



**DESKTOP REPORT OF KNOWN ABORIGINAL AND EUROPEAN HERITAGE PLACES AND VALUES WITHIN THE SHIRE OF EXMOUTH LOCAL PLANNING SCHEME NO. 4 AREA, CONDUCTED BY TERRA ROSA CULTURAL RESOURCE MANAGEMENT AND PREPARED FOR THE LOCAL PLANNING STRATEGY DEVELOPED BY TAYLOR BURRELL BARNETT.**

Desktop report of known Aboriginal and European heritage places and values within the Shire of Exmouth local planning scheme no. 4 area

**September 2013**

Author: Scott Chisholm



**TERRA ROSA**  
CULTURAL RESOURCE  
MANAGEMENT

## **AUTHOR CONTACT DETAILS**

Name: Scott Chisholm

Company: **Terra Rosa Cultural Resource Management Pty Ltd**

Contact Details: 346 South Terrace, South Fremantle, Western Australia 6162

## **PROPONENT CONTACT DETAILS**

Name: Shelley Bell

Company: **Taylor Burrell Barnett Town Planning and Design**

Contact Details: 187 Roberts Road Subiaco, Western Australia 6008

## **COPYRIGHT**

This document is copyright. As such, no portion of this document may be reproduced or copied in any form, or by any means, without prior written permission from Terra Rosa Cultural Resource Management Pty Ltd except as permitted under the *Copyright Act 1968* (Cth). Notwithstanding this, Taylor Burrell Barnett Town Planning and Design may use this material for the purposes of employee awareness and make sufficient copies for use within Taylor Burrell Barnett Town Planning and Design.

## **DISCLAIMER**

The information, opinion, ideas and recommendations presented in this document is partly based on the experience of the authors, research, and recognised procedures, which are believed to be accurate, but not infallible. The advice contained herein is given in good faith and follows acceptable professional standards and procedures, but is not meant to encourage any activity, practice or exercise, which may have ceased, changed or have been superseded for any reason without the knowledge of the authors. The authors assume no responsibility or liability for any loss or damage caused directly or indirectly by the information presented in this document.

## **ACKNOWLEDGEMENTS**

The authors would like to acknowledge and thank the following people in this report:

- Shelley Bell and Michael Willcock of Taylor Burrell Barnett Town Planning and Design;
- Yamatji Marlpa Aboriginal Corporation;
- The Gnulli Traditional Owners; and
- Vicki Thomas of the State Heritage Office.

## LIST OF TERMS AND ACRONYMS

The following terms and acronyms are utilised throughout the report. Definitions are provided below for reference.

TERM / ABBREVIATION	DEFINITION
<b>ACMC</b>	Aboriginal Cultural Materials Committee
<b>AHIS</b>	Aboriginal Heritage Inquiry System
<b>ATSIHPA</b>	<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i> (Cth)
<b>CHMP</b>	Cultural Heritage Management Plan
<b>DAA</b>	Department of Aboriginal Affairs
<b>DPA</b>	Development pressure area
<b>GIS</b>	Geographic Information System
<b>GPS</b>	Global Positioning System
<b>Heritage object</b>	An object to which the Act applies under s6
<b>Heritage place</b>	Any place to which there is evidence that s5 of the Act applies
<b>LPS</b>	Local Planning Strategy
<b>LPS4</b>	Shire of Exmouth Local Planning Scheme No. 4
<b>MGA</b>	Map Grid of Australia
<b>NNTT</b>	National Native Title Tribunal
<b>OHP</b>	<p>Other Aboriginal heritage place catalogued by the DAA but not included on the Register of Aboriginal Sites for one of the following reasons:</p> <ol style="list-style-type: none"> <li>1. Information about the OHP has been lodged with the DAA but is pending assessment by the ACMC (status L - lodged);</li> <li>2. Insufficient information has been provided to the DAA for the ACMC to accurately assess whether the OHP constitutes a heritage place under the Act (status I - insufficient information); or</li> <li>3. The ACMC assessed the OHP and considered it not to meet the evaluation criteria for inclusion on the Register of Sites (ie not a registered Aboriginal site) (status S - stored).</li> </ol>



TERM / ABBREVIATION	DEFINITION
<b>Registered Aboriginal site</b>	An Aboriginal heritage place which has been registered by the Registrar of Aboriginal Sites (DAA status R - registered)
<b>Terra Rosa CRM</b>	Terra Rosa Cultural Resource Management Pty Ltd
<b>Traditional Owners</b>	Gnulli native title claimants (NNTT no WC1997/028)
<b>The Act</b>	<i>Aboriginal Heritage Act 1972 (WA)</i>
<b>YMAC</b>	Yamatji Marlpa Aboriginal Corporation

## CONTENTS

Author Contact Details .....	
Proponent Contact Details .....	i
Copyright.....	ii
Disclaimer .....	ii
Acknowledgements.....	ii
List of Terms and Acronyms .....	iii
Contents.....	v
List of Tables.....	vi
List of Maps.....	vi
List of Figures .....	vii
1 Purpose of the Desktop report .....	1
2 Methodology .....	3
2.1 Desktop research methodology .....	3
2.1.1 Aboriginal heritage places and values .....	3
2.1.2 European heritage places and values.....	4
2.1.3 World heritage places and values .....	4
2.2 Cultural Sensitivity Mapping .....	4
2.3 Community consultation .....	4
3 Research Results.....	5
3.1 AHIS Research Results .....	5
3.1.1 Registered Aboriginal Heritage Sites and OHPs.....	5
3.1.2 Registered Aboriginal Heritage Reports.....	5
3.1.3 Significance of Aboriginal heritage places .....	8
3.2 Site File Data within Area of Targeted Development.....	14
3.2.2 Summary of OHPs Intersecting the DPA .....	21
3.2.3 Heritage Reports Relevant to the DPA .....	28
3.3 Cultural Sensitivity Mapping .....	30
3.4 Non-Aboriginal Heritage Research Results .....	33
3.4.1 Shipwrecks.....	33
3.4.2 State Heritage Register.....	33
3.4.3 Significance of European Heritage places .....	51
3.5 UNESCO World Heritage .....	52

3.6 Community Consultation.....	52
4 Heritage Compliance Obligations .....	54
4.1 Heritage legislation, guidelines and best practice.....	54
4.1.1 Aboriginal Heritage.....	54
4.1.2 Non-Aboriginal Heritage and Shipwrecks .....	54
4.1.3 UNESCO World Heritage .....	55
5 Recommendations .....	56
6 References.....	59
Appendix A.....	64
Appendix B.....	73
Appendix C .....	76
Appendix D .....	79

## **LIST OF TABLES**

Table 1: Registered Aboriginal sites according to type within the Shire of Exmouth .....	11
Table 2: Registered Aboriginal sites intersecting the DPA .....	14
Table 3: OHPs intersecting the DPA.....	21
Table 4: Registered heritage reports relevant to the DPA .....	28
Table 5: Registered Aboriginal sites and OHPs located within the Shire of Exmouth .....	64
Table 6: Registered heritage reports relevant to the Shire of Exmouth .....	73
Table 7: Shipwrecks identified off the Exmouth coast .....	76
Table 8: State Heritage Places in the Exmouth Area.....	79

## **LIST OF MAPS**

Map 1: The Exmouth LGA; Appendix 1 of the Shire of Exmouth's Local Planning Strategy and Local Planning Scheme Request for Tenders.....	2
Map 2: Registered Heritage Places and OHP's in the Shire of Exmouth - Northern Portion .....	6
Map 3: Registered Heritage Places and OHP's in the Shire of Exmouth - Southern Portion .....	7
Map 4: Cultural sensitivity mapping northern portion.....	31
Map 5: Cultural sensitivity mapping southern section.....	31

## **LIST OF FIGURES**

Figure 1: Percentage of registered Aboriginal sites according to type within the Shire of Exmouth .....	12
--	----





## **1 PURPOSE OF THE DESKTOP REPORT**

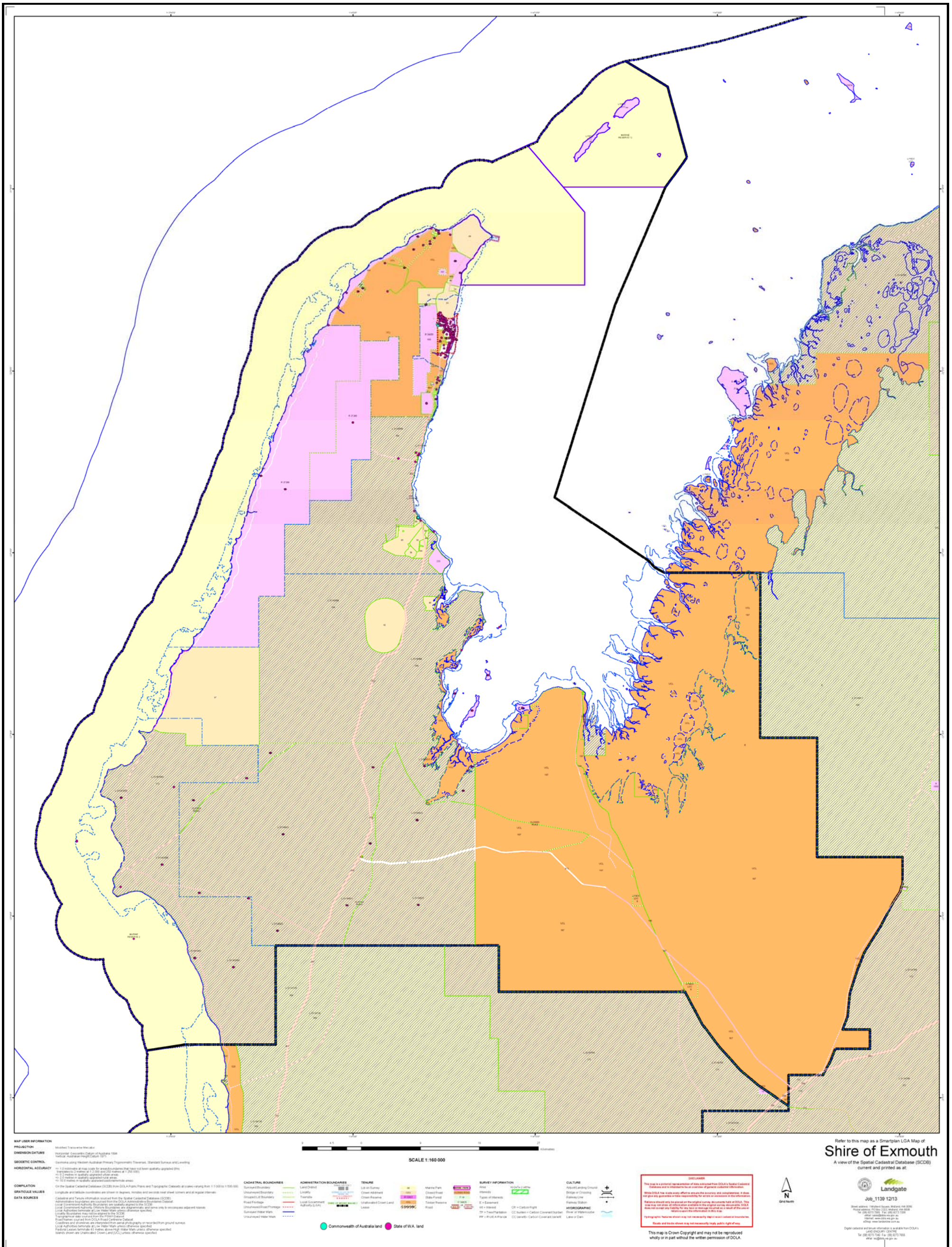
TBB commissioned Terra Rosa CRM to prepare a desktop report to address any heritage concerns within the Shire of Exmouth's Scheme Area (Map 1). The desktop report will form part of the Shire of Exmouth Local Planning Strategy, which will directly inform the Shire of Exmouth's Local Planning Scheme No. 4 area (no. RFT – 03/2013).

1. Consult with Yamatji Marlpa Aboriginal Corporation (YMAC) personnel as the agents of the Gnulli Traditional Owner Group.
2. Undertake desktop research of known Aboriginal and European heritage places and values within the Local Planning Strategy and Local Planning Scheme No. 4 area.
3. Provide an overview of the extent and nature of any known heritage places within the planned development areas.
4. Provide an overview of relevant statutory compliance considerations pertaining to any heritage interests that may be impacted during implementation of the Local Planning Strategy and Local Planning Scheme No. 4.
5. Provide preliminary heritage management recommendations for the implementation of the Local Planning Strategy and Local Planning Scheme No. 4 (based on a best-practice approach and previously identified areas of heritage interest).
6. Provide maps and GIS spatial data indicating locations of known heritage places.
7. Provide a proposed community engagement process for the development of heritage protection protocols (such as a Cultural Heritage Management Plan) or interpretation strategies within tourism development.

The results of the research conducted to address the task sheet items are presented in section 3 of the current report. Recommendations and the proposed community engagement process are presented in section 4 of the current report.



*Map 1: The Exmouth LGA; Appendix 1 of the Shire of Exmouth's Local Planning Strategy and Local Planning Scheme Request for Tenders*





## 2 METHODOLOGY

Research for the current report consisted of:

- Conducting desktop research of all known Aboriginal and European heritage places and values within the Scheme Area;
- Undertaking and providing a summary of consultation with YMAC as agents of the Gnulli Traditional Owners; and
- Strategizing a community engagement process for the development of heritage protection protocols or interpretation strategies within tourism development across the Scheme Area.

### 2.1 Desktop research methodology

#### 2.1.1 Aboriginal heritage places and values

Desktop research for heritage values relies largely on the Register of Sites maintained by the DAA, which provides an indication as to the presence and nature of any heritage values previously recorded and registered within the Shire of Exmouth.

The desktop research involved searching the boundaries of the Exmouth Shire on the DAA Aboriginal Heritage Inquiry System (AHIS) to ascertain whether any registered Aboriginal heritage places or Other Heritage Places (OHP) have been recorded within the area. Registered Aboriginal heritage places are those areas that have been assessed by the Aboriginal Cultural Materials Committee (ACMC) as constituting heritage places under the Act (status R). OHPs include places for which data has been lodged with the DAA but is pending assessment by the ACMC (status L), places for which insufficient information has been provided for accurate assessment by the ACMC (status I), and stored data pertaining to heritage places and objects that have been assessed by the ACMC as not constituting registered Aboriginal heritage places (status S). The status codes utilised by the DAA are provided below.

DAA STATUS ABBREVIATIONS		
<b>C</b> <i>Closed</i>	<b>F</b> <i>Female only</i>	<b>I</b> <i>Insufficient information</i>
<b>L</b> <i>Lodged</i>	<b>M</b> <i>Male only</i>	<b>MI</b> <i>Initiated males only</i>
<b>N</b> <i>No restriction</i>	<b>O</b> <i>Open</i>	<b>R</b> <i>Registered Aboriginal site</i>
<b>S</b> <i>Stored data</i>	<b>V</b> <i>Vulnerable</i>	

The AHIS search is also utilised to ascertain whether any heritage assessments have previously been conducted within the Exmouth Shire, and if any heritage reports containing information relevant to the Shire of Exmouth have been registered with the DAA.

Following the AHIS search, relevant registered Aboriginal heritage place and OHP files and heritage reports held by the DAA are accessed and studied. Some of the information held by the DAA is not publically accessible due to cultural sensitivity (status C) or due to temporary

access suspension as a result of DAA administrative processes. In such cases, the inability to access information is noted in the desktop research results within the Terra Rosa CRM heritage report.

Unpublished material (that is, heritage reports not registered with the DAA) that is available for review is also researched and results provided in the desktop results.

#### **2.1.1.1 Additional area of direct impact**

During the desktop assessment, further detailed research was conducted of the eastern portion of the Exmouth Peninsula, where TBB informed TRCRM that possible development pressures may apply. Within this area, the site files held at the DAA were accessed by TRCRM consultants, and the details provided below to assist directly in future planning.

### **2.1.2 European heritage places and values**

Desktop research for heritage values relied largely on the Register of Heritage Places maintained by the State Heritage Office, which represents a statutory list of places of State cultural heritage significance and on the Shipwreck databases maintained by the Western Australian Museum.

The desktop research involved searching the boundaries of the Exmouth Shire on the Register of Heritage Places to ascertain whether any places of State cultural heritage significance have been recorded within the area. Entry of European heritage places in the Register is reserved for places of Local, State, National or International heritage significance and to become a Registered Heritage Place is the highest recognition afforded at State level. The maritime archaeology shipwreck database was also searched for information and details on major Western Australian shipwrecks located off the Exmouth coast.

### **2.1.3 World heritage places and values**

The Exmouth Shire has one UNESCO World Heritage Site which falls within its boundaries. The desktop research involved a thorough search of the properties inscribed on the UNESCO World Heritage List. World Heritage Listing is the highest global recognition of the importance of a site. The Ningaloo Coast was inscribed on the World Heritage List in 2011 under criteria vii and x for its outstanding universal value. While the Ningaloo Coast is considered to be of Natural significance, its boundaries include areas containing both Aboriginal and European heritage concerns and as such it has been included in this report.

## **2.2 Cultural Sensitivity Mapping**

Once the above research was completed and summarised, it was subsequently mapped to enable a visual aid to planned development, with the gradients of High, Medium and Low areas of cultural sensitivity mapped for the purposes of the Shire's risk assessment for future planning.

## **2.3 Community consultation**

TRCRM contacted various stakeholders through YMAC and the local Traditional Owner community. The results of this consultation are then summarised, with a proposed strategy mapped out for future reference.



### **3 RESEARCH RESULTS**

#### **3.1 AHIS Research Results**

A polygon containing the Exmouth LGA was searched on the DAA AHIS to establish the presence or absence of registered Aboriginal sites and OHPs previously registered with the DAA. Results of the AHIS are detailed below (Map 2 and 3).

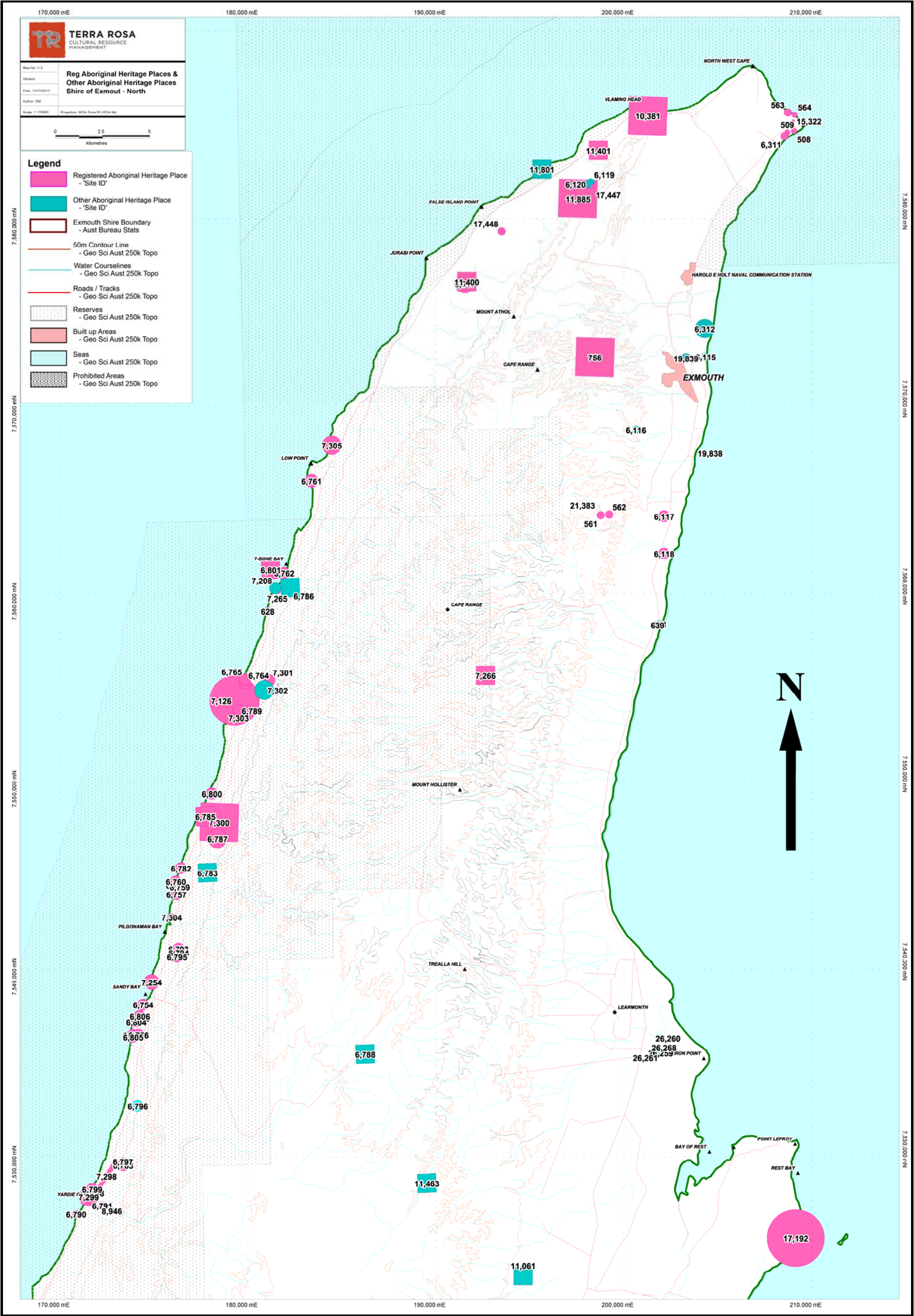
##### **3.1.1 Registered Aboriginal Heritage Sites and OHPs**

The AHIS search of the polygon containing the Exmouth LGA revealed that there are 81 registered Aboriginal heritage places (status R) and 31 OHPs (status I, L or S) previously catalogued within the area. Appendix A lists the results of the search and provides a summary of each place. Status abbreviations are defined in section 2.1.1.

