie) and Ms Lulu Flox (Lake Yealering). Mrs Khan-White attended school in Quindanning, Williams and Collie before being 'stolen' at the age of 11 and placed in the Wandering Mission. Mrs Khan-White returned to Collie where she was married and raised her three children for over 40 years. Mrs Khan-White was a site informant for the Collie River site complex and her daughter Ms Marie Khan was selected to participate in this survey by nomination through the Gnaala Karla Booja working party at SWALSC.

**Mrs Violet Bennell (nee Khan)** was born in Williams to parents Mr Henry Khan (Bridgetown) and Ms Blanche Hart (Collie). Mrs Bennell grandparents on her father's side are Phatta Khan (Afghan) and Alice Mary Bolton (Narrogin). Mrs Bennell grandparents on her mother's side are Mr Frank Hart (Collie) and Ms Jeffrey Dyer. Mrs Bennell went to school at Roelands Mission. Mrs Bennell resides in Bunbury and has lived there for over 35 years. Mrs Bennell worked at the Bunbury Hospital and also the Gardiner Abattoirs in Dardanup prior to getting married. Mrs Bennell is a member of the Gnaala Karla Booja Native Title Claim group and the Bunbury Elders group.

**Mr Ritchie Bennell** was born in Pingelly to parents Mr Andy Bennell and Ms Alice Hill. Mr Bennell attended school in Pingelly and on completion of his education has been employed in numerous positions and is currently employed as a bus driver in Bunbury. Mr Ritchie Bennell has lived in Bunbury for over 30 years has a long historical association with the Bunbury area and considerable heritage knowledge stating that his grandfather on his mother's side Mr Charlie Hill had camped at Burekup and Waterloo for many years when working in the area on potato farms. Mr Bennell is a member of the Gnaala Karla Booja Native Title Claim group and was identified to participate in this survey to represent the Hill/Bennell clan.

**Mr Les Wallam** is the son of Mr Lee Hart and Ms Mabel Wallam and was born in Bunbury. Mr Wallam's grandparents on his father's side were Jack Hart and Tottie Cockie. On his mother's side his grandparents were Bob Wallam and Grace Gillespie. Mr Les Wallam spent his early childhood at Roelands mission and attended high school at Harvey. He is currently employed at Roelands Village as a Project Manager.

**Mr Denis Hill** was born in Pingelly to parents Mr Charlie Hill and Ms Rachael Abraham. Mr Hill's great grandfather is 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 is a member of the Gnaala Karla Booja Native Title claim.

**Ms Dorothy Winmar** is the daughter of Ms Nancy Riley and Mr Claude Hanson. Ms Winmar's grandparents on her mother's side are Ms Eva Kelly and Mr Percy Riley, and on her father's side are Mr Larry Hanson and an Ms Cornwall. Ms Winmar is a member of the Ngalang Booja Council of Collie and the GKB Native Title Claim group.

## 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 Western Australian Aboriginal Heritage Act (1972) within the project 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

Representatives from Gnaala Karla Booja WC 98/058 Native Title Claim Group were contacted by phone with a meeting arranged at the Main Roads office in Bunbury. The informants were orientated to the project with the aid of a large aerial photo with the locations of the previously recorded Aboriginal heritage sites marked. Following this orientation the survey team conducted an inspection of areas of interest by vehicle and on foot. Following this inspection, recommendations made by the Nyungar representatives were recorded by the anthropologist in a notebook. Photos and GPS (Garmin CX 60's) coordinates of locations visited were also taken throughout the consultation process.

### COMMUNITY CONSULTATION PROCESS

**On the 21<sup>st</sup> February 2012**, the consultants; Mr Brad Goode (Anthropologist) and Mr Colin (Floyd) Irvine (Ethnographer) in company with representatives from Main Roads; Mr Gerry Zoetelief (Senior Project Manager), Mr Alan Grist (Project Manager SW Region), Mr Daniel Voery (Graduate Engineer), and Mr Neil Mc McCarthy (Senior Environmental Scientist - from GHD) met representatives from Gnaala Karla Booja WC 98/058 Native Title Claim Group; Mrs Violet Khan (nee Bennell), Mrs Marie Khan, Mr Denis Hill, Mr Peter Michaels, Mrs Janine Williams (for Mr Les Wallam), Mr James Khan, Mr Richard Bennell, Dorothy Winmar and Mr Joe Northover at the Main Roads office in Bunbury for a briefing.

The group viewed a power point presentation that included several overhead projections of large aerial photographs and plans showing the route of the intended by-pass road and the location of a reported Aboriginal heritage place.

The aerial photograph indicated to the group the type of country that the proposed by-pass road will traverse. For much of the route the proposed road will cross mainly cleared land presently used for farming. It will cross through or close to several degraded seasonally inundated wetlands (some stands of Melaleucas exist but the understory has been removed through years of grazing). The section of road closest to the Gelorup end runs through some areas of high quality vegetation consisting of Jarrah and Banksia woodland with a largely intact understory. This area also contains part of the Five Mile Brook and is characterised by high secondary sand dunes.

The group was informed that an artefact scatter had previously been recorded on the corner of Hastings Road. The alignment of the proposed road was investigated by archaeologists and they determined that the site was likely to be affected by the road proposal. At the stage that planning was at for the project it was unclear if the site would be actually affected.

The group advised that as the area was disturbed by a sand quarry that any material left had limited cultural significance, all agreed that avoidance would be their preference but if this is

not possible then a section 18 consent notice followed by salvage and relocation would be the next best course of action.

Several members of the group asked if the road would disturb ground water levels and if flora surveys had been conducted through the area. The group was told that most of the roadway would be raised above the existing ground level by around 1.5 meters where it traversed the flat farm land and that there would be some cutting through the dune area to lower the level of the road. As there was no intention of lowering the road and potentially interfering with the groundwater the group was told the road would have no impact on the groundwater.

The road will be constructed in such a manner that there will be future potential to include a train line to Busselton running down the space between the north and southbound lanes.

The road will also include a 'fly-over' bridge which will allow Yolinda Drive, an existing residential service road, to pass over the Bunbury Outer Ring Road. It is currently planned for the fly over to incorporate a 5 meter wide 'planter box' as part of the bridge to establish a vegetated corridor for fauna (particularly Western Ringtail Possum) to cross above the Bunbury Outer Ring Road thereby linking areas of high quality vegetation. This is a proposed trial for the concept to determine if it is possible to establish the vegetated corridor and to see if animals will use it.

The group expressed their support for the proposal.

The group was told that in the Gelorup area the road would pass through high value vegetation and an area recognised as having potential to harbour Western Ring-tailed possums. The group was informed that this section of the road would entail around 20-25 ha of clearing and that Main Roads was purchasing an area of uncleared bushland to be kept as an offset to the proposed clearing for the construction of the road. The offset will link existing DEC Conservation Reserves creating a larger conservation area. The offset would eventually be ceded to DEC for management.

Mr Joe Northover commented that many conservation reserves have become places for people to dump their rubbish and to ride trail-bikes. He said that if we were able to find the necessary funding to build roads there needed to be allowances for the maintenance of the conservation reserves as well.

The road will be fenced to prevent stock and wildlife from entering the road reserve and 'noise walls' will be built where the road passes close to existing residential areas and where vehicle noise is likely to exceed acceptable limits.

Mrs Janine Williams suggested that the walls would provide an opportunity for Nyungar artists to paint and display their art and culture to the wider public. Mr Jerry Zoetelief told the group that where there were going to be noise walls there would be plantings of native vegetation varying between 10 -15 meters thick screening the wall from the road. He suggested that the bridge abutments would be more appropriate as places to display Aboriginal artworks.

Mr Brad Goode asked the group if they felt they had been adequately briefed on the proposed road works. The group replied they felt they had been and were then asked if they had any comments to make of the proposal.

Mr James Khan requested that provision to employ and train Nyungar people on the project be given support.

The group also requested that the road should be given a Nyungar name which reflected the heritage of the area.

Mr Gerry Zoetelief said he thought there would be a greater chance of getting support for Noongar names for the bridges than the actual highway but said that if the group was able to provide a list of suitable names Main Roads would support appropriate suggested names at the appropriate decision making level.

The group stated they were not happy with the naming of the Forrest Highway but were supportive of the dual naming of the bridges and rivers in the northern section of the Forrest Highway. The group said that the same dual naming of bridges and watercourses in the southern section of the highway including the Bunbury Outer Ring Road should continue. Mrs J Williams also said that the conservation offset which was also being used as a repository for artefacts disturbed during the road-works should also be given a Nyungar name.

The group then went on a site inspection by vehicle to see the location of the previously recorded archaeological site and other parts of the proposed road which were accessible.

The first stop was the location of the proposed roundabout on the corner of Queelup and Centenary Rd. This is open country currently used for farming with some stands of mature Peppermint and Marri trees. The group was told there would be some clearing of trees where necessary but that the road would mainly run through cleared land.



**Figure 2: Other Heritage Place ID 18884 Bunbury Bypass Archaeological Site 1, view looking to southeast**

The group then drove to Hastie's Rd, the location of the previously recorded artefact scatter. The recorded site location is between a large bund of earth and an area previously used to extract sand, the group declined to inspect the site to try to locate artefacts saying they were satisfied the archaeologists would have been thorough and that they could see the area had been highly disturbed in the past and now had little cultural significance.

The group requested that an archaeologist and monitors to be present during earthworks to salvage and relocate any artefacts or other cultural material should a ministerial consent notice be required to affect the area.

The group then drove to the end of Marchetti Rd which is located close to the end of the section of road which will run through the cleared farmland. To the east of the end of Marchetti Rd there is a small sandy hill which will require some cutting to allow for the proposed road. Mr Joe Northover identified this as having a higher potential to have been used as a camping place and also as a place which could contain burials, upon this basis he requested monitoring in this area.



**Figure 3: Dunes that Mr Joe Northover identified as potential to contain burials located east of the end of Marchetti Rd**

The group then drove to the end of Yolinda Drive to inspect the location of the proposed overpass which will contain the ‘planter box’ fauna link trial. It was suggested by the Nyungar informants that this overpass should be named ‘*Coomal*’ – the local word for possum.

The group then drove to the end of Jilly Rd where the proposed road will run through the area of high quality vegetation. This area is also close to the point the road would cross the Five Mile Brook.

The group was told that the crossing of the Five Mile Brook would not be a bridge but a series of concrete culverts allowing the flow of water beneath the road. The group asked if the brook drained towards the Preston or Ferguson rivers and was told the brook drained towards a swampy area near the coast and was not a tributary of the other rivers.

Sections of the Five Mile Brook have clearly been modified (straightened and cleared of obstructions) although the area of the proposed crossing is apparently in a ‘natural’ state. That is to say the course of the creek does not appear to have been dug or straightened in the location of the proposed crossing although the banks of the creek (which was dry when inspected) were covered with introduced grass and had no native understory plants. It was also located in a modified semi-rural housing area and may be mowed by the residents.

Mr James Khan said the creek expressed the view that the creek was in a ‘natural’ state and said that he believed the creek should be registered as an Aboriginal heritage site as for all the other waterways in the region.

