APPENDIX 7

Aboriginal Archaeology, Ethnographic and Historic Heritage Desktop Assessment
Desktop Study of Aboriginal Heritage & Historical Issues Relating to the proposed Ethanol Bio-Refinery at Kwinana, Western Australia

Prepared for

Umwelt (Australia) Pty Ltd

by

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EXECUTIVE SUMMARY

Australian Interaction Consultants (AIC) was engaged to prepare a preliminary desktop survey to advise Umwelt (Australia) Pty Limited (Umwelt) on the Aboriginal heritage & Historical issues relating to the Kwinana Industrial Area.

Primary Energy Pty Limited has proposed to establish an Ethanol Bio-Refinery in Kwinana Beach, with Umwelt preparing environmental documentation for the project, to be submitted to the Western Australian Environment Protection Authority and the Department of Environment sometime in 2006.

The Kwinana Industrial Area is located south of Fremantle and just north of Rockingham in Western Australia. The proposed site for the Ethanol Bio-Refinery is a 20-hectare portion of land at Kwinana Beach, part of Cockburn Sound location 244. The area will be extensively developed.

There has been no systematic survey conducted in the proposed development area (PDA) although there have been several surveys conducted in the general vicinity.

A current search of the Department of Indigenous Affairs (DIA) database does not identify any previously recorded Aboriginal sites within the boundaries of the Kwinana PDA itself. However, the DIA search found five (5) sites within a 5 km radius of the PDA.

DIA archival research brought up thirty-two (32) reports for the wider Rockingham/Kwinana and surrounding areas, of which six (6) were relevant to the current project area. In addition, one other report (Locke and Smith 1990) was forwarded to AIC by Mr. Peter Jamieson, Director at Umwelt.

The Native Title Claim covering this area is:
Combined Single Noongar – WAG6006/03 (WC03/006)
Ballaruk – WAG0149/98 (WC95/086)

Australian Interaction Consultants formulated the following conclusions:

- The project area has minimal archaeological potential for Aboriginal cultural heritage sites.
- The project area has the potential for ethnographic Aboriginal cultural heritage sites.
- The project area has minimal potential for significant historical archaeological sites.
- The project area has been extensively disturbed by European development, especially in recent history. Primarily, the development of infrastructure and industrial areas, but to a lesser extent recreational use and use as a rubbish tip.
- That additional archaeological and ethnographic work will have to be undertaken prior to development to ensure that all requirements under the Act (1972) are fulfilled including consent to use the land under Section 18 of the Act.
Based on the research findings presented in this paper and the above conclusions, AIC makes the following recommendations to ensure the developer gives due diligence to the obligations of the Aboriginal Heritage Act (1972):

- that Primary Energy Pty Limited continues with their proposed developments at Kwinana Beach by undertaking a site identification survey under the Act.

- that Primary Energy Pty Limited undertakes a full archaeological survey of the area prior to any ground disturbing works to ensure that any archaeological Aboriginal cultural heritage sites are located and recorded within the development area.

- that Primary Energy Pty Limited undertakes a full ethnographic consultation and survey of the area prior to any ground disturbing works to ensure that any ethnographic Aboriginal cultural heritage sites are located and recorded within the development area.

- that Aboriginal Native Title Claimants for the proposed development area are consulted early during development process and are regularly informed of progress at the proposed development site.

- that all Primary Energy Pty Limited staff and contractors are made fully aware of their obligations and responsibilities under the Act (1972)
Abbreviations

ACMC  Aboriginal Cultural Material Committee
AIC   Australian Interaction Consultants
DIA   Department of Indigenous Affairs
NTC   Native Title Claimant Group
The Act  Aboriginal Heritage Act 1972 (WA)
PDA   Proposed Development Area

Disclaimer

AIC attempts to give voice to the Indigenous people who take part in surveys such as the one reported here. We neither claim the knowledge revealed to us, nor can we necessarily vouch for the veracity of the information given. We do, however, consult with people whom we consider to have the best knowledge of the area being surveyed. In instances where no ethnographic information is presented, it should not be presumed that heritage values are not present. Often, we are told by Indigenous people that they have not known the consultant sufficiently well, or that they have not been in the appropriate company, and have claimed ignorance of places that they may identify as a site at a different time, under different circumstances. Within this report we have intended that only the fact of a site be recorded. This report is not designed to be the basis of the recording of sites – it is designed to advise the client of those places that may need to be accommodated under the Act. More elaborate details of the place or object will be provided in the site recording forms that AIC will submit to DIA to enable the site recording process to be completed.

GPS Datum

The GPS datum used during this survey was either WGS 84 or MGA 94.

Limitations

Whereas we endeavour to pinpoint geographical/site locations, the limitations of handheld GPS devices will create inaccuracies on occasion. Also, the potential for error from datum shift is ever present.
CONTENTS

EXECUTIVE SUMMARY ........................................................................................................ 2
CURRENT PROPOSAL AND AREA ASSESSED ................................................................ 6
DESKTOP REPORT METHODOLOGY ............................................................................... 9
DESKTOP ............................................................................................................................. 10
Previously Recorded Sites .............................................................................................. 10
Heritage Survey Reports .................................................................................................. 12
ETHNOGRAPHIC HISTORY ............................................................................................. 17
ARCHAEOLOGICAL BACKGROUND ............................................................................ 26
Archaeological Significance ........................................................................................... 26
Archaeological Background ............................................................................................ 26
ARCHAEOLOGICAL SURVEY ........................................................................................... 31
Methodology .................................................................................................................... 31
Results ............................................................................................................................... 31
Discussion ........................................................................................................................ 33
CONCLUSIONS .................................................................................................................. 34
RECOMMENDATIONS ....................................................................................................... 35
REFERENCES ...................................................................................................................... 36
APPENDIX I GLOSSARY OF TERMS ............................................................................. 40
APPENDIX II: ABORIGINAL HERITAGE ACT (1972) .................................................... 41

This report is a result of the combined efforts of the AIC team:

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Damien Lyndon  BA Media  Report redaction
Ryan Coughlan  BA (Hons) Archaeology  Fieldwork, reporting
Shane Burke  PhD Archaeology  Fieldwork, reporting
Damien Lafrentz  BA Anthropology  Fieldwork, research, reporting
Stephen Morgan  MA Applied Anthropology  Proofing
CURRENT PROPOSAL AND AREA ASSESSED

Primary Energy Pty Limited proposes to establish an Ethanol Bio-Refinery in the Kwinana Industrial Area, south of Fremantle in Western Australia.

The proposed facility will use Western Australian wheat to produce up to 160 million litres of fuel grade ethanol per year, which could reduce net greenhouse gas emissions from the transport sector by 400,000 tonnes of carbon dioxide per year.

The Bio-Refinery will also produce a number of other products, namely:

- Fertiliser;
- Aqueous ammonia; and
- Green electricity

Umwelt (Australia) Pty Limited (Umwelt) is in the process of preparing environmental documentation for the project, to be submitted to the Western Australian Environment Protection Authority and the Department of Environment in June 2006.

AIC was engaged to complete an ethnographic survey to identify sites of cultural heritage significance and to conduct an archaeological inspection to identify any archaeological sites in the project area.

The Native Title Claims in the area –
Combined Single Noongar – WAG6006/03 (WC03/006)
Ballaruk – WAG0149/98 (WC95/086)
Figure 1: General location of Ethanol Bio-Refinery
Figure 2: Map of project area – Ethanol Bio-Refinery
DESKTOP REPORT METHODOLOGY

AIC completed the following steps:

- Searched the DIA sites database for known and recorded sites and the reports of previous surveys completed in, or near, the project area.