##### **3.1.2 Registered Aboriginal Heritage Reports**

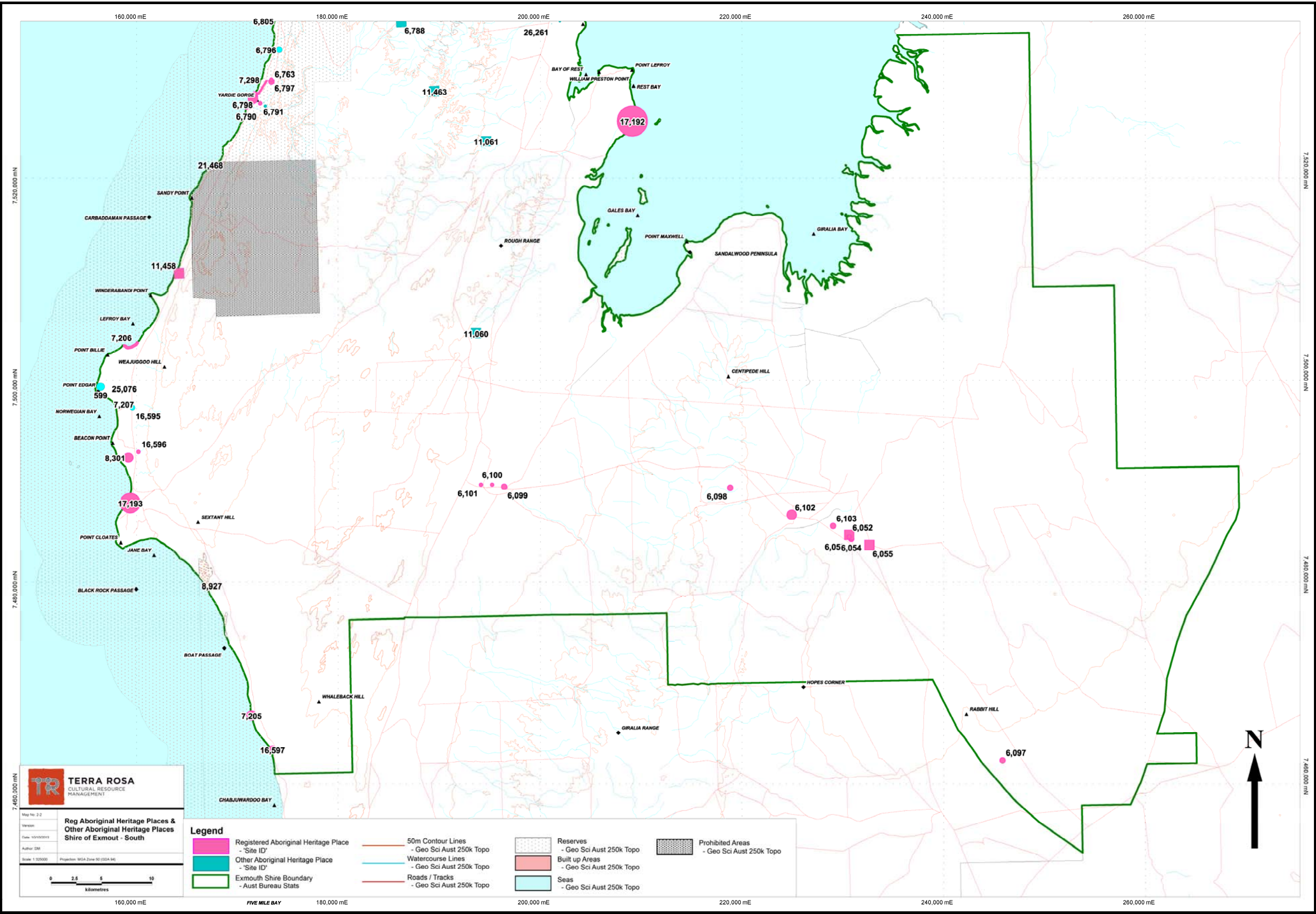
The AHIS was searched for reports of previous heritage assessments within the Shire of Exmouth. The search revealed 28 registered reports relevant to the Shire of Exmouth. Results of the search are listed in Appendix B.

Map 2: Registered Heritage Places and OHP's in the Shire of Exmouth- Northern Portion





Map 3: Map of Registered Heritage Places and OHP's in the Shire of Exmouth-Southern Portion



### 3.1.3 Significance of Aboriginal heritage places

#### 3.1.3.1 Ethno-Historical Background

The Gnulli Native Title Claim (Tribunal No. WC97/28) spans an area totalling approximately 87,878 square kilometres within the Gascoyne and Murchison regions of Western Australia. The claim overlies the Shires of Ashburton, Carnarvon, Exmouth, Shark Bay and Upper Gascoyne. The Gnulli Native Title Claim incorporates the two language groups of Baijungu and Inggarda. While the Baijungu and Inggarda people share a Native Title Claim, the Inggarda Traditional Lands are south of Exmouth. The term *Gnulli* comes from the Thalanyji language and means 'all of us' (Jones et al. 2009).

Traditionally there were two main socio-dialectical groups who occupied the Exmouth LGA, Jinigudira and Baijungu. The Jinigudira were the northern group who lived on the North West Cape and its peninsula to a line between the bottom of Exmouth Gulf and Whaleback Hills (Tindale 1974). According to Tindale (1974), the Baijungu were the southern group who were located on the lower Lyndon and Minilya Rivers, south west of the salt marshes to Quobba; east to Winning Pool; north to Giralia but not to the sea coast and Exmouth peninsula. According to the Baijungu-Mandi Aboriginal Corporation the Baijungu were a coastal people who would also travel up to 100 kilometres inland, this contradicts Tindale's belief that the Baijungu did not exploit coastal areas (Gallagher 1996).

Consistent with the post-contact history of other Aboriginal groups throughout the state, the population of the Jinigudira people was decimated through the introduction of disease and other less savoury aspects associated with colonisation. Today, it is generally accepted that while there may be no one to speak for Jinigudira specifically, Gnulli continue to identify with the land and seas and trace their connection to the region through their ancestors who lived in the area. The traditional lands of the Jinigudira and Baijungu are currently covered by the Gnulli Native Title Claim application (Native Title Tribunal 2013).

A very small portion of the north east corner of the LGA also crosses into Thalanyji territory. The Thalanyji traditional country is located around the Ashburton River to Onslow (Wangka Maya Pilbara Aboriginal Language Centre 2009).

Overall, there is little ethnographic information on either the Jinigudira or Baijungu peoples. What can be understood from the available sources and the archaeological record is that both groups were predominantly coastal dwelling peoples with an economy that focussed on marine resources. The people camped primarily in open-air sites in the dunes adjacent to the tidal mud-flats and mangroves that provided the majority of their food resources (Lantze, Murphy & Hammond 1995). The local environment also provides rock overhangs and rockshelters in the gorges that would also have been used for habitation and as a refuge during inclement weather (Lantze, Murphy & Hammond 1995). The Jinigudira and Baijungu exploited a variety of marine resources including turtles, turtle eggs, fish and shell fish such as Terabralia, Melo and rock oyster (McGann 1999). Tindale (1974) notes that the Jinigudira had sophisticated methods for procuring marine resources including the use of stick rafts to access deeper water and the construction of fish traps in the estuary. Within midden sites in the area there are also terrestrial mammal bones (e.g. Kangaroo) indicating that terrestrial species were also exploited by the Jinigudira and Baijungu as a supplement to their predominantly marine diet. The registered Aboriginal heritage places within the Exmouth LGA support the ethnographic data. The most common sites are open air and rockshelter



sites with an accompanying midden of predominantly shell as well as lithic artefacts and sometimes terrestrial mammal bones (DAA 2013). Both groups also exploited a variety of vegetation for both food and medicinal purposes. For example, when Francis Gregory explored the Gascoyne region in 1858 he observed local Aboriginal people collecting and processing seeds, roots and other plant matter (Petkovic, 2007).

The Jinigudira and Baijangu also manufactured a wide range of tools including lithic artefacts made from the local silicified limestone as well as imported 'exotic' materials (DAA ID 6120). Shells (in particular Baler shell) were used to carry water and also worked into tools. The presence of adzes and adze slugs in some of the artefact scatters is also possible evidence of wood working activities undertaken by the groups (Lantze, Murphy & Hammond 1995). Ethnographically, boomerangs and spears were very important to the Jinigudira and Baijangu who used them for hunting and warfare (Clark 1992). Composite barbed spears in particular were very important for fishing. Gregory, also observed the Aboriginal people using wooden 'scoops' to carry grain and root vegetables (Petkovic 2007). This grain (most likely Spinifex or native grass seeds) could then be processed using a grindstone and muller to produce flour that could be made into flat bread and baked in the fire.

The Jinigudira and Baijangu both had skin systems consisting of four different skin groups. These skin groups governed all social interactions including identifying appropriate marriage partners (Clark 1992). This was part of an active ritual and ceremonial life that included 'increase ceremonies' performed at specific sites that were designed to increase the numbers of a particular resource such as kangaroo or turtle (Clark 1992). Initiation ceremonies were also very important, through these ceremonies boys became men and important cultural knowledge was transmitted to the next generation (Clark 1992). Corroborees provided valuable opportunities for people to meet, share stories, perform ceremonies and transmit important cultural knowledge (Clark 1992). These activities continued through historical times until today (Clark 1992).

Despite limited research and archaeological dating within the boundaries of the Gnulli native title claim, evidence suggests that Aboriginal people have inhabited the area for at least 32,000 years (Morse, 1993 as cited in Jones et al 2009).

The close proximity of the North West Cape to colonial shipping routes meant the ancestors of those who now form part of the *Gnulli* claim would have been familiar with the sight of European ships on their way north prior to white contact. While the coastline was first mapped in 1618, no European explorers ventured into the Gascoyne until 1839 (Clark 1992). Contact on the North West Cape occurred even later, with the first recorded contact between Europeans and the local Aboriginal people in October 1875 when the brig Stefano wrecked on the coast towards the south of the Cape. Pastoral exploration opened up the North West Cape in 1876, coinciding with the rescue of two crew members of the Stefano who had relied on the local Aboriginal people for their survival for several months (Petkovic 2007).

The 1870s onward brought pastoralism to the larger Gascoyne area, with physically able Jinigudira, Inggarda and Baiyangu people being solicited to perform stock and house-work for the white station owners, in return for often meagre rations (Clark 1992). While this fragmented pre-contact lifestyles and family structures, many families were still able to live on or close to Country, assisting in maintaining knowledge and connection despite their legal alienation from their land. The introduction of the Federal Pastoral Industry Award (1968) that required pastoralists to pay their Aboriginal workers the same wages as their Caucasian

staff led to the majority of the Aboriginal pastoral workers being laid off (Edmunds 1989, p. 26). As a result, the remaining Aboriginal people on Country were further pushed off their land and were drawn into missions and developing towns, such as Onslow and Carnarvon (Wangka Maya Pilbara Aboriginal Language Centre 2009). Many of those who identify as part of the *Gnulli* native title claim still reside in these towns today.

### **3.1.3.2    *The Archaeology of Exmouth***

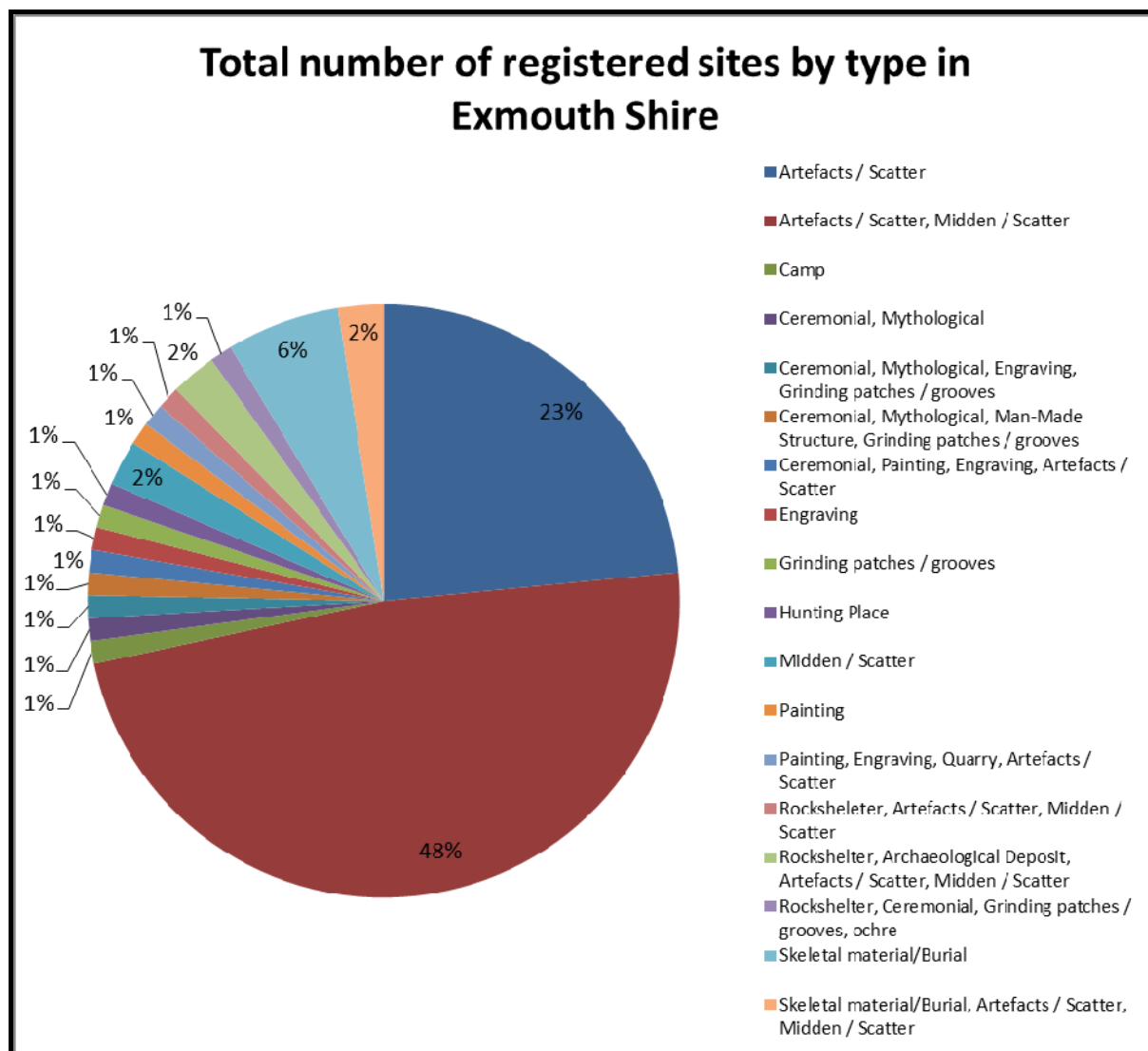
There are currently 81 registered Aboriginal heritage places and 31 Other Heritage Places (OHPs) registered with the DAA within the Shire of Exmouth (DAA 2013). The majority of the registered Aboriginal heritage places (70.37%, n = 57) are grouped along the west coast of the Cape Range Peninsula (Map 2). The remaining registered Aboriginal heritage places are located on the east coast of the peninsula (16.04%, n = 13) or inland (13.58%, n = 11). The distribution of these heritage places cannot be assumed to be representative of the archaeology of the entire Exmouth Shire as the majority of Aboriginal heritage places that appear on the DAA register are identified and reported as a result of cultural resource management surveys undertaken as part of the legislative responsibilities of development projects. As such, the decision as to which areas are surveyed is dictated by development pressures. When the registered Aboriginal heritage places are plotted against the location of previous heritage surveys it becomes apparent that all 81 of the registered Aboriginal heritage places fall within the areas subject to previous heritage survey. For example, 10 of the 11 inland sites are located within a heritage survey corridor along what is now Burkett Road (DAA 2013). The majority of the registered Aboriginal heritage places, both coastal and inland, are also located on, or in close proximity to a permanent or ephemeral source of freshwater (Map 2 and 3).

Table 1 and figure 1, below, detail the total number and type of registered Aboriginal heritage places relevant to the Shire of Exmouth as identified in the desktop research. Artefact scatters accompanied by shell middens are the most common type of heritage place at 48% (n = 39) of the assemblage. This pattern is to be expected based on current archaeological research that indicates the area has been occupied from as early as 35,000BP right through until the recent historic period by Aboriginal people who practised a diverse and highly specialised coastal economy (Morse 1993). The 35,000BP occupation date comes from OHP Pap Hill 2 (DAA ID 17447) a rockshelter with occupation layers dated to 35,000 - 31,360BP before it was abandoned and then reoccupied at around 11,000BP (Przywolnik 1998).

Table 1: Registered Aboriginal sites according to type within the Shire of Exmouth

ABORIGINAL SITE TYPE	TOTAL
Artefacts / Scatter	19
Artefacts / Scatter, Midden / Scatter	39
Camp	1
Ceremonial, Mythological	1
Ceremonial, Mythological, Engraving, Grinding patches / grooves	1
Ceremonial, Mythological, Man-Made Structure, Grinding patches / grooves	1
Ceremonial, Painting, Engraving, Artefacts / Scatter	1
Engraving	1
Grinding patches / grooves	1
Hunting Place	1
Midden / Scatter	2
Painting	1
Painting, Engraving, Quarry, Artefacts / Scatter	1
Rockshelter, Artefacts / Scatter, Midden / Scatter	1
Rockshelter, Archaeological Deposit, Artefacts / Scatter, Midden / Scatter	2
Rockshelter, Ceremonial, Grinding patches / grooves, ochre	1
Skeletal material/Burial	5
Skeletal material/Burial, Artefacts / Scatter, Midden / Scatter	2
<b>TOTAL</b>	<b>81</b>

Figure 1: Percentage of registered Aboriginal sites according to type within the Shire of Exmouth



The majority of registered Aboriginal heritage places are found on the western coast of the Cape and range from discrete, high and low density clusters of marine shells and stone artefacts to extensive scatters of marine fauna and lithic artefacts (Veth & Wright 1989). For example, OHP Jarvis Well Camp (DAA ID 16595) is a low density midden approximately 70m by 50m consisting primarily of *Terebralia*, *melo* shell and rock oyster. The significance of this site can be ascertained due to the presence of *Terebralia*, a species that normally inhabit mangroves which have not existed in great numbers in this area since the mid-Holocene. The presence of *Terebralia* at the site indicates this may be one of the older surviving shell middens in the area (McGann 1999, p. 13). As discussed earlier, the distribution pattern of identified sites is a result of previous cultural heritage surveys, as well as the prevalence of academic research undertaken within the Shire of Exmouth, concentrating on the western coastal plain and foothills of the Cape Range Peninsula (e.g. Morse & Jackson 2002; Morse 1988).

The most dense and diverse middens tend to be located adjacent to areas of easily accessible intertidal reef platform and in close proximity to a fresh water source (Veth &



Wright 1989). These midden sites are characterised by a range of marine fauna including gastropod shells, fish bones, dugong bones along with turtle shell and bones. For example, Low Point Midden is an extensive (580 m by 100 m) shell midden located immediately adjacent to the shore and easily accessible intertidal reef platforms. This site contains mangrove gastropods such as *Terebralia*, *Accanthopleura gemmate* and *melo*. There is also evidence of a turtle butchering area consisting of numerous turtle shells, bones and stone tools (Morse & Fry 1989, p. 14, DAA ID 6761) as well as Baler and giant clam shells that could have been utilised as water containers as well as exploited as a food resource (Veth & Wright 1989). Shell samples taken from a range of these midden sites have returned Holocene dates ranging from 5,000-7,000BP to the pre-contact period; however, these dates do not necessarily reflect the earliest occupation and coastal resource exploitation in the Shire of Exmouth (Veth & Wright 1989).

The Holocene (the last 10,000 years) has been characterised by a warmer climate resulting in a gradual increase in sea levels. Given that the current midden sites are located on or very near to the coast we can extrapolate that any earlier Pleistocene (10,000BP to 1.26 million years BP) midden sites would also have been located on or very near the coast and as such these sites would have been inundated during the Holocene sea level rise and would now be lost. Mandu Mandu Creek Rockshelter which is located on the west coast of the Cape Range Peninsula typifies this kind of heritage place (DAA ID 6787). Within the rock-shelter there were surface concentrations of lithic artefacts, marine shell and the bones of terrestrial fauna such as the *Euro* (Wallaroo Kangaroo). A 1 m by 1m test pit opened in the rockshelter yielded more lithic artefacts as well as marine and terrestrial faunal remains throughout the deposit. Larger densities occurred in the more recent sediments but continued down to the bed rock in sparser numbers, the oldest were located in Pleistocene sediment layers dated to 19,590BP +/-440 (Morse 1988). Mandu Mandu Creek Rockshelter contains both an artefact scatter and a midden and also demonstrates that the Pleistocene occupants also relied on the exploitation of the reefs marine resources (Morse 1992, p. 40).

The next most common heritage places within the area are artefact scatters (with no associated shell midden) at 23% (n = 19) of the assemblage. Artefact scatters are a very common type of heritage place found throughout Australia and are thought to be the archaeological remains of habitation camps or task specific camps (Veth 1993). The determination of the type of camp is usually based on the following criteria: size and density of the scatter, range of stone tool types present and the range of lithic materials used in their manufacture. For example, a medium sized, medium density scatter with a variety of lithic materials and stone tool types present would usually be interpreted as a habitation camp. In this case the variety in the assemblage is interpreted as representing the diverse range of activities that would have been undertaken at a habitation camp (Veth 1993). A task specific camp would generally be smaller and have a less diverse assemblage (Veth 1993). The stone tools found at both artefact scatters and midden/artefact scatters within the Shire of Exmouth were manufactured from a variety of local lithic materials, some sites also contained thick pieces of clam shell that had been worked to produce shell tools. Grindstones present at some sites also indicate food preparation beyond the exploitation of marine resources.

The majority of the heritage surveys and academic research undertaken in the area has focused on the Cape Range Peninsula and the coastal plain below. There is very limited data concerning inland sites, with the only registered Aboriginal heritage places located on

or near Burkett Road. All of these sites are artefact scatters located on or very near freshwater sources. One of these sites, Bullara-Giralia Road 05 (DAA ID 6101) also includes shell material; this site is within 10 km of the coast and consists of a sparse artefact scatter and weathered fragments of Baler shell. The presence of Baler shell indicates that marine resources may still have played an important role at heritage places that are not directly adjacent to the coast. Baler shell can be used as a water container and to make shell tools, and these shell fragments may have been transported into the site or have been traded from the coast.

### 3.2 Site File Data within Area of Targeted Development

A detailed search of the area described as the focus of possible future development (the eastern portion of the Exmouth Peninsula – see Map 4). As a result of this search, 20 registered sites (see table 2) and 17 Other Heritage Places were located within the area. The findings within this area are summarised below.