In response Mr Brad Goode asked Mr Khan to specify the cultural values of this waterway and to advise what values he sought to protect by reporting the creek under section 5 of the AHA.

Mr Khan said that it was because the traditional Aboriginal people would always have followed the creek on their seasonal fishing visits to the coast. He said that the creek was also important to the wildlife and said there must be water close by as the group had just seen kangaroos on their drive in. He said the waterway was a source of food and a path to the ocean. He also said that he would like to see the large trees preserved as much as possible. He said that the age of an old tree was culturally important as it was truly the same vegetation as had been seen by his ancestors.



**Figure 4: Group discuss the crossing of the Five Mile Brook, the clearing of vegetation and Nyungar values regarding waterways.**

Mr Goode asked Mr Khan and the rest of the group if they could specify any specific myth regarding this creek or if they knew of any customary use of places along its course either traditionally, historically or in contemporary times. In reply all stated that they had no specific knowledge of such myth or use.

In terms of the entire road alignment the group then discussed the possibility of burials existing in the sand dunes and agreed there was a high likelihood of burials in that type of country. The group said they could see that most of the route of the road was through cleared farmland and that where the road did pass through areas of high quality vegetation it tended to have been routed through areas that had been previously disturbed by grazing (evident were old fences and an altered understory but there is currently no stock on the land).

The group was asked if they had any other cultural or heritage issues with the proposed road. The group said they had no objections with the road and their only concerns were that there should be monitoring in the area of the previously recorded artefact site and also in the areas where the road passed through the secondary dunes nearer to where the Bunbury Outer Ring Road connects with the Bussell Highway.

## COMMUNITY CONSULTATION OUTCOMES

As a result of the above consultations no new ethnographic sites of significance as defined by Section 5 of the Western Australian Aboriginal Heritage Act (1972) were identified to be located along the proposed corridor for Stage 2 of the Bunbury Outer Ring Road.

In terms of the potential affects upon previously recorded archaeological other heritage place ID 18884 Bunbury Bypass Archaeological Site 1, all consulted;

- advised that as the area was disturbed by a sand quarry that any material left had limited cultural significance, all agreed that avoidance would be their preference but if this is not possible then a section 18 consent notice followed by salvage and relocation would be the next best course of action.
- That recognition of the cultural significance of the area to Nyungar people through the naming of bridges and roads with Nyungar names is considered.
- That dunes near the southern end of the road should be monitored as the group considers that there is some potential for burials in coastal sands
- That Main Roads should replant areas being cleared with local native species and protect all waterways and riparian areas.
- That Main Roads consider creating employment opportunities for Nyungar people during the construction stage of the project.

## RECOMMENDATIONS

As a result of the above consultations no new ethnographic sites of significance as defined by Section 5 of the Western Australian Aboriginal Heritage Act (1972) were identified to be located along the proposed corridor for Stage 2 of the Bunbury Outer Ring Road, **it is recommended** that the project should proceed as planned.

As a result of the survey it is likely **that** previously recorded archaeological other heritage place ID 18884 Bunbury Bypass Archaeological Site 1 will be affected by the construction of the ramp connection of the BORR with Hastie Road.

As such **it is recommended** that Main Roads make application under Section 18 the Western Australian Aboriginal Heritage Act (1972) for consent to use the land that may contain an Aboriginal site.

As most representatives from Gnaala Karla Booja WC 98/058 Native Title Claim Group who were consulted advised that the site had little contemporary cultural significance **it is further recommended** that ministerial consent should be given.

Should ministerial consent be given, **it is recommended** that prior to any work commencing that Main Roads in consultation with the above claim group **develop a cultural heritage management plan** whereby the salvage and relocation of the material can occur prior to construction.

In terms of all salvaged archaeological material **it is recommended** that Main Roads provide suitable land as a repository site. Ideally this site would be close by to where the artefacts have come from. However Nyungar community monitors should be able to determine where to place material during the salvage operation. The repository should then be registered and protected under the AHA.

**It is recommended** that Main Roads give due recognition of the Nyungar community as prior owners of the land and as a community willing to accommodate development that affects cultural values. This could be achieved by the naming of roads and bridges with Nyungar names.

**It is finally recommended** that Main Roads give due consideration to the use of local native species for rehabilitation and the creation of employment opportunities are considered

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**REPORT ON AN ARCHAEOLOGICAL SURVEY OF THE  
BUNBURY OUTER RING ROAD (SOUTHERN SECTION)  
PROJECT AREA, BUNBURY, WESTERN AUSTRALIA**



*Prepared for GHD Pty Ltd on behalf of Main Roads WA*

*by*

**Thomas O'Reilly**

*on behalf of*

**BRAD GOODE & ASSOCIATES**

April 2012

## EXECUTIVE SUMMARY

In January 2012, GHD Pty Ltd on behalf of Main Roads Western Australia, commissioned an archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area, centred approximately 9km SSE of the Bunbury City centre. It comprises a single discrete survey area that is irregularly shaped and which traverses an area that comprises cleared paddocks and road reserve corridors with some patches of remnant bush. GHD Pty Ltd on behalf of Main Roads Western Australia proposes to construct a dual carriageway and associated overpasses and service roads within the Bunbury Outer Ring Road (Southern Section) Project Area.

The Bunbury Outer Ring Road (Southern Section) Project Area extends for approximately 9km from South Western Highway near the intersection of Centenary Road to Bussell Highway between Woods Road and Calinup Road and varies in width from 50m to 150m.

The archaeological survey discussed in this report was undertaken to identify and record any Aboriginal archaeological sites that may be located within the Bunbury Outer Ring Road (Southern Section) Project Area, in order that GHD Pty Ltd and Main Roads Western Australia can avoid disturbing them or, as required under Section 18 of the Western Australian *Aboriginal Heritage Act 1972*, seek the consent of the Minister for Indigenous Affairs to proceed with activities that may disturb Aboriginal heritage sites.

The archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area included research at the Heritage and Culture Division, Department of Indigenous Affairs (WA) to assess and investigate the results of any previous archaeological surveys and investigations undertaken in the immediate vicinity of this area as well as in the wider region. Sources of environmental information were also utilised before a systematic archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area was conducted.

As a result of research at the Heritage and Culture Division, Department of Indigenous Affairs (WA) and a search of their Aboriginal Sites Database, it was established that no registered Aboriginal archaeological sites or sites with an archaeological component, are located within the survey area. However, it was established that one 'other heritage place' (Bunbury Bypass Archaeological Site 1) has been registered at a position that abuts and is encompassed by the survey area. It is noted here that information pertaining to the Bunbury Bypass Archaeological Site 1 (DIA 18884) 'other heritage place' has been reported to the Registrar of Aboriginal Sites and assessed by the Site Assessment Group. This is not the final assessment. The final assessment is yet to be determined by the Aboriginal Cultural Material Committee. Consequently, the Bunbury Bypass Archaeological Site 1 (DIA 18884) appears on the Department of Indigenous Affairs' Aboriginal Sites Database as 'Other Heritage Place'. Despite this, the provisions of the *Aboriginal Heritage Act 1972* still apply to this other heritage place until it is assessed as a place to which the *Aboriginal Heritage Act 1972* does not apply.

The Bunbury Bypass Archaeological Site 1 (DIA 18884) was initially identified during an archaeological survey of the proposed Bunbury Bypass Road over fifteen years ago (Hammond and O'Reilly 1995). During the course of fieldwork associated with the archaeological survey described in this report, the Bunbury Bypass Archaeological Site 1 (DIA 18884) other heritage place was visited and scrutinised for the presence of Aboriginal archaeological material. As a consequence, it was established that the Bunbury Bypass Archaeological Site 1 (DIA 18884) other heritage place is a very sparse artefact scatter which abuts and is encompassed by the survey area. The Bunbury Bypass Archaeological Site 1 (DIA 18884) other heritage place was subsequently re-recorded and its precise location and extent determined. Its extent, location and artefact assemblage were found to be consistent with the descriptions and data recorded when this other heritage place was initially identified over fifteen years ago.

The Bunbury Bypass Archaeological Site 1 (DIA 18884) artefact scatter was identified within what appears to have been a dam structure where an area of yellow sand has been excavated and either removed or used to construct the southern dam wall. It is estimated to contain not more than twenty artefacts and has an artefact assemblage manufactured exclusively on quartz and dominated by flaked pieces and flake fragments. While a single quartz backed blade was identified, no grinding material or other retouched/utilised artefacts were observed at this site and although artefacts may be present below the surface, there is little or no potential for it to contain stratified cultural deposits. The artefact assemblage at the Bunbury Bypass Archaeological Site 1 artefact scatter is very small, unremarkable and generally typical of other artefact scatters located in the wider region. As a result of its size, limited artefact assemblage and disturbed context, the Bunbury Bypass Archaeological Site 1 artefact scatter is assessed here as having very low archaeological significance.

No other Aboriginal archaeological sites or material were identified as a result of the archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area.

It is therefore recommended that GHD Pty Ltd and/or Main Roads Western Australia be allowed to proceed with their proposal to construct a dual carriageway and associated overpasses and service roads within the Bunbury Outer Ring Road (Southern Section) Project Area, on the condition that they avoid any impact upon or disturbance to the heritage place Bunbury Bypass Archaeological Site 1 (DIA 18884). If any impact upon or disturbance to the heritage place Bunbury Bypass Archaeological Site 1 (DIA 18884) cannot be avoided then GHD Pty Ltd and/or Main Roads Western Australia, as required under Section 18 of the Western Australian *Aboriginal Heritage Act 1972*, need to seek the consent of the Minister for Indigenous Affairs to proceed with activities that may disturb Aboriginal heritage sites.

## INTRODUCTION

An archaeological survey for Aboriginal archaeological sites was commissioned by GHD Pty Ltd on behalf of Main Roads Western Australia, in January 2012. The primary aim of this survey was to examine the Bunbury Outer Ring Road (Southern Section) Project Area, south-southeast of Bunbury (WA) and to record and report any Aboriginal archaeological sites that may be located within it. A preliminary assessment of the archaeological significance of any such site(s) will be given and their extent determined in order that GHD Pty Ltd and Main Roads Western Australia can avoid disturbing them or, as required under Section 18 of the Western Australian *Aboriginal Heritage Act 1972*, seek the consent of the Minister for Indigenous Affairs to proceed with activities that may disturb Aboriginal heritage sites.

The area designated by GHD Pty Ltd to be surveyed was an irregularly shaped corridor that extends for approximately 9km from South Western Highway near the intersection of Centenary Road to Bussell Highway between Woods Road and Calinup Road and varies in width from 50m to 150m. In the following pages this is referred to as the survey area. GHD Pty Ltd proposes to construct a dual carriageway and associated overpasses and service roads within the survey area. Knowledge of the location and extent of any Aboriginal archaeological sites that exist within the survey area will facilitate the making of management decisions that will ensure that these sites are not inadvertently impacted upon by any road work or related activities.