- Analysed the reports related to this proposed project

- Analysed the sites to assess their heritage value and the likelihood of them being impacted upon by the proposed project

- AIC conducted an initial archaeological reconnaissance of the survey area to identify any potential areas of interest to Aboriginal cultural heritage and European history.

- Made recommendations regarding the assessment and protection of any sites identified under the Act

- Submitted a draft of the report to the Client

- Edited the report where necessary

- Submitted the final report to the client
DESKTOP

Previously Recorded Sites

DIA RESEARCH

AIC conducted a search of the Department of Indigenous Affairs Register of Aboriginal Sites database on the 21 of June 2006 to ascertain the number and nature of sites known to exist in the area of the Ethanol Bio-Refinery Site proposed by Umwelt (Australia) Pty Ltd. at East Rockingham/Kwinana, WA. The search involved accessing the database via on-line access, down loading the results and using GIS technology Mapinfo to plot the registered sites on a map to indicate their proximity to the proposed works.

The area searched to identify sites already recorded and surveys reported under the Act, was contained within the following coordinates:

MGA Coordinates - MGA Zone: 50
Easting 6436000, Northing 380000
Easting 6436000, Northing 385000
Easting 6427500, Northing 385000
Easting 6427500, Northing 380000

Based on that search area, a print out of recorded sites was obtained and analysed.

The purpose of the search is to provide a background to both the archaeological and ethnographic sites in the area as well as an indication of the nature and frequency of surveys under the Act. The results of the search establish the heritage context from which the potential impact of proposed works and the likelihood of identifying further sites or heritage issues may be assessed.

The search revealed five (5) previously recorded sites in the general area and thirty two reports, of which none directly report on the Aboriginal heritage in the search area.

Research was undertaken at DIA accessing the individual site files of the recorded sites, four of the five site files were accessed and synthesized. A summary of these sites and their proximity to the proposed development is listed in Table 1 below. This is followed by more detailed site information and an analysis of the reports and sites.

<table>
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<th>SITE #</th>
<th>SITE NAME</th>
<th>Arc/Eth</th>
<th>STATUS</th>
<th>TYPE</th>
<th>PROXIMITY</th>
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</thead>
<tbody>
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<td>18501</td>
<td></td>
<td>Scarred &amp; Modified Trees</td>
<td>Arc</td>
<td>Interim</td>
<td>Ceremonial, Mythological, Man-Made Structure, Modified Tree, Engraving, Artefacts / Scatter, Historical</td>
<td>Approximately 3kms</td>
</tr>
<tr>
<td>18942</td>
<td></td>
<td>Dixon Rd Foothole Tree</td>
<td>Arc</td>
<td>Interim</td>
<td>Modified Tree</td>
<td>Approximately 3kms</td>
</tr>
<tr>
<td>3776</td>
<td>S02169</td>
<td>Indian Ocean</td>
<td>Eth</td>
<td>Permanent</td>
<td>Mythological</td>
<td>250 metres</td>
</tr>
<tr>
<td>3334</td>
<td>S00178</td>
<td>Rockingham (Stone Arrangement)</td>
<td>Arc</td>
<td>Interim</td>
<td>Man-Made Structure</td>
<td>Approximately 3kms</td>
</tr>
</tbody>
</table>
Table 1: Synthesis of previously recorded sites identified during archival search

The DIA database search results and a map showing the location of existing sites in relation to the proposed works are attached.

Site Details

3334 ROCKINGHAM (STONE ARRANGEMENT)
Said by O’Connor, Quartermaine and Yates (WAM) to be a stone arrangement (man-made) of ceremonial significance, approximately 20’-30’ long and 8’ wide. At the time of initial identification, few of the stones were reported as being disturbed. The site was identified as lying within the property of Sam Chatwell, a farm located ‘on one side of the main Mandurah road, one mile past East Rockingham state school’. However, an attempt to re-visit the site by O’Connor et al. in 1994, for their Report on an Aboriginal Site Survey of the Proposed South-West Corridor Transport Reserve, failed to relocate the stone arrangement. A later attempt to re-visit the site in 2000 by Yates was also unsuccessful.

Furthermore, O’Reilly and Price (1995) have pointed out that the evidence regarding the location of this stone arrangement is in fact contradictory. The accuracy of the grid references recorded in the site file (AMG 381.427) is unreliable, and the rest of the information has seemed of little (if any) assistance to surveyors who have since attempted to re-visit the site (see above) and is contradictory to the grid reference itself (the ‘main Mandurah road’ may refer to Reid Street, Mandurah Road, or even to Ennis Avenue; and there is no ‘East Rockingham state school’) (O’Reilly and Price 1995:4).

Access status for this site file is open, it is on the interim register, and has been declared as having insufficient information (ACMC 13/06/2000).

18501 SCARRED AND MODIFIED TREES
Recorded by Trevor Walley in 2001, as being a group of four (4) trees, modified by man-made engravings or scarrings, that are ceremonial, mythological, historical and archaeological in significance. The trees are located within the same vicinity, on the south side of Dixon Road (north of Calume Street, between Ennis Avenue and Darile Street), as are recorded the Rockingham Stone Arrangement (3334), Dixon Road Foothole Tree (18942), and the Ring of Stones (18502).

The coordinates for the site (below) recorded on the Department of Indigenous Affairs (DIA) registry are given as ‘Unreliable’. The site entry sits on the interim register, has open access, and has no gender restrictions applied to it.
383729mE 6428074mN
Zone 50

18942 DIXON ROAD FOOTHOLE TREE
Recorded by Trevor Walley in 2002, as being a modified tree which at the time of identification was dead and lying on the ground. The tree appears to be located within the same vicinity, on the south side of Dixon Road (north of Calume Street, between Ennis Avenue and Darile Street), as are recorded Rockingham Stone Arrangement (3334), Ring of Stones (18502), and Scarred and Modified Trees (18501).
The coordinates for the site (below) recorded on the DIA sites registry are given as being 'Reliable'. The site entry sits on the interim register, has open access, and has no gender restrictions applied to it.
383478mE 6427978mN
Zone 50

3776 INDIAN OCEAN
Originally registered on the basis of information summarised in Steve Brown’s 1983 report entitled: A Survey for Aboriginal Sites – Ethnographic Investigations Relating to Some Proposed Highway and Road Developments in the Perth Metropolitan Area. As it is currently mapped, the Indian Ocean site lies within the area of Cockburn Sound between the mainland and Rottnest, Carnac and Garden Islands. The ACMC was advised in 2004 that Brown describes two accounts of Aboriginal myths associated with the separation of the offshore islands from the mainland and quotes the records of Armstrong and Moore. Armstrong is quoted as follows: “They [the Aboriginal people] state, as a fact handed down to them from their ancestors, that Garden Island was formerly united to the main, and that the separation was caused, in some preternatural manner by the waugal”. Moore observed in 1884: “The natives have a tradition that Rottnest, Carnac and Garden Island, once formed part of the mainland… the ground split asunder with a great noise, and the sea rushed in between…”. Other versions of the Aboriginal myth have also been found and recorded (see site file, DIA 3776). The site is registered as having mythological significance, and the coordinates (below) are given as being ‘Reliable’. The ACMC has recently (Resolution 2004/082) resolved to reassess and evaluate the site noted as DIA 3776 (Indian Ocean) as not a site under the Aboriginal Heritage Act 1972. The ACMC further resolved that the site may be restored at any time if and when further supporting information comes to hand. Moreover, with its recent re-mapping (ACMC Resolution 2004/083), 3776 now reaches the mean high water mark of the coastline up to the mean high water mark of the coastline of Garden, Carnac and Rottnest Islands.