*Table 2: Registered Aboriginal sites intersecting the DPA*

DAA ID	Name	Classification	Status	Location
508	Point Murat 03	Artefacts / Scatter, Midden / Scatter	R / O / N	209042 mE 7584688 mN [Reliable]
509	Point Murat 04	Artefacts / Scatter	R / O / N	208690 mE 7584604 mN [Reliable]
561	Mowbowra Creek 01	Artefacts / Scatter	R / O / N	198764 mE 7564207 mN [Reliable]
562	Mowbowra Creek 02	Artefacts / Scatter	R / O / N	199217 mE 7564242 mN [Reliable]
563	Point Murat 01	Artefacts / Scatter, Midden / Scatter	R / O / N	208716 mE 7585665 mN [Reliable]
564	Point Murat 02	Artefacts / Scatter, Midden / Scatter	R / O / N	209079 mE 7585539 mN [Reliable]

DAA ID	Name	Classification	Status	Location
756	Winpikanya	Ceremonial, Mythological, Engraving, Grinding patches / grooves	R / C / F	Not available for closed Sites
6017	Yardie Creek Caravan Burial	Skeletal material/Burial	R / O / N	191538 mE 7576555 mN [Unreliable]
6117	Mowbowra Pool.	Grinding patches / grooves	R / O / N	202138 mE 7564155 mN [Reliable]
6118	Qualing Pool.	Camp	R / O / N	202138 mE 7562155 mN [Reliable]
6311	Point Murat.	Skeletal material/Burial, Artefacts / Scatter, Midden / Scatter	R / O / N	208538 mE 7584405 mN [Reliable]
7266	Walking Trail Site 1	Artefacts / Scatter	R / O / N	192638 mE 7555655 mN [Unreliable]
10381	Vlaming Head	Ceremonial, Mythological	R / C / N	Not available for closed Sites
11400	Yardie Creek Station	Engraving	R / O / N	191638 mE 7576655 mN [Unreliable]
11401	5 Mile Well (Cape Range)	Painting, Engraving, Quarry, Artefacts / Scatter	R / O / N	198638 mE 7583655 mN [Unreliable]
11885	Padjari Manu Cave (Formerly Bunbury Cave)	Ceremonial, Painting, Engraving, Artefacts / Scatter	R / C / N	Not available for closed Sites

DAA ID	Name	Classification	Status	Location
15322	Point Murat/White Opal	Artefacts / Scatter, Midden / Scatter	R / O / N	209012 mE 7585213 mN [Reliable]
17192	Exmouth Station	Skeletal material/Burial	R / O / N	209138 mE 7525654 mN [Unreliable]
17447	Pap Hill Ochre	Ceremonial, Grinding patches / grooves	R / O / N	198327 mE 7581741 mN [Reliable]
17448	Chugori Rockhole	Ceremonial, Mythological, Man-Made Structure, Grinding patches / grooves	R / O / N	193492 mE 7579323 mN [Reliable]

### 3.2.1.1 Registered Aboriginal Site ID 508- Point Murat 03

Registered Aboriginal Site 508- Point Murat 03 is a sparse artefact scatter and shell midden and is one of two sites located within the coastal dunes of Point Murat. Point Murat 03 is located in a small deflated dune approximately 150 m from the beach front and to the north of the Point Murat jetty which was in existence at the time the site was recorded (subsequent development may have impacted on the reliability of this information). The site has a central coordinate of 209042 mE / 7584688 mN [Reliable].

The artefactual material at the site consisted of several pieces of debitage and shell fragments including baler shell and turban shell whorl. A 100% sample of the site was recorded.

### 3.2.1.2 Registered Aboriginal Site ID 509- Point Murat 04

Registered Aboriginal Site 509- Point Murat 04 is an artefact scatter and shell midden and is one of two sites located within the coastal dunes of Point Murat. Located in a larger blowout than Point Murat 03, the site is approximately 200 m inland from the coast. The site has a central coordinate of 208690 mE / 7584604 mN [Reliable].

Point Murat 04 covers an area of 40 m by 30 m and has a density of approximately 1,000 artefacts. The site was sampled using three 1 m by 1m sample squares. Artefacts were predominately debitage however several formal tools were identified, particularly adze slugs which the recorder identifies as being indicative of wood working. Several large surface stones were located which were highly pitted and abraded, and may have been used for shellfish processing. However due to the significant weathering of the stones the field team

decided it was impossible to determine if they were of artefactual nature and therefore none were subject to detailed recording. Shell was also present in the site including baler, turban whorl, oyster, limpet, terebralia and conch.

### *3.2.1.3 Registered Aboriginal Site ID 561- Mowbowra Creek 01*

Registered Aboriginal Site 561- Mowbowra Creek 01 is an artefact scatter located on a flat ridgetop overlooking a creek. The site is a cluster of six artefacts in a 5 m by 5 m area. Access to the site was extremely difficult however it does offer visibility to the ocean and the creek below. The recorders stated that it "is difficult to appreciate the factors which might have lead to artefact discard at this location" (Murphy, Lantzke & Hammond 1995; p 18).

### *3.2.1.4 Registered Aboriginal Site ID 562- Mowbowra Creek 02*

Registered Aboriginal Site ID 562- Mowbowra Creek 02 is an artefact scatter located on a ridge top overlooking Stoney Creek. The site consists of four artefacts within a 2 m<sup>2</sup> area and is found at 199217 mE / 7564242 mN [Reliable].

### *3.2.1.5 Registered Aboriginal Site ID 563-Point Murat 01*

Registered Aboriginal Site ID 563- Point Murat 01 is an artefact scatter and shell midden. The site consists of four artefacts in a 100 m by 10 m area over a significant shell midden. The presence of shell dropped markedly beyond the boundaries delineated by the artefacts. The artefactual material was debitage and the shell species present included baler, turban, terebralia and conch. The site is located at 208716 mE / 7585665 mN [Reliable].

### *3.2.1.6 Registered Aboriginal Site ID 564- Point Murat 02*

Registered Aboriginal Site 564-Point Murat 02 is an artefact scatter and shell midden in the Point Murat sand dunes. The site consists of six artefacts in a 50 m by 10 m area over a significant shell midden. The artefactual material consisted of debitage and formal tools, and the shell species present included baler, terebralia and clam. As Point Murat 02 was located in a dune, it is possible that subsurface artefactual material exists at the site.

### *3.2.1.7 Registered Aboriginal Site ID 756- Winpikanya*

Registered Aboriginal Site 756- Winpikanya is a ceremonial and mythological site with engravings and grinding patches. Winpikanya is restricted and only females may view the closed site file.

### *3.2.1.8 Registered Aboriginal Site ID 6017- Yardie Creek Caravan Burial*

Registered Aboriginal Site 6017- Yardie Creek Caravan Burial is skeletal material recorded in detail in Paul Raaff's (1996) thesis A grave look at Western Australian Prehistory. The burial is located within the Yardie Creek Caravan Park, Exmouth, approximately 87 m from the north east corner of the old shearers quarters.

An excavation of the burial site was undertaken and after a detailed recording, all skeletal material was returned to the trench which was backfilled. The site has a GPS location of 191538 mE / 7576555 mN [Unreliable].

Raaff's analysis of the skeletal material indicated that the person was a woman (tentatively posited) of Aboriginal descent of around 30-35 years old who died of a blow to the back of the head, diagnosed as a result of being hit with a blunt object, likely a club, stick or boomerang. The corpse was placed in a shallow east/west orientated grave.

### *3.2.1.9 Registered Aboriginal Site ID 6117- Mowbowra Pool*

Registered Aboriginal Site 6117- Mowbowra Pool is a natural pool with grinding patches/grooves. Mowbowra Pool is located at 202138 mE / 7564155 mN. The site file contains no further information about the site.

### *3.2.1.10 Registered Aboriginal Site ID 6118- Qualing Pool*

Registered Aboriginal Site 6118- Qualing Pool is a camp site with a natural spring. It is unclear what qualifies this place as an Aboriginal site other than the recorder Mr Les Harris stating, "I have reason to believe that Aborigines did use it as a camping area" (Les Harris 1993). The site is located at 202138 mE / 7562155 mN.

### *3.2.1.11 Registered Aboriginal Site ID 6311- Point Murat*

Registered Aboriginal Site ID 6311- Point Murat consists of artefactual material including grinding stones, shell middens and skeletal material possibly pertaining to a burial. The site is located in the dune system at Bundegi Beach backing on to a restricted area of Commonwealth land used by the Armed Forces. The site has a central location of 208538 mE / 7584405 mN [Reliable].

The site was recorded by local Exmouth resident Mr Les Harris who has registered several sites with the DAA. Mr Harris identified and photographed worked artefacts, shells, grindstones and remnants of fires in the blowouts of the dunes; along with bone fragments, a possible knee bone, human teeth, a piece of skull and a complete lower jaw with some teeth intact. Mr Harris came to the following conclusion of the site,

It is very obvious, even to the untrained eye, that this is a "very old" midden, and is the exact site of the camp for a group of Aborigines who took care of two young shipwreck survivors until they were rescued in the late 1800's, from the book of the true story, "The Wreck of the Barque Steffano" (Les Harris 1991).

It is not clear how Mr Harris came to this definitive conclusion, however his recording of the site was reviewed by heritage advisor Kate Morse in 1991. Morse stated that it was clear that Point Murat was a burial site and that it is typical for this area to find burial sites within the sand dunes. While she recognised that it is not likely that skeletal material would remain in situ within a dune system owing to a range of taphonomic processes, she advises Mr Harris not to gather up or reposition any artefactual material he finds, as is evident in the photographs Harris submitted to the DAA. Subsequently any future recording of this site should note that the site has been disturbed when artefacts were relocated from their original position by Mr Harris in addition to any natural re-location of the material.

Regarding the artefactual material at the site, Morse stated that some of the objects were questionable although the bone, particularly the jaw bone was very bleached and weathered and is therefore of some considerable age. Morse does note that the chin of the skeleton



was particularly prominent leading her to believe the person may not have been Aboriginal. Her conclusion was however that the site would need to be subject to further investigation; unfortunately, she states, without funding this would not be possible. It is not apparent that any further recording of this site has been undertaken.

Final remarks about the site include advice that contrary to Harris' statement that "there are no Aboriginal left on the North-West Cape", there are people who can speak for this Country, including Les Cook, the coordinator of Kuwinywardu Aboriginal Corporation and Syd Dale in Carnarvon. It was also noted that the site was particularly vulnerable as four wheel drive tracks pass all through the area.

### *3.2.1.12 Registered Aboriginal Site ID 7266- Walking Trail Site 1*

Registered Aboriginal Site 7266- Walking Trail Site 1 is an artefact scatter located between walking trail markers 18 and 19 on the Cape Range National Park walking trail. This area is found between Shot Hole Canyon and Charles Knife Road.

The site consists of a sparse artefact scatter of predominately silcrete and chert flakes. The site extends over the plateau which runs into a gully on its eastern margin which is likely to have been a Traditional access route through the site.

### *3.2.1.13 Registered Aboriginal Site ID 10381- Vlaming Head*

Registered Aboriginal Site 10381 is a ceremonial and mythological site. Vlaming Head is a closed site file; anyone wishing to view it must seek permission from the relevant authorities and the original site file informants.

### *3.2.1.14 Registered Aboriginal Site ID 11400- Yardie Creek Station*

Registered Aboriginal Site 11400- Yardie Creek is an engraving site on the wall of a series of 100 ft high cliffs. The site is 16 km south of the Yardie Creek homestead and 4 km to the northern side of the creek itself, behind a row of high pinnacles. Unfortunately there is no other information in the site file to characterise the Yardie Creek Station engraving. It is located at 191638 mE / 7576655 mN [Unreliable].

### *3.2.1.15 Registered Aboriginal Site ID 11401- 5 Mile Well (Cape Range)*

Registered Aboriginal Site 11401- 5 Mile Well (Cape Range) is a series of paintings and engravings in two rockshelters, containing a quarry, artefact scatter, and bone and shell remains. The rockshelters are located on the western side of a breakaway at 5 Mile Well on the North West Cape. They have a central coordinate of 198638 mE / 7583655 mN [Unreliable].

Initial recording of the site in 1986 identified red ochre paintings and some engravings, along with a silicate quarry and artefacts. Bone, artefacts and shell fragments were visible on the floor of both shelters. Macropod and turtle carapace were noted as being present.

A subsequent investigation of the site by Lee Atkins and Peter Randolph in 1991 dispute the findings of the 1986 survey, stating that the colouring on the walls were not of cultural origin, rather remains of mud nests. They also state that the engravings are very poor and almost not visible. They do not mention the other cultural aspects at the site other than to say that,

generally, the area appears to be intact. It is not apparent if any further recording has been undertaken at the 5 Mile Well site.

### *3.2.1.16 Registered Aboriginal Site ID 11885- Padjari Manu Cave (formerly Bunbury Cave)*

Registered Aboriginal Site 11885- Padjari Manu Cave (formerly Bunbury Cave) is a ceremonial site with paintings, engravings and an artefact scatter. Padjari Manu Cave (formerly Bunbury Cave) is a closed site file; anyone wishing to view it must seek permission from the relevant authorities and the original site file informants.

### *3.2.1.17 Registered Aboriginal Site ID 15322- Point Murat/White Opal*

Registered Aboriginal Site 15322- Point Murat/White Opal is a sparse artefact scatter and shell midden located on an exposed vehicle track through the primary dunes within the White Opal 1 Exploration Well Site in the Defence Department compound at Point Murat.

The site consists of five artefacts and fragmented baler shell including two silcrete grinding stones. It is found at 209012 mE / 7585213 mN [Reliable].

### *3.2.1.18 Registered Aboriginal Site ID 17192- Exmouth Station*

Registered Aboriginal Site 17192- Exmouth Station is a burial which was identified and re-located four metres west of the original site. The original burial was found 7.8 km from the Exmouth Station homestead in a southerly direction, taking a north-eastern turn at the shoreline. The site is now located at 209138 m E / 7525654 m N [Unreliable].

The cranium of the individual was originally found floating in the water after cyclonic activity exposed parts of the grave. The skull was sent for forensic testing and returned to the site after it was found to be of post-European Aboriginal origin. The Traditional Owners with the assistance of a representative from the Aboriginal Affairs Department excavated the remaining skeletal material from the site and relocated it along with the previously located skull. The skeleton was placed in black plastic with a 1995 fifty cent piece and buried in a grave 50 cm deep, 4 m west of the original burial location. No ochre was noted on the bones.

The recorder noted that according to previous research the Traditional Owners in this area often buried their dead in the sand dunes along the Cape.

### *3.2.1.19 Registered Aboriginal Site ID 17447- Pap Hill Ochre*

Registered Aboriginal Site 17447- Pap Hill Ochre is a rockshelter with an ochre quarry and grinding patches / grooves. The Traditional Owners and the recorder assert that it is likely the ochre was used for ceremonial purposes, potentially by the Jinigudira people who sadly no longer exist today.

The rockshelter is found in a small valley two kilometres off the Exmouth/Yardie creek road at the base of the foothills of Pap Hill. The wall of the rockshelter is comprised of white sandstone which may have been used as an ochre and features many small elongated grooves. The site is found at 198327 mE / 7581741 mN [Reliable].

### 3.2.1.20 Registered Aboriginal Site ID 17448- Chugori Rockhole

Registered Aboriginal Site 17448- Chugori Rockhole is a rockhole with an associated stone arrangement, which may have been used for ceremonial purposes. The site is located 1.5 km at the end of a small track running east off the Exmouth/Yardie Creek sealed road. It is found at 193492 mE / 7579323 mN [Reliable].

The base of the Chugori rockhole is filled grass shoots and a creeper which indicates water activity in the base of the hole. The stone arrangement begins approximately one metre from the rockhole and extends approximately 20 m south. The arrangement consists of 30 stones of various shapes and sizes in an elaborate design. Aboriginal informant Syd Dale indicated that when an elaborate stone arrangement is located close to a water source it is because the ancestors believed a spiritual being inhabited that place. The recorder also noted that stone arrangements, such as this one, are often used for special events such as 'increase ceremonies' and initiations.

### 3.2.2 Summary of OHPs Intersecting the DPA

Seventeen OHPs are catalogued with the DAA as having boundaries that intersect the DPA. The 17 OHPs are listed in table 3 and summarised below.

Table 3: OHPs intersecting the DPA

DAA ID	Name	Classification	Status	Location
638	Learmonth 1	Artefacts / Scatter	S / O / N	201888 mE 7558405 mN [Reliable]
639	Learmonth 2	Artefacts / Scatter	S / O / N	201788 mE 7558355 mN [Reliable]
6115	Exmouth North-East	Skeletal material/Burial	I / O / N	204338 mE 7572655 mN [Reliable]
6116	Exmouth South-West	Skeletal material/Burial	I / O / N	200638 mE 7568755 mN [Reliable]
6119	Pap Hill 1.	Rockshelter	I / O / N	198238 mE 7581955 mN [Reliable]

DAA ID	Name	Classification	Status	Location
6120	Pap Hill 2.	Grinding patches / grooves / Rockshelter, [BP Dating: 35,230 BP]	I / O / N	198138 mE 7581855 mN [Reliable]
6312	Exmouth North-East	Artefacts / Scatter	I / O / N	204300 mE 7574150 mN [Unreliable]
11060	Rough Range	Artefacts / Scatter	I / O / N	193638 mE 7504655 mN [Unreliable]
11061	Billy Wells.	Ceremonial	I / O / N	194638 mE 7523655 mN [Unreliable]
11801	Coastal Midden, 5 Mile	Artefacts / Scatter, Midden / Scatter	I / O / N	195638 mE 7582655 mN [Unreliable]
19838	Midden Site At Exmouth River Mouth	Artefacts / Scatter, Midden / Scatter	L / O / N	203751 mE 7567075 mN [Reliable]
19839	Waterhole, Exmouth	Artefacts / Scatter	L / O / N	203301 mE 7572574 mN [Reliable]
21383	Mowbowra Creek Isolated Finds	Artefacts / Scatter	S / O / N	198635 mE 7564321 mN [Unreliable]
26259	Field Site 1	Artefacts / Scatter	L / O / N	201953 mE 7535544 mN [Reliable]

DAA ID	Name	Classification	Status	Location
26260	Field Site 2	Artefacts / Scatter	L / O / N	202340 mE 7536319 mN [Reliable]
26261	Field Site 3	Artefacts / Scatter	L / O / N	201142 mE 7535288 mN [Reliable]
26268	Csf Isolated Find	[Other: 3 Isolated artefacts]	L / O / N	202134 mE 7535834 mN [Unreliable]

### 3.2.2.1 OHP ID – 638 Learmonth 1

OHP 638- Learmonth 1 is a small discrete artefact scatter located approximately 200 m west of the beach and 300 m east off Murat Road. The OHP consists of 18 artefacts however at least two thirds of the artefactual material was obscured by thick spinifex. One utilised retouched piece was found along with flakes, flake fragments and debris. One red quartzite artefact was noted, which is foreign to the area. On the 14 June 1995 the ACMC assessed this heritage place not to be a site under the Act. Learmonth 1 is registered as Stored Data on the AHIS and has a GPS location of 201888 mE / 7558405 mN [Reliable].

### 3.2.2.2 OHP ID – 639 Learmonth 2

OHP 639- Learmonth 2 is a small artefact scatter located approximately 60 m west of the beach and 180 m east of Murat Road. The OHP consists of 16 artefacts over a 30 m by 30 m area although vegetation obscured approximately half of the surface area. The artefactual material comprised of two cores, flakes and debris. On the 14 June 1995 the ACMC assessed this heritage place not to be a site under the Act. Learmonth 2 is registered as Stored Data on the AHIS and has a GPS location of 201788 mE / 7558355 mN [Reliable].

### 3.2.2.3 OHP ID – 6115 Exmouth North-East

OHP 6115- Exmouth North-East is skeletal material located at 204338 mE / 7572655 mN [Reliable]. Recorded by Mr Les Harris in 1992, the heritage place is described as a possible human bone protruding from a sand hill. No further information is contained in the site file. Exmouth North-East is registered on the AHIS as having insufficient information to be registered as a site.

### 3.2.2.4 OHP ID – 6116 Exmouth South-West

OHP 6116- Exmouth South-West is skeletal material found at 200638 mE / 7568755 mN. Recorded by Mr Les Harris in 1992, the heritage place is described as an old piece of a human femur bone found in a gully. Mr Harris states that medical professionals have

identified the bone as human. No further information is contained in the site file. Exmouth South-West is registered on the AHIS as having insufficient information to be registered as a site.

#### **3.2.2.5 OHP ID – 6119 Pap Hill 1**

OHP 6119- Pap Hill 1 is a rockshelter with what the recorder has described as a 'table' made from the natural stone protruding from the wall in a ledge-like fashion. According to the recorder the 'table' is quite smooth and displays fine cut marks on its surface and may have been used by Aboriginal people in the past. Pap Hill 1 is listed on the AHIS as having insufficient information to constitute a site under the Act.

#### **3.2.2.6 OHP ID – 6120 Pap Hill 2**

OHP 6120- Pap Hill 2 is a series of engraved grooves on a sandstone cliff face amongst a series of rockshelters.

In the site file of Pap Hill 2 there is information regarding two other sites called Wobiri and Jansz, which in pencil on the right hand margin of the documents have been given the same DAA site file number as Pap Hill 2. The sites do not appear to correlate with Pap Hill 2 as the site information for Wobiri and Jansz discuss excavated rockshelters but contain no information regarding the engravings noted at Pap Hill 2. Wobiri and Jansz are located at their closest point approximately 170 m south east of Pap Hill 2. It is unclear if the grouping of this paperwork is an administrative error or the three sites are actually relatable, however evidence suggests the former.

Briefly, Jansz was excavated revealing a date of human occupation of 35,230 years BP. Occupation of this rockshelter occurred in three main phases and presented two periods of cultural hiatus. The first phase of occupation occurred between c. 35,000 BP and c. 31,136 BP and was followed by a period of abandonment until c. 11,000BP. Jansz was reoccupied in 10,730 BP for approximately 1000 years and again abandoned. Jansz was once more occupied after c. 2,500 BP to the modern period. The excavation revealed a range of stone tools, particularly in the most recent period, a range of aquatic and terrestrial food sources and some processed vegetation.

The excavation of the rockshelter Wobiri found a human occupation date of 5,160 years BP. Three stratigraphic layers were found however only the two upper layers contained archaeological material. The lower stratigraphic layer containing artefactual material dated between 5,160 BP and c. 2,000 BP and was typified by shellfish, fish and turtle bone, chiton and baler shell. This layer presented the highest density of stone artefacts and was the most intense period of site use. The upper stratigraphic layer was dated between 5,160 BP and 4,000 BP and contained a similar assemblage to stratigraphic layer 1, however notably contained *Terebralia* sp. which no longer grows in the area.

Pap Hill 2 is considered to have insufficient information to constitute a site under the Act.



### **3.2.2.7 OHP ID – 6312 Exmouth North-East**

OHP 6312- Exmouth North-East is an artefact scatter located in the blowout of the sand dunes on the eastern side of the North West Cape at 204300 m E / 7574150 m N [Unreliable]. The heritage place comprises of artefacts, grinding stones and shell middens. Exmouth North-East is listed on the AHIS as having insufficient information to constitute a site under the Act.

### **3.2.2.8 OHP ID – 11060 Rough Range**

OHP 11060- Rough Range is an artefact scatter located 25 m south of Learmonth Shell depot. The heritage place is described as a midden with two figs and one *Garillia Teligarea granosa*. There is no other information about Rough Range in the OHP file. Rough Range is considered to have insufficient information to constitute a site under the Act.

### **3.2.2.9 OHP ID – 11061 Billy Wells**

OHP 11061- Billy Wells is a ceremonial place near to a group of wells known as 'Billy Wells' which produce drinking water. The heritage place is near to the corner of a paddock, south of the track in the Exmouth Gulf homestead. Billy Wells was described by an Aboriginal Informant as a Bora Ring which is a uniform shaped circle comprised of eucalyptus trees. There is no other information about the heritage place recorded in the site file. Billy Wells is listed on the AHIS as having insufficient information to constitute a site under the Act.