As part of the archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area, data was gathered from reports on previous archaeological surveys and investigations undertaken in the vicinity of this area and in the wider region. Details of previously recorded and/or registered Aboriginal archaeological sites in the region were obtained from the relevant site files held at the Heritage and Culture Division, Department of Indigenous Affairs (WA) and, where possible, from unpublished reports on previous archaeological surveys. In addition to this, a review of maps, environmental information and academic research carried out within the wider region was also undertaken. Thomas O'Reilly and Stuart Johnston undertook the fieldwork associated with the archaeological survey in January 2012.

## LOCATION OF THE SURVEY AREA

The Bunbury Outer Ring Road (Southern Section) Project Area is centred approximately 9km SSE of the Bunbury City centre and comprises a single discrete survey area (Figure 5). It is irregularly shaped and extends for approximately 9km from South Western Highway near the intersection of Centenary Road to Bussell Highway between Woods Road and Calinup Road and varies in width from 50m to 150m (Figure 6).

The Bunbury Outer Ring Road (Southern Section) Project Area traverses an area that comprises cleared paddocks and road reserve corridors with some patches of remnant bush.

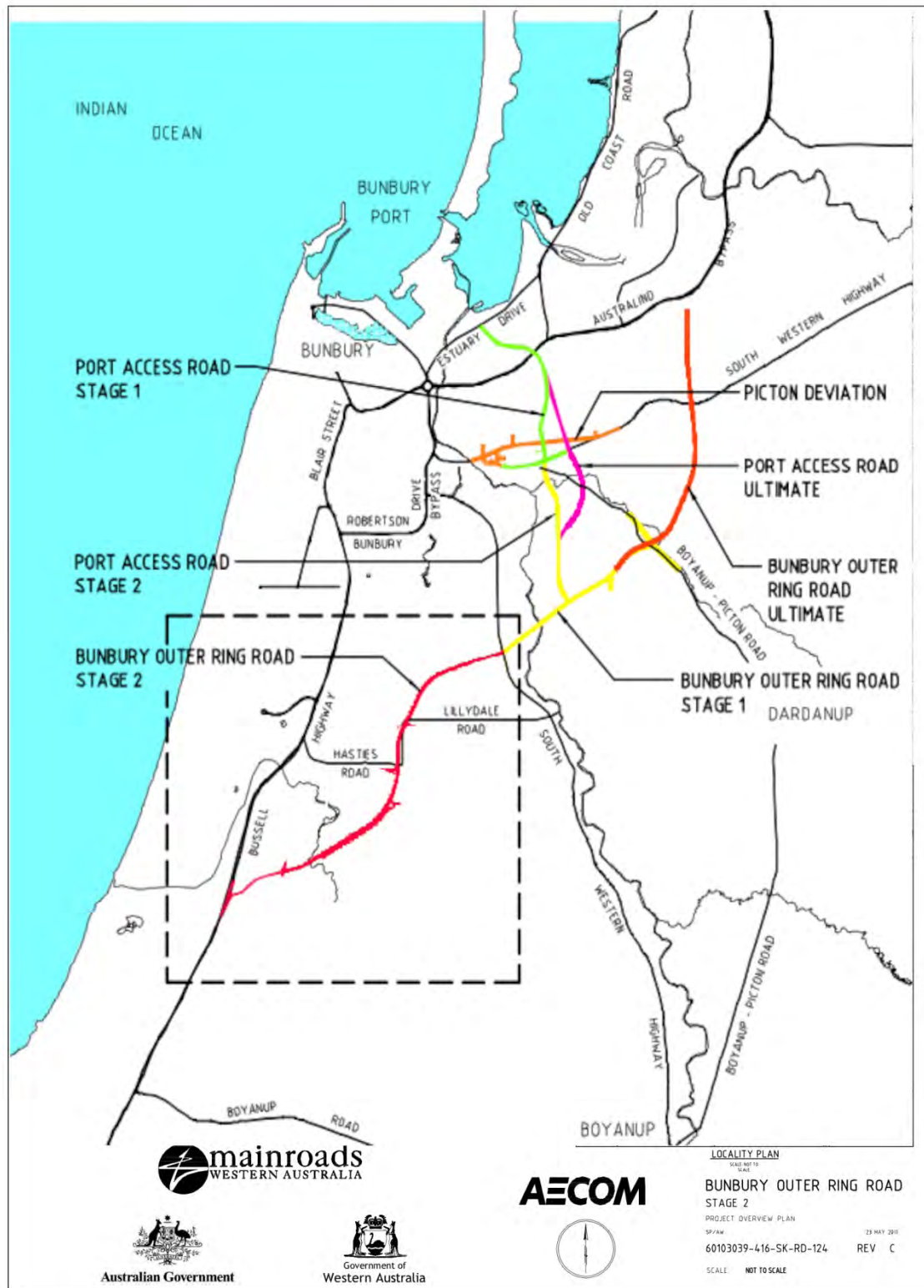


Figure 5: Location Plan: Bunbury Outer Ring Road (Southern Section) Project Area.

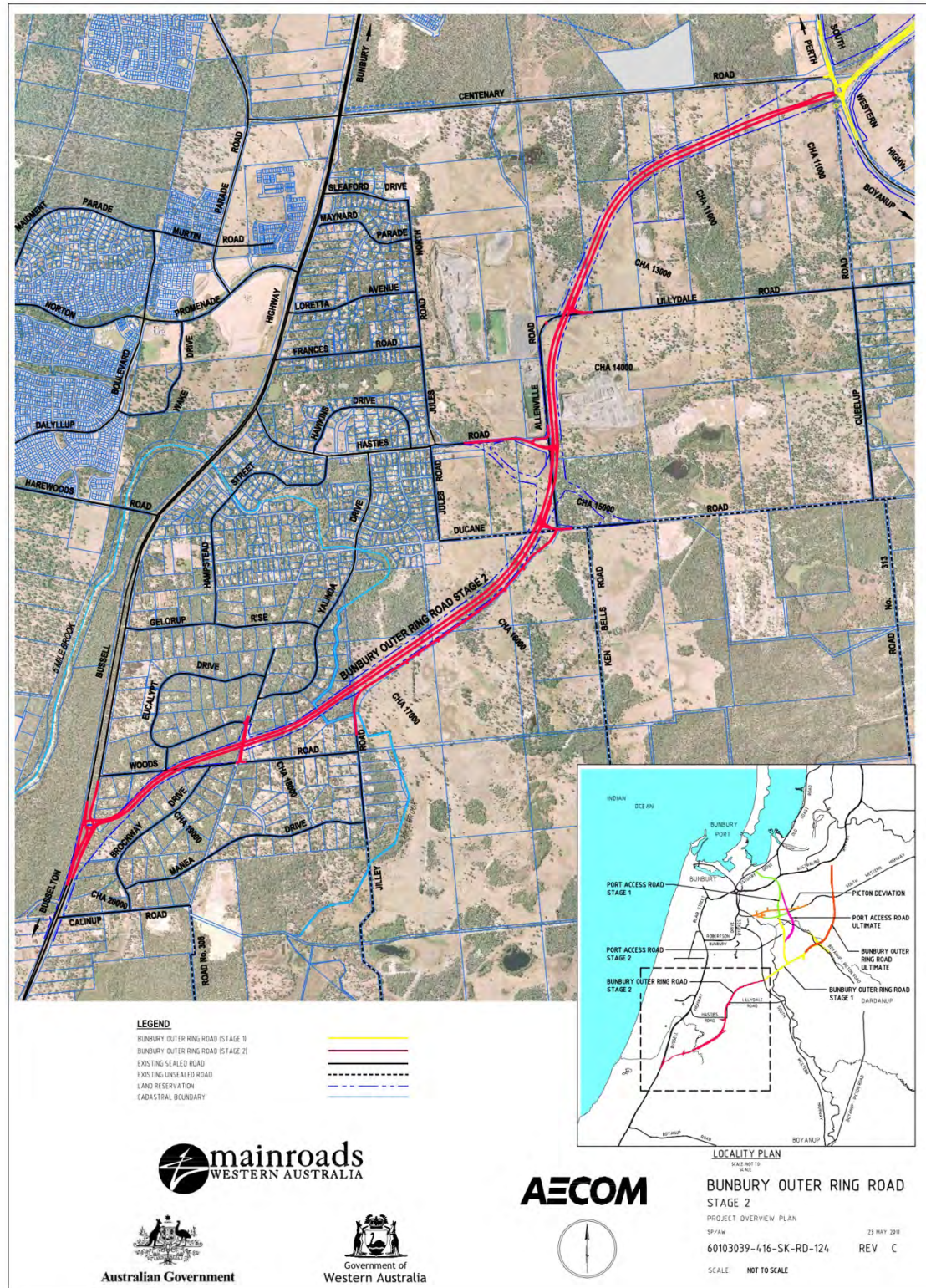


Figure 6: Bunbury Outer Ring Road (Southern Section) Project Area.

## ENVIRONMENTAL BACKGROUND

### CLIMATE

The survey area lies within a Dry Mediterranean climatic zone averaging between five and six dry months per year (Beard 1981). Climatic recording stations located at Bunbury have recorded weather conditions in the area for over a century. During the winter months (June-August) the long term average maximum temperature is 17.2°C, and the long term average minimum is 8.7°C. In summer (December-February) the equivalent temperatures are 27.0°C maximum and 14.8°C minimum (Bureau of Meteorology, Australia 2012). It is likely that average temperatures in and near the survey area follow a similar trend to those recorded in Bunbury.

The survey area and its surrounds lie within a region that has received an average annual rainfall of approximately 718mm since 1995. Approximately 57% of this rain falls in the winter months, and less than 5% in the summer, the rest being distributed between spring and autumn (Bureau of Meteorology, Australia 2012). Typically there is a summer drought of several months duration, when high evaporation exacerbates the shortage of surface water.

### GEOLOGY AND LANDFORMS

The geology of the area in and around the survey area has been mapped and described in detail on the Collie 1:250 000 map sheet and accompanying notes (Wilde and Walker 1982) with a more detailed account given on the Bunbury-Burekup 1:50,000 urban geology map sheet (Geological Survey of Western Australia 1981).

In general, the survey area is located on the western edge of the Perth Basin, a polycyclic basin consisting of a Silurian to early Neocomian sequence deposited in an interior-fracture setting, and an overlying late Neocomian Quaternary sequence laid down in a marginal sag basin (Cockbain 1990:495). That part of the Perth Basin that lies between the Darling Fault and the Indian Ocean is known as the Swan Coastal Plain, a narrow strip of land between 15 and 30km wide, that extends from around Jurien Bay southwards to Busselton (McArthur 1991). Most of the Swan Coastal Plain is covered by Quaternary sediments of fluvial and aeolian deposits, deposited in a series of geomorphic entities zones sub-parallel to the present coastline (McArthur and Bettenay 1974). Five geomorphic entities are recognised by McArthur and Bettenay (1974) the most westerly of which is the Quindalup Dune System that borders the present coastline. This is bounded to the west by the Spearwood Dune System with the Bassendean Dune System lying between this and the Pinjarra Plain.

Geologically, all but the western end of the survey area is located on the Bassendean Dunes System of the Swan Coastal Plain. This system, which occurs immediately to the west of the Pinjarra Plain, generally comprises low hills of siliceous sand interspersed with poorly drained areas (McArthur and Bettenay 1974). The surface geology can be characterised as grey alluvial sand within and adjacent to that part of the survey area located on the Bassendean Dunes.