Registry Status: section 5(B) section 5(C) section 39(2)(a) section 39(2)(b), section 39(2)(c)
372552mE 6445470mN
Zone 50

Heritage Survey Reports
There were 32 Heritage reports identified in the DIA database search, of these only five reported on surveys in close proximity to the PDA.

Report ID 19383
The Port Catherine Project was a proposal for urban clean-up and renewal of derelict industrial land and development of a residential community at Coogee.
No archaeological material was revealed within the site during archival research and field survey.

However, two (2) Aboriginal ethnographic sites were identified: Indian Ocean (ID 3776), a mythological site encompassing the ocean between the mainland and Rottnest, Carnac and Garden Islands; and a site referred to as Jervoise Bay Ethnographic #1 (JBE#1, now registered as Cockburn Road, Site ID 15840), which is not yet listed on the register of Aboriginal sites but is a mythological site associated with the limestone ridge and the creation of Lake Coogee and other nearby Lake.

The biological and physical environments of the two ethnographic sites were expected to undergo changes as a result of the development. No concerns were raised by the Aboriginal groups consulted that these changes would adversely affect their cultural association with these sites.

An important part of the planning process, and believed to be of benefit to site JBE#1, was protection of the eastern face of the limestone ridge, which is associated with a creation myth for the western chain of the Cockburn wetlands.

Report ID 19248

The State Register of Aboriginal Sites revealed one (1) site located within a 5 km radius of the proposed Private Port development area: NATGAS 127 (ID 4148), a stone artefact scatter on sand dunes on Thomas Rd near Bingfield Rd, recorded in 1981 during an archaeological survey of the Dampier to Perth gas pipeline. The report notes a second site, known to the researchers but which did not appear in their Register search: Indian Ocean (ID 3776), a site covering the area of water between the mainland and Rottnest, Carnac and Garden Islands and Cockburn Sound. The site was reported by Brown in 1983 and added to the interim register of Aboriginal sites in 1985.

The archaeological field survey employed a series of closely spaced pedestrian transects across accessible areas of the PDA, walked by the archaeologist (Gavin Johnson), and in part (across the northern portion) also by the anthropologist (Fred Collard) and a number of local Aboriginal representatives.

The survey revealed no new sites within the survey area.

The report insists it is essential that any ground disturbing work in the coastal dune system is monitored by local Aboriginal people in case buried skeletal material, or other sub-surface archaeological material, is uncovered during excavation.

Report ID 104514

No new sites in report
Four (4) previously recorded sites
Open
No restrictions

The PDA with which this archaeological survey was concerned consists of a narrow strip of coastline, approximately 0.5 km long, to the east of Cape Peron, due north of Point Peron Road.

The researchers uncovered no archaeological evidence during the survey, and were confident that, due to their high percentage of coverage (approximately 80% of the whole area, using pedestrian transects) within the PDA, no such evidence could have been overlooked.

However, while they interpret this lack as being a true reflection of the dunes survey area’s minimal occupation in the past, they go on to point out that no systematic survey had been conducted in the Shire of Rockingham (within which the presently proposed Umwelt Ethanol Bio-Refinery Site, 7004 is located) – ‘a fact that needs rectifying if hypotheses about past Aboriginal lifestyles and habitation patterns are to be drawn’ (Smith 1989:4). They base this argument on the high probability (despite it not yet being reflected in the archaeological record due to lack of research) that large numbers of sites may be associated with the wetlands in the Rockingham area, due to the traditional pathways, Aboriginal tracks, along waterways throughout the south-west, which joined chains of water sources. It is also clear that the rivers and the waterways were the access tracks that led to the sea for inland groups (see ATA Environmental, 2004).

Jesse Hammond (1933) referred to these tracks as “the pads of natives”, which occurred throughout the south-west, connecting water sources. Hammond lists one of these pads as running from Perth along the north bank of the river to North Fremantle, then to Bibra Lake, through Rockingham to Mandurah, and then up both sides of the Murray River.

Also spoken of by Hammond (who was in close contact with the Aboriginal people in the area from the 1860s onwards) was the custom of “old time natives” to visit their birth places and stay there for as long as resources would allow. Rockingham is mentioned as one such place where the food supply could support a large number of people and, consequently, had a large number of births.

While this has yet to be confirmed by needed research, an occurrence that is recorded from geological evidence and that was passed down via oral traditions in Aboriginal legend is observed by G.F. Moore in 1884: “The natives have a tradition that Rottnest, Carnac and Garden Island, once formed part of the mainland… the ground split asunder with a great noise, and the sea rushed in between…”.

Report ID [UNKNOWN]
Dames and Moore Pty Ltd, Consulting Engineers, commissioned McDonald, Hales and Associates to conduct a survey for Aboriginal sites at the Rockingham Industrial Park (IP14) in April, 1990.

The total area covered approximately 1,000 hectares, 10% of which had already undergone development, 20% containing farmland was thick pasture, 50% heath and low scrub, 10% open woodland, 5% closed woodland, and 5% coastal shoreline. They found extensive evidence of clearing, burning, as well as bulldozing. Hence, the potential for site discovery varied considerably over the survey area.

Archival research showed no previously recorded archaeological sites within the then proposed development area (PDA). However, one new archaeological site of limited significance was found within the then PDA: a campsite of which the principal Aboriginal informant for the survey had no specific knowledge, identified within the heath and low scrub unit of the survey area. The new site, covering approximately 5m x 15m, contained two (2) discrete scatters of porcelain and glass, the latter material indicating an Aboriginal camping site utilised sometime between the early to mid-1900s. This site was not felt by Locke and Smith to be of high significance.

One isolated artefact was also discovered within the then PDA: a quartz flake, located within the open woodland unit of the survey area, due east of the intersection of Mandurah and Day Roads.

There were also found (through archival research) two previously recorded ethnographic sites of spiritual significance within the then PDA: 3689 East Rockingham Cemetery; and 3690 Mandurah Road Trees (located opposite the cemetery). Both of these sites are important ones to Aboriginal people in the area, due to their associations with the spirits of dead Nyungars – significant and strong associations which attest to the importance of this area to Aboriginal people in historic times, as it became utilised for campsites by Aboriginal people as they were pushed out of highly productive hunting and gathering regions by white settlers, forcing them to use more marginal areas.

At the time of the survey (1990) the City of Rockingham, an extensive area, was for the most part undeveloped. Residential development was centred in the Shoalwater-Rockingham-Safety Bay area with recreation and industrial clusters along the coastline. Since this time, the area has undergone some significant changes, with many more industrial sites being erected and put into operation, plus further spread of residential development.

Report ID 102143

McDonald, Hales and Associates were commissioned in June 1995 by the Water Authority of Western Australia (WAWA) to conduct an archaeological and
ethnographic survey of a proposed sewer in-fill development at Rockingham, Perth, WA. Both surveys were conducted in June 1995, by S. O’Reilly and J. Price, with the assistance of a total 28 Aboriginal informants.

No new archaeological sites and no new ethnographic sites were located within the boundaries of the then proposed development area (PDA) as a result of the surveys.

One previously recorded site (3836 Lot 234, Safety Bay Road [Burial]), said to be of both archaeological and ethnographic significance, was identified within the boundaries of the PDA, though an inspection of the area in which it was reported to lie showed that it is now situated beneath a housing development.

The report names another previously recorded site (3334 Rockingham Stone Arrangement) as possibly lying within the then PDA boundaries, though it notes that the evidence regarding its location is contradictory, and that this site may have suffered a similar fate to that of site 3836, owing to the close proximity of urban infrastructure.