### **3.2.2.10 OHP ID – 11801 Coastal Midden, 5 Mile Well**

OHP 11801- Coastal Midden, 5 Mile Well is a badly disturbed artefact scatter and shell midden four miles south of Vlaming Head Lighthouse. There is no other information about the heritage place recorded in the site file. Coastal Midden, 5 Mile Well is listed on the AHIS as having insufficient information to constitute a site under the Act.

### **3.2.2.11 OHP ID – 19838 Midden Site at Exmouth River Mouth**

OHP 19838- Midden Site at Exmouth River Mouth is an artefact scatter and shell midden at Exmouth River's mouth. The heritage place consists of scatters of baler shell, flint and grinding stones. The recorder notes that the shell is not a dump caused by the recent floods in the area, as there are layers of shell within the sandy embankment. The recorder also argues that the presence of flint and grinding material indicate this area was a camping ground which is further supported by the place's close proximity to the river and ocean, where an abundance of food and shelter would have been accessible. At the time this research was undertaken the Midden Site at Exmouth River Mouth OHP was lodged with the DAA pending its assessment with the ACMC.

### **3.2.2.12 OHP ID – 19839 Waterhole Exmouth**

OHP 19839- Waterhole Exmouth is an artefact scatter and waterhole about 3 km to 5 km from town and less than 1 km from the main road. The waterhole is currently covered by a modern steel cover to keep out livestock. Within a 200 m radius west of the waterhole a sparse artefact scatter comprising of flints, middens and other artefacts have been located. Within the close vicinity of the waterhole approximately 100-300 artefacts were found. At the

time this research was undertaken the Exmouth Waterhole OHP was lodged with the DAA pending its assessment with the ACMC.

### **3.2.2.13 OHP ID – 21383 Mowbowra Creek Isolated Finds**

OHP 21383- Mowbowra Creek Isolated Finds consists of one isolated artefact and two rockshelters each containing an isolated artefact. The individual isolated artefact was located on a ridgetop and the rockshelters were found in a gully along a creek in the development corridor of Whitecrest Pty Ltd's proposed limestone quarry.

The first rockshelter (Rockshelter #1) is a small overhang at the base of a weathered cliff in the main channel of the creek. There is a reasonable soil deposit in the shelter, although obvious evidence of water flow across the entire floor means the shelter is likely to have low excavation potential. The second rockshelter (rockshelter #2) is located higher up the cliff face towards the top of a small gully. No other information about Rockshelter # 2 is contained in the site file.

Mowbowra Creek Isolated Finds has a general location of 198635 mE / 7564321 mN [Unreliable] and is listed on the AHIS as stored data.

### **3.2.2.14 OHP ID – 26259 Field Site 1**

OHP 26259- Field Site 1 is an artefact scatter and shell midden located on a low red-sandy ridge between the proposed settling ponds and the drainage line to Wapet Creek in Cape Seafarms prawn farm at Heron Point. Extensive gullies appear along the ridge. The archaeological material at Field Site 1 is present in an area of approximately 200 m by 44 m in a deflated area over the ridge top.

The artefactual material comprised of six stone artefacts, baler shell, mangrove molluscs *Terebralia sulcata*, clam and rare turban shell (*Turbo argyrostomus*) as well as a number of emu egg shells. The heritage place appeared to have been heavily disturbed by rain and cyclonic events.

At the time this research was undertaken the Field Site 1 OHP was lodged with the DAA pending its assessment with the ACMC.

### **3.2.2.15 OHP ID – 26260 Field Site 2**

OHP 26260- Field Site 2 is an artefact scatter and shell midden located on a low red-sandy ridge overlooking the adjacent coastal plain in Cape Seafarms prawn farm at Heron Point. Extensive gullies appear along the ridge where the heritage place is situated.

The artefactual material comprised of five stone artefacts, extensive pieces of baler shell and *Terebralia* sp. in a 100 m by 30 m area. The recorder noted that the area was likely to contain subsurface artefactual material as it was considerably affected by sand dune movement, caused by rain, wind and cyclonic events. The recorder also noted the potential for burials in this area, as the local Aboriginal people typically buried their dead among the sand dunes.

At the time this research was undertaken the Field Site 2 OHP was lodged with the DAA pending its assessment with the ACMC.

### **3.2.2.16 OHP ID – 26261 Field Site 3**

OHP 26261- Field Site 3 is an artefact scatter and shell midden located on the northern end of a low red-sandy ridge, overlooking the adjacent coastal plain. Field Site 3 traverses the proposed expansion area of the main access track from the Exmouth-Minilya road to Cape Seafarms prawn farm. The expansion requires a 100 m easement to widen the current track. Field Site 3 currently sits 45 m north of the existing track.

The artefactual material comprised of two stone artefacts, however the recorder noted that the area was likely to contain subsurface artefactual material. The recorder also noted the potential for burials in this area, as the local Aboriginal people typically buried their dead among the sand dunes.

At the time this research was undertaken the Field Site 3 OHP was lodged with the DAA pending its assessment with the ACMC.

### **3.2.2.17 OHP ID – 26268 Csf Isolated Find**

OHP 26268- Csf Isolated Find comprises of three stone artefacts in the sand dunes of Cape Seafarms proposed accommodation area. The recorder noted that disturbance to the area was likely to expose subsurface archaeological material. At the time this research was undertaken the Csf Isolated Find OHP was lodged with the DAA pending its assessment with the ACMC.

### 3.2.3 Heritage Reports Relevant to the DPA

The heritage reports relevant to the DPA are listed in table 4 below. These are provided here largely for reference in future planning, as the current scope did not allow for the detailed assessment of these reports.

Table 4: Registered heritage reports relevant to the DPA

DAA Report Number	Author	Report Title
17258	Martinick McNulty Pty Ltd 2000	<i>Environmental protection statement for the proposed industrial park Lot 51 of Lyndon location 221 Murat Road Exmouth</i>
17613	Randolph, P 1986	<i>North West Cape investigation of selected Aboriginal Sites (Bunbury Cave-P0267, another cave containing rock art-P0751 and the midden at Mesa Camp-P5792) including recommendations for management an tourist visitation</i>
17614	Randolph, P 1987	<i>Bunbury Cave N.W. Cape W.A. The task of consulting with Aboriginal people. December 1987</i>
18776	Raaff, P 1996	<i>A Grave Look at Western Australian Prehistory (Arch. Hons. Thesis.)</i>
18797	Taylor, R & Burrell, W 1995	<i>Proposed Subdivision and Development. Lyndon Locations 222 and 223, Exmouth June 1995</i>
19357	Morse, K 2002	<i>A report of an Aboriginal archaeological survey of the Australian Maritime Safety Authority's Digital Global Positioning System Site, Exmouth, Western Australia</i>
21208	Randolph, P 2002	<i>The Indigenous people of North West Cape (Yinigudira, Talandji &amp; Baijungu): a picture drawing on the perceptions of Miho Bacciah, castaway from the wreck 'Stefano' in 1875 and my limited knowledge: a presentation to 'A Symposium on 'The Wreck of the.. [Title incomplete on AHIS]</i>
22919	Morse, K 2000	<i>A report of an Aboriginal archaeological assessment of Cape Seafarms' proposed Prawn Farm Development, Heron Point, Cape Range Peninsula</i>
23943	Doulman, T 2009	<i>A report of an ethnographic Section 18 survey of Agnew Gold Mining Company's Crusader South East Project Area with Wanmulla Representatives</i>



<b>DAA Report Number</b>	<b>Author</b>	<b>Report Title</b>
<b>101898</b>	Przywolnik, K 1998	<i>Archaeological research, Cape Range Peninsula, Western Australia: interim report</i>
<b>101900</b>	Przywolnik, K 1998	<i>Lighthouse Caravan Park sewerage evaporation ponds, Cape Range Peninsula</i>
<b>102136</b>	Veitch, B 1993	<i>Report of an Archaeological Monitoring Programme Tubridge Near Onslow W.A. Nov 1993</i>
<b>102144</b>	Barnard, J 1996	<i>A brief report on reburial and documentation of skeletal remains at Exmouth and Ningaloo Stations</i>
<b>102402</b>	Murphy, A 1995	<i>Report of an Aboriginal Heritage Survey, proposed Limestone Quarry; Transport Corridor and Laydown Facility, Exmouth Western Australia, August 1995</i>
<b>102474</b>	Randolph, P 2002	<i>Report on Archaeological Sites on and around Lyndon Locations 221, 222, and 223, South of Exmouth June 1995</i>
<b>102601</b>	Corsini, S 1995	<i>An investigation of reported Skeletal Remains, Ningaloo and Warroora Pastoral Stations, North West Cape, Western Australia, August 1995</i>
<b>103086</b>	Warren, L 1993	<i>The salvage, recording and re-internment of the Yardie Creek Caravan Park Burial, North West Cape Near Exmouth, W.A.</i>
<b>103088</b>	Randolph, P 1988	<i>Padjari Manu (formerly Bunbury Cave), North West Cape, Western Australia. Oct.</i>
<b>106086</b>	URS Australia 2002	<i>Plenty River Ammonia / Urea Project Burrup Peninsula, Western Australia: supplement to 1998 consultative environmental review- technical appendices</i>

### **3.3 Cultural Sensitivity Mapping**

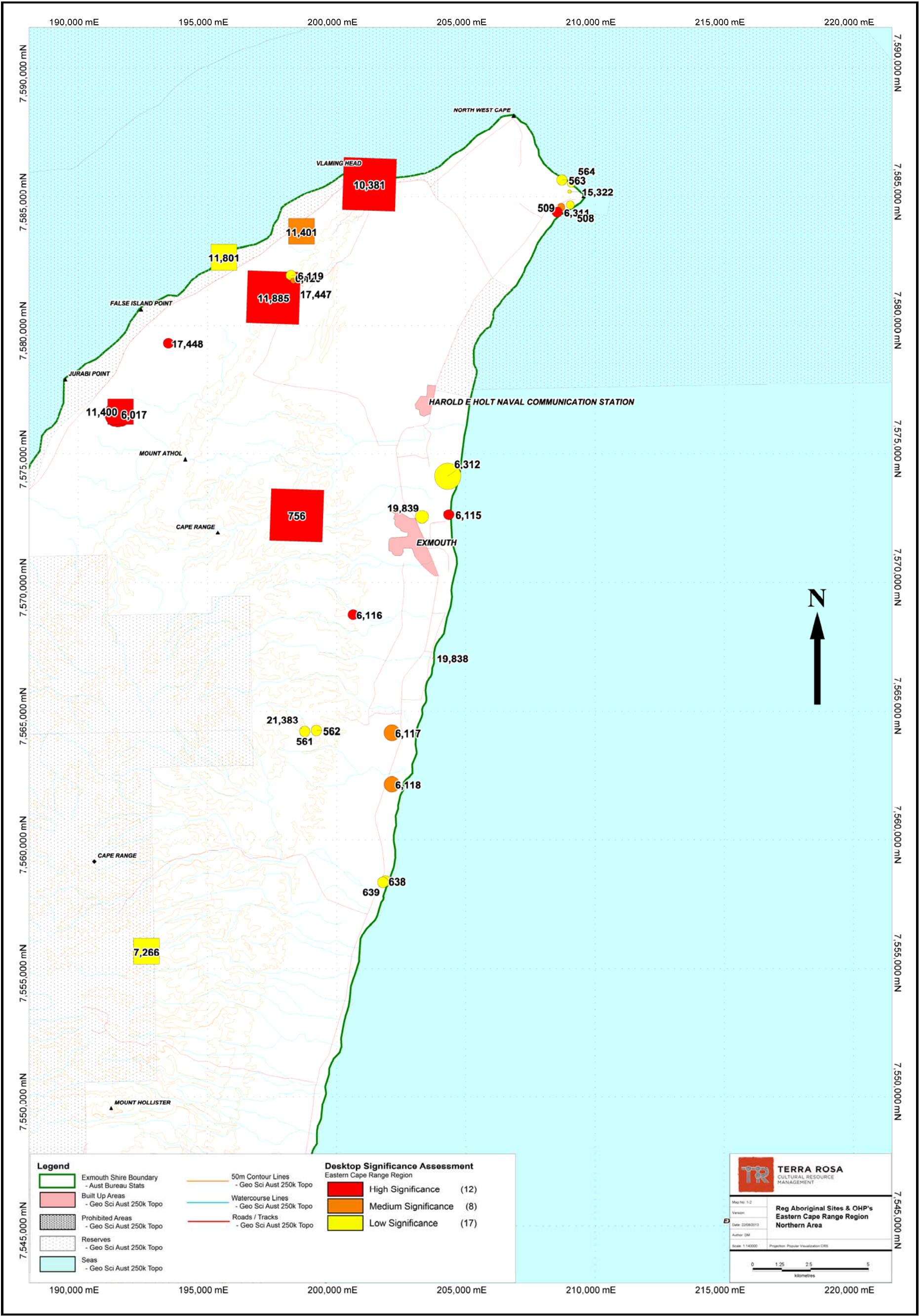
The results of the analysis of the known Aboriginal Heritage constraints within the targeted development area are mapped in map 4 and map 5. The sites are mapped as of High, Medium and Low potential significance. High cultural sensitivity indicates that permission to disturb the place may not be granted due to the place being of utmost cultural significance. Low cultural sensitivity indicates that although heritage values are present there is a reasonable likelihood that an application to disturb these places would be granted. Medium cultural sensitivity indicates that further research is required in order to more accurately determine whether the places are of high or low cultural sensitivity. It should be noted that this is an illustrative assessment for the purposes of planning, and should not take the place of further heritage surveys. It is suggested also that the current boundary polygons of the areas do not reflect the actual “ground truthed” locations, size or reality of the site. Many of these places were recorded pre GPS and many years ago, so this assessment is inherently limited.

It does however provide a starting point in guiding development away from areas that may already be a “no-go” and effectively illustrates the potential areas that may be less likely to be hampered by these constraints. It is considered highly prudent that prior to any proposed development within these polygons, or nearby areas that are considered to be of high potential significance, thought is given to arranging a heritage survey as soon as practicably possible.

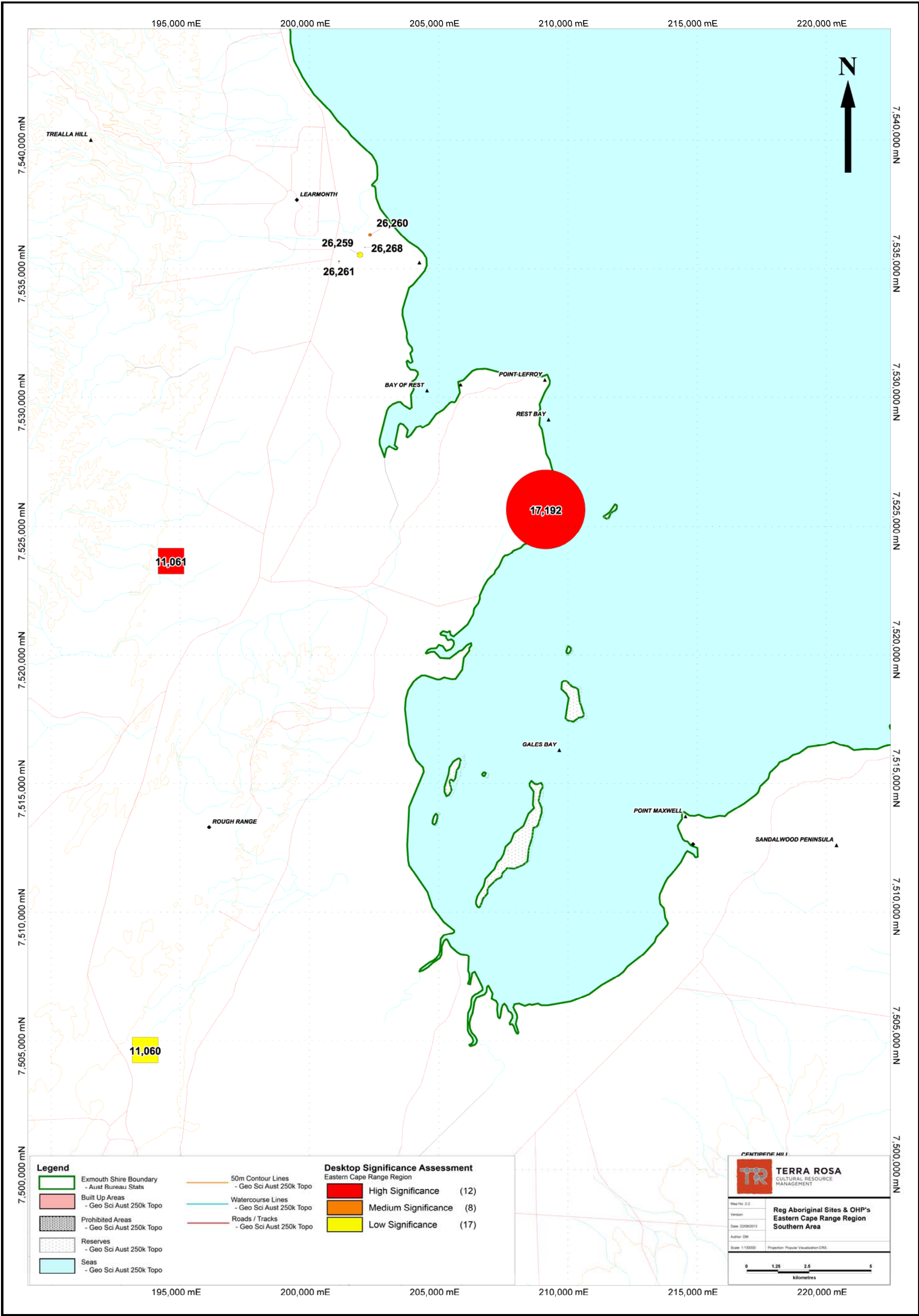
As a broad rule, several key themes have emerged from the research and the sensitivity mapping:

- Largely the areas have a high potential for as yet undiscovered sites to be present;
- Forward planning should consider the documented evidence of coastal dunes containing human burials;
- Several key sites of ethnographic importance have previously been identified; and
- The area represents a very rich history of occupation spanning 35,000 years, and any development should be designed where possible to conserve any heritage values identified.

Map 4: Cultural sensitivity mapping northern portion



Map 5: Cultural sensitivity mapping southern section





## 3.4 Non-Aboriginal Heritage Research Results

### 3.4.1 Shipwrecks

The Western Australian Museum maintains a register of all known shipwrecks located off the State's coastline. Thirty-nine shipwrecks have been identified along the Exmouth coastal area and are listed in Appendix C of this report. Additionally, consultation with the Western Australian Maritime Museum highlighted the very high potential for shipwrecks on the eastern side of the Exmouth peninsula due to a common practice of utilising the mangrove channels and creeklines to shelter from cyclones over the years. As such, there is a high potential for unrecorded shipwrecks and maritime heritage to be present within this area.

### 3.4.2 State Heritage Register

The Register of Heritage Places is maintained by the State Heritage Office, which represents a statutory list of places of State cultural heritage significance. There are 40 places of either Local, State, National or International significance within the Exmouth LGA which have been included on the State Heritage Register.

Place No.	Names	Location	Listings	Custodian
261	Naval Communication Station Harold E Holt (Area B)	14km N of Exmouth	RHP - Minister did not direct Registration, Commonwealth List, Register of the National Estate	Heritage Council
837	Vlaming Head Lighthouse Group (Vlamingh Head Lighthouse Group)	Yardie Creek Rd via Exmouth	Classified by the National Trust, Municipal Inventory, Town Planning Scheme & Register of the National Estate	Heritage Council & Shire of Exmouth
839	Yardie Creek Homestead	Exmouth	Municipal Inventory & Classified by the National Trust - Register of the National Estate	Heritage Council & Shire of Exmouth
3053	Community Hall	Cnr Maidstone Cres & Learmonth St Exmouth	None noted*	Heritage Council

Place No.	Names	Location	Listings	Custodian
4231	Norwegian Bay Whaling Station (Point Cloates Whaling Station)	Norwegian Bay N of Point Cloates Ningaloo	Port-related Structures Survey	Heritage Council
4288	RAAF Base Learmonth	Learmonth-Manilya Rd Learmonth	None noted*	Heritage Council
4451	Cape Range & Adjacent Coastal Plain	20km from Exmouth	Register of the National Estate & National Heritage List - Classified by the National Trust	Heritage Council
5491	Point Cloates Lighthouse & Quarters (ruins)	Ningaloo Station	Register of the National Estate & Lighthouses Survey	Heritage Council
10615	Bundegi-Cape Well	Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10617	Cape Range No. 1 Oil Well	Shothole Canyon, Cape Range National Pk Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10619	Cape Range No. 2 Oil Well	Charles Knife Rd, Cape Range National Pk Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10620	Charles Knife Road	Lyndon Location 164	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10622	First Trees planted in Exmouth	Maidstone Cres Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth

<b>Place No.</b>	<b>Names</b>	<b>Location</b>	<b>Listings</b>	<b>Custodian</b>
<b>10624</b>	F J Reddy's Grave	Yardie Creek Rd Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10625</b>	Giralia Station	Burkett Rd Lyndon Location	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>106260</b>	Operation Potshot - Site	Lyndon	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10629</b>	Pier - Pt Murat (Navy Pier)	Pt Murat Lyndon	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10630</b>	Rough Range No. 1 Oil Well	Rough Range	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10632</b>	Shire Library (Office of Civil Commissioner (fmr))	Maidstone Cres Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10636</b>	Shothole Canyon and Road	Lyndon Location	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10637</b>	Staff House	Cnr Bennett/Fyfe Sts Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10638</b>	Tantabiddi Well	Cape Range National Park	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth

<b>Place No.</b>	<b>Names</b>	<b>Location</b>	<b>Listings</b>	<b>Custodian</b>
<b>10639</b>	Transit House	Lot 263 Christie St Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10640</b>	Vlaming Head Radar (World War II Aircraft Warning Radar)	Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10641</b>	VLF Towers, Harold E Holt Naval Communication Stn	14km N of Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10642</b>	WAPET Jetty (ruin) (Learmonth Jetty)	Learmonth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>10643</b>	Yardie Creek	Cape Range National Park	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
<b>12290</b>	Exmouth War memorial	Maidstone Cres Exmouth	Statewide War memorial Survey	Heritage Council
<b>14506</b>	Exmouth Fire Station	Payne Street Exmouth	Fire & Rescue Service Heritage Inventory	Heritage Council
<b>17339</b>	Exmouth Police Station, Lockup & Quarters (Exmouth Police Station & Lockup)	Maidstone Crescent Exmouth	RHP - To be assessed	Heritage Council



Place No.	Names	Location	Listings	Custodian
18605	Cape Range National Park (Cape Range Geological Site)	Lot 106 Ningaloo Yardie Creek Rd, Cape Range National Park	Register of the National Estate, National Heritage List, Aboriginal Heritage Sites Register & Classified by the National Trust	Heritage Council
18617	Coastal Margin - Exmouth Gulf to Cape Preston	Exmouth Gulf to Cape Preston, Onslow	Register of the National Estate	Heritage Council
18635	Fairy Queen Shipwreck	Exmouth	Register of the National Estate	Heritage Council
18636	Fin Shipwreck	Point Cloates	Register of the National Estate	Heritage Council
18677	Learmouth Air Weapons Range Facility	Learmouth	Register of the National Estate	Heritage Council
18705	Ningaloo Marine Park	Ningaloo	World Heritage List & Register of the National Estate	Heritage Council
18710	Perth Shipwreck	Ningaloo Reef Point Cloates	Register of the National Estate	Heritage Council
18757	Zvir Shipwreck	Two nautical miles North of Frazer Island	Register of the National Estate	Heritage Council
23799	Vlamingh Head Lighthouse Quarters	Yardi Creek Rd via Exmouth Exmouth	Municipal Inventory	Heritage Council & Shire of Exmouth
24419	Vlamingh Head Lighthouse	Yardie Creek Rd via Exmouth Exmouth	Municipal Inventory	Heritage Council & Shire of Exmouth

### **3.4.2.1    *Naval Communication Station (NCS) Harold E Holt (HEH) (Area B)***

The NCS HEH Area B is a joint US and Australian radio relay station that includes the administration buildings and a high frequency transmission tower. The administration buildings include the major residential facilities and the communications centre. The layout is set to the functional and hierarchical representation of defence bases. Other major buildings within the facility include a water tower, pumping station and a fire station. The accommodation buildings include sports facilities, mess halls, storage and service buildings. The permanent buildings are considered to be architecturally austere and functionalist, predominately constructed from concrete and steel frames. A monument to Harold E. Holt is located in front of the main entrance to the Administration building, which was built after the station was renamed to honour the recently deceased Prime Minister.