The western end of the survey area is located on the Spearwood Dunes System of the Swan Coastal Plain. This system, which occurs immediately to the west of the Bassendean Dunes System, generally comprises “a core of aeolianite with a hard capping of secondary calcite overlain by variable depths of yellow or brown sand” (McArthur and Bettenay 1974:13). The surface geology within and around the western end of the survey area can also be characterised as grey alluvial sand.

As stated above, the Bunbury Outer Ring Road (Southern Section) Project Area traverses an area that comprises cleared paddocks and road reserve corridors with some patches of remnant bush. With the exception of a large sand hill south of Ducane Road and more elevated ground west of Cokelup Road, the survey area is generally flat.

While some low lying areas were observed in the paddocks mentioned above, well defined drainage features were generally absent from the survey area. The exception to this is a narrow ephemeral drainage line that crosses the survey area between Cokelup Road and Jilley Road. This drainage feature was dry at the time of the archaeological survey discussed in this report.

The Bunbury Outer Ring Road (Southern Section) Project Area is located in a region that has been and still is utilised by the pastoral industry and to a lesser degree by a small residential urban population. As a consequence, the majority of the land in and adjacent to the survey area has been universally disturbed and modified.

## VEGETATION

Beard (1981) notes the relationship between specific soil types and vegetation. The survey area and its surrounds are located in the Drummond Botanical Sub-district of the Darling Botanical District (Beard 1981).

Generally, the vegetation within the survey area would probably have been characterised by scrub vegetation with *Banksia* low woodland dominated by *Banksia attenuata*, *B. menziesii*, *B. ilicifolia*, *Eucalyptus tottiana* and *Nuytsia floribunda*, with a dense understorey of sclerophyll shrubs. However, as noted above, the majority of the land within and adjacent to the survey area has been universally disturbed and modified which has resulted in almost all the native vegetation having been cleared.

At the time of the archaeological survey, the vegetation within those parts of the survey area that traverse cleared paddocks, was dominated by a moderate to dense cover of low (<0.3m) grasses in some places and generally sparse grasses in others. Some *Eucalyptus* spp. trees to 15m, a small stand of pepper trees (*Agonis flexuosa*) to 4m and the occasional small paperbark tree (*Melaleuca* spp) to 3m were also observed in or adjacent to the survey area. As a consequence, surface visibility within that part of the survey area that traverses cleared paddocks was variable and ranged from <10% to approximately 40%. Areas of excellent visibility (>80%) were limited to cleared fire breaks, fence lines, tracks and other opportunistic exposures.

The vegetation on the large sand hill south of Ducane Road comprised numerous *Banksia* spp. trees to 10m over a sparse to moderate cover of low grasses. Visibility on this sand hill was generally good and averaged approximately 40%.

The vegetation within the remainder of the survey area comprised numerous areas of regrowth with *Eucalyptus* spp. trees to 10m over low shrubs to 1m, numerous grass trees (*Xanthorrhoea* spp.) to 1m and some grasses with a moderate to dense cover of leaf litter in some parts. Surface visibility within this part of the survey area was also variable and ranged from <10% to approximately 30%. It is noted here that where ground visibility was very low, adjacent cleared fence lines and fire breaks afforded excellent ground visibility at approximately 80%.

## ARCHAEOLOGICAL BACKGROUND

### DEFINITIONS

The commonest Aboriginal archaeological materials found in Australia are discarded stone tools, or the debris from making such tools by knapping. These artefacts formed a small but durable part of the Aboriginal tool-kit. Often stone tools were used to manufacture other tools from organic materials that have not survived. Where numerous artefacts occur in context and in association they constitute an artefact scatter and together comprise the scatter's artefact assemblage.

Artefact scatters generally represent campsites. Large scatters are places that were regularly occupied, sometimes for long periods and represent the accumulation of many overlapping smaller camps. Small scatters are the remains of sites that were briefly occupied, probably on several occasions. Very small scatters may be evidence of an overnight camp, meal-time camp or work area where specific activities were carried out.

Many stone arrangements have been interpreted as ceremonial sites, but this rarely can be established. Stone arrangements can consist of hundreds of stones arranged in elaborate lines or in mounds, or can be a single line or small cluster. Solitary placed or standing stones may have served as a sign; for example, as a warning to avoid a specific site or as an indicator of water. Some stone arrangements are the remains of hunting hides or the bases of huts.

A place where stone was obtained for making stone tools is a quarry. Generally quarries contain knapping centres or core reduction areas where knapping was intensive. Quarries are found at occurrences of highly siliceous stone, such as chalcedony, chert, silcrete, quartz, *etc.* Finished artefacts are not common at quarries and the vast majority of material found at this type of site is waste, called debitage or debris, from making tools or preparing cores for transport off the quarry for later use.

Apart from concentrations of artefacts at campsites, there are also solitary artefacts that are distributed at a very low density across the landscape. These form a background scatter that probably represents evidence of dispersed hunting and gathering activities. In some instances, isolated finds are found beside watercourses in a long ribbon known as a 'creekline scatter'.

For the purposes of the survey discussed in this report, an archaeological "site" is defined as a place where "significant traces of human activity are identified" (Renfrew & Bahn 1991:42). In other words, where there is substantial *in situ* evidence of past Aboriginal occupation or activity. This is a scientific definition, not a legal definition.

The decision as to whether a place might or might not constitute a "site" under Section 5 of the W.A. *Aboriginal Heritage Act 1972*, is made by the Aboriginal Cultural Material Committee. Excerpts from the Act are included in Appendices 2 and 3. Most types of Aboriginal sites are described in more detail in Appendix 3. It is important to note that all sites are protected under the W.A. *Aboriginal Heritage Act 1972*, whether known or not, and that it is an offence to disturb or conceal a site, or remove artefacts, without appropriate consent.

### REGISTERED SITES

As a result of research undertaken at the Heritage and Culture Division, Department of Indigenous Affairs (WA) and a search of their Aboriginal Sites Database prior to the archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area, it was established that no registered Aboriginal archaeological sites or sites with an archaeological component are located within the survey area. However, it was established, on the basis of information given on the Department of Indigenous Affairs' Aboriginal Sites Database that one 'other heritage place' (Bunbury Bypass Archaeological Site 1) has been recorded at a

position that abuts and is encompassed by the survey area. It is noted here that information pertaining to the Bunbury Bypass Archaeological Site 1 (DIA 18884) 'other heritage place' has been reported to the Registrar of Aboriginal Sites and assessed by the Site Assessment Group. This is not the final assessment. The final assessment is yet to be determined by the Aboriginal Cultural Material Committee. Consequently, the Bunbury Bypass Archaeological Site 1 (DIA 18884) appears on the Department of Indigenous Affairs' Aboriginal Sites Database as 'Other Heritage Place'. Despite this, the provisions of the *Aboriginal Heritage Act 1972* still apply to this other heritage place until it is assessed as a place to which the *Aboriginal Heritage Act 1972* does not apply.

The Bunbury Bypass Archaeological Site 1 (DIA 18884) was initially identified during an archaeological survey of the proposed Bunbury Bypass Road over fifteen years ago (Hammond and O'Reilly 1995). According to Hammond and O'Reilly (1995), the Bunbury Bypass Archaeological Site 1 (DIA 18884) is located approximately 30m to the southwest of the intersection of Hasties Road and Allenville Road. They described it as a very low density artefact scatter situated within a large dam structure which measures approximately 50m x 100m. They identified two discrete artefact clusters on the dam wall, one in the southwest corner and one in the southeast corner which combined contained a total of fourteen artefacts. Hammond and O'Reilly (1995:31) subsequently recorded these artefacts and identified four complete flakes (28.6%), nine flake fragments (64.3%) and one core fragment (7.1%), all of which had been manufactured on quartz.

During the course of fieldwork associated with the archaeological survey described in this report, the Bunbury Bypass Archaeological Site 1 (DIA 18884) was visited and re-recorded. This artefact scatter is described and discussed in detail in 'Site Description' in the 'Results' section of this report.

Beyond the survey area but within approximately 3km of its boundaries, the Department of Indigenous Affairs has files on one registered Aboriginal archaeological site and twelve 'other heritage places' that have been registered as Aboriginal archaeological sites. Details of these registered sites and other heritage places are given in Table 2. Additional information was obtained from the relevant site files and unpublished reports held at the Department of Indigenous Affairs. A brief review of these will highlight the types of Aboriginal archaeological sites and other heritage places already known to exist in the vicinity of the survey area as well as their geomorphological context.

The Bunbury 23 archaeological site and the Bunbury 10, Bunbury 15, Bunbury 16, Bunbury 17, Bunbury 18, Bunbury 24 and Bunbury 08 other heritage places listed in Table 2 were all initially identified and recorded in 1978 by staff from the Western Australian Museum during the course of an archaeological survey of the wider Bunbury region. The Bunbury 23 site is described in the relevant site file as an artefact scatter that was identified on grey sand along part of cleared firebreak and which comprises numerous quartz flakes.

The Bunbury 10, Bunbury 15, Bunbury 16, Bunbury 17, Bunbury 18, Bunbury 24 and Bunbury 08 other heritage places have all been registered as artefact scatters. According to the relevant site file, the Bunbury 10 artefact scatter was identified in an area of yellow sand 220m x 170m that had been cleared for residential development. At the time it was recorded it artefact assemblage comprised three quartz flakes and one piece of fossiliferous chert.

The Bunbury 15 artefact scatter was identified on the pale yellow sand embankment of a large road cutting approximately 0.4km along Moore Rd from the junction of South Western Highway. While no estimate of the site extent is given in the relevant site file, its artefact assemblage is described as comprising numerous small quartz flakes and chips on the southeast embankment and two quartz chips on the northwest embankment. A recent visit to this other heritage identified six small flakes and chips that had been manufactured on quartz and crystal

quartz (Harris and Johnston 2010). These were identified on a mixed yellow and white sandy embankment.

The Bunbury 16 artefact scatter was identified in a road cutting 0.9km along Moore Road from South Western Highway on the west side of the junction of Moore Road and Wallrodt Road. At the time it was initially recorded the Bunbury 16 artefact assemblage was described as comprising mainly large unmodified quartz flakes, several modified quartz flakes and several chips. A more recent visit to the Bunbury 16 artefact scatter resulted in no artefacts being identified. According to Harris and Johnston (2010:49) it is possible that the entrance to Wallrodt Road may have widened over the years and, presumably, has resulted in the concealment of any artefacts that may have once been visible on the surface.