The ethnographic survey employed the ‘snowball’, or network, method, whereby the personal, family and community connections of Aboriginal Consultants are utilised by asking them to recommend other people/groups who may have associations with the land crossed by the then PDA. If recommendations are made, then the new Consultants thus identified are asked (by the ethnographer) for further recommendations, and so forth, until all key Aboriginal Consultants are identified.

For the ethnographic survey, eight (#1 - #8) key Aboriginal Consultants were involved in five separate trips, driving around the then PDA with the ethnographer, stopping periodically to discuss the area and view sections of the then PDA on foot. Aboriginal Consultants #9 - #28 were consulted about the project with the aid of maps.

As a result of the ethnographic survey, the existence of the Rotary Park site (3471) in Rockingham was confirmed, and hence rerecorded.

References


ETHNOGRAPHIC HISTORY

Profile of the Swan River Region (Perth Metropolitan):

(by Bruce Shaw)

Introduction: Place, Antiquity, People
The South West region takes in the southern part of what Jutson describes as the South West Division or Swanland (Jutson, 1950:32). According to Jutson, Swanland includes the Perth coastal plain extending from the country north of Gingin southwards to Cape Leeuwin, and the escarpment country further inland as far as the Bremer Bay locality on the south coast. The Swan Coastal Plain has been divided into several ‘physiographic elements’ starting from the Darling Fault Scarp: a Piedmont Zone of alluvial sediments, a gently undulating Sandy Plain with swampy areas in low-lying land between the dunes, characterised by a string of lakes running north and south, and Coastal Limestone, the Shore Line, shallow waters, and islands and reefs (Jutson, 1950: 89-90). All of these ecological niches are important to the Indigenous people.

According to Tindale (see Appendix 1), the traditional territory of the ‘Whadjuk’ of the Perth Metropolitan area includes:

Swan River and northern and eastern tributaries inland to beyond mount Helena; at Kalamunda, Armadale, Victoria Plains, south of Toodyay, and western vicinity of York; at Perth; south along coast to near Pinjarra (Tindale, 1974: 242-243).

The Noongar language family is classified as belonging to the ‘Nyunga Subgroup’ and to the Pama-Nyungan Family of Aboriginal languages (Oates and Oates, 1970: xiii). According to that authority, ‘Nyunga’ contains within it twelve languages: Juat, Wadjuk, Balardong, Pinjarup, Wilman, Kaneang, Wardandi, Pibelmen, Minang, Koreng, Nyakinyaki, and Wudjari (ibid., pp. 60-62). More recently, Thieberger (1996) finds eleven languages of the South West: Yuwat, Balardung, Wajuk, Binjarub, Wilman, Kaniyang, Wardandi, Bibbulman, Minang, Goreng, and Wudjaarri that are today subsumed under the name ‘Nyungan.’ Drawing upon twenty-five documented sources, Bindon and Chadwick (1992) in their Nyoongar wordlist include variations between these languages, but they are often differences of pronunciation as recorded by European listeners of the time. Noongar people hear the differences too.

The Archaeological evidence for Indigenous occupation in the Perth area is strong. In particular:

The Upper Swan River site near Perth has the distinction of having its age of about 38 000 years old accepted by almost all leading archaeologists … It is an extensive, open-air camp site on an ancient floodplain bordering the upper Swan River between Perth and Walyunga’ (Flood, 1995: 106).

While entertaining doubts about those dates of 32,000 to 38,000 years BP – on questions of radiocarbon dating and insufficient details about the artefacts – Mulvaney and Kamminga are satisfied with other dates for the Perth area: 29,000 years BP for
Helena Valley and 10,000 years BP for Minim Cove on the Swan River (Mulvaney and Kamminga, 1999: 137-138, 178). Mulvaney and Kamminga note:

detailed observations of Aboriginal life, documenting the enormous variety of plant and animal foods that the local Nyoongar people obtained from many environments … One of the most important Holocene sites in southwestern Australia is Walyunga, 40 kilometres north of the Swan River near Perth … In the early phase, from 8000 to 4500 years BP … in the later phase, which continues after 3200 years BP’ (Mulvaney and Kamminga, 1999: 293-294).

Walyunga National Park appears to lie near the boundaries of three Noongar language groups: the Whadjuk of the Perth plains, the Balardong and the Juat (Tindale’s spelling).

The Swan River has special significance to Noongar people who called it the Derbal Yaragan (der-bal = an estuary; yaragan = river; Bindon & Chadwick, 1992: 43, 187).

The Warndoolier, nearer to Perth became the Swan and combined downstream with the Dyarlgarro or Canning River; all then flowing as one to the coast to empty into the Derbal Naral, the expanse of sheltered water that includes the whole of Cockburn Sound from Mangles Bay to the northernmost tip of Rottnest Island (Green, 1984: 2)

Contact & Settlement
The Swan River Colony was proclaimed on the 12th August 1829, the year in which captain James Stirling arrived in the ship Parmelia, and the city of Perth was named after Perth city in Scotland, which was the birthplace of the Secretary of State George Murray (Aplin, 1987: 452). Using Governor Stirling’s figure of 1834-1839, Daisy Bates calculates that ‘there could not have been less that 40 000 Aborigines living in the Southwest before white settlement took place’ (Bates, 1985: 54). The official Native Interpreter, Francis Armstrong, provides population estimates for some of the local groups of the Perth coastal plain:

The Interpreter has taken down the names of every individual in most of the Swan tribes. Munday’s tribe at present contains about 30, and Yalgonga’s 32, men, women and children. The late Yagan’s tribe is much weaker. None of the tribes on the Swan or Canning exceed 40 Individuals, at most. The total number, including women and children, who are in the habit of visiting Perth, Fremantle, Guildford and Kelmscott, are estimated at nearly 700; of whom the Interpreter can recognise, at sight, 400 at least. He averages a tribe to every ten miles square of country (Armstrong, 1836).

The ‘weakening’ of these local groups appears to have come about from a combination of disease and violence, the latter sometimes described in the oral tradition as ‘massacres.’ In 1832 whooping cough was prevalent, followed in 1833 by cholera (Green, 1979: 95).

Tindale notes that R. M. Lyon (1833) ‘when dealing with the people in the immediate vicinity of Perth … recognized groups on a hordal basis … As he considered groups further away where he had less information, he recognized the larger units that are called tribes’ (Tindale, 1974: 142). The ‘horde’ in anthropological usage usually denotes a local group, that is, ‘the small group that owned and occupied a certain
defined territory.’ It was exogamous, that is, marrying out, and a number of hordes together may be called a tribe (Tindale, 1974: 16-17). Armstrong’s use of the word tribe in this context appears to refer to the local group. Arguably the Noongar families that figure in the present-day in Heritage surveys and local associations or cultural centres are equivalents of the local group.

Robert Menli Lyon arrived at the Swan River Colony in 1829 and took up land on the Swan River for a short time before leaving the colony in 1834. His description of Aboriginal ‘tribal districts’ in the region from 1832-1833 is among the first to be documented for the Perth coastal plain (Green, 1979: 141-142). Some of the local groups are acknowledged in present-day nomenclature, for example, ‘Beeliar’ for a major road running east from the Mitchell Freeway, Murray for the Murray River further south (see Appendices I & II: two versions of Lyon’s map).

Writing in 1836, Francis Armstrong took a broad perspective, remarking on a mountains/plain dichotomy but saying that the tribes of the plain had their origin in the mountains and that they shared the same language. One thinks of the extension into the Darling Scarp of Whajuk territory to the area west of York and their neighbours the Ballardong. Armstrong noted much social intercourse between mountain and plain, that tribes met frequently to settle quarrels, and that the common language was favoured as the story telling medium.