An allied base had been built on Cape Murat during World War II, particularly as a provision for fuelling submarines. Although the area had returned to pastoral after the war in 1963, during the cold war, Australia and the US agreed to establish a communications station as a follow on from the ANZUS treaty. The Commonwealth acquired 7511 ha which was leased to the US navy for 25 years. The station was to serve as a relay station for naval communications. The station would employ over 400 Australian and 525 American personnel, and so it was determined that a supporting town would be developed. Exmouth was gazetted in 1963 and by 1966 the region reached a population of 2,284. By 1967, it was the largest and most powerful of the three VLF stations and became extremely important during the Vietnam War, complicating the political climate in Australia.

In 1992, the US Navy vacated the base, with all personnel having left by 1993. From 1999 until 2002 it was used by the Australian Defence Force, although a number of buildings were destroyed by Cyclone Vance in 1999 resulting in some refurbishment.

### **3.4.2.2    *Vlamingh Head Lighthouse Group***

See sections 3.4.2.14, 3.4.2.24, 3.4.2.39 and 3.4.2.40 below for detailed information about the grave, Radar, Lighthouse quarters and Lighthouse that comprise this group of structures.

Although each facet holds significance, as a group, it is important for its historical associations with coastal shipping and World War II defence.

### **3.4.2.3    *Yardie Creek Homestead***

Although little information about the Yardie Creek Homestead is available, it is named for the Creek that has been vital in the survival of the Yardie Creek Station. The homestead was built in 1907 by Thomas Carter. For further information see 3.4.2.27 below.

### **3.4.2.4    *Community Hall***

This has been identified during a survey as a place of potential heritage significance, as it holds value to the local community. No information was available as it has not been formally assessed.

### **3.4.2.5 Norwegian Bay Whaling Station (Point Cloates Whaling Station)**

The Norwegian Bay Whaling Station is located at the northern end of Point Cloates, and was built by the Norwegian whaling company, the Western Australian Company (W.A. Co.).

In 1911, Norwegian interests spread to the Western Australian coast for whaling purposes. The W.A. Co. was one of these and they applied for a license to hunt whales from Steep Point near Denham to Cape Lambert near Wickham. As a condition of receiving the license in 1912, they were required to build a factory and treatment works within 12 months of its commencement. The W.A. Co. chose Norwegian Bay as it was a point where whales passed in both their northern and southern "treks".

Unfortunately, the area was inhospitable, fresh water was limited and the harbour was very dangerous to enter and leave. To add to the stresses, the machinery ordered for the station was delayed and so construction did not commence until 1915. In the meantime whaling commenced and was far more successful than anticipated causing tensions with other whaling companies that had previously applied for licenses in the area.

By the time construction was underway, the number of whales caught decreased and as it was no longer considered profitable, the company closed its operations. In 1922, the North West (Aust) Whaling Company purchased the station but by 1925, they had been forced into liquidation and agreed to lease the station and ships to the newly formed Norwegian Bay Whaling Corporation. Although the following whaling seasons were a success, operations were suddenly ceased and a further attempt to utilise the station failed.

After a cyclone destroyed the station in 1944, it was resurrected by the Nor' West Whaling Company, who modernized it to increase production but by 1957 it closed as it was no longer considered profitable.

Over the intervening years weathering, strong winds and human salvage have resulted in the destruction of most of the buildings, so little remains to date. The remaining structures contain great historical value in that it was the only successful whaling station to operate in Western Australia in the early 20<sup>th</sup> century and has the potential to yield information about whaling practises in Western Australia.

### **3.4.2.6 RAAF Base Learmonth**

This has been identified during a survey as a place of potential heritage significance, as it holds value to the local community. No information was available as it has not been formally assessed.

### **3.4.2.7 Cape Range and Adjacent Coastal Plain**

The Cape Range and adjacent coastal plain covers an area of approximately 183,000 ha and comprises part of the North West Cape and extends inland as far as the mean low watermark. The Exmouth townsite boundary has been excluded from the Cape Range place boundary. The area is potentially threatened by a variety of land uses with many flora and fauna species likely to be impacted by development.

The Cape Range rises to an altitude of 311m and forms a 16km wide spine along the Cape Range peninsula. It is fringed by coastal plains on its eastern and western margins, and the range is extremely rugged and rocky, with steep-sided canyons up to 120m deep on the

eastern side of the range. South of Learmonth the range grades into undulating limestone and sand plain country. The coastal plain contains a network of subterranean waterways, small sink holes and artificial wells in caverns and fissures in limestone beneath the narrow coastal plain (1km-5km wide, 70km long) that lies between Cape Range and the Indian Ocean on both sides of the peninsula. The continental shelf is narrower here than anywhere else in Australia, which makes the area especially suitable for registering evidence of recent sea level changes in the late Pleistocene.

It is considered to be of outstanding significance for its geological and palaeontological features, biological attributes and cultural values, and in particular, its subterranean cave fauna. Further, it is the only example in Australia of an orogenic (mountain building phase) limestone formed during the Tertiary (less than 65 million years ago). It also provides information about the events that shaped the Australian continent.

The Cape Range is considered to be of great value to scientific research, particularly to the study of geology, climate change, global environmental history, geomorphology landscape evolution, palaeontology, biology, ecology and biogeography. Scientific research conducted here has implications far beyond Cape Range.

Up to 630 taxa of vascular plants have been recorded from the peninsula. The flora is dominated by widespread desertic plants, both temperate and tropical, reflecting the geographic position of the peninsula and the general composition of the flora of the Carnarvon Botanical District, 50% of these are considered to be endemic to the region. A well-developed cave system is found in the limestone, and more than 500 karst features have been recorded. The caves are the deepest in the mainland of Australia, containing a rich troglobitic (confined to caves), and stygobiont (confined to subterranean waters) fauna. The antiquity of the stygofauna is illustrated by the fact that the Tethys Sea, where these species are thought to have evolved, existed before and during the breakup of Pangaea, when it is thought that all the landmasses of the world were joined. Many species of the terrestrial cave fauna originated when the region was blanketed by tropical rainforests over 38 million years ago, and includes a number of classes, orders, families and genera which are only known elsewhere from a few caves on islands of the Atlantic Ocean, and this remarkably disjunct distribution suggests that this fauna comprises one of the most ancient faunal communities anywhere in the world. The place is rich in fossils and is of palaeontological that are of considerable importance in helping to understand mammal extinction in Australia, and in reconstructing the distribution of the mammal fauna immediately prior to European settlement.

Finally, the beaches and the limestone landscape, including the gorges, pinnacles, natural bridges, and caves such make the area of great significance to the Western Australian community and tourism in the area.

#### **3.4.2.8 Point Cloates Lighthouse and Quarters (Ruins)**

The Point Cloates Lighthouse and Quarters is located in the Ningaloo Pastoral station. It was built in 1910 in response to the increasing shipping activity along the north-west coast. Point Cloates was considered a necessary location as the currents and reefs extending offshore.

Locally available sandstone was used to build the tower and quarters, in a similar design to that of the lighthouse at Vlamingh Head. By 1936, the sand dune on which the lighthouse



was built became unstable threatening the safety of the building and so it was decommissioned in 1936 and replaced with a new lightstation on Frazer Island.

Eventually the building fell into disrepair and the ruins were incorporated into the pastoral lease.

#### **3.4.2.9 Bundegi-Cape Well**

Bundegi-Cape Well is located 3 km west of Murat Road on a sparsely treed track, approximately 12 km to the north of Exmouth. The origin of the well is unknown but it is said to be constructed around 1875 as either a source of fresh water by the survivors of the ship wrecked barque 'Stefano' or alternatively by pearlers and whalers prevalent in the Exmouth area during the late 19<sup>th</sup> Century.

Bundegi-Cape Well is no longer in service and was documented as being covered by an array of timber poles and beams covered in iron sheets to prevent possible hazards. The walls of the well are made of rock reinforced by rough timber. A large cylindrical concrete tank is located near the well, standing at 2 metres above ground. Additionally an unknown concrete structure is located directly next to the well.

Bundegi-Cape Well holds high levels of historical significance as early evidence of the first European settlers in the North West Cape, as illustrated with the link to the barque 'Stefano'. Due to the importance of water in the arid environment of Exmouth this water source would have been central to the survival of early settlers and later pastoralist that utilised the resource, acting as a marker of settlement in the Exmouth region.

#### **3.4.2.10 Cape Range No 1 Oil Well**

Cape Range No 1 Oil Well is located in Cape Range National Park, on the southern tip of the Exmouth Gulf. The well was one of the first attempts at exploratory drilling for oil in Exmouth and was constructed in 1954 by West Australian Petroleum Pty Ltd (WAPET), previously known as Ampol Petroleum Ltd.

The rig itself was mobile, ultimately being removed on the completion of drilling, leaving little physical evidence of the works at present. After the discovery at No 1 Oil Well a succession of drilling programs were undertaken by WAPET, making the well central to industry development of the Exmouth region.

Other industry developments resulting from the find included the building of the WAPET Jetty allow transport of large equipment. Cape Range No 1 Oil Well did not prove to be lucrative but WAPET did eventually strike large amounts of oil in 1964 on Barrow Island.

Cape Range No 1 Oil Well holds high historical significant because of roll on effects that the discovery of oil in Exmouth created, resulting in the development of industry and influx of people to the region for economic purposes.

#### **3.4.2.11 Cape Range No 2 Oil Well**

Cape Range No 2 Oil Well is located in Cape Range National Park on the southern tip of the Exmouth gulf. The well itself was constructed in 1954 by West Australian Petroleum Pty Ltd

(WAPET), previously known as Ampol Petroleum Ltd. It was one of the first attempts at exploration drilling in Exmouth, including Cape Range No 1 Oil Well.

The rig itself was mobile, ultimately being removed on the completion of drilling and capped off resulting in little physical evidence of the works at present.

The well was one of the first attempts at exploratory drilling for oil in Exmouth during the 1950's by WAPET that resulted in a series of oil wells being constructed throughout the Exmouth region. Like Cape Range No 1 Oil Well, Cape Range No 2 Oil Well was not lucrative but rather acted as a representation of the possibility of a future strikes in the region.

The Cape Range No 2 Oil Well holds historical and scientific heritage significance because it provides an example of early exploration drilling and capping.

#### *3.4.2.12 Charles Knife Road*

The Charles Knife Road is an unsealed section of road located 23 km south of Exmouth. The track dissects the peaks of the Cape Range covering undulating topography and is now utilised as a scenic track.

The Charles Knife Road was constructed in 1954 and gains its name from the administration officer that surveyed the area, alongside Jack King, in order for drilling teams of the West Australian Petroleum Pty Ltd (WAPET) to access country. The Bell Brothers were the contractors tasked with completing the road.

The Charles Knife Road is associated with Cape Range No 2 Oil Well, an example of development of the Exmouth region by WAPET during the 1950's. The road holds historical significance because of the difficulty in construction due to terrain of the area, requiring engineering innovation rarely employed during this period of time.

#### *3.4.2.13 First Trees Planted in Exmouth*

The First trees Planted in Exmouth are commemorative plants designed to establish and commemorate the significance of the US Naval presence in North West Cape. They consist of three river gums separately planted and located in Exmouth. The first was rooted on the 23<sup>rd</sup> of June 1964 adjacent the car park of Maidstone Crescent, the second on the 8<sup>th</sup> of July 1964 in a grass area adjacent to the western side of the Shire Office and the third on the 17<sup>th</sup> of October 1964 on the western side of the Council Chambers. To strengthen the relationship between Australia and the US Hon Allen Fairhall MP, Vice Admiral Sir Hastings Harrington and the Australian Governor General were chosen as representatives to plant the trees.

The call for the symbolic acts arose from a 1963 agreement signed between Australia and the US designed to strengthen defence and security, resulting in the establishment of the US Communications Station at Exmouth.

The trees serve as markers of an enduring relationship between the Australian and American government focused around defence and naval activities making them historically significant. They are also linked to notable historical figures.

#### **3.4.2.14 F J Reddy's Grave**

The grave site of Frank Jospeh Reddy, also known as the 'Lonely Grave' is located 0.3km east of the Lighthouse Caravan Park, 17km north of Exmouth.

The grave consists of a painted white timber cross bordered by a 0.47 metre high white chain fence. The inscription "F J Freddy 27 May 1912" is the only identifier of the historic burial.

The grave is historically significant because F J Reddy is the first identified European grave site on the North West Cape, hence the epithet of the 'Lonely Grave'. F J Reddy lost his life during the construction of the Vlamingh Head Lighthouse that began in 1911. It is reported that he died on 27 May 1912 from dysentery most likely brought on by poor working and living conditions, he was buried on May 28. The place is directly linked to the history of the Vlamingh Head Lighthouse and the early maritime industry in Exmouth.

#### **3.4.2.15 Giralia Station**

Giralia Station came into existence in 1888 when H R Frenergy & Co leased 204,698 acres from the WA Government. The homestead itself was constructed in two parts, Pre 1910 was the initial building and 1916 saw an extension to a larger homestead. The station was utilised for grazing, pastoralism and dairy over its history.

The homestead in both phases of construction was made from corrugated iron and timber, used predominantly in the construction of the walls roof. Pressed tin ceilings originally comprised the ceiling of the homestead which were later converted to tongue and groove timber walls and ceilings.

Ownership of the station was passed to The Blake family in 1921 and subsequently Rac and Denver in 1972. Today the station has a total area of 654,000 acres after the area of the property was expanded in 1976. The larger land and homestead hold aesthetic, historical and cultural significance as an example of early settlement in remote locations in 20<sup>th</sup> century Australia.

#### **3.4.2.16 Operation Potshot – Site**

The Operation Potshot Site consists of remains of historic buildings and artefacts that once comprised a base utilised by the Australian and US Navy during World War II in the Exmouth Gulf.

The base was constructed in 1942 after the Japanese advanced south towards the Pacific; American forces were compelled to find locations to base their defence force to engage with this advance on territory. Exmouth was located as a site with strategic positioning resulting in the establishment of the Learmonth airstrip, a radar station, water storage and a submarine tender with anti-submarine and aircraft defences. Additionally submarines were refuelled in the Exmouth Gulf.

The effectiveness of the base was moderate as Japanese were aware of the location of the Operation Potshot site, resulting in bombing in 1943 by Japanese pilots. The site is linked to various famous events and people such as 'Z Force' raid on Singapore and Squadron Leader Keith 'Bluey' Truscott who died in the Exmouth gulf after crashing in the gulf. The

base was largely decommissioned in February 1945 after a cyclone destroyed various sections of the base, leading to the withdrawal of personnel and equipment.

The Operation Potshot site holds high historical significance as a place signifying the close relations of the Australian and American Naval forces in the realm of maintaining defence, a place intimately tied to the history of World War II, including Japanese history during the war period and various famous operations and figures of World War II such as Squadron Leader Keith 'Bluey' Truscott.

#### *3.4.2.17 Pier- Pt Murat (Navy Pier)*

The Point Murat Pier was completed in 1967 by the US Navy and Australian Department of Defence in order to supply the US Naval Communication Centre. The Pier was built to withstand extreme weather conditions including cyclones and tsunamis.

It is 356 metres long made of steel, timber, rubber and chain in a loose deck style. This length is comprised of a 315 metre jetty with a face of 48.75 metres. There are also mooring and breasting dolphins with a space of 320 metres between them.

The pier head is 6.4 metres above the M.S.L, 4.9 metres in length and 17.1 metres wide. The decking is made of Jarrah planks with 3 fenders and a total of 4 bollards of 136 tonnes evenly spaced every 9.75 metres. The wharf has both mooring and breasting dolphins with 320 metres between dolphins. The breasting dolphins, both northern and southern, are at least 3 metres above the M.S.L, 12.2 metres in length and 6 metres wide, made of steel and rubber fenders and chain. They have 3 bollards totalling 136 Tonnes. The mooring dolphins, both northern and southern, are at least 4 metres above the M.S.L and 4.8 in length and 4.8 metres wide. They are made of steel grating and have 2 bollards totalling 136 tonnes. Finally access to the pier is controlled through gates and lights run along the length.

The pier is historically significant because of ties to naval history in Exmouth, including international relations with the US Navy. It is also an existing example of early engineering in Australia designed to withstand extreme environmental forces. The pier is still in use today utilised for recreational activities and the delivery of fuel.

#### *3.4.2.18 Rough Range No 1 Oil Well*

Rough Range No 1 Oil Well is located in Rough Range, located at the southern tip of the Exmouth Gulf. The well was one of the first significant finds on oil in WA constructed in 1953 by West Australian Petroleum Pty Ltd (WAPET), previously known as Ampol Petroleum Ltd.

The rig itself was mobile, ultimately being removed on the completion of drilling, leaving little physical evidence of the works at present except a drilling cap.

The rig was central to industry development of the Exmouth region, after the discovery of oil a succession of drilling programs were undertaken by WAPET. Rough Range No 1 Oil Well did not prove to be lucrative but WAPET did eventually strike oil in 1964 on Barrow Island.

The Oil Well holds high historical significant because of roll on effects that the discovery of oil in Exmouth created, resulting in the development of industry and influx of people to the region for economic purposes.

### **3.4.2.19 Shire Library (Office of Civil Commissioner (fmr))**

The Shire Library was constructed in 1964 as a place where town administration was carried out by the elected Civil Commissioner. This is historically significant because the Civil Commissioner was a first point of call for the US Navy that historically established itself in Exmouth during World War II. The Civil Commissioner also dealt with State and Commonwealth authorities and community cohesion.

The Shire Library is centrally located on Lot 320 of Maidstone Crescent in Exmouth. The building consists of a low gradient roof and metal frame covered in fibreboard. Additionally to being the work space of the Civil Commissioner, the building has also served as the first school and civil centre of Exmouth and is now the Shire Library. The building illustrates demographic settlements, governmental policies and structure during the 1960's and onwards.

### **3.4.2.20 Shothole Canyon and Road**

Shothole Canyon and Road are located 16km south of Exmouth stretching to the Cape Range National Park. This stretch of road allows easy access to Cape Range National Park where a myriad of exploratory drilling took place during the 1950's and 1960's by West Australian Petroleum Pty Ltd (WAPET). The Canyon is named after a series of earthquake studies that were performed in the valley utilising explosives, making it historically significant as a place linked to the development of mining in Western Australia and seismology. Due to the aesthetic beauty of the canyon it is a popular tourist destination continuing to be an important environmental feature in the Exmouth region.

### **3.4.2.21 Staff House**

The Staff House was the personal residence of the Civil Commissioner located on the corner of Bennett and Fyfe Streets in Exmouth. The house was built in Talgarno WA in 1960 and transported to Exmouth in 1965. The construction accounted for extreme weather prevalent in North West of Western Australia.

The structure is significant because it is linked to the historical development of Exmouth during the mid-20<sup>th</sup> century, specifically the vast influence the US Navy had on the government and layout of the town and structures in the gulf of Exmouth. The Civil Commissioner was a constructed role to deal with the dominant presence of the US Navy in Exmouth. Additionally the role also dealt with State and Commonwealth authorities and community cohesion. The building illustrates demographic settlements, governmental policies and structure during the 1960's and onwards.

### **3.4.2.22 Tantabiddi Well**

Tantabiddi Well is located in the Cape Range National Park that runs along the western side of the Cape Peninsula. The construction date of the site is unknown but historically the well was used for watering cattle and as drinking water for the regions inhabitants. Physically the well was constructed from rock but has since been boarded up using wooden beams and iron sheets.

Tantabiddi Well is highly significant because it is linked to a set of subterranean caves that run underneath the entire peninsula also supplying Exmouth with fresh water. These caves



house rare fauna limited to this region and Barrow Island such as the Blind Gudgeon discovered in Tantabiddi Well in 1948.

#### **3.4.2.23 Transit House**

The Transit house located on Christie Street in Exmouth was erected in 1964 to house workers that constructed the US Communications Station and Shire employees. The house is significant because it was one of the earliest structures entirely built in Exmouth; previously buildings were constructed in other locations and transported to the settlement.

The construction of the house was a direct result of an agreement signed on 9 May 1963 that cemented a cooperative working relationship between the Australian and US to assist in security and defence.

#### **3.4.2.24 Vlamingh Head Radar (World War II Aircraft Warning Radar)**

The Vlamingh Head Radar located 17km north of Exmouth was built in 1943 to act as an aircraft warning system in defence of the Australian coast during the World War II effort of Operation Potshot.

The North West Cape was chosen by the American Navy as an advantage point to defend against the Japanese incursion into the Pacific. The Operation Potshot base was constructed in 1942 in Exmouth and Exmouth Gulf on the precedence of security and defence for both the Australian and American government. Various structures and defensive technology such as the Vlamingh Head Radar were erected during this period.

The radar was comprised of a steel angle frame that housed a transmitter and receiver powered by an electric motor. It was shielded by a wall of sandbags, wire netting and spinifex, the sandbags and steel frame still remain today.