**Table 2: Registered Aboriginal archaeological site and ‘other heritage places’ located within 3km of the survey area.**

SITE ID.	Status	Access	Restriction	Name	Location (Zone 50)		Site Type
					East	North	
Registered Archaeological Site							
4873	R	O	N	Bunbury 23	377689	6306898	Artefact Scatter
Other Heritage Places							
4866	I	O	N	Bunbury 10	374639	6307648	Artefact Scatter
4876	I	O	N	Bunbury 15	380688	6307067	Artefact Scatter
4877	I	O	N	Bunbury 16	380380	6306751	Artefact Scatter
4878	I	O	N	Bunbury 17	380595	6306465	Artefact Scatter
4879	I	O	N	Bunbury 18	380293	6306026	Artefact Scatter
4881	I	O	N	Bunbury 24	373702	6303011	Artefact Scatter
4919	I	O	N	Bunbury 08	377439	6308148	Artefact Scatter
5169	S	O	N	Natgas 263	380639	6306648	Artefact Scatter
5814	I	O	N	Sand Dune Cutting Bunbury	374639	6307648	Artefact Scatter
5815	S	O	N	Bunbury Preston River	377639	6307648	Artefact Scatter
18884	L	O	N	Bunbury Bypass Archaeological Site 1	375149	6302418	Artefact Scatter
18965	L	O	N	Woodcrest Rise Development Marked Tree	374196	6305257	Modified Tree
21700	L	O	N	Hooper Place Burial	372852	6307081	Skeletal Material Burial

\* 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.

**LEGEND**

**R** – Registered Site, **I** - Insufficient Information, **S** - Stored Data, **L** - Lodged awaiting assessment, **IA** - Information Assessed, **O** – Access Open, **C** - Closed Access, **N** – File Not Restricted.

\* 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.

The Bunbury 17 artefact scatter was identified in a road cutting approximately 1.2km along Moore Road from its junction with South Western Highway. At the time it was initially recorded it was estimated that the Bunbury 17 artefact scatter comprised two quartz flakes on the eastern bank of the cutting and four quartz flakes on the western slope. These were all located on yellow sand.

The Bunbury 18 artefact scatter was identified in a road cutting 1.6km along Moore Road, southwest of the junction of South Western Highway and Moore Road. At the time it was initially recorded approximately a dozen quartz flakes, several quartz lumps, one chert flake and one silcrete flake were identified on the slopes of the road cutting. A recent search for the Bunbury 18 artefact scatter resulted in one silcrete flake being identified on a yellow sandy road cutting (Harris and Johnston 2010).

According to the relevant site file, the Bunbury 24 artefact scatter comprises several quartz waste flakes that were identified on yellow sand around a soccer field somewhere west of the Bussell Highway south of Bunbury and in the vicinity of the Bunbury Cathedral Grammar School.

The Bunbury 08 artefact scatter was identified in a yellow sandy road cutting on Boyanup Road approximately 400m southeast of its junction with Dodson Road. It is described in the relevant site file as comprising a sparse scatter of mainly quartz flakes.

According to the relevant site file the Natgas 263 artefact scatter was identified in a road cutting where artefacts appear to be eroding out from the Pinjarra/Bassendean Sands interface. Its artefact assemblage is described as comprising a number of amorphous quartz chips.

According to the relevant site file the Sand Dune Cutting, Bunbury other heritage place comprises flakes and cores that were identified in a road cutting. No other information pertaining to this place is available from the relevant site file. There is a similar dearth of information in the Bunbury/Preston River site file that, in 1974, was described as comprising four quartz artefacts identified in an eroding section of sand dune on high ground west of a bend in the Preston River.

The Woodcrest Rise Development Marked Tree other heritage place has been recorded as a marked tree and described by Parker and Lantzke (2001) as displaying footholds that old people had cut into its trunk to allow them to access a bee-hive in a hole left by a fallen branch.

The Hooper Place Burial is a prehistoric Aboriginal grave uncovered at 5-7 Hooper Place in suburban Bunbury (Corsini 2004).

In addition to those referred to above, numerous other archaeological surveys and investigations have also been undertaken in the wider region around the survey area (*e.g.* Australian Interaction Consultants 2004; Edwards *et al.* 1997; Goode 2002; Goode and Harris 2007, 2008; Greenfeld 2002, 2003; Harris 2001; Harris & Webb 2007; Martinick McNulty 2000; McDonald Hales 1998; McDonald *et al.* 2000; Murphy 1999; Murphy *et al.* 1990; O'Connor *et al.* 1989; O'Reilly 2007, 2011; Parker and Lantzke 2002, 2003; Parker *et al.* 2000; Tempus Archaeology 2007) which have resulted in the identification, recording and reporting of numerous Aboriginal archaeological sites, the majority of which are small open artefact scatters that are generally located near or adjacent to drainage features or other ephemeral water sources.

## PREVIOUS ARCHEOLOGICAL RESEARCH

Bunbury in general and the survey area in particular, are located on the Swan Coastal Plain that is contained within the broader south-western region of Western Australia. Previous archaeological research conducted in the south-west of Western Australia documents, amongst other things, the antiquity of human occupation in this region. At present the earliest occupation date for the south-west of Western Australia is in the order of 47,000 years Before Present (BP)

obtained from archaeological deposits at Devil's Lair (Dortch 2002), located approximately 20km north of Cape Leeuwin in the Leeuwin-Naturaliste Region. Some other sites of Pleistocene age recorded in the south-west include Upper Swan *c.*38,000 BP (Pearce and Barbetti 1981), Helena River *c.*29,000 BP (Schwede 1983) and Kalgan Hall *c.*18,000 BP (Ferguson 1985). There are at least 46 dated archaeological sites in south-western Australia which together span the period from *c.*38,000 BP to the present (*cf.* Smith 1993). In a wider regional context, these sites provide a more or less continuous record of human occupation of this region.

The artefact assemblages at the majority of previously recorded sites on the Swan Coastal Plain are dominated by quartz. Many sites also contain a proportion of fossiliferous chert, a superior raw material for artefact manufacture. The sources of this material, believed to lie off the Western Australian coast in the general vicinity of Mandurah, were submerged approximately 6,000 years ago with the last eustatic change, a 140 metre rise in sea level (Glover 1975). Although the timing of the loss of access to this resource is not precise, the presence of fossiliferous chert in an assemblage may indicate the relative age of a site. Hallam (1987) developed a relative dating scheme based on the relative proportions of lithic material and artefact types represented in artefact assemblages that is outlined as follows. Sites classified as Early Phase assemblages include artefacts of fossiliferous chert. Middle Phase assemblages contain backed artefacts and adzes, while Late Phase assemblages are quartz-rich with high proportions of chips. Final Phase assemblages are those with worked glass and/or ceramic artefacts. Assemblages could, of course, belong to more than one phase (Hallam 1987:20). Although there are obvious inadequacies with this approach it is one of the only methods available for assigning a relative date to open artefact scatters on the Swan Coastal Plain.

The majority of previously recorded archaeological sites on the Swan Coastal Plain are usually found on intact or deflated Holocene dunes and represent a general background scatter reflecting single activity episodes or ephemeral activities. Much of the internal complexity of these sites has been destroyed due to natural processes such as aeolian deflation, or from disturbance as a result of development.

The distribution of archaeological sites on the Swan Coastal Plain is not uniform. Larger sites and site clusters are found at highly favourable locations indicating that these locations were occupied repeatedly over a long time frame. Favoured locations on the coastal plain included areas of predictably high productivity such as those with reliable fish runs and large seasonal game resources (Anderson 1984; Meagher and Ride 1979). At times of plenitude this resource security facilitated the support of large gatherings which served to enhance group identity and cohesion (Gibbs 1987). These favourable locations correspond to the major wetlands, lakes and estuaries of the coastal plain and the rivers that drain into them. The vast majority of sites that have been located are within 500 metres of water sources, indicating that Aboriginal habitation of the area was closely linked to the availability of wetland resources. The high seasonal productivity and the availability of fresh water at wetlands would clearly have made them a focus for Aboriginal habitation.

The results of previous archaeological surveys and research, as well as the data on registered sites presented above, demonstrates the types of Aboriginal archaeological sites already known to exist in the wider region around the designated survey area. In addition to this, these results, together with the environmental information already discussed, enables predictions to be made about probable site locations and the types of archaeological material and/or sites which could reasonably be expected to be found as a result of the survey of the designated survey area. The underlying geology and the vegetation regime within the survey area preclude the likelihood of sites such as quarries, rock shelters, engravings or art sites being present. The types of archaeological sites or material, if any, that are most likely to be located within the designated survey area would be various types of lithic artefacts either singularly or in scatters and possibly skeletal material or burials.

## **SIGNIFICANCE OF ARCHAEOLOGICAL SITES**

The scientific significance of an archaeological site is determined by its ability to provide information that can address regional and site specific questions and by its representativeness (Bowdler 1984). Unique sites are more significant than common sites and sites with stratified deposits are more significant than un-stratified sites. It should be noted that significance is a mutable quality, changing as more sites are recorded, as research questions are answered and as new research directions arise.

Some research questions that any archaeological sites in the survey area may address include;

- what is the antiquity of the Aboriginal occupation of the Swan Coastal Plain?
- what social and technological changes, if any, may have occurred in the region in the mid-Holocene?
- specific patterns of occupation on the Swan Coastal Plain?
- the dating of industrial sequences in the region.

## **SURVEY METHODS**

The archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area was undertaken in January 2012 by archaeologists Thomas O'Reilly and Stuart Johnston. The methods utilised prior to and during the archaeological survey are outlined below.

Prior to undertaking the field component of the archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area, a search of the Aboriginal Sites Database at the Department of Indigenous Affairs (WA) was made to determine if any Aboriginal archaeological sites, or sites with an archaeological component, or any other heritage places, are located within or adjacent to the survey area. At the same time, site files pertaining to any registered Aboriginal archaeological sites or sites with an archaeological component in the vicinity of the survey area were also examined as were site files pertaining to other heritage places. A review of reports detailing the results of previous archaeological surveys and investigations carried out in the vicinity of the survey area was also undertaken as was a review of archaeological research conducted in the wider region.

Geological and vegetation maps were also examined prior to the field survey to ascertain the physical geography and geomorphology of the land within the survey area. Any areas of interest identified from these maps, or areas identified as having a high probability of containing Aboriginal archaeological sites, would subsequently be targeted during the field survey.

That part of the survey area between Cokelup Road and Jilley Road and which is traversed by a narrow ephemeral drainage line, was targeted and scrutinised for the presence of Aboriginal archaeological material by walking along the sides and margins of this drainage line and examining the exposed banks and adjacent cleared ground. In general, ground visibility in this part of the survey area was excellent and averaged approximately 80%.

The remainder of the survey area was surveyed for the presence of Aboriginal archaeological sites by walking a series of transects along the entire length of the survey area. These transects followed the general alignment of the survey area and were spaced at approximately 20m to 30m intervals.

In general, ground visibility throughout the survey area was variable and ranged from as low as <10% in some parts as a result of grass cover and leaf litter, to as high as approximately 40% throughout the remainder. Areas of excellent visibility (>80%) were limited to cleared fire breaks, fence lines, tracks and other opportunistic exposures. It is noted here that where ground visibility was very low, adjacent cleared fence lines and fire breaks afforded excellent ground visibility at approximately >80%.

## RESULTS

As a result of research undertaken at the Heritage and Culture Division, Department of Indigenous Affairs (WA) and a search of their Aboriginal Sites Database prior to the archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area, it was established that no registered Aboriginal archaeological sites or sites with an archaeological component are located within the survey area. However, it was established that one 'other heritage place' (Bunbury Bypass Archaeological Site 1 DIA 18884) has been recorded at a position that places it partially within the survey area (Figure 7).