... the mountain dialect is still invariably preferred ... for ... quarrels between tribe and tribe ... narratives of legends, battles and hunting matches (Armstrong in Green, p. 191).

Considering that Armstrong’s observations were made within eight years after the establishment of the Swan River Colony, we can be confident that he was reporting on pre-contact Aboriginal culture.

From the beginning, the Swan River was of vital importance to the new settlers and Indigenous people alike as a communication route, and to the Indigenous people for whom it exerted strong spiritual significance which value holds today.

Not only in a general sense, by utilising the same tracts of country, but in a very specific sense, by using the same network of nodes (at water sources) linked by tracks, the European pattern of land use was based on (and modified) the Aboriginal pattern … The tracks ran from Perth to North Fremantle, across the river, on to Bibra Lake, Rockingham, Mandurah, and alongside the Murray to Pinjarra; another two crossed the river near the Causeway, to Canning, Bibra Lake and south; they led through Kelmscott to the Pinjarra ford and on to Bunbury, Busselton, and the extreme South-west (Hallam, 1975: 67).

The settlers’ activities severely restricted Indigenous movement and disrupted their traditional fishing areas. Consequently early hostilities and shootings soon became commonplace. In 1833, two Aboriginal men were shot by firing squad, and in 1834 the South Perth mill was attacked (Green, 1984: 92).

Green’s table itemising ‘Aboriginal and Settler Conflict in Western Australia, 1826-1852’ in Green (1979: 75) has the following entries for one year alone, 1833:

30th of April Canning John & William Velvick speared at Bull Creek on High Road ... 1st of May Swan Barracks 9 unarmed Aborigines shot at by soldiers. Soldiers shoot 1 Aborigine and take 3 prisoners ... 5th of May Murray A brother
of Midgegooroo shot by Hunts posse searching for Yagan ... May Midgegooroo captured along Helena River and executed in Perth ... June Upper Swan Yagan & Heegan shot by Keates brothers. William Keates speared.

Midgegooroo was a ‘Wajuk’ leader, the father of Yagan. Both men were among the early casualties of European violence on the Swan River frontier. Lyon’s map, as reproduced in Alexandra Hasluck’s paper, locates the traditional territory of Midgegooroo and Yagan in the area extending from the southern banks of the Swan and Canning rivers to a bearing opposite Garden Island (see Figure 5). Ian Howie-Willis notes that in April 1833 Yagan’s brother Domjum was killed and decapitated and the head put on display. Yagan took what today we interpret as traditional payback against the settlers by killing two brothers, John and Tom Velvick. During the punitive search for Yagan that followed, Midgegooroo was captured and executed. On the 11th of July 1833, William Keats (aged 18) shot Yagan, whose head subsequently was taken by an unnamed party, smoked in a hollow tree and sent to England (Howie-Willis, 1994: 1213-1214).

In the morning of the 24th of April 1834, members of the Murray group thirty strong attacked the Mill of George Shenton at South Perth. It was the same morning in which a young man named Goodyak was publicly flogged at the Perth barracks as punishment for petty theft. Shenton was spared and bags of flour, etc. were carried away. The group, led by a man named Calyute, was from the southern ‘tribe’ in Lyon’s map. He was subsequently arrested with others when he visited the military barracks at Mandurah. Calyute received a flogging and was eventually released from Fremantle jail (Green, 1984: 92-93, 207). Later, in October that year, the so-called ‘Battle of Pinjarra’ took place.

The shooting of Yagan and the attack on the South Perth mill are two notable events among a string of attacks, retaliations and punitive expeditions that characterised this time of early contact and settlement.

Continuities of the Sacred
Daisy Bates collected the bulk of the material that went into The Native Tribes of Western Australia in the period from 1899 to 1911 (Bates, 1985: 36). She notes ‘the almost total extinction of the pure-blooded natives,’ for example in York, the Victoria Plains, and Gingin (Bates, 1985: 55). However, due to her prejudice against people of mixed Aboriginal and European parentage, she missed the dynamic local cultures of Noongar people. Her turn of the century interviews with elders confirm traditional relationships between Indigenous people from Perth and people from other parts of the South West.

In one instance, Bates describes how the flowers of the banksia tree were picked by the men and allowed to ferment, and that for the subsequent feast in South Perth Aboriginal people from Pinjarra, Guildford, York, and Gingin were invited to participate (Bates, 1985: 241). In a second instance, an important rite de passage to manhood/womanhood, the ceremony within the living memory of Bates’s informants (nineteenth century), was held last in the Swan district. On that occasion messengers were sent to many districts carrying message sticks, ‘to Moore River, York, Northam, Toojee ... Mandura[h], Bunbury’ (Bates, 1985: 327). These observations support the oral history that there were well-beaten communication routes north to south along the
coastal plain and inland to districts such as York. They continued in use after Bates’s
time, Noongar cultural life having continuity to the present-day.

The Swan River, the Canning River and their tributaries, as well as the Murray River
further south, the Moore River to the north and the strings of coastal lakes
interconnected through the water table, are regarded as sacred to the Rainbow
Serpent, the *Wagyl*, by present-day Noongars. Belief in the Rainbow Snake as a major
creative Dreamtime being is widespread in Aboriginal Australia.

Sylvia Hallam points to the rich complex of associations between the *Wagyl* (which is
the name of the Rainbow Serpent in the Noongar South West) and the chief physical
elements of nature - fire, water, the sky, the earth - saying that, ‘the connection of the
serpent with water and also with dark caverns, are themes seen as recurring within and
without the South-west of Australia’ (Hallam, 1975:82). Descriptions of the Rainbow
Serpent have a common core of beliefs about its qualities. It dwells deep within
dwarcourses, waterholes, rivers and rock pools, and maintains the quantity and the
quality of the drinking water. If a site closely associated with the Rainbow Snake is
desecrated in any manner - and that includes virtually all places where there is water
in significant quantities or, in arid areas, water courses albeit dry for most of the year -
the persons responsible are in literal physical danger and the land itself is depleted, for
the Rainbow Snake will go away.

The waterways are interconnected too with the Dreaming tracks of other beings.
Dreaming tracks – sometimes called story lines – have been identified throughout the
South West. A story line, as the term implies, usually concerns one or more creative
spirit ancestor (and other human and non-human beings) that travelled across the
landscape. During those travels, the ancestral spirits had encounters with one another
and created land features such as the river systems, waterholes, hills and other natural
features.

In Aboriginal Australia, a story line or Dreaming track often passes through the
territories of local groups that together comprise ‘tribe’ or language groups, and is not
known in its entirety by the people of any one place – except perhaps by
knowledgeable senior men. The known ‘episode’ ‘belongs’ to one elder or more who
reserve the sole right to tell/sing the story. Episodes of a longer story are shared
during group meetings (connected with Law, ceremonial and ritual) during which one
elder after another will sing/recite the part of the story that is their right. This means
that although individuals may have a good knowledge of an episode, several episodes,
or even a whole Dreaming story, they are not entitled to tell it to another without
permission and formal performance because they do not ‘own’ it. This would have
applied in the instances recorded by Daisy Bates.