The Vlamingh Head Radar holds historical, cultural and scientific significance as a place linked to World War II efforts along the remote coastline of Australia. The structure is an early and rare example of naval defensive technology and can be directly linked to Operation Potshot.

#### **3.4.2.25 VLF Towers, Harold E. Holt Naval Communication Station**

The Very Low Frequency Towers (VLF Towers) are a series of 13 towers located 11 km north of Exmouth that were utilised for long range communication with submarines by the US Navy. Construction of the 13 towers began in 1963 with the first transmission occurring on September 16<sup>th</sup> 1967.

The towers are located within a centralised area of 2km in order to support large antennae. The ce

entral tower is 387.5 metres high with the inner and outer towers measuring 387.2 metres and 364.2 metres respectively. Over 24,466 cubic metres of concrete was used for the foundation and anchor blocks. The antennae measures approximately 2 km in diameter and 350.000 metres of copper wire is buried underneath the areal antennae. Additionally a power plant was built in the VLF area to power the towers.

The VLF Towers later replaced the Valmingh Head Lighthouse when an electric light was attached to the central tower in 1967. The towers are historically significant because they

were the tallest man-made structures in the southern hemisphere for a time. They were also central to the defence of Australia and transmission for the US Navy. Today the Towers are actively involved in submarine transmission.

#### **3.4.2.26 WAPET Jetty (Ruin) (Learmonth Jetty)**

The West Australian Petroleum Pty Ltd (WAPET) Jetty is located 33 km south of Exmouth at Learmonth. The jetty is the result of oil exploration in the 1950s by WAPET, previously known as Ampol Petroleum Ltd. Discoveries at Rough Range and Cape Range such as Cape Range No 1 Oil Well and Rough Range No 1 Oil Well were the prime cause for the jetty's construction that was used to transport fuel and equipment to various oil wells, while the RAAF airstrips were used for light supplies.

In 1958 WAPET exploration ceased and the jetty was no longer used, yet the historical significance of the jetty remains as it was central to the exploration the North West Cape.

#### **3.4.2.27 Yardie Creek**

Yardie Creek previously known as Williams River by Dutch explorers stretches from Exmouth to the western part of Cape Range National Park. Various sections of the Creek are boarded by steep granite edge cliffs.

The name Yardie is Aboriginal in origin with the high possibility of the water source being traditionally utilised by Aboriginal populations. More recently Yardie Creek Station was heavily reliant on Yardie Creek as a means for transporting supplies. The station was leased by Thomas Carter in 1902 with the homestead built in 1907, active pastoralism occurred from founding until the area was deemed a national park.

Yardie Creek holds varying levels of significance from aesthetic and environmental significance acting as a draw card for tourism, contributing to the beauty of the Cape Range National Park through to historical and cultural heritage significance as a place where early Australian pastoralism took place and possibly a place and resource used by Aboriginal inhabitants of the region.

#### **3.4.2.28 Exmouth War Memorial**

The Exmouth War Memorial was built in the 1980s is a decorative curved wall of interlocking cement blocks with a bronze wreath and plaques inscribed with the names of various wars. It also contains a separate plaque in honour of the *Krait*, a vessel used in a mission conducted from Exmouth. The mission was undertaken by the Z Special Force, a commando unit, and saw the successful raid against Japanese shipping at Singapore in 1943.

#### **3.4.2.29 Exmouth Fire Station**

The fire station was built in 1967 and although it is not registered as a Heritage site, it has been included on the Fire & Rescue Service Heritage Inventory as it is considered important to the local community with its provisions of fire services since its construction.

It is also considered to hold some importance as the place helps illustrate the building campaign arising from the expansion of volunteer fire services in the 1950s and 1960s.

### **3.4.2.30 *Exmouth Police Station, Lockup and Quarters (Exmouth Police Station & Lockup)***

This has been identified during a survey as a place of potential heritage significance, as it holds value to the local community. No information was available as it has not been formally assessed.

### **3.4.2.31 *Cape Range National Park (Cape Range Geological Site)***

The Cape Range National Park covers approximately 120,000ha on North West Cape, 10km west of Exmouth, extending from Ningaloo Station in the south to Vlamingh Head in the north, and inland from the west coast to include much of the range area to the east.

It is considered to have outstanding significance for its geological, palaeontological and biological features and the associated cultural values. It rises to 311m above sea level and forms a 16 km wide spine to the Cape Range Peninsula. Extensive areas of fossil coral reef underlie much of the coastal plain to the west of the Cape Range and exposures of the deposit at Mangrove Bay are considered to be of late Pleistocene age, formed about 100,000 years - 120,000 years ago. The Cape Range peninsula presents an unusual combination of environments for the north-west coast. Pre-Cambrian units are absent and the dissected limestone of the Cape Range is isolated from other rocky country by lowland sand plains, dune fields and heavier alluvial units. Further, it is home to a number of flora and fauna species that are considered to be endemic to the area.

The place has many historic associations, structures and artefacts of exploration colonisation and exploitation by Europeans and development of the Cape Range Peninsula and north-west WA. These include Yardie Creek homestead, Vlamingh Head Lighthouse and Quarters, Cloates Point Lighthouse and quarters and the Norwegian Bay Whaling station. As a result of this activity, a great deal of material evidence of human occupation can be identified across the National Park.

### **3.4.2.32 *Coastal Margin – Exmouth Gulf to Cape Preston***

The Coastal Margin – Exmouth Gulf to Cape Preston approximately 120,00 ha of land on the Western Australian Coast comprising the saline coastal flats between Exmouth Gulf and Onslow and includes the Mary Anne Island group to the North of Exmouth. It is considered to be an important representation of intact tidal flats and mangrove thickets in the north-west of Western Australia. This is an important habitat for the juveniles of many marine species, an important bird habitat and the location of a dugong colony.

It is considered to be in good condition and comprises numerous tidal channels extending landward with are bordered by extensive mangrove thickets and terrains of algal mat.

### **3.4.2.33 *Fairy Queen Shipwreck***

The Fairy Queen was a pearling ship built in Singapore. In 1875 it was purchased by three men from the Swan River colony for the north-west pearl fishery and on board it was reported to have a crew and 37 divers. On its way from Singapore to the North West Cape, it was damaged in two storms enroute, forcing the crew to seek shelter in the Exmouth Gulf. On the night of 7 October, the water was considered to be too rough to anchor so the crew proceeded into the Gulf under reduced sail. During this journey the rudder was damaged

again and without it the crashed into the shore. The ship was severely damaged and there was no hope of refloating it. They then set off in 5 boats for Cossack, only reaching the Mary Anne Islands. An inquiry was held and the Captain was not considered to be at fault for the wreck.

#### **3.4.2.34 *Fin Shipwreck***

The Fin was built in 1881, Norway for the North West Whaling Co. Ltd. Little information about the wreck is available, except that while at anchor it was driven ashore at Point Cloates in 1923.

#### **3.4.2.35 *Learmonth Air Weapons Range Facility***

Although this has been registered under its current use, the importance of the facility lies in its geomorphology. It covers an area of approximately 18,954 ha, it lies 30km south-west of Learmonth and is demarcated as an air weapons range facility.

Its location is within the Cape Range and Adjacent Coastal Plain running along the western side of the peninsula and consists predominately of coastal sand plains, with a series of limestone terraces on the western edge, parallel to the coast, that constitute a former wave cut platform derived from coral reef. As with the rest of the Cape Range Peninsula, it is rich in stygofauna, that developed prior to the break-up of Pangaea. The area is also the habitat to many endemic species of flora and fauna.

The geomorphology of Cape Range, of which the Learmonth Range Facility is a part, is of considerable importance in documenting sea level and landform changes since the late Cenozoic (around 1.8 million years ago). A series of emergent reef-complexes, which represent several periods of coral reef development, are elements of the geomorphology of the western side of the Learmonth Range Facility, and of Cape Range. The ages of these reef terraces hold the key to an understanding of the timing of uplift events. Further the area comprises a network of subterranean waterways, comprising caverns and fissures in the limestone beneath the coastal plain. The Bundera Sinkhole, found within the Learmonth Range Facility, is the only deep anchialine system known in Australia, and is the only continental anchialine system known in the southern hemisphere. These are noted both for their specialised fauna. It for this reason the area yields important information concerning the evolution of life on earth.

#### **3.4.2.36 *Ningaloo Marine Park***

Ningaloo Marine Park covers an area of approximately 470,000ha, that comprises the waters surrounding the Exmouth Peninsula. It is the longest fringing barrier reef in Australia, forming a discontinuous barrier over approximately 260km and enclosing a lagoon which varies in width from 200m to just over 6m. The reef flat is, on average, several hundred metres wide and becomes partially exposed at low tide and consists of a partially dissected basement platform of Pleistocene marine or aeolian sediments, or tertiary limestone, which is covered by a thin layer of living or dead coral or macro-algae. In this way it is geologically distinct from the Great Barrier Reef. Surveys of Ningaloo Reef Marine Park have yielded over 600 species of mollusc, more than 460 species of fish making the fauna from North West Cape to Bundegi Reef is exceptionally rich and diverse. The area is important for marine mammals with a dugong colony located near Norwegian Bay, five species of whales,

a dolphin species and at least three turtle species all using the reef as habitat and breeding grounds.

The Marine Park also contains great historic value as many shipwrecks are evidence of European exploration and industry within the region.

#### *3.4.2.37 Perth Shipwreck*

The Perth (formerly the Penrith) was built in Glasgow for the Adelaide Steamship Company in 1863. Little information about the wreck is available, except that it hit the Ningaloo Reef in 1887 while enroute from Wyndham to Fremantle.

#### *3.4.2.38 Zvir Shipwreck*

The Zvir was built in 1900 in the U.K. for the Croatian Society in Azioni Urgara Croata per la Nar Libera. It was travelling from Java to Port Adelaide in 1927 and was reported to be carrying a cargo of sugar under the charter of the Colonial Sugar Refining Company. The ship ran aground at Point Cloates and the extensive damage resulted in the vessel's total loss, the cargo was valued at £50, 000 and none of it could be saved. No lives were lost and so the crew abandoned the wreck in lifeboats and walked to Carnavon, they were then rescued and repatriated to Austria.

#### *3.4.2.39 Vlamingh Head Lighthouse Quarters*

The Vlamingh Head Lighthouse Quarters were constructed alongside the Vlamingh Head Lighthouse north of Exmouth, completed in November 1912. The residence was designed to accommodate workers and family that manned the post, with enough space to accommodate 2 families.

The dwelling that was originally split into two wings with a corrugated iron roof and walls made of rendered concrete and fibro clad verandas. Drop down shutters were also a feature of the quarters to guard against extreme weather conditions. The residence of Vlamingh Head Lighthouse Quarters faced isolation with a monthly postal service as a means of contact with the wider world.

The historical and cultural significance of the Quarters lays in the connection to the prominent lighthouse. The building holds aesthetic value illustrating the early architectural style and way of life.

#### *3.4.2.40 Vlamingh Head Lighthouse*

The Vlamingh Head Lighthouse is located 17km north of Exmouth, construction began in November 1911 and was completed by November 1912. The Lighthouse was commissioned due to a large number of shipwrecks off the North West Cape including the wrecking of the SS Mildura.

The construction was plagued by unsanitary conditions, noted in a Commonwealth report written by Commander Brewis RN documenting the ill effects of isolation, poor drinking water and little medical supplies on workers. The death of F J Reddy during construction due to poor conditions is widely known because his was the first marked European grave in the Exmouth region.



The base of the Vlamingh Head Lighthouse was made of rendered concrete while the walls were shuttered stone filled with mortar and rendered. The lantern was visible from 22 nautical miles and was made of pre-fabricated steel and glass dome. Accommodation was provided nearby at the Vlamingh head Lighthouse Quarters for the lighthouse keepers but in 1967 the lighthouse was antiquated with an electric light on the Harold Holt Communication Centre.

The significance of the lighthouse lays in the prominent role it played in maritime history of the North West Cape and as one of the major early architectural constructs of the region. It is currently a scenic tourist destination.

### **3.4.3 Significance of European Heritage places**

The town of Exmouth was gazetted in 1963 to support the US Navy run Harold E. Holt Communications Station. The town is situated on the western side of the Exmouth Gulf, for which it has been named after. The Gulf was named by Commander Phillip Parker when he was undertaking a hydrographic survey of the area in 1818. It was named for the Viscount Exmouth, Edward Pellew who was regarded as a British Naval hero (Landgate 2013). The North West Cape as an area has been referred to since 1618, with the first recorded European sighting, being the Dutch Vessel the “Zeewolf”. The first known landing on the Exmouth Coast was in later in 1618 by the Dutch Captain Jacobz of the “Mauritius” (Shire of Exmouth 2013).

Once Western Australia had been named a British Colony, J. Brockman acquired pastoral leases that covered the entirety of the Cape. He sold this onto Thomas Carter who is responsible for most of the coastal wells that still exist in the area. This was also the era in which Pearl Luggers visited the Exmouth Gulf on a regular basis and inevitably contributed to the 39 shipwrecks (listed in Appendix C) that have been identified in the waters surrounding Exmouth.

In 1911 and 1912, two lighthouses were built on Point Cloates and Vlamingh Head, this coincides with the establishment of the Point Cloates Whaling Station that operated intermittently until 1957 when it was closed permanently (Shire of Exmouth 2013).

Exmouth came into importance in 1942 when the US Navy established a submarine base and extensive facilities were built adjacent to where the Learmonth Airforce Base now stands. The Australian Defence Forces and the US Navy continued to use the facilities throughout the remainder of the War and it was thus bombed by the Japanese in 1943 after Operation Jaywick departed from the Exmouth Gulf to attack shipping within Singapore Harbour. The base was finally closed in 1945 after a cyclone caused extensive damage. The base was then used in the 1950s for Oil exploration, which included the significant discovery of Rough Range in 1954 (Shire of Exmouth 2013).

As mentioned above, in 1963, Exmouth was gazetted to support the VLF Communications Station and in 1967 both were officially opened. This was also the time that MG Kailis Fisheries opened a prawn trawling industry (1964) and Morgan and Sons established a Pearl Culture Operation (1965) (Shire of Exmouth 2013).

### **3.5 UNESCO World Heritage**

Today, Exmouth's is premier tourist location given its marine and terrestrial national parks; particularly the UNESCO listed Ningaloo Reef which is considered to be one of the few fringing coral reefs on the west coast of a continent (Shire of Exmouth 2013).

The Ningaloo Coast is a 604,500 hectare marine and terrestrial property whose boundary includes the Ningaloo Marine Park (Commonwealth Waters), Ningaloo Marine Park (State Waters) and Muiron Islands Marine Management Area (including the Muiron Islands), Jurabi Coastal Park, Bundegi Coastal Park, Cape Range National Park and the Learmonth Air Weapons Range (UNESCO 2013).

The Ningaloo Coast is one of the longest near-shore reefs in the world. It includes a network of Karst systems and underground caves and watercourses. It is also renowned for its numerous marine species including a large variety of sea turtles and an annual gathering of whale sharks. The terrestrial and aquatic aspects of the site support a variety of rare species (Shire of Exmouth 2013).

The Ningaloo Coast is considered to have Outstanding Universal Value given the aesthetically striking landscapes, the endemism of its terrestrial species and high marine species diversity and abundance. It was inscribed on the UNESCO World Heritage Register as it is considered to fulfil Criterion vii (to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance) and x (to contain the most important and significant natural habitats for *in-situ* conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation) of the UNESCO Selection Criteria. This has been considered on the basis that the area is largely untouched and the marine environment creates a striking contrast to the rugged and arid terrestrial environment. Furthermore, this classification is due to the fact that between 300 and 500 whale sharks congregate in the region on an annual basis and that an overwhelming variety of documented coral (300 species), reef fish (700 species), molluscs (650 species), crustaceans (600 species) and marine algae (100 species) live on the Ningaloo Coast. There is also an unusual diversity of marine turtles with an estimated 10,000 nests deposited annually. It is also considered to have some of the highest varieties of cave fauna in the world (UNESCO 2013).

Interestingly there appears to be little to no engagement of the Jinigudira and Baijundu Traditional Owners for the country in the tourism operations in the area. This appears to offer a major potential for community engagement and outcomes for any future development.

### **3.6 Community Consultation**

Preliminary discussions were held with YMAC as the representatives for the Gnulli Traditional Owners. During this consultation it was pointed out that there are several key families within the Exmouth area. It became clear that the history of consultation in this area has not been as inclusive as possible, and any further engagement in Aboriginal heritage should aim to firstly establish clear lines of communication with the Traditional Owners for the affected areas. This would ideally be conducted through YMAC as the representative body. It was also found that while the Jinigudira and Baijundu Traditional Owners are the rightful people to speak for the Exmouth area, there are other Aboriginal families within the

Exmouth area, whom while not asserting a traditional connection to country should be considered stakeholders in any future developments.

This was followed by an attempted on country consultation, but the key informants given were not available during the site visit on the 17<sup>th</sup> and 18<sup>th</sup> of July.

It is proposed that any heritage investigations within the Exmouth Region should utilise YMAC as the primary interface in identifying the groups to both consult with and to conduct heritage surveys.

## 4 HERITAGE COMPLIANCE OBLIGATIONS

### 4.1 Heritage legislation, guidelines and best practice

#### 4.1.1 Aboriginal Heritage

Aboriginal heritage is protected, at a State level, under the *Aboriginal Heritage Act 1972* (WA) (the Act). The Act applies to both places and objects. Any place to which the Act applies is protected, including places that have not been formally identified or registered with the Department of Aboriginal Affairs (DAA). Violations of the Act may result in prosecution, regardless of the registration status of the heritage place.

Land users should familiarise themselves with the DAA's *Due Diligence Guidelines* available online regarding their obligations under the Act and should be aware any disturbance to an Aboriginal heritage place or object must be approved by the Registrar of Aboriginal Sites under section 16 of the Act or have the consent of the Minister of Aboriginal Affairs under section 18.

At a Federal level, the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth) (ATSHPA) applies to Aboriginal heritage across Australia, and is intended to provide another level of protection in the event that State laws are considered to be ineffective.

#### 4.1.2 Non-Aboriginal Heritage and Shipwrecks

Non-Indigenous heritage is afforded legislative protection at both a State and Federal level. The *Commonwealth Historic Shipwrecks Act 1976* (Shipwrecks Act) is concerned with any shipwreck or relics associated with shipwrecks such as survivor camps older than 75 years in Australian waters, extending from the low tide mark to the edge of the continental shelf. Artefacts less than 75 years old can be especially declared by the Minister for Environment, Heritage and the Arts e.g. World War II wrecks.

Some shipwrecks lie within protected or no-entry zones. A protected or no-entry zone may cover an area up to 800 metres around a wreck site, and may be declared where circumstances place it at particular risk. There are currently no no-entry zones in the Exmouth LGA.

If an application to operate within a protected or no-entry zone is being sought or development is proposed that may impact a shipwreck protected under the Shipwrecks Act approval by the Minister for Environment, Heritage and the Arts must be sought.

Shipwrecks can also be included on the State Register of Heritage Places, along with any other places recognised for their value and importance to the State. The State register is held with the Heritage Council of Western Australia under the *Heritage of Western Australia Act 1990*. It is a statutory list of places that represent Western Australia's history and development. If a development or change to a place on the State Register is proposed it will be referred to the State Heritage Office or decision making body. Major developments will be dealt with by the Heritage Council and must comply with *State Planning Policy 3.5* (2007).

In addition, two non-legislative charters - the Australian ICOMOS Burra Charter 2013 and the Australian Natural Heritage Charter 2002 - detail best practice methodologies for the

identification, protection and management of heritage places. Places and objects of cultural heritage significance are afforded legislative protection at both a State and Federal level through the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act). All states and territories have heritage protection legislation and many local government bodies also identify and protect heritage, such as the National Trust Register of Heritage Places, Municipal listing of heritage places, and local planning policies and schemes that designate heritage significance within town precincts. Places assessed as having cultural heritage significance are captured on databases such as the National Heritage List, the Commonwealth Heritage list and the Register of the National Estate (RNE), and advisory bodies such as the Australian Heritage Council (AHC) play an important role in maintaining the national heritage system.

#### **4.1.3 UNESCO World Heritage**

As signatories to the *Convention Concerning the Protection of World Cultural and Natural Heritage* (the World Heritage Convention) adopted by the United Nations Educational, Scientific and Cultural Organisations, Australia has agreed to identify, protect, conserve and present World Heritage properties. As signatories we are also responsible for the identification and safeguarding of World Heritage in Australia (Department of Sustainability, Environment, Water, Population and Communities). To ensure adequate protection of World Heritage Sites the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was established. The EPBC Act provides legislative protection for World Heritage properties, establishes a stringent assessment and approvals process and management principles for World Heritage properties. Any developments in areas of World Heritage or actions that may impact on World Heritage are subject to a rigorous environmental assessment and approvals process under the EPBC Act. Actions which are taken that contravene the EPBC Act carry a civil penalty of up to \$5.5 million or a criminal charge of seven years imprisonment.

Any person who proposes to take an action which may impact on the World Heritage values of a UNESCO World Heritage site should consult the Environment Minister who will assess whether the action requires approval under the EPBC Act. If the action is found to require approval under the EPBC Act an environmental assessment will be carried out by either the Commonwealth, State or Territory. This assessment will be utilised by the Minister to make a decision whether to approve or deny the action, and what conditions may be imposed on an approval.



## **5 RECOMMENDATIONS**

Terra Rosa CRM has undertaken a preliminary assessment of the Heritage values within the Scheme Area and recommends that;

- 1. Any future planning should take into account the heritage places, sites and constraints identified within this Report.**

The Exmouth Shire should ensure that this Report is forwarded as a baseline to any prospective developments, in order to inform the initial conceptual and planning stages of any such projects.

- 2. There is considered to be a high potential for any development on the Exmouth peninsula to have significant impact upon heritage places both known and unknown.**

The Desktop research has shown that there are numerous and varied heritage sites throughout the Exmouth Shire. These sites include Indigenous, historic and maritime heritage sites, as well as the World Heritage Site. These sites represent an incomplete record as there has not been a systematic survey of the entirety of the shire, but are indicative that there is a rich cultural, historic and natural heritage within the area. The Aboriginal heritage sites in particular are widespread, complex and in many cases fragile; with the majority consisting of sites within coastal dunes and mangrove environments.

- 3. If the Exmouth Shire proposes to promote development within the DPA, a heritage survey to further “ground truth” areas of particularly high significance would be highly beneficial in forward planning.**

The mapping illustrating the cultural sensitivities within the detailed area, should be used for planning purposes only. It represents the heritage information that is available to the author at this time, and it has not been assessed in great detail in the field. It is proposed that a small survey / site verification effort be conducted, potentially just focusing on the highly significant sites, in order to ascertain the likely impact on the area of any proposed development.