The Bunbury Bypass Archaeological Site 1 (DIA 18884) was initially identified during an archaeological survey of the proposed Bunbury Bypass Road over fifteen years ago (Hammond and O'Reilly 1995). According to Hammond and O'Reilly (1995), the Bunbury Bypass Archaeological Site 1 (DIA 18884) is located approximately 30m to the southwest of the intersection of Hasties Road and Allenville Road. They described it as a very low density artefact scatter situated within a large dam structure which measures approximately 50m x 100m. They identified two discrete artefact clusters on the dam wall, one in the southwest corner and one in the southeast corner which combined contained a total of fourteen artefacts. Hammond and O'Reilly (1995:31) subsequently recorded these artefacts and identified four complete flakes (28.6%), nine flake fragments (64.3%) and one core fragment (7.1%), all of which had been manufactured on quartz.

During the course of fieldwork associated with the archaeological survey described in this report, the Bunbury Bypass Archaeological Site 1 (DIA 18884) was visited and re-recorded. Its precise location and extent was determined and its position recorded as accurately as possible using a Garmin GPSMAP 62 series hand held GPS. The associated spatial data was recorded in Map Grid of Australia (MGA) co-ordinates using the Geocentric Datum of Australia (GDA) 1994 and co-ordinates given below (Table 3) represent the approximate centre of the site. The extent of the site was also determined and clearly marked with pink flagging tape and a series of co-ordinates recorded which define its boundary. Details of the Bunbury Bypass Archaeological Site 1 (DIA 18884) are given in Table 4 and it is described and discussed below.

No other Aboriginal archaeological sites or material were identified as a result of the archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area.

**Table 3: Details of the Aboriginal archaeological heritage place identified within the survey area.**

SITE ID.	Name	Location (Zone 50)		Site Type	Site Extent	Estimated Number of Artefacts	Significance
		East	North				
18884	Bunbury Bypass Archaeological Site 1	375149	6302418	Artefact Scatter	100m x 200m	20	Very Low



Figure 7: Archaeological survey results, blue polygon showing actual extent of DIA 18884 Bunbury Bypass Archaeological Site 1, red polygon showing Survey Corridor and green polygon showing DIA buffered site extent.

## SITE DESCRIPTION

### DIA 18884 Bunbury Bypass Archaeological Site 1

*MGA co-ordinates 375149mE and 6302418mN*

The Bunbury Bypass Archaeological Site 1 site is a diffuse artefact scatter that is located on the south side of Hasties Road immediately west of the corner with Allenville Road. It was identified within what appears to have been a dam structure where an area of yellow sand has been excavated and either removed or used to construct the southern dam wall. Fences parallel the northern and eastern boundaries of the site (Figure 10). It appears that the area within the site has been universally disturbed in the past. Vegetation within this site was extremely open and low and dominated by low (<0.3m) grasses with some bushes to <1m at the western end of the site and several trees and bushes to 2m-3m at its eastern end. As a consequence, ground visibility in and around the Bunbury Bypass Archaeological Site 1 artefact scatter was excellent and averaged approximately 80% (Plate 1). The surface geology in and around this site can be characterised as yellow sand. The Bunbury Bypass Archaeological Site 1 artefact scatter has maximum dimensions of approximately 100m NS x 200m EW and its boundary is defined by the co-ordinates given in Table 4.

Table 4: MGA co-ordinates defining the boundary of the Bunbury Bypass Archaeological Site 1 artefact scatter.

EASTING (mE)	NORTHING (mN)	EASTING (mE)	NORTHING (mN)
375084	6302440	375170	6302392
375283	6302409	375201	6302467
375081	6302405	375204	6302397
375284	6302439	375168	6302467
375107	6302376	375239	6302388
375266	6302460	375135	6302467
375140	6302370	375280	6302378
375236	6302467	375105	6302466

It is estimated that the Bunbury Bypass Archaeological Site 1 artefact scatter contains less than twenty artefacts that have been manufactured exclusively on quartz. A single piece of quartz debris was identified at the western end of the site while one quartz backed blade (Plate 2), one quartz complete flake (Plate 3) and approximately fifteen pieces of quartz debris were identified at the eastern end of the site. Observations made at this site indicate that its artefact assemblage consists predominantly of small flaked pieces and flake fragments. On the basis of the above estimates, average artefact density has been calculated at approximately 0.001 artefacts/m<sup>2</sup> across the entire site. However, it is noted that artefacts are concentrated at the eastern end of the site. The distribution of the artefacts observed during the recording the Bunbury Bypass Archaeological Site 1 artefact scatter is probably a result of disturbance associated with the construction of the dam and not an internal feature of the site. An examination of exposed vertical sections at the eastern and western ends of the site did not reveal any cultural material *in situ* nor did it reveal any visible stratigraphy.

The Bunbury Bypass Archaeological Site 1 artefact scatter is interpreted as a camp site that was probably occupied on one or two occasions. While a single quartz backed blade was identified, no grinding material or other retouched/utilised artefacts were observed at this site and although artefacts may be present below the surface, there is little or no potential for it to contain stratified cultural deposits. The artefact assemblage at the Bunbury Bypass Archaeological Site 1 artefact scatter is very small, unremarkable and generally typical of other artefact scatters located in the wider region. As a result of its size, limited artefact assemblage and disturbed context, the Bunbury Bypass Archaeological Site 1 artefact scatter has little potential to address any of the research questions outlined above. Consequently, the Bunbury Bypass Archaeological Site 1 artefact scatter is assessed here as having very low archaeological significance.



**Figure 8: Plate 1. Looking east from west end of the Bunbury Bypass Archaeological Site 1 artefact scatter.**

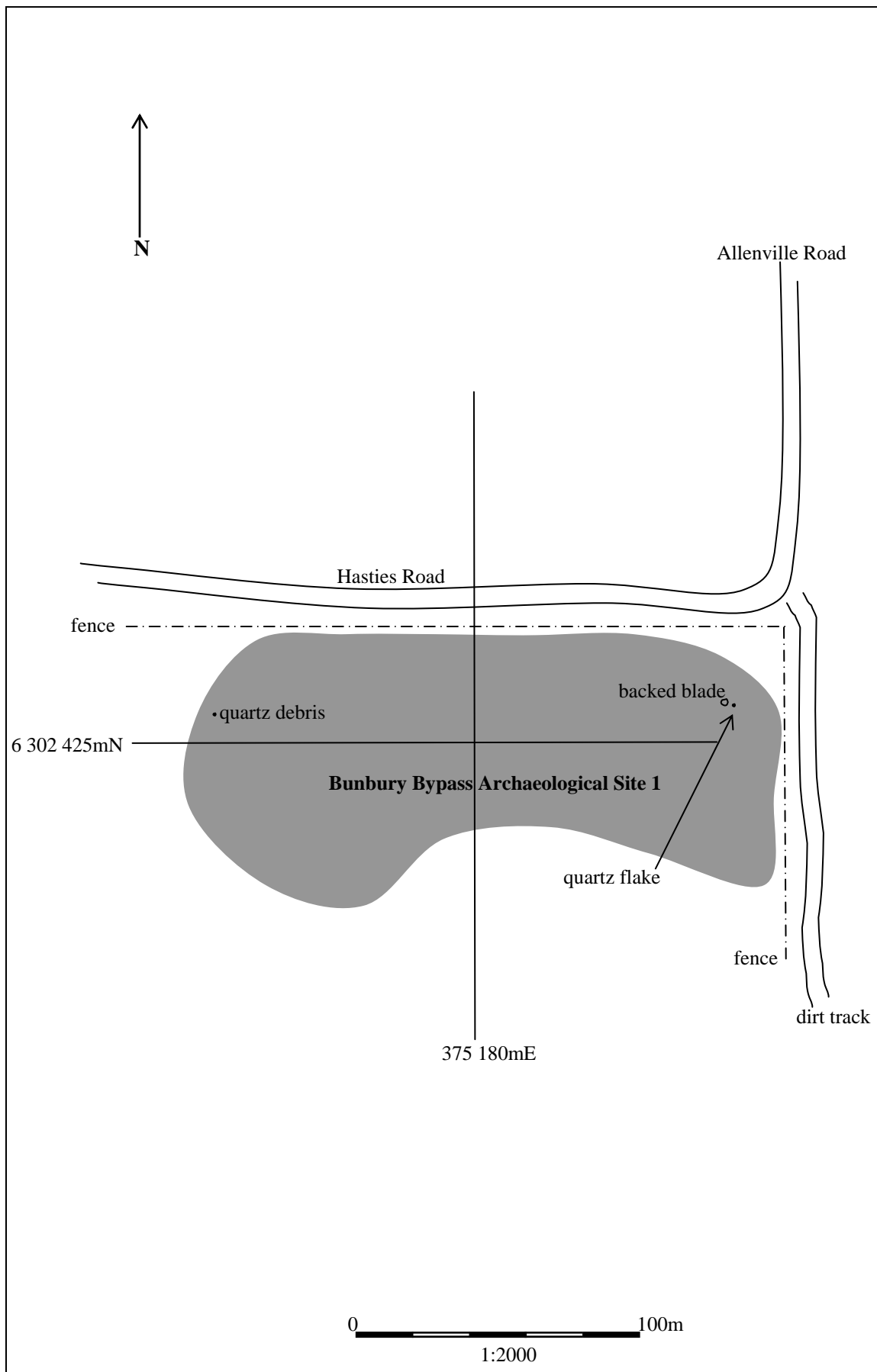


Figure 9: Sketch map showing location of the Bunbury Bypass Archaeological Site 1 artefact scatter.



Figure 10: Plate 2. Quartz backed blade *in situ* in the Bunbury Bypass Archaeological Site 1 artefact scatter.



Figure 11: Plate 3. Quartz flake *in situ* in the Bunbury Bypass Archaeological Site 1 artefact scatter.

## CONCLUSIONS

### DISCUSSION

An archaeological survey for Aboriginal archaeological sites within the Bunbury Outer Ring Road (Southern Section) Project Area, centred approximately 9km SSE of the Bunbury City centre, was undertaken on behalf of GHD Pty Ltd by archaeologists Thomas O'Reilly and Stuart Johnston in January 2012. The Bunbury Outer Ring Road (Southern Section) Project Area comprises a single discrete survey area that is irregularly shaped and which extends for approximately 9km from South Western Highway near the intersection of Centenary Road to Bussell Highway between Woods Road and Calinup Road. It varies in width from 50m to 150m and traverses an area that comprises cleared paddocks and road reserve corridors with some patches of remnant bush. In general, the majority of the survey area has been universally disturbed. GHD Pty Ltd on behalf of Main Roads Western Australia proposes to construct a dual carriageway and associated overpasses and service roads within the Bunbury Outer Ring Road (Southern Section) Project Area.