**Conclusion**

Communication routes, Dreaming tracks and Dreaming stories remain in the oral
tradition of many Noongar families; as do the stories of ‘massacres’ remain, and the
localities with which they are associated as campsites or as burials. It is these sets of
associations in particular that concern Aboriginal people when they participate in
Heritage surveys. This explains the prevalence of those concerns expressed in the
Heritage reports.
The coastal fringe and the dunal system in which the proposed Bio-Ethanol Refinery is located were widely used in pre-contact times and in the immediate years following contact. The Dreaming stories, recently related in an unpublished confidential report for an art works project in the Fremantle area, associated with the many natural features of the Cockburn Sound are highly significant and the subject of the struggle to protect and preserve Noongar heritage.
Figure 3 Tindale’s Whadjuk
Figure 4 Lyon's Map

Adapted from Neville Green, Nyungar - The People (1979:180). Original source: Lyon, Robert 1833 Perth Gazette, 20 April.
Figure 5 Lyon’s Map in Alexandra Hasluck (1961)
ARCHAEOLOGICAL BACKGROUND

Archaeological Significance

There were no Aboriginal sites identified from neither background research nor the initial field reconnaissance of the PDA. The survey area, located on Quindalup dunes has been previously identified as an area of very low archaeological potential for Aboriginal sites.

There is evidence of European historical activity in the area, the remains of the historical town site still exist today. Although there is clear signs of occupation and use of the area during the historic period, remarkably little artefactual material was located during the survey. The bulk of the archaeological remains are the features of the historic town site, the limestone tracks and some foundations. These areas should be the focus of further archaeological survey.

Archaeological Background

Aboriginal Heritage
This section of the report will assess the Aboriginal heritage significance of the portion of land using available DIA sites research and academic publications.

Although there are no known sites within the PDA there are several sites in the area. Archaeologically there is a very limited archaeological record for the survey area, the DIA sites register records a ring of stones (18502) and several modified trees (18501, 18942). In addition, most of the published research on the Swan Coastal plain indicates that Aboriginal archaeological sites rarely occur in Quindalup dune systems were the PDA is located (Hallam 1972, 1977, 1987, Strawbridge 1988, and Bowdler et al 1991). Thus very few archaeological sites are even located in the vicinity of the PDA.

European Heritage

Historical use of a 20-hectare portion of Cockburn Sound location 244 at Kwinana Beach to be impacted by a proposed Ethanol Bio-refinery

(by Dr. Shane Burke)

This section of the report will assess the European heritage significance of the portion of land using available historical documents, and make recommendations about further heritage interpretation.

The study area’s description
The area for analysis is a 175 by 1100 m rectangle of land about 180 metres from Cockburn Sound. A railway borders its east margin and Kwinana Beach Road lies to its north, with west and south margins free. Aerial photographs suggest the study area vegetated with coastal heath and crossed by vehicle or walking tracks.
The area’s European history

**Early colonial period (1829 to 1860)**

Land bordering the southern part of Cockburn Sound has a long European history despite its distance from Western Australia’s early west coast towns of Perth, Fremantle and Guildford. On 14 May 1830, the *Rockingham* with 152 passengers arrived off Western Australia’s coast. The ship and its passengers were associated with the Peel Association of four wealthy land investors lead by Thomas Peel – two other ships, the *Hooghly* and the *Gilmore* having arrived in December 1829 and February 1830. The *Rockingham* ran aground 2 km south of the proposed development area in Mangles Bay (Scott 1830a) with all saved from the vessel that was later refloated, but the *Rockingham*’s settlers experienced much hardship while camping near the grounded ship (Hasluck 1965: 97). Many of the *Rockingham*’s passengers moved north along the coast and combined with members of the *Gilmore* and *Hooghly* camped at Clarence near Woodman Point, but 12 families comprising 12 men, nine women and a ‘proportion of children’ (Collie 1830) remained at the *Rockingham*’s grounding site. Within two years, all moved to other Swan River Colony settlements (Berryman 1979), leaving the area vacant.

**Late colonial period (1861 to 1890)**

The area facing Mangles Bay – later to become the town of Rockingham – developed from November 1872 as a harbour transporting timber brought from the Darling Ranges, whale bone and whale oil (Minchin and Higham 1981: 1), but the study area remained vacant and unowned. A sandy track (later to become the original Rockingham Road) ran near the area’s west margin between Rockingham and Woodman Point, while in 1888 the area became part of Cockburn Sound location 244 of 2000 acres purchased by north west pastoralist and pearler A. R. Richardson (Russell 1979: 152; Erickson 1988: 2615). However, he did little with the land.

**20th century**

A small store with postal facilities existed on Rockingham Road near the study area when the State Steamships ship *Kwinana* ran aground on 27 May 1922 after a storm. The ship, already badly damaged by a November 1920 fire at Carnarvon and after collision damage with the *Port Stephen* while in Fremantle, broke its Careening Bay Garden Island moorings during the storm (Kohlhagan 1969: 4; McKenna 1978: 4). The ship, proving impossible to refloat, was written off and purchased for £10 (Russell 1979). The *Kwinana*’s wreck leant its name to the area, while its rusting hulk became a major tourist site for many years with mention in fiction and non-fiction works (Harcourt 1934; see Figure 5).
By the 1940s, the study area was part of the original Kwinana town comprising anglers and occasional campers. The town’s access was by the old Rockingham Road from the north, or from Office Road from the east. Rockingham Road, First Avenue, Second Avenue, Third Avenue and Pioneer Road were the town’s main west to east streets, with Office Road, Kwinana Road, Bay Street and Harbor Road south to north. Only Office Road, Rockingham Road and First Avenue were sealed (Department of Lands and Survey 1944, 1947 see Figure 6).
In 1952, the Western Australian government offered 1000 acres of land north of the old Kwinana town and adjacent to Point James for BP’s use as an oil refinery. Under terms of agreement, BP purchased 949 acres of land near Point James and another 75 acres of beachfront land south of Office Road (Russell 1979: 152). The potential impact on old Kwinana town was high with BP’s land purchase, with the State government, via the Industrial Development Act (Kwinana Area) of 1952, resuming 7,560 acres east of old Kwinana town to establish a new town of Kwinana in addition to Medina and Parmelia for the expected influx of population needed for the refinery’s construction and operation (Russell 1979: 153). Many moved away from the old Kwinana town, but some stayed until the late 1960s.

**The study area’s heritage potential**

Analysis of historical sources relating to the study area suggests inconstant and limited use of the study area during the historical period, with most use occurring in the last 80 years by holiday markers and anglers. However, disturbance caused by refinery and later industry construction have not completely eliminated material remains of this life style because modern aerial photographs of the study area indicate the preservation of Office Road, Charles Street and First Avenue.
alignments (Figure 7). In addition, historical records’ impreciseness about the location of the 1830 Peel Association camp somewhere in south Cockburn Sound suggests care when allocating a degree of significance to the study area.

Figure 8. Detail of present aerial photograph of the study area with old Kwinana town roads and streets visible (Umvelt 2006). Compare with Figure 6
ARCHAEOLOGICAL SURVEY

In addition to the desktop study commissioned by AIC there was an initial archaeological reconnaissance undertaken on the 27th of June, 2006. Analysis of historical sources relating to the study area suggests inconstant and limited use of the study area mainly by during the historical period within the last 80 years. Disturbance caused by construction has not completely eliminated material remains of this life style because modern aerial photographs of the study area indicate the preservation of some of the original town site (Burke 2006 See Above). During the survey, an attempt to locate the remains of the town site was undertaken. Additionally, the survey aimed to identify archaeological remains of Aboriginal and European origin.

Methodology

AIC archaeologist, Ryan Coughlan, undertook the survey with the assistance of two AIC assistant Anthropologists, Annie Moloney & Damien Lafrentz. The survey was performed by meandering pedestrian transects on a roughly north-south axis. Survey members were spaced at five metre intervals to provide a transect frontage of 15 metres. By this method an overall survey coverage of approximately 65% was achieved.

Results

The survey recorded the archaeological character and potential of the survey area. The survey also identified the remains of the old Kwinana town site as well as a few isolated historical artefacts.