- 4. Should development be proposed to utilise areas in which heritage places have been identified, it is advised the developer consult with the Gnulli Traditional Owners and arrange assessment of heritage places to a site identification standard prior to applying to disturb the areas under s18 of the Act.**

Proponents looking to develop this area should first contact YMAC in order to establish an arrangement / agreement to conduct heritage surveys and formally assess the proposed development areas. Unless this is conducted under an existing heritage agreement, this process may need to be instigated (the author can provide separate advice upon request in regards to this process). This method of survey will require a detailed level of recording of any heritage sites within the area, and will enable the proponent to lodge permission to disturb these sites as needed. It is an offence to disturb an Aboriginal heritage place without prior written permission to do so under s16 or s18 of the Act. Heavy financial penalties may be applied against

individuals or corporations who disturb a heritage place, whether knowingly or unknowingly.

5. **Should development be proposed that is likely to impact on any artefact or area protected under the Shipwrecks Act, it is advised that approval from the Minister for Environment, Heritage and the Arts be obtained.**

Further details of this process can be researched and information provided upon request.

6. **Should development be proposed which may impact on any heritage place listed on the State Heritage Register, it is advised that the developer contact the State Heritage Office for further advice.**

Further details of this process can be researched and information provided upon request.

7. **It is advised that any person who proposes to take an action which may impact on the World Heritage values of a UNESCO World Heritage site should consult the Environment Minister who will assess if the action requires approval under the EPBC Act.**

Further details of this process can be researched and information provided upon request.

8. **It is advised that the current Municipal Inventory be carried over into the Local Planning Scheme No. 4.**

Undertaking a Municipal Inventory review is an extensive process. It is therefore advised that the current Municipal Inventory be included as part of the Local Planning Scheme No. 4.

9. **It is advised that a comprehensive review of the Municipal Inventory be undertaken.**

During this review it is recommended that all non-Aboriginal heritage places and Aboriginal heritage places of state significance within the Shire of Exmouth are reviewed and assessed for inclusion. This should be conducted in accordance with the State Heritage Office publication *Basic Principles for Local Government Inventories* (2012a). This review should be undertaken in line with the State Planning Policy 3.5 (2007), the Burra Charter (2013) and the *State Heritage Act 1990*. Further, it is advised that the significance of these heritage places be graded based on the State Heritage Office publication *Criteria for the Assessment of Local Heritage Places and Areas* (2012a).

Once this review of the Municipal Inventory is completed, it is advised that it be updated annually and reviewed every four years in accordance with the *State Heritage Act 1990*.

10. **It is advised that a Local Heritage Planning Policy is implemented for the alteration or development of heritage places.**

This policy should be written to outline how development should be undertaken on heritage places and how the infill between heritage places is developed. Further advice should be sought from the State Heritage Office with regards to these developments.

## 6 REFERENCES

- Clark, B 1992, *Yammatji: Aboriginal memories of the Gascoyne*, Hesperian Press, Carlisle WA
- Department of Contract and Management Services 1997. *Fire and Rescue Service of Western Australia Heritage Inventory, Volume 2 E – M*, Fire and Rescue Service for Western Australia, Perth.
- Edmunds, M 1989, *They get heaps: a study of attitudes in Roebourne, Western Australia*, Aboriginal Studies Press for the Australian Institute of Aboriginal Studies, Canberra
- Gallagher, M 1996, 'Report of the survey of culturally and historically significant places in the Carnarvon-Pt. Cloates region for the Baiyungu-Mandi Aboriginal Corporation'.
- Jones, T, Hughes, M, Wood, D, Lewis, A and Chandler, P 2009, *Ningaloo coast region visitor statistics: collected for the Ningaloo destination modelling project*, Cooperative Research Centre for Sustainable Tourism, Gold Coast, Queensland.
- McGann, S 1999, 'Report on an archaeological survey for Aboriginal sites on the proposed Coral Bay to Yardie Creek road alignment', Quatermaine Consultants
- Morse, K & Fry, R 1989, 'Report of an archaeological survey of proposed development areas in the Cape Range National Park, North West Cape, Western Australia'
- Morse, K & Jackson, G 2002, 'A report of an Aboriginal archaeological survey of the Australian Maritime Safety Authority's digital global positioning system site, Exmouth, Western Australia, Gavin Jackson Pty Ltd
- Morse, K 1988, 'Mandu Mandu Creek Rockshelter: Pleistocene human coastal occupation of North West Cape, Western Australia, *Archaeology in Oceania*, vol. 23, no. 3, pp. 81-88
- Morse, K 1992, 'Archaeological research at North West Cape Western Australia', Department of Anthropology, Western Australian Museum
- Morse, K 1993, 'New radiocarbon dates from North West Cape, Western Australia: a preliminary report, in *Sahul in review: Pleistocene archaeology in Australia, New Guinea and Island Melanesia*, eds M. Smith, M. Spriggs & B. Frankhauser, Department of Prehistory, Research School of Pacific Studies, Australian National University, Canberra
- Petkovic, J, 2007, 'Aboriginal Groups in the Stefano Manuscript' in *The Wreck of the Austro-Hungarian Barque Stefano on the North West Coast of Australia*, ed J Petkovic, National Academy of Screen and Sound, Murdoch WA.
- Przywolnik, K 1998, 'Archaeological research, Cape Preston Peninsula, Western Australia: interim report'

- Richards, O. 1996, *War Memorials in Western Australia*, Statewide War Memorial Survey, Perth.
- Stanbury, M. 1985, *Norwegian Bay Whaling Station: An Archaeological Report*, Western Australian Museum, Perth.
- The Regents of the University of California (RUC), 2012, *Western Australia: Tindale Tribal Boundaries*, Department of Indigenous Affairs, Perth WA.
- Tindale, NB 1974, *Aboriginal Tribes of Australia: their terrain, environmental controls, distribution, limits and proper names*, Australian National University Press, Canberra
- Veth, P & Wright, G 1989, 'Report of an archaeological and ethnographic survey of the Coral Coast Marina Resort, Exmouth North-West Australia', Centre for Prehistory, The University of Western Australia
- Veth, P. 1993. *Islands in the interior: the dynamics of prehistoric adaptations within the arid zone of Australia*. International Monographs in Prehistory, Archaeological Series 3. Ann Arbor, Michigan.

### **Websites**

- Australian Heritage Council 2013,  
<<http://www.environment.gov.au/heritage/ahc/about/index.html> >
- Department of Aboriginal Affairs 2013, *Aboriginal Heritage Inquiry System*, Available from:  
<<http://maps.dia.wa.gov.au/AHIS2/> > [16 July 2013]
- Department of the Environment 2013, <http://www.environment.gov.au/epbc/index.html>
- Department of the Environment, n.d.(a) 'Naval Communication Station Harold E Holt ( Area B ), Exmouth, WA, Australia' from the *Australian Heritage Database*, viewed on 6 November 2013 < [http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place\\_detail;search=state%3DWA%3Bkeyword\\_PD%3Don%3Bkeyword\\_SS%3Don%3Bkeyword\\_PH%3Don%3Blatitude\\_1dir%3DS%3Blongitude\\_1dir%3DE%3Blongitude\\_2dir%3DE%3Blatitude\\_2dir%3DS%3Bin\\_region%3Dpart;place\\_id=102767](http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=state%3DWA%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitude_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Bin_region%3Dpart;place_id=102767)>
- Department of the Environment, n.d.(b) 'Cape Range and Adjacent Coastal Plain' from the *Australian Heritage Database*, viewed on 6 November 2013 <[http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place\\_detail;search=place\\_name%3DCape%2520range%3Bkeyword\\_PD%3Don%3Bkeyword\\_SS%3Don%3Bkeyword\\_PH%3Don%3Blatitude\\_1dir%3DS%3Blongitude\\_1dir%3DE%3Blongitude\\_2dir%3DE%3Blatitude\\_2dir%3DS%3Bin\\_region%3Dpart;place\\_id=18865](http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=place_name%3DCape%2520range%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitude_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Bin_region%3Dpart;place_id=18865)>
- Department of the Environment, n.d.(c) 'Cape Range National Park and Surrounds, Exmouth, WA, Australia' from the *Australian Heritage Database*, viewed on 8 November 2013, <[http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place\\_detail;search=place\\_name%3DCape%2520range%3Bkeyword\\_PD%3Don%3Bkeyword\\_SS%3Don%3Bkeyword\\_PH%3Don%3](http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=place_name%3DCape%2520range%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3)



Blatitude\_1dir%3DS%3Blongitude\_1dir%3DE%3Blongitude\_2dir%3DE%3Blatitude\_2dir%3DS%3Bin\_region%3Dpart;place\_id=10798>

Department of the Environment, n.d.(d) 'Cape Range National Park and Surrounds, Exmouth, WA, Australia' from the *Australian Heritage Database*, viewed on 6 November 2013, <[http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place\\_detail;search=place\\_name%3Dcoastal%2520margin%3Bstate%3DWA%3Bkeyword\\_PD%3Don%3Bkeyword\\_SS%3Don%3Bkeyword\\_PH%3Don%3Blatitude\\_1dir%3DS%3Blongitude\\_1dir%3DE%3Blongitude\\_2dir%3DE%3Blatitude\\_2dir%3DS%3Bin\\_region%3Dpart;place\\_id=17918](http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=place_name%3Dcoastal%2520margin%3Bstate%3DWA%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitude_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Bin_region%3Dpart;place_id=17918)>

Department of the Environment, n.d.(e) 'Learmonth Air Weapons Range Facility, Learmonth, WA, Australia' from the *Australian Heritage Database*, viewed on 8 November 2013, <[http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place\\_detail;search=place\\_name%3DLearmonth%3Bkeyword\\_PD%3Don%3Bkeyword\\_SS%3Don%3Bkeyword\\_PH%3Don%3Blatitude\\_1dir%3DS%3Blongitude\\_1dir%3DE%3Blongitude\\_2dir%3DE%3Blatitude\\_2dir%3DS%3Bin\\_region%3Dpart;place\\_id=102768](http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=place_name%3DLearmonth%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitude_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Bin_region%3Dpart;place_id=102768)>

Department of the Environment, n.d.(f) 'Ningaloo Marine Park and Proposed Additions, Ningaloo, WA, Australia' from the *Australian Heritage Database*, viewed on 8 November 2013, <[http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place\\_detail;search=place\\_name%3DNingaloo%3Bkeyword\\_PD%3Don%3Bkeyword\\_SS%3Don%3Bkeyword\\_PH%3Don%3Blatitude\\_1dir%3DS%3Blongitude\\_1dir%3DE%3Blongitude\\_2dir%3DE%3Blatitude\\_2dir%3DS%3Bin\\_region%3Dpart;place\\_id=17346](http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=place_name%3DNingaloo%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitude_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Bin_region%3Dpart;place_id=17346)>

Government of Western Australia Heritage Council, *inherit our place names*, <<http://inherit.stateheritage.wa.gov.au/Public/Search/Results?newSearch=True&placeNameContains=&streetNameContains=&suburbOrTownContains=Exmouth>>, [16 July 2013]

Heritage Council, 2006a, *Register of Heritage Places - Assessment Documentation Point Cloates Lighthouse Station (Ruins)*, viewed 8 November 2013, <<http://inherit.stateheritage.wa.gov.au/Public/Content/PdfLoader.aspx?id=40a35e87-342a-41c7-abdf-293cad4ccf99&type=assessment>>

Heritage Council, 2006b, *Register of Heritage Places - Assessment Documentation Norwegian Bay Whaling Station*, viewed 8 November 2013, <<http://inherit.stateheritage.wa.gov.au/Public/Content/PdfLoader.aspx?id=40a35e87-342a-41c7-abdf-293cad4ccf99&type=assessment>>

Heritage Council, 2007, *Register of Heritage Places - Assessment Documentation Vlamingh Head Lighthouse Group*, viewed 8 November 2013, <<http://inherit.stateheritage.wa.gov.au/Public/Content/PdfLoader.aspx?id=8bbad3e7-a024-4dbc-b725-3f2c266f6145&type=assessment>>

Heritage Council state Heritage Office 2013, <<http://stateheritage.wa.gov.au/state-heritage-register>>

Landgate, History of Country Town Names,

<<http://www.landgate.wa.gov.au/corporate.nsf/web/History+of+Country+Town+Names>> [16 July 2013]

Museum of Western Australia 2013, Shipwreck Database, Available from:

<http://museum.wa.gov.au/maritime-archaeology-db/wrecks>, [16 July 2013]

Museum of Western Australia, n.d. (a) 'Fairy Queen (1875/10/08)' from the *Shipwrecks Database: Western Australian Museum*, viewed on 7 November 2013 <  
<http://museum.wa.gov.au/maritime-archaeology-db/wrecks/fairy-queen>>

Museum of Western Australia, n.d. (b) 'Fin (1923/02/15)' from the *Shipwrecks Database: Western Australian Museum*, viewed on 8 November 2013, <  
<http://museum.wa.gov.au/maritime-archaeology-db/wrecks/id-1444>>

Museum of Western Australia, n.d. (c) 'Perth (1887/09/17)' from the *Shipwrecks Database: Western Australian Museum*, viewed on 8 November 2013, <  
<http://museum.wa.gov.au/maritime-archaeology-db/wrecks/id-343>>

Museum of Western Australia, n.d. (d) 'Zvir (1902/11/27)' from the *Shipwrecks Database: Western Australian Museum*, viewed on 8 November 2013,<  
<http://museum.wa.gov.au/maritime-archaeology-db/wrecks/id-1536>>

National Native Title Tribunal, *Search Applications: Gnulli*. Available from:

<http://www.nntt.gov.au/Applications-And-Determinations/Search-Applications/Pages/Search.aspx> [16 July 2013].

National Trust 2013, <http://www.nationaltrust.org.au/wa/heritage-places>

Shire of Exmouth, Tourism and History,

[http://www.exmouth.wa.gov.au/tourism\\_and\\_history/history](http://www.exmouth.wa.gov.au/tourism_and_history/history), Shire of Exmouth 2013, [16 July 2013].

United Nations Education and Scientific and Cultural Organization,

<http://whc.unesco.org/en/list/1369>, [16 July 2013].

Wangka Maya Pilbara Aboriginal Language Centre 2009, *Thalanyji*. Available from:

[http://www.wangkamaya.org.au/index.php?option=com\\_content&view=article&id=162&Itemid=323](http://www.wangkamaya.org.au/index.php?option=com_content&view=article&id=162&Itemid=323) [16 July 2013]

Wangka Maya Aboriginal Language Centre 2009, *Aboriginal Languages of the Pilbara*.

Available from: <http://www.wangkamaya.org.au>, [16 July 2013]

### **Legislation and Frameworks**

*Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Commonwealth of Australia), viewed 10 August 2012,

<<http://www.comlaw.gov.au/Details/C2010C00807>>

*Aboriginal Heritage Act 1972* (Western Australia), viewed 10 August 2012,

<[http://www.austlii.edu.au/au/legis/wa/consol\\_act/aha1972164/](http://www.austlii.edu.au/au/legis/wa/consol_act/aha1972164/)>

Australia ICOMOS 2013, *The Burra Charter: The Australia ICOMOS charter for places of cultural significance 2013*, viewed 8 November 2013,  
<<http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf>>

Commonwealth of Australia 2002, *Australian Natural Heritage Charter 2002*, 2nd edn., viewed 10 August 2012,  
<<http://www.environment.gov.au/heritage/ahc/publications/commission/books/publications/australian-natural-heritage-charter.pdf>>

*Environmental Protection and Biodiversity Conservation Act 1999* (Commonwealth of Australia), viewed 15 July 2013,  
<<http://www.comlaw.gov.au/Details/C2013C00301>>

*Heritage of Western Australia Act 1990* (Parliament of Western Australia), viewed 15 July 2013, <[http://www.austlii.edu.au/au/legis/wa/consol\\_act/howaa1990295/](http://www.austlii.edu.au/au/legis/wa/consol_act/howaa1990295/)>

*Historic Shipwrecks Act 1976* (Commonwealth of Australia) viewed 15 July 2013,  
<[http://www.comlaw.gov.au/Details/C2012C00174/Html/Text#\\_Toc315883141](http://www.comlaw.gov.au/Details/C2012C00174/Html/Text#_Toc315883141)>

State Heritage Office 2012a, *Basic Principles for Local Government Inventories*, viewed 8 November 2013, <[http://stateheritage.wa.gov.au/docs/rebranded-publications/basicprinciplesforlocalgovinventories\\_2012.pdf?sfvrsn=2](http://stateheritage.wa.gov.au/docs/rebranded-publications/basicprinciplesforlocalgovinventories_2012.pdf?sfvrsn=2)>

State Heritage Office 2012b, *Criteria for the Assessment of Local Heritage Places and Areas*, viewed 8 November 2013, <[http://stateheritage.wa.gov.au/docs/local-government/criteria-for-the-assessment-of-local-heritage-places-and-areas\\_2012.pdf?sfvrsn=10](http://stateheritage.wa.gov.au/docs/local-government/criteria-for-the-assessment-of-local-heritage-places-and-areas_2012.pdf?sfvrsn=10)>

Western Australian Planning Commission 2007, *State Planning Policy 3.5.*, viewed 8 November 2013, <[http://www.planning.wa.gov.au/dop\\_pub\\_pdf/SPP3\\_5.pdf](http://www.planning.wa.gov.au/dop_pub_pdf/SPP3_5.pdf)>

### **DAA Registered Aboriginal Site and OHP Files**

DAA 6101 – Bullara-Giralia Road 05

DAA 6120 - Pap Hill 2DAA 6761 – Low Point Midden

DAA 6787 – Mandu Mandu Rockshelters

### **DAA Heritage Report**

Lantze, D, Murphy, A & Hammond, M 1995, 'Report of an Aboriginal heritage survey. Proposed limestone quarry; transport corridor and laydown facility. Exmouth Western Australia. DAA report # 102402

## APPENDIX A

Table 5: Registered Aboriginal sites and OHPs located within the Shire of Exmouth

DAA ID	Name	Classification	Status	Location
508	Point Murat 03	Artefacts / Scatter, Midden / Scatter	R / O / N	209042 mE / 7584688 mN Zone 50 [Reliable]
509	Point Murat 04	Artefacts / Scatter	R / O / N	208690 mE / 7584604 mN Zone 50 [Reliable]
561	Mowbowra Creek 01	Artefacts / Scatter	R / O / N	198764 mE / 7564207 mN Zone 50 [Reliable]
562	Mowbowra Creek 02	Artefacts / Scatter	R / O / N	199217 mE / 7564242 mN Zone 50 [Reliable]
563	Point Murat 01	Artefacts / Scatter, Midden / Scatter	R / O / N	208716 mE / 7585665 mN Zone 50 [Reliable]
564	Point Murat 02	Artefacts / Scatter, Midden / Scatter	R / O / N	209079 mE / 7585539 mN Zone 50 [Reliable]
628	Camp Thirteen Burial	Skeletal material/Burial	R / O / N	800392 mE / 7559449 mN Zone 49 [Reliable]
756	Winpikanya	Ceremonial, Mythological, Engraving, Grinding patches / grooves	R / C / F	Not available for closed sites
6017	Yardie Creek Caravan Burial	Skeletal material/Burial	R / O / N	191538 mE / 7576555 mN Zone 50 [Unreliable]
6052	Bullara-Giralia Road 08	Artefacts / Scatter	R / O / N	230638 mE / 7484654 mN Zone 50 [Unreliable]
6053	Bullara-Giralia Road 09&09a	Artefacts / Scatter	R / O / N	230638 mE / 7484454 mN Zone 50 [Unreliable]

DAA ID	Name	Classification	Status	Location
6054	Bullara-Giralia Road 10	Artefacts / Scatter	R / O / N	230838 mE / 7484254 mN Zone 50 [Unreliable]
6055	Bullara-Giralia Road 11	Artefacts / Scatter	R / O / N	232638 mE / 7483654 mN Zone 50 [Unreliable]
6097	Bullara-Giralia Road 01	Artefacts / Scatter	R / O / N	245838 mE / 7462354 mN Zone 50 [Reliable]
6098	Bullara-Giralia Road 02	Artefacts / Scatter	R / O / N	218838 mE / 7489354 mN Zone 50 [Unreliable]
6099	Bullara-Giralia Road 03	Artefacts / Scatter	R / O / N	196438 mE / 7489454 mN Zone 50 [Unreliable]
6100	Bullara-Giralia Road 04	Artefacts / Scatter	R / O / N	195238 mE / 7489654 mN Zone 50 [Unreliable]
6101	Bullara-Giralia Road 05.	Artefacts / Scatter	R / O / N	194138 mE / 7489654 mN Zone 50 [Unreliable]
6102	Bullara-Giralia Road 06	Artefacts / Scatter	R / O / N	224938 mE / 7486654 mN Zone 50 [Unreliable]
6103	Bullara-Giralia Road 07	Artefacts / Scatter	R / O / N	202138 mE / 7564155 mN Zone 50 [Reliable]
6117	Mowbowra Pool.	Grinding patches / grooves	R / O / N	202138 mE / 7564155 mN Zone 50 [Reliable]
6118	Qualing Pool.	Camp	R / O / N	202138 mE / 7562155 mN Zone 50 [Reliable]
6311	Point Murat.	Skeletal material/Burial, Artefacts / Scatter, Midden / Scatter	R / O / N	208538 mE / 7584405 mN Zone 50 [Reliable]
6754	Osprey Bay 6	Artefacts / Scatter, Midden / Scatter	R / O / N	792942 mE / 7538749 mN Zone 49 [Reliable]



DAA ID	Name	Classification	Status	Location
6755	Osprey Bay Interdunal 1	Artefacts / Scatter, Midden / Scatter	R / O / N	792342 mE / 7537149 mN Zone 49 [Unreliable]
6756	Osprey Bay Interdunal 2	Midden / Scatter	R / O / N	792642 mE / 7537149 mN Zone 49 [Reliable]
6757	Bloodwood Creek Midden 1	Artefacts / Scatter, Midden / Scatter	R / O / N	794942 mE / 7544549 mN Zone 49 [Reliable]
6758	Bloodwood Creek Midden 2	Artefacts / Scatter, Midden / Scatter	R / O / N	794942 mE / 7545049 mN Zone 49 [Reliable]
6759	Bloodwood Creek Midden 3	Artefacts / Scatter, Midden / Scatter	R / O / N	795142 mE / 7544949 mN Zone 49 [Reliable]
6760	Bloodwood Creek Shoreline	Artefacts / Scatter, Midden / Scatter	R / O / N	794942 mE / 7545249 mN Zone 49 [Reliable]
6761	Low Point Midden	Artefacts / Scatter, Midden / Scatter	R / O / N	802992 mE / 7566299 mN Zone 49 [Reliable]
6762	Milyering Midden	Artefacts / Scatter, Midden / Scatter	R / O / N	801342 mE / 7561449 mN Zone 49 [Reliable]
6763	Yardie Rockshelters North.	Artefacts / Scatter, Midden / Scatter / Rockshelter	R / O / N	791542 mE / 7530249 mN Zone 49 [Unreliable]
6764	Camp 17 South Middens	Artefacts / Scatter, Midden / Scatter	R / O / N	799042 mE / 7555649 mN Zone 49 [Unreliable]
6765	Camp 17 North Middens	Artefacts / Scatter, Midden / Scatter	R / O / N	799042 mE / 7555849 mN Zone 49 [Unreliable]
6782	28 Mile Creek North 1	Artefacts / Scatter, Midden / Scatter	R / O / N	795242 mE / 7545949 mN Zone 49 [Unreliable]
6784	Mandu Mandu Creek South	Artefacts / Scatter, Midden / Scatter	R / O / N	796642 mE / 7548649 mN Zone 49 [Unreliable]