As a result of research undertaken at the Heritage and Culture Division, Department of Indigenous Affairs (WA) and a search of their Aboriginal Sites Database prior to the archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area, it was established that no registered Aboriginal archaeological sites or sites with an archaeological component are located within the survey area. However, it was established, on the basis of information given on the Department of Indigenous Affairs' Aboriginal Sites Database that one 'other heritage place' (Bunbury Bypass Archaeological Site 1) has been registered at a position that places it in a position that abuts and is encompassed by the survey area. As can be seen in Figures 5 and 6, the Bunbury Outer Ring Road (Southern Section) Project Area appears to encompass the Bunbury Bypass Archaeological Site 1 other heritage place.

It is noted here that information pertaining to the Bunbury Bypass Archaeological Site 1 (DIA 18884) 'other heritage place' has been reported to the Registrar of Aboriginal Sites and assessed by the Site Assessment Group. This is not the final assessment. The final assessment is yet to be determined by the Aboriginal Cultural Material Committee. Consequently, the Bunbury Bypass Archaeological Site 1 (DIA 18884) appears on the Department of Indigenous Affairs' Aboriginal Sites Database as 'Other Heritage Place'. Despite this, the provisions of the *Aboriginal Heritage Act 1972* still apply to this other heritage place until it is assessed as a place to which the *Aboriginal Heritage Act 1972* does not apply.

As previously stated, the Bunbury Bypass Archaeological Site 1 (DIA 18884) was initially identified during an archaeological survey of the proposed Bunbury Bypass Road over fifteen years ago (Hammond and O'Reilly 1995). During the course of the fieldwork associated with the archaeological survey described in this report, the Bunbury Bypass Archaeological Site 1 (DIA 18884) was visited and re-recorded (see Site Description in Results). As a result of this re-recording the Bunbury Bypass Archaeological Site 1 (DIA 18884) location, extent, artefact distribution and artefact assemblage were found to be consistent with the descriptions given by Hammond and O'Reilly (1995). Furthermore, it is noted here that Hammond and O'Reilly (1995) recorded all visible artefacts and identified four complete flakes (28.6%), nine flake fragments (64.3%) and one core fragment (7.1%), all of which had been manufactured on quartz.

In general, the artefact assemblage observed at the Bunbury Bypass Archaeological Site 1 (DIA 18884) artefact scatter appeared mundane and was dominated by flaked pieces and flake fragments that have been manufactured exclusively on quartz. Although a single backed blade was noted, no grinding material or other retouched and/or utilised artefacts were observed at this site and although artefacts may be present below the surface, there is little or no potential for it to contain stratified cultural deposits.

Given the features outlined above, the very small Bunbury Bypass Archaeological Site 1 (DIA 18884) artefact scatter is interpreted as a campsite that was probably visited on only one or two occasions. The artefact assemblage at this site is very small, generally unremarkable and has little potential to address the research questions outlined in 'Significance of Archaeological Sites.' Consequently, this site is assessed here as having very low archaeological or scientific significance.

It is noted here that the Aboriginal archaeological site identified within the survey area has been assessed on the basis of its archaeological or scientific significance only. It is pointed out that this site may also have cultural and/or social significance to Aboriginal people and that the opinion of the appropriate Aboriginal people should be sought before any planning decisions are made which may impact upon this site.

The entire length of the Bunbury Outer Ring Road (Southern Section) Project Area was surveyed and examined for the presence of Aboriginal archaeological sites and/or material using regularly spaced linear transects. The low surface visibility encountered in some parts the survey area can cause sites and archaeological material to be overlooked. A moderate to dense cover of grass and leaf litter in some parts of the survey area made it very difficult to see or find any Aboriginal archaeological material that may have been on the obscured ground surface. However, it should be noted that searches of fence lines, fire breaks and cleared tracks and their margins as well as other opportunistic exposures with high surface visibility adjacent to these parts of the survey also yielded no Aboriginal archaeological sites or material. Therefore, it is considered that the scarcity of Aboriginal archaeological sites and/or material within the low visibility parts of the survey area is real and not simply a product of poor visibility.

Given the degree of surface visibility in general throughout the survey area and the intensity of coverage, it is considered that the archaeological survey was sufficient to locate any Aboriginal archaeological sites present on the surface. It should be noted that sites can be exposed and/or concealed as a result of both wind and water erosion. It is also possible that archaeological material lies below the surface and may be exposed as a result of environmental factors or work undertaken within the surveyed area. GHD Pty Ltd and Main Roads Western Australia should be aware of this when undertaking ground disturbing work or any other activities.

## RECOMMENDATIONS

On the basis of the results of the archaeological survey of the Bunbury Outer Ring Road (Southern Section) Project Area, and the above discussion it is recommended that;

- 1) GHD Pty Ltd and/or Main Roads Western Australia be allowed to proceed with their proposal to construct a dual carriageway and associated overpasses and service roads within the Bunbury Outer Ring Road (Southern Section) Project Area, on the condition that they avoid any impact upon or disturbance to heritage place Bunbury Bypass Archaeological Site 1 (DIA 18884).
- 2) If it is necessary to disturb any part(s) of the heritage place Bunbury Bypass Archaeological Site 1 (DIA 18884), GHD Pty Ltd and/or Main Roads Western Australia, as required under section 18 of the Western Australian *Aboriginal Heritage Act 1972*, need to apply to the Minister for Indigenous Affairs for consent to proceed with activities that will disturb Aboriginal heritage sites.
- 3) If such an application is made, consent should be granted to proceed with activities that will disturb heritage place Bunbury Bypass Archaeological Site 1 (DIA 18884) unconditionally as this place and its artefact assemblage has been previously recorded in detail.
- 4) In the event of any artefactual material or skeletal material being discovered in the course of mineral exploration activities or any other activities, work should stop while the Department of Indigenous Affairs carry out an investigation of the site. In the case of skeletal material being uncovered, work must cease immediately and the Western Australian Police must be notified.
- 5) GHD Pty Ltd and/or Main Roads Western Australia personnel and contractors be advised of their obligations under section 15 of the *Aboriginal Heritage Act 1972*, to report the discovery of any Aboriginal cultural material which may be uncovered in the course of their work.

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



## Search Criteria

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

MGA Zone 50	
Northing	Easting
6299057	371102
6300853	373679
6302457	374339
6303355	375203
6303376	375299
6304410	375886
6305077	377742
6304838	377835
6304812	377541
6300242	373672
6299004	371111
6299057	371102

## 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.

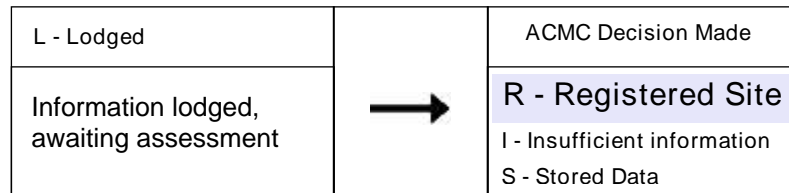
## Copyright

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## Legend

Restriction	Access	Coordinate Accuracy
N No restriction	C Closed	Accuracy is shown as a code in brackets following the site coordinates.
M Male access only	O 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