The survey area itself is heavily vegetated with the overall vegetation in the low forest to tall shrub range. The survey itself was indeed impacted by the density of the vegetation with surface visibility dropping to zero at some points. The survey area sits atop the coastal Quindalup Dune formation (Bolland 1998, p. 1-2), which typically has a very sparse Aboriginal archaeological signature in comparison with other areas of the Swan Coastal Plain (Hallam 1987). In fact according to Bowdler et. al (1991), there are only three (3) identified Aboriginal sites in the Quindalup Dune system. Additionally, the survey area has been heavily impacted by European intrusion. There has been the historical construction and recent development as well as recreational use of the area and regular rubbish dumping. The survey area has been heavily disturbed by the construction of infrastructure and equally the saturation of the area by rubbish.

The remains of the historical Kwinana town site are located near the northern boundary of the survey area. The evidence of its existence is preserved in the remains of limestone tracks, building foundations, chimney remains and scattered glass and metal artefacts. Interestingly, there appears to be some evidence of historic settlement to the south as well where scattered limestone and brick remains are located in close proximity to a large cluster of non-indigenous plants. There is also isolated artefactual material from the historic period. The only isolated material located was a lavender bottle fragment, and a wicker fish trap. Table 2 below indicates the artefacts and features in the survey area and their location in zone 50, WGS84 datum.
REPORT ON A DESKTOP STUDY OF ABORIGINAL HERITAGE ISSUES RELATING TO THE PROPOSED ETHANOL BIO-REFINERY AT KWINANA, WESTERN AUSTRALIA

<table>
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<th>Description</th>
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<td>383370</td>
<td>6431326</td>
</tr>
<tr>
<td>KB2</td>
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<td>383087</td>
<td>6430876</td>
</tr>
<tr>
<td>KB3</td>
<td>Bottle Fragment</td>
<td>382827</td>
<td>6430709</td>
</tr>
<tr>
<td>KB4</td>
<td>Wicker fish trap</td>
<td>383047</td>
<td>6430985</td>
</tr>
</tbody>
</table>

Table 2 Features and Artefacts identified in June 27, 2006 survey

Figure 9 Remains of limestone track

Figure 10 Lavender bottle fragment
Discussion

Although the survey area has been heavily disturbed, limited archaeological potential still remains. In particular the Kwinana town site has some archaeological potential as a historical site. The remainder of the survey area has a few areas of potential interest, in particular the settlement area with the non-indigenous plants. Investigations in the future should consider areas with imported plant material to be of interest as several were noted in the survey area. Based on the lack of findings in this survey and predictive modelling (Hallam 1987 and Bowdler et al. 1991) the archaeological potential for Aboriginal cultural material in the survey area is virtually negligible.
CONCLUSIONS

Although research has been done in the area, none of the previous sites, reports, publications or surveys focused directly on the proposed development area (PDA). The research does however indicate that there has been use of the surrounding area by Aboriginal people in antiquity. Historical documents indicate that there was a European town site within the PDA. In addition, the area in and around the PDA was used historically as a holiday destination for fishing and recreation. In light of this, AIC has formulated the following conclusions:

- The project area has minimal archaeological potential for Aboriginal cultural heritage sites.
- The project area has the potential for ethnographic Aboriginal cultural heritage sites.
- The project area has minimal potential for significant historical archaeological sites.
- The project area has been extensively disturbed by European development, especially in recent history. Primarily, the development of infrastructure and industrial areas, but to a lesser extent recreational use and use as a rubbish tip.
- That additional archaeological and ethnographic work will have to be undertaken prior to development to ensure that all requirements under the Act (1972) are fulfilled including consent to use the land under Section 18 of the Act.
RECOMMENDATIONS

Based on the research findings presented in this paper, AIC makes the following recommendations to ensure the developer gives due diligence to the obligations of the Aboriginal Heritage Act (1972):

- that Primary Energy Pty Limited continues with their proposed developments at Kwinana Beach by undertaking a site identification survey under the Act.

- that Primary Energy Pty Limited undertakes a full archaeological survey of the area prior to any ground disturbing works to ensure that any archaeological Aboriginal cultural heritage sites are located and recorded within the development area.

- that Primary Energy Pty Limited undertakes a full ethnographic consultation and survey of the area prior to any ground disturbing works to ensure that any ethnographic Aboriginal cultural heritage sites are located and recorded within the development area.

- That Aboriginal Native Title Claimants for the proposed development area are consulted early during development process and are regularly informed of progress at the proposed development site.

- that all Primary Energy Pty Limited staff and contractors are made fully aware of their obligations and responsibilities under the Act (1972).
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APPENDIX I GLOSSARY OF TERMS

Artefact Scatters: Stone artefact scatters are the most common archaeological component represented throughout Southwest Western Australia. In most cases they comprise a surface scatter of stone artefacts, although a sub-surface component may also be present, particularly in depositional environments such as those found in the coastal and sub-coastal areas. Such deposits are particularly significant in terms of the potential afforded for dating the site and examining change over time.

Burials: These are generally difficult to identify unless explicitly distinguished by some sort of marker, are known to family and/or community members, or have been recorded in a documentary or oral format.

Engraving: These are places at which designs have been carved, pecked or abraded into a rock surface, are known to occur throughout much of the state although, in common with painting sites, they are rare in the Southwest.

Fishtraps: These can be broken down into two main groups; stone structures constructed in tidal estuaries, and wooden fences or weirs built across inland drainage features.

Grinding patches/grooves: In the lower Southwest of Western Australia grinding patches/grooves generally take the form of small circular depressions found on rocky exposures along the coast. These features are thought to represent activities relating to the production of ‘burley’ to be used in spear fishing.

Middens: Such sites consist of scatters of humanly deposited shell, usually with a stratified component.

Modified Trees: These are trees that show evidence of having been carved or scarred for the purpose of creating territorial markers, the extraction of raw material for the production of items of material culture (such as bowls or shields), or for the purpose of capturing animals such as possums.

Painting: Aboriginal paintings were probably undertaken on a wide variety of media, but are best known from rockshelters, caves and overhangs where they are protected from the detrimental effects of the weather. A wide variety of motifs, including anthropomorphic, animal and geometric figures were used; stenciled objects are also common. Whilst spectacular painting sites can be found across most of the state, particularly in the Kimberley region, very few have been recorded in the lower Southwest.

Quarry: These sites can take several forms. In most cases they comprise surface hardstone exposures, which were exploited as a raw material for the manufacture of stone artefacts. Ochre and other mineral pigments were also exploited, usually being mined from naturally occurring deposits.

Structure: This is a generic label used to describe a range of archaeological features including what have been interpreted as lizard ‘habitats’, hunting blinds and stone arrangements (DIA file notes).
APPENDIX II: ABORIGINAL HERITAGE ACT (1972)

The following information is from a heritage perspective only, and any binding legal advice must be sought from an appropriate legal source. This information is extracted from the DIA website at www.dia.wa.gov.au.

Developers must make a reasonable effort to find out if any sites exist in the development area. If a previously unrecorded site or any Aboriginal material is located the land owner or user must report them to the Registrar of Aboriginal Sites.

Under the Act it is an offence to disturb any Aboriginal site. If a development is likely to impact on a site, consent to proceed must be given by the Minister for Aboriginal Affairs in the form of a section 18 permit. Penalties include fines of up to $2000 and/or 12 months imprisonment. Sites or material can include burial grounds; symbols; objects; cave or rock paintings or engravings; stone structures; arranged stones; and carved trees.

The Minister for Indigenous Affairs is responsible for the administration of the Act. He or she ensures that all places in Western Australia which are of traditional or current sacred, ritual or ceremonial significance to Indigenous people are recorded and their importance evaluated.

A section 18 permit is required only if a development is likely to impact on an existing site. If no sites are located within an area, or if the development can avoid an existing site in a manner acceptable to relevant Aboriginal people, no section 18 is required. However, should a previously unrecorded site be located during works, then work must cease and a section 18 application must be made. For this reason it is recommended that a survey be conducted before development to assess the location of any sites and prevent delays to the proceedings.

If monitoring by Aboriginal people and a heritage consultant is to occur during development, a section 16 permit can also be obtained which allows study and removal of objects located in the development area. Consultation with Aboriginal people before development should indicate whether this is an appropriate possibility to mitigate the impact of development.

5. Application to places

This Act applies to:

(a) any place of importance and significance where persons of Aboriginal descent have, or appear to have, left any object, natural or artificial, used for, or made or adapted for use for, any purpose connected with the traditional cultural life of the Aboriginal people, past or present;

(b) any sacred, ritual or ceremonial site, which is of importance and special significance to persons of Aboriginal descent;

(c) any place which, in the opinion of the Committee, is or was associated with the Aboriginal people and which is of historical, anthropological, archaeological or ethnographical interest and should be preserved because of its importance and significance to the cultural heritage of the State;
(d) any place where objects to which this Act applies are traditionally stored, or to which, under the provisions of this Act, such objects have been taken or removed.

[Section 5 inserted by No. 8 of 1980 s. 2; amended by No. 24 of 1995 s. 6.]

6. Application to objects

(1) Subject to subsection (2a), this Act applies to all objects, whether natural or artificial and irrespective of where found or situated in the State, which are or have been of sacred, ritual or ceremonial significance to persons of Aboriginal descent, or which are or were used for, or made or adapted for use for, any purpose connected with the traditional cultural life of the Aboriginal people past or present.

(2) Subject to subsection (2a), this Act applies to objects so nearly resembling an object of sacred significance to persons of Aboriginal descent as to be likely to deceive or be capable of being mistaken for such an object.

(2a) This Act does not apply to a collection, held by the Museum under section 9 of the Museum Act 1969, which is under the management and control of the Trustees under that Act.

(3) The provisions of Part VI do not apply to an object made for the purpose of sale and which:

(a) is not an object that is or has been of sacred significance to persons of Aboriginal descent, or an object so nearly resembling such an object as to be likely to deceive or be capable of being mistaken for the same; or

(b) is an object of the kind referred to in paragraph (a) that is disposed of or dealt with by or with the consent of the Minister.

[Section 6 amended by No. 24 of 1995 s. 7.]

7. Traditional use

(1) Subject to subsection (2), in relation to a person of Aboriginal descent who usually lives subject to Aboriginal customary law, or in relation to any group of such persons, this Act shall not be construed:

(a) so as to take away or restrict any right or interest held or enjoyed in respect to any place or object to which this Act applies, in so far as that right or interest is exercised in a manner that has been approved by the Aboriginal possessor or custodian of that place or object and is not contrary to the usage sanctioned by the Aboriginal tradition relevant to that place or object; or

(b) so as to require any such person to disclose information or otherwise to act contrary to any prohibition of the relevant Aboriginal customary law or tradition.

(2) Nothing in subsection (1) authorises any person, or group of persons, to dispose of or exercise any right or interest, or any purported right or interest, in a manner which is, in the opinion of the Minister, detrimental to the purposes of this Act.

[Section 7 amended by No. 24 of 1995 s. 8.]

16. Excavation of Aboriginal sites

(1) Subject to section 18, the right to excavate or to remove any thing from an Aboriginal site is reserved to the Registrar.
2. The Registrar, on the advice of the Committee, may authorise the entry upon and excavation of an Aboriginal site and the examination or removal of any thing on or under the site in such manner and subject to such conditions as the Committee may advise.

[Section 16 amended by No. 8 of 1980 s. 5; No. 24 of 1995 s. 17.]

17. Offences relating to Aboriginal sites

A person who:

(a) excavates, destroys, damages, conceals or in any way alters any Aboriginal site; or

(b) in any way alters, damages, removes, destroys, conceals, or who deals with in a manner not sanctioned by relevant custom, or assumes the possession, custody or control of, any object on or under an Aboriginal site, commits an offence unless he is acting with the authorisation of the Registrar under section 16 or the consent of the Minister under section 18.

[Section 17 inserted by No. 8 of 1980 s. 6; amended by No. 24 of 1995 s. 18.]

18. Consent to certain uses

(1) For the purposes of this section, the expression “the owner of any land” includes a lessee from the Crown, and the holder of any mining tenement or mining privilege, or of any right or privilege under the Petroleum Act 1967, in relation to the land.

(1a) A person is also included as an owner of land for the purposes of this section if:

(a) the person;

(i) is the holder of rights conferred under section 34 of the Dampier to Bunbury Pipeline Act 1997 in respect of the land or is the holder's nominee approved under section 34(3) of that Act; or

(ii) has authority under section 7 of the Petroleum Pipelines Act 1969 to enter upon the land; or

(b) the person is the holder of a distribution licence under Part 2A of the Energy Coordination Act 1994 as a result of which the person has rights or powers in respect of the land.

(2) Where the owner of any land gives to the Committee notice in writing that he requires to use the land for a purpose which, unless the Minister gives his consent under this section, would be likely to result in a breach of section 17 in respect of any Aboriginal site that might be on the land, the Committee shall, as soon as it is reasonably able, form an opinion as to whether there is any Aboriginal site on the land, evaluate the importance and significance of any such site, and submit the notice to the Minister together with its recommendation in writing as to whether or not the Minister should consent to the use of the land for that purpose, and, where applicable, the extent to which and the conditions upon which his consent should be given.

(3) Where the Committee submits a notice to the Minister under subsection (2) he shall consider its recommendation and having regard to the general interest of the community shall either:
(a) consent to the use of the land the subject of the notice, or a specified part of the land, for the purpose required, subject to such conditions, if any, as he may specify; or

(b) wholly decline to consent to the use of the land the subject of the notice for the purpose required, and shall forthwith inform the owner in writing of his decision.

(4) Where the owner of any land has given to the Committee notice pursuant to subsection (2) and the Committee has not submitted it with its recommendation to the Minister in accordance with that subsection the Minister may require the Committee to do so within a specified time, or may require the Committee to take such other action as the Minister considers necessary in order to expedite the matter, and the Committee shall comply with any such requirement.

(5) Where the owner of any land is aggrieved by a decision of the Minister made under subsection (3) he may, within the time and in the manner prescribed by rules of court, appeal from the decision of the Minister to the Supreme Court which may hear and determine the appeal.

(6) In determining an appeal under subsection (5) the Judge hearing the appeal may confirm or vary the decision of the Minister against which the appeal is made or quash the decision and substitute his own decision which shall have effect as if it were the decision of the Minister, and may make such order as to the costs of the appeal as he sees fit.

(7) Where the owner of any land gives notice to the Committee under subsection (2), the Committee may, if it is satisfied that it is practicable to do so, direct the removal of any object to which this Act applies from the land to a place of safe custody.

(8) Where consent has been given under this section to a person to use any land for a particular purpose nothing done by or on behalf of that person pursuant to, and in accordance with any conditions attached to, the consent constitutes an offence against this Act.

[Section 18 inserted by No. 8 of 1980 s. 6; amended by No. 24 of 1995 s. 19; No. 58 of 1999 s. 39.]

62. Special defence of lack of knowledge
In proceedings for an offence against this Act it is a defence for the person charged to prove that he did not know and could not reasonably be expected to have known, that the place or object to which the charge relates was a place or object to which this Act applies.