## 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.

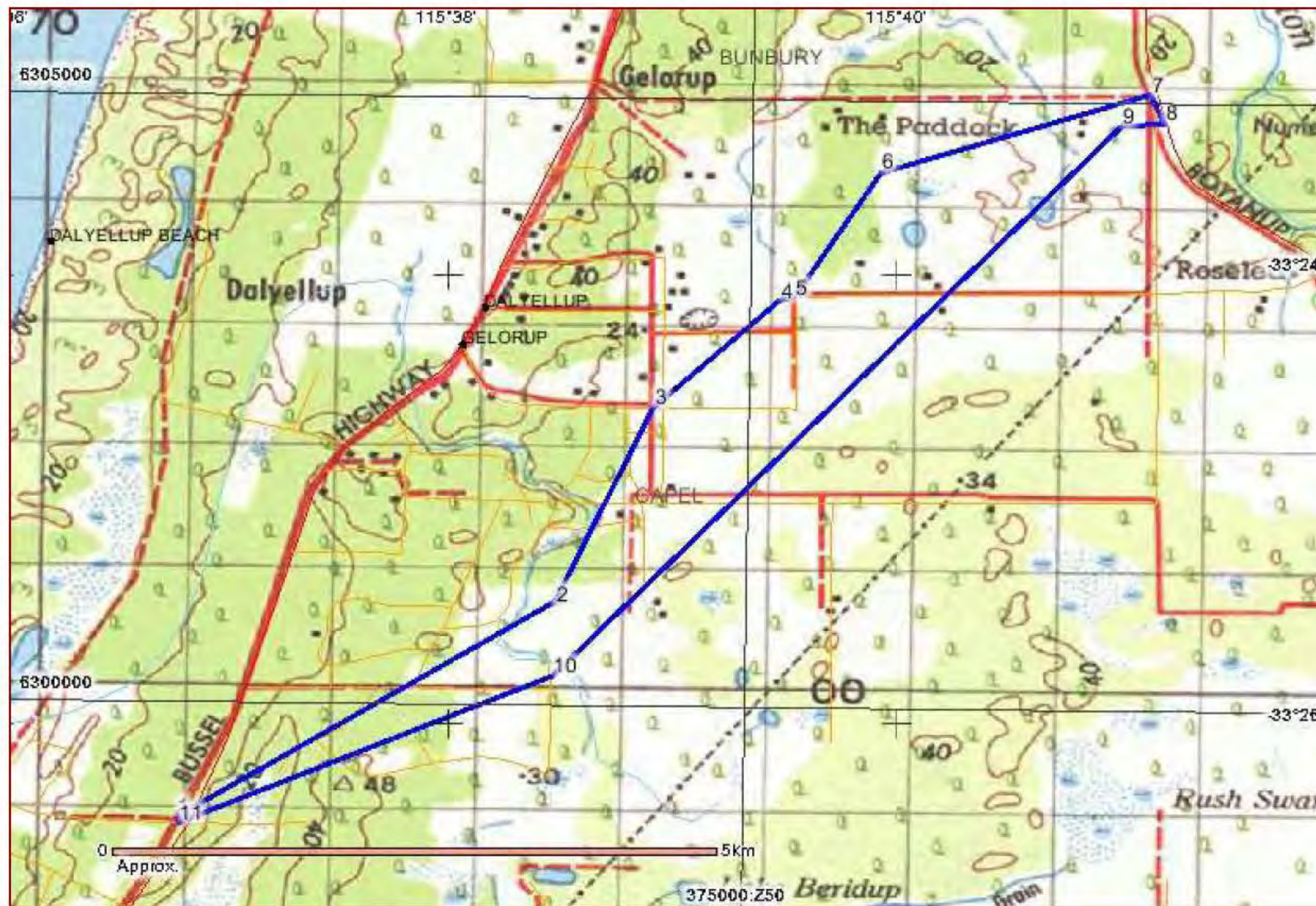
## Sites Shown on Maps

Site boundaries may not appear on maps at low zoom levels



## List of Registered Aboriginal Sites with Map

No results



## Legend

Selected Heritage Sites

Registered Sites

Town

Map Area

Search Area

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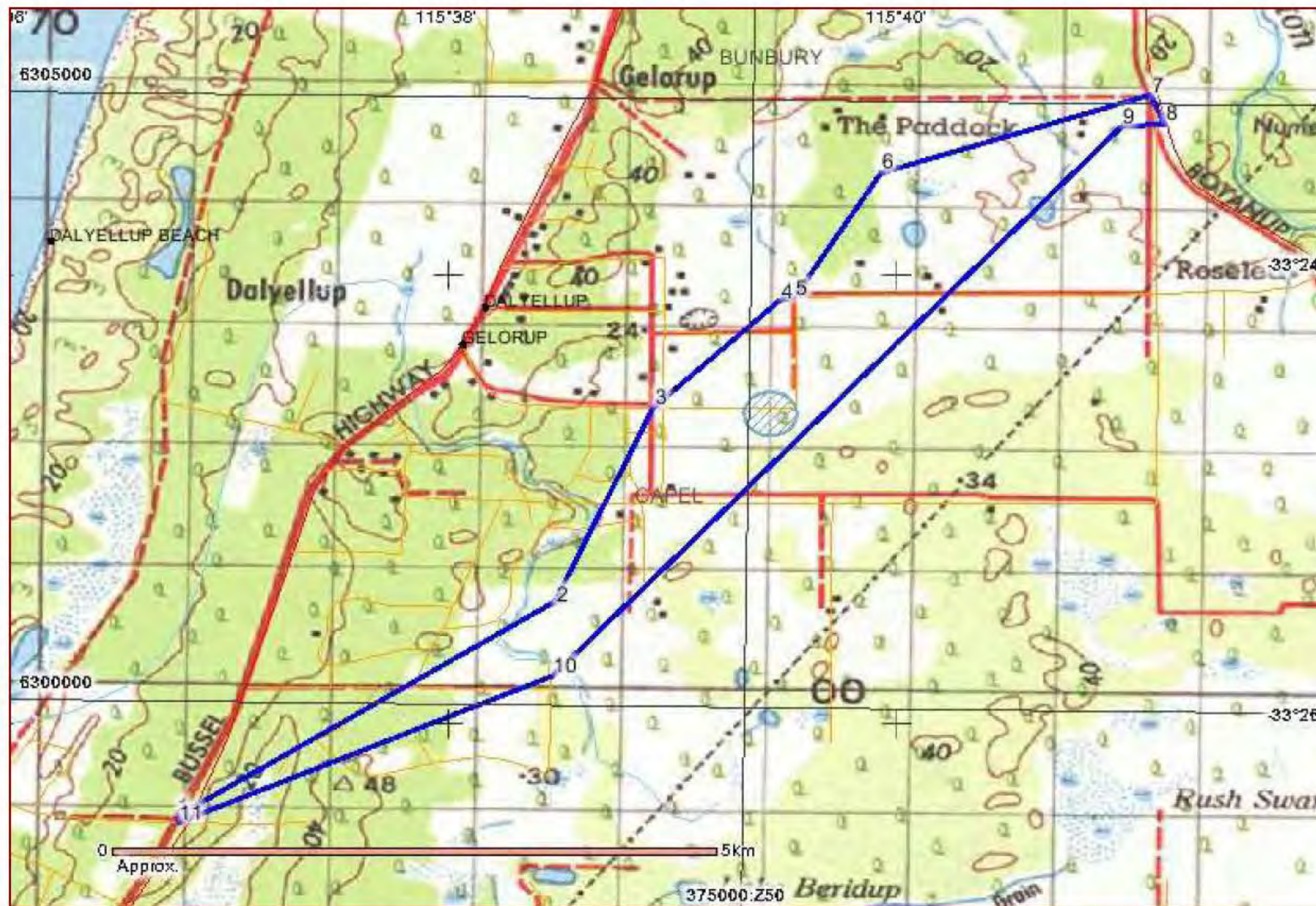
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## List of 1 Other Heritage Places with Map

Site ID	Status	Access	Restriction	Site Name	Site Type	Additional Info	Informants	Coordinates	Site No.
18884	L	O	N	Bunbury Bypass Archaeological Site 1	Artefacts / Scatter			375149mE 6302418mN Zone 50 [Reliable]	



## Legend

Selected Heritage Sites

Other Heritage Places

Town

Map Area

Search Area

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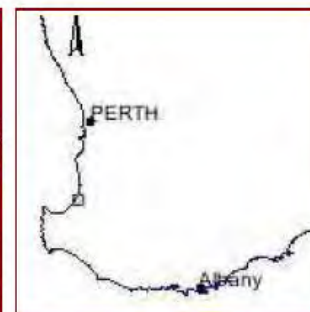
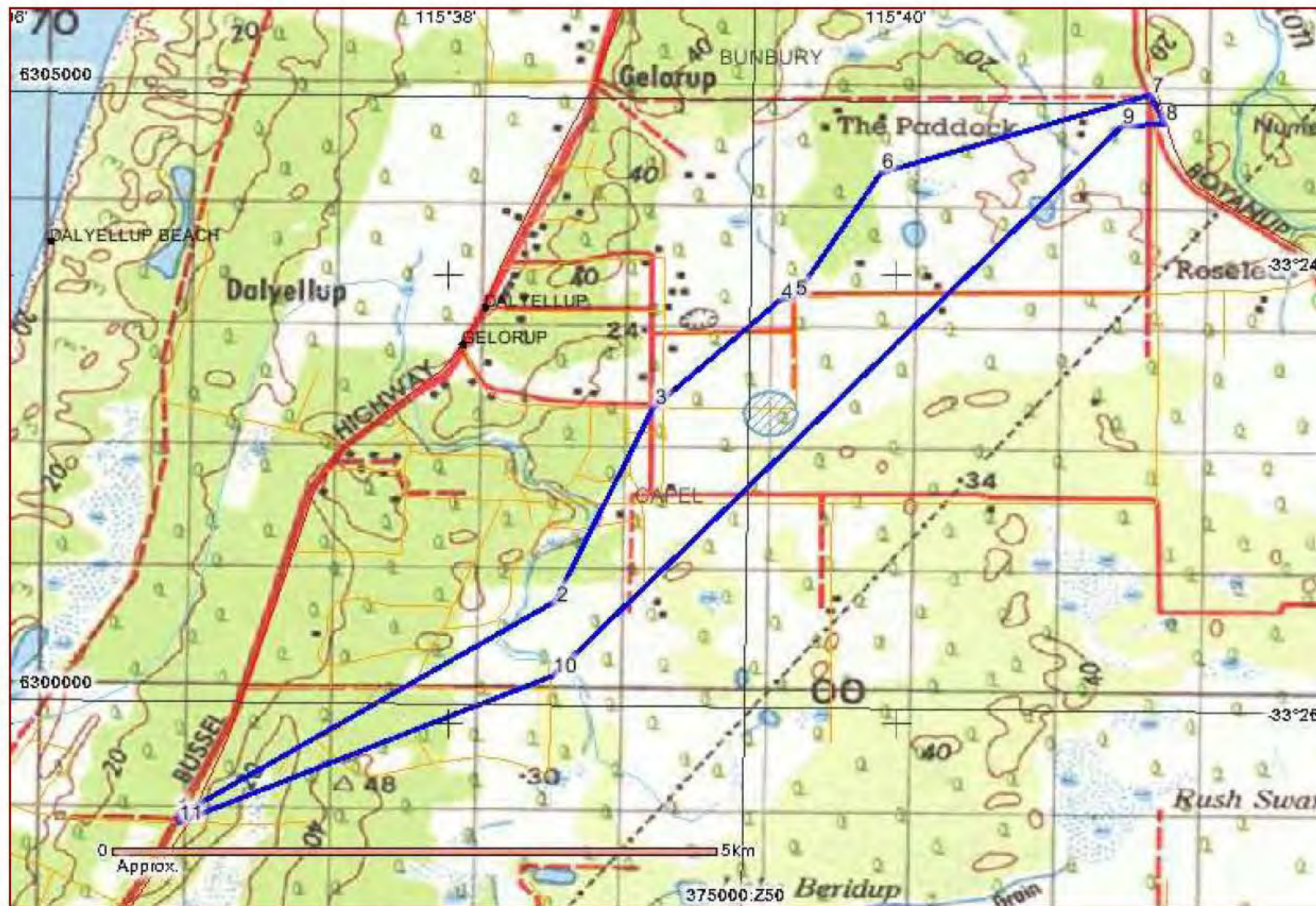
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## Map Showing Registered Aboriginal Sites and Other Heritage Places



### Legend

## Selected Heritage Sites

 Registered Sites

 Other Heritage Places

● Town

Map Area

 Search Area

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Cadastre, Local Government  
Authority, Native Title boundary  
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## APPENDIX 2: LETTER OF ADVICE

### Brad Goode & Associates Pty Ltd

Consulting Anthropologist  
Heritage Assessments

79 Naturaliste Terrace  
DUNSBOROUGH WA 6281  
(08) 9755 3716  
bradnlee@westnet.com.au  
ACN: 134 732 040  
ABN: 41 134 732 040

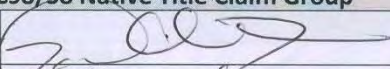
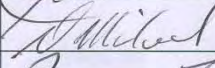
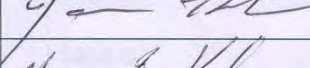
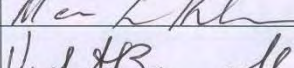
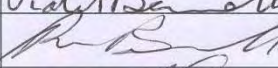
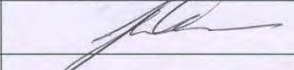
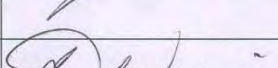
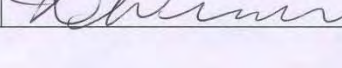

21<sup>st</sup> February 2012

We the undersigned have been consulted by Bradley Goode on behalf of Main Roads in regard to the Bunbury Outer Ring Road, Southern Section (Stage 2). We would like to make the following recommendations in relation to the Western Australian Aboriginal Heritage Act (1972)

\* No site, or sig as defined by  
section 5 of the AHA offered

\* Monitor Arch site Hastu Ad

\* Request about naming of Bridges

Gnaala Karla Booja WC98/58 Native Title Claim Group		
Joe Northover	21.2.2012	
Peter Michael	21.2.2012	
James Khan	21.2.2012	
Marie Khan	21.2.2012	
Violet Bennell	21.2.2012	
Ritchie Bennell	21.2.2012	
Les Wallam	21.2.2012	
Denis Hill	21.2.2012	
Dorothy Winmar	21.2.2012	

## **APPENDIX 3: MAPS OF THE PROJECT AREA IN RELATION TO ABORIGINAL HERITAGE SITES**



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6302500.000000

6302500.000000

6302400.000000

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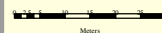
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**BUNBURY OUTER RING ROAD STAGE TWO JAN 2012**  
**Site ID 18784 Bunbury Bypass Archaeological Site 1**

- Legend
- DIA Site Extents Jan 2012
  - BORR SURVEY CORRIDOR
  - roads
  - SiteID 18884 Bunbury Bypass Archaeological Site 1

DATE  
30th Jan 2012

SCALE - at A4  
1:1,500



GDA 1994 MGA Zone 50

Survey conducted by  
BRAD GOODE & ASSOCIATES PTY LTD.  
Mapping provided by  
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