DAA ID	Name	Classification	Status	Location
6785	Mandu Mandu Creek North	Artefacts / Scatter, Midden / Scatter	R / O / N	796642 mE / 7548649 mN Zone 49 [Unreliable]
6787	Mandu Mandu Rockshelters.	Artefacts / Scatter, Midden / Scatter / Rockshelter	R / O / N	797242 mE / 7547449 mN Zone 49 [Reliable]
6790	Yardie Creek South 1	Artefacts / Scatter, Midden / Scatter	R / O / N	788942 mE / 7527749 mN Zone 49 [Reliable]
6791	Yardie Creek South 2	Artefacts / Scatter, Midden / Scatter	R / O / N	790342 mE / 7528149 mN Zone 49 [Reliable]
6793	Road Alignment 1	Artefacts / Scatter, Midden / Scatter	R / O / N	794942 mE / 7541649 mN Zone 49 [Unreliable]
6794	Road Alignment 2	Artefacts / Scatter, Midden / Scatter	R / O / N	794942 mE / 7541449 mN Zone 49 [Unreliable]
6795	Road Alignment 3	Midden / Scatter	R / O / N	794842 mE / 7541249 mN Zone 49 [Reliable]
6797	Yardie Well Rockshelter.	Artefacts / Scatter, Midden / Scatter / Rockshelter	R / O / N	791542 mE / 7530449 mN Zone 49 [Reliable]
6798	Yardie Interdunal Swale	Artefacts / Scatter, Midden / Scatter	R / O / N	789942 mE / 7528849 mN Zone 49 [Reliable]
6799	Yardie Beach Midden	Artefacts / Scatter, Midden / Scatter	R / O / N	789842 mE / 7529049 mN Zone 49 [Reliable]
6800	Oyster Stacks Midden	Artefacts / Scatter, Midden / Scatter	R / O / N	797042 mE / 7549849 mN Zone 49 [Reliable]
6801	North T-Bone Bay	Artefacts / Scatter, Midden / Scatter	R / O / N	800642 mE / 7561649 mN Zone 49 [Unreliable]
6802	Osprey Bay 1	Artefacts / Scatter, Midden / Scatter	R / O / N	792742 mE / 7538149 mN Zone 49 [Reliable]

DAA ID	Name	Classification	Status	Location
6803	Osprey Bay 2	Artefacts / Scatter, Midden / Scatter	R / O / N	792742 mE / 7538049 mN Zone 49 [Reliable]
6804	Osprey Bay 3	Artefacts / Scatter, Midden / Scatter	R / O / N	792542 mE / 7537849 mN Zone 49 [Reliable]
6805	Osprey Bay 4	Artefacts / Scatter, Midden / Scatter	R / O / N	792342 mE / 7537049 mN Zone 49 [Reliable]
6806	Osprey Bay 5	Artefacts / Scatter, Midden / Scatter	R / O / N	792742 mE / 7538149 mN Zone 49 [Reliable]
7126	Mesa Camp	Artefacts / Scatter, Midden / Scatter	R / O / N	798442 mE / 7554749 mN Zone 49 [Unreliable]
7205	Twin Hill Fishing Place.	Hunting Place	R / O / N	787042 mE / 7467649 mN Zone 49 [Unreliable]
7206	Wealjugoo Midden.	Artefacts / Scatter, Midden / Scatter	R / O / N	776584 mE / 7504740 mN Zone 49 [Reliable]
7254	Sandy Bay North	Artefacts / Scatter, Midden / Scatter	R / O / N	793442 mE / 7539949 mN Zone 49 [Reliable]
7265	Lake Side View	Artefacts / Scatter, Midden / Scatter	R / O / N	800942 mE / 7560549 mN Zone 49 [Reliable]
7266	Walking Trail Site 1	Artefacts / Scatter	R / O / N	192638 mE / 7555655 mN Zone 50 [Unreliable]
7298	Yardie Creek Rockshelters	Artefacts / Scatter	R / O / N	790635 mE / 7529704 mN Zone 49 [Reliable]
7299	Yardie Creek	Artefacts / Scatter, Midden / Scatter	R / O / N	789642 mE / 7528649 mN Zone 49 [Unreliable]
7300	Mandu Mandu Creek Rockshelters	Artefacts / Scatter	R / C / N	Not available for closed sites

DAA ID	Name	Classification	Status	Location
7301	Camp 17 Creek East	Artefacts / Scatter, Midden / Scatter	R / O / N	800342 mE / 7555749 mN Zone 49 [Reliable]
7303	Tulki Well Midden	Artefacts / Scatter, Midden / Scatter	R / O / N	798642 mE / 7554249 mN Zone 49 [Reliable]
7304	Pilgramunna Bay Midden	Artefacts / Scatter, Midden / Scatter	R / O / N	794642 mE / 7543349 mN Zone 49 [Reliable]
7305	Mangrove Bay.	Skeletal material/Burial, Artefacts / Scatter, Midden / Scatter	R / O / N	804142 mE / 7568149 mN Zone 49 [Reliable]
8301	Ningaloo Station	Artefacts / Scatter	R / O / N	775891 mE / 7493649 mN Zone 49 [Unreliable]
8927	Ten Mile Well Burial	Skeletal material/Burial	R / O / N	783642 mE / 7480649 mN Zone 49 [Reliable]
10381	Vlaming Head	Ceremonial, Mythological	R / C / N	Not available for closed Sites
11400	Yardie Creek Station	Engraving	R / O / N	191638 mE / 7576655 mN Zone 50 [Unreliable]
11401	5 Mile Well (Cape Range)	Painting, Engraving, Quarry, Artefacts / Scatter	R / O / N	198638 mE / 7583655 mN Zone 50 [Unreliable]
11458	NINGALOO (Near)	Painting	R / O / N	781642 mE / 7511649 mN Zone 49 [Unreliable]
11885	Padjari Manu Cave (Formerly Bunbury Cave)	Ceremonial, Painting, Engraving, Artefacts / Scatter	R / C / N	Not available for closed sites
15322	Point Murat/White Opal	Artefacts / Scatter, Midden / Scatter	R / O / N	209012 mE / 7585213 mN Zone 50 [Reliable]

DAA ID	Name	Classification	Status	Location
16596	Coral Bay To Yardie Creek 3	Artefacts / Scatter	R / O / N	776901 mE / 7494189 mN Zone 49 [Reliable]
16597	Baler Bluff	Artefacts / Scatter, Midden / Scatter	R / O / N	788977 mE / 7464149 mN Zone 49 [Reliable]
17192	Exmouth Station	Skeletal material/Burial	R / O / N	209138 mE / 7525654 mN Zone 50 [Unreliable]
17193	Ningaloo Station	Skeletal material/Burial	R / O / N	775891 mE / 7489149 mN Zone 49 [Unreliable]
17447	Pap Hill Ochre	Ceremonial, Grinding patches / grooves / Rockshelter	R / O / N	198327 mE / 7581741 mN Zone 50 [Reliable]
17448	Chugori Rockhole	Ceremonial, Mythological, Man- Made Structure, Grinding patches / grooves	R / O / N	193492 mE / 7579323 mN Zone 50 [Reliable]
599	Norwegian Bay 2	Skeletal material/Burial, Artefacts / Scatter, Midden / Scatter	S / O / N	773421 mE / 7500769 mN Zone 49 [Reliable]
638	Learmonth 1	Artefacts / Scatter	S / O / N	201888 mE / 7558405 mN Zone 50 [Reliable]
639	Learmonth 2	Artefacts / Scatter	S / O / N	201788 mE / 7558355 mN Zone 50 [Reliable]
6115	Exmouth North-East	Skeletal material/Burial	I / O / N	204338 mE / 7572655 mN Zone 50 [Reliable]
6116	Exmouth South-West	Skeletal material/Burial	I / O / N	200638 mE / 7568755 mN Zone 50 [Reliable]
6119	Pap Hill 1.	Rockshelter	I / O / N	198238 mE / 7581955 mN Zone 50 [Reliable]



DAA ID	Name	Classification	Status	Location
6120	Pap Hill 2.	Grinding patches / grooves	I / O / N	198138 mE / 7581855 mN Zone 50 [Reliable]
6312	Exmouth North-East	Artefacts / Scatter	I / O / N	204300 mE / 7574150 mN Zone 50 [Unreliable]
6783	28 Mile Creek North 2	Artefacts / Scatter, Midden / Scatter	L / O / N	796642 mE / 7545649 mN Zone 49 [Unreliable]
6786	Lakeside Coastal Plain	Artefacts / Scatter, Midden / Scatter	L / O / N	801642 mE / 7560649 mN Zone 49 [Unreliable]
6788	Goat Cave.	Artefacts / Scatter	L / O / N	804642 mE / 7535649 mN Zone 49 [Unreliable]
6789	Turquoise Bay North	Artefacts / Scatter, Midden / Scatter	L / O / N	798642 mE / 7554649 mN Zone 49 [Unreliable]
6796	Road Alignment 4	Artefacts / Scatter	S / O / N	792442 mE / 7533369 mN Zone 49 [Reliable]
7207	Norwegian Bay Midden	Midden / Scatter	I / O / N	775641 mE / 7498949 mN Zone 49 [Reliable]
7208	Milyering Rocks.	Hunting Place	I / O / N	775641 mE / 7498949 mN Zone 49 [Reliable]
7302	Camp 17 Creek Rockshelters	Artefacts / Scatter	I / O / N	800042 mE / 7555249 mN Zone 49 [Unreliable]
8946	Yardie Creek	Artefacts / Scatter	I / O / N	790842 mE / 7527849 mN Zone 49 [Reliable]
11060	Rough Range	Artefacts / Scatter	I / O / N	193638 mE / 7504655 mN Zone 50 [Unreliable]
11061	Billy Wells	Ceremonial	I / O / N	194638 mE / 7523655 mN Zone 50 [Unreliable]
11463	North West Cape	Artefacts / Scatter	I / O / N	807642 mE / 7528649 mN Zone 49 [Unreliable]
11801	Coastal Midden, 5 Mile	Artefacts / Scatter, Midden / Scatter	I / O / N	195638 mE / 7582655 mN Zone 50 [Unreliable]

DAA ID	Name	Classification	Status	Location
<b>16595</b>	Jarvis Well Camp	Artefacts / Scatter, Historical	S / O / N	776491 mE / 7498549 mN Zone 49 [Reliable]
<b>19838</b>	Midden Site At Exmouth River Mouth	Artefacts / Scatter, Midden / Scatter	L / O / N	203751 mE / 7567075 mN Zone 50 [Reliable]
<b>19839</b>	Waterhole, Exmouth	Artefacts / Scatter	L / O / N	203301 mE / 7572574 mN Zone 50 [Reliable]
<b>21383</b>	Mowbowra Creek Isolated Finds	Artefacts / Scatter / Rockshelter	S / O / N	198635 mE / 7564321 mN Zone 50 [Unreliable]
<b>21468</b>	Sandy Point Rockshelter	Man-Made Structure	L / O / N	786694 mE / 7521436 mN Zone 49 [Reliable]
<b>25076</b>	Norwegian Bay Burial 01/2008	Skeletal material/Burial	L / O / N	774175 mE / 7499790 mN Zone 49 [Reliable]
<b>26259</b>	Field Site 1	Artefacts / Scatter / Shell	L / O / N	201953 mE / 7535544 mN Zone 50 [Reliable]
<b>26260</b>	Field Site 2	Artefacts / Scatter / Shell	L / O / N	202340 mE / 7536319 mN Zone 50 [Reliable]
<b>26261</b>	Field Site 3	Artefacts / Scatter / Shell	L / O / N	201142 mE / 7535288 mN Zone 50 [Reliable]
<b>26268</b>	CSF Isolated Find	3 Isolated Artefacts	L / O / N	202134 mE / 7535834 mN Zone 50 [Unreliable]

## APPENDIX B

Table 6: Registered heritage reports relevant to the Shire of Exmouth

DAA Report ID	Author / Year of Publication	Report Title
17613	Randolph, P, Wallam, J 1986	<i>North West Cape investigation of selected Aboriginal sites (Bunbury Cave-P0267, another cave containing rock art-P0751 and the midden at mesa Camp-P5792) including recommendations for management and tourist visitation.</i>
17614	Randolph, P; J. Wallam, J 1987	<i>Bunbury Cave, N.W. Cape W.A. The task of consulting with Aboriginal people.</i>
19357	Morse, K 2001	<i>A report of an Aboriginal archaeological survey of the Australian Maritime Safety Authority's Digital Global Positioning System Site, Exmouth, Western Australia.</i>
20964	Strawbridge, L, Marwick, B, Balme, J 2002	<i>Inland Pilbara archaeology: a study of variation in Aboriginal occupation over time and space on the Hamersley Plateau [thesis].</i>
21464	McDonald; E, Frewen; J, Hayes, A, Hayes, G, Hicks, R, Hayes, A 2004	<i>Report of a Thalanyji heritage survey of the proposed drill site locations and test pit locations, Ashburton Region, Western Australia.</i>
21465	Farnham, T 2004	<i>Results of an ethnographic heritage survey: the Straits Salt Project at Exmouth.</i>
21466	McDonald, E 2004	<i>Report of an ethnographic survey: Straits Resources Exmouth Salt Project, Ashburton Region, Western Australia.</i>
22919	Morse, K, Fry, R, Jackson, G 2000	<i>A report of an Aboriginal archaeological assessment of Cape Seafarms proposed Prawn Farm Development, Heron Point, Cape Range Peninsula.</i>
101898	Przywolnik, K 1998	<i>Archaeological research, Cape Range Peninsula, Western Australia; interim report.</i>

DAA Report ID	Author / Year of Publication	Report Title
101900	Przywolnik, K, Gardos, A 1998	<i>Lighthouse Caravan Park sewerage evaporation ponds, Cape Range Peninsula.</i>
102133	Turner, J, Peck, C 1985	<i>Report on preliminary ethnographic investigations for the area encompassed by the proposed Ningaloo Marine Park.</i>
102134	Turner, J, Peck, C 1985	<i>Photographs from the Ningaloo Marine Park survey for places of Aboriginal significance.</i>
102144	Barnard, J 1996	<i>A brief report on reburial and documentation of skeletal remains at Exmouth and Ningaloo Stations.</i>
102258	Morse, K, Robinson, M 1997	<i>RAAF Base Learmonth: Reports of a survey for Aboriginal archaeological and ethnographic sites.</i>
102259	Department of Defence 1997	<i>Development of operational facilities, RAAF Base Learmonth, Western Australia.</i>
102402	Lantzke, D, Murphy, A, Hammond, M 1995	<i>Report of an Aboriginal heritage survey. Proposed limestone quarry; transport corridor and laydown facility, Exmouth Western Australia.</i>
102474	Martinick, W, Heine, C, Mattner, C, Wells, E 1995	<i>Report on archaeological sites on and around Lyndon Locations 221, 222 and 223, south of Exmouth.</i>
102494	Morse, K; Dr Wright, G 1990	<i>Report of an archaeological and ethnographic survey of a proposed sand pit, Exmouth, North Western Australia.</i>
102496	Morse, K, Fry, R 1987	<i>Report of an archaeological survey of proposed development areas in the Cape Range National Park, North West Cape, W.A.</i>
102497	Morse, K; Kee, SD 1985	<i>Preliminary report of a survey for Aboriginal archaeological sites in the Cape Range National Park, North West Cape, W.A.</i>

DAA Report ID	Author / Year of Publication	Report Title
102501	Morse, K, Fry, R, Strawbridge, L, Gehlen, B, Chadwick, R 1992	<i>Archaeological research at North West Cape Western Australia. Final report prepared for the National Estate Program.</i>
102502	Morse, K, Fry, R 1993	<i>Report on the salvage of archaeological sites on the Bullara-Giralia Road, Shire of Exmouth, Western Australia.</i>
102561	WG Martinick & Associates Pty Ltd 1993	<i>Aboriginal site survey Learmonth area.</i>
102601	Corsini, S 1995	<i>An investigation of reported skeletal remains, Ningaloo and Warroora Pastoral Stations, North West Cape, Western Australia.</i>
102896	Veth, P, Dr Wright, G 1989	<i>Report of an archaeological and ethnographic survey of the Coral Coast Marina Resort, Exmouth, North-West Australia.</i>
103086	Warren, L 1993	<i>The salvage, recording and re-internment of the Yardie Creek Caravan Park Burial, North West Cape Near Exmouth, W.A.</i>
103087	Morse, K, Fry, R, Dr Wright, G 1992	<i>Report of an Archaeological and Ethnographic Survey of the Bullara-Giralia Road, Shire of Exmouth, Western Australia.</i>
103088	Randolph, P; Wallam, J 1988	<i>Padjari Manu (Formerly Bunbury Cave), North-West Cape, Western Australia.</i>



## APPENDIX C

Table 7: Shipwrecks identified off the Exmouth coast

Ship Name	Year	Where Lost	Federally Protected	Cause of Sinking
<b>Agnes</b>	1893	Exmouth Gulf.	Yes	Unknown
<b>Airlie</b>	1889	Ashburton River	Yes	Explosions by spontaneous combustion in the coal
<b>Bell</b>	1893	Exmouth	Yes	Wrecked and Sunk
<b>Benan</b>	1888	Point Cloates	Yes	Struck reef
<b>Brothers</b>	1867	Unknown	Yes	Never seen again after leaving for Roebourne
<b>Chofuku Maru</b>	1931	Point Cloates	Yes	Anchor chains broke and forced onto reef in heavy swell while attempting to assist stranded Japanese vessel SS Shunsei Maru, cargo caught fire and damaged superstructure, vessel abandoned and sunk.
<b>Correio Da Azia</b>	1816	Point Cloates	Yes	Wrecked and sunk
<b>Cutty Sark</b>	1907	Bay of Rest	Yes	Wrecked with the Eclipse and five other lugsers. Vessel wrecked and sunk
<b>Eclipse</b>	1907	Bay of Rest	Yes	Been blown far above high-water mark
<b>Elizabeth</b>	1893	Exmouth Gulf	Yes	Wrecked ashore, hurricane
<b>Ellen</b>	1893	Exmouth Gulf	Yes	Wrecked in Cyclone
<b>Emma</b>	1867	Coral Bay	Yes	Unknown
<b>Finn</b>	1923	Point Cloates, Fraser Island	Yes	At anchor, driven ashore
<b>Florence</b>	1893	Exmouth Gulf	Yes	Wrecked and sunk

Ship Name	Year	Where Lost	Federally Protected	Cause of Sinking
<b>Hawk</b>	1907	Bay of Rest	Yes	Capsized
<b>Kapala</b>	1964	Exmouth Gulf	Yes	Dragged moorings and sank
<b>Lady Ann</b>	1982	24 Miles North of NW Cape	Yes	Collided with drill ship Regional Endeavor
<b>Lamareaux</b>	1893	Exmouth Gulf	Yes	Unknown
<b>Leave</b>	1893	Exmouth Gulf	Yes	Wrecked During Cyclone
<b>Lily of the Lake</b>	1875	Exmouth Gulf	Yes	Sank in cyclone
<b>Mabel</b>	1893	Exmouth Gulf	Yes	Wrecked during cyclone
<b>Nellie</b>	1893	Exmouth Gulf	Yes	Cyclone
<b>Mildura</b>	1907	North-west Cape	Yes	Gone ashore in bad weather
<b>Occator</b>	1856	55 km South of the Cape Carbaddaman Passage	Yes	On Reef
<b>Olive</b>	1893	Exmouth Gulf	Yes	Totally destroyed
<b>Pearl</b>	1896	Exmouth Gulf, meda Creek	Yes	Found as a total wreck
<b>Perth</b>	1887	Point Cloates	Yes	Hit Ningaloo Reef
<b>Rapid</b>	1811	Ningaloo Reef	Yes	Burnt after running aground
<b>Ruby</b>	1893	Exmouth Gulf	Yes	Cyclone
<b>SC51</b>	1943	Ningaloo Reef	Yes	Ran aground
<b>Sea Queen</b>	1893	Exmouth Gulf	Yes	Cyclone
<b>Smuggler</b>	1893	Exmouth Gulf	Yes	Storm, total lost
<b>Shunsei Maru</b>	1931	Carbaddaman Passage, North of Point Cloates	Yes	Refloated

<b>Ship Name</b>	<b>Year</b>	<b>Where Lost</b>	<b>Federally Protected</b>	<b>Cause of Sinking</b>
<b>Stefano</b>	1875	Point Cloates	Yes	Struck Ningaloo reef
<b>Unidentified Lugger</b>	1893	Exmouth Gulf	Yes	Unknown
<b>Unidentified Luggers (various)</b>	1883	Shark Bay and Exmouth Gulf	Yes	Unknown
<b>Veronica</b>	1928	Sunday Island	Yes	Wrecked and sunk
<b>Wild Wave</b>	1875	Exmouth Gulf	Yes	Cyclone
<b>Zvir</b>	1902	Point Cloates	Yes	Went aground

## APPENDIX D

Table 8: State Heritage Places in the Exmouth Area

Place No.	Names	Location	Listings	Custodian
261	Naval Communication Station Harold E Holt (Area B)	14km N of Exmouth	RHP - Minister did not direct Registration, Commonwealth List, Register of the National Estate	Heritage Council
837	Vlaming Head Lighthouse Group (Vlamingh Head Lighthouse Group)	Yardie Creek Rd via Exmouth	Classified by the National Trust, Municipal Inventory, Town Planning Scheme & Register of the National Estate	Heritage Council & Shire of Exmouth
839	Yardie Creek Homestead	Exmouth	Municipal Inventory & Classified by the National Trust - Register of the National Estate	Heritage Council & Shire of Exmouth
3053	Community Hall	Cnr Maidstone Cres & Learmonth St Exmouth	None noted*	Heritage Council
4231	Norwegian Bay Whaling Station (Point Cloates Whaling Station)	Norwegian Bay N of Point Cloates Ningaloo	Port-related Structures Survey	Heritage Council
4288	RAAF Base Learmonth	Learmonth-Manilya Rd Learmonth	None noted*	Heritage Council
4451	Cape Range & Adjacent Coastal Plain	20km from Exmouth	Register of the National Estate & National Heritage List - Classified by the National Trust	Heritage Council

Place No.	Names	Location	Listings	Custodian
5491	Point Cloates Lighthouse & Quarters (ruins)	Ningaloo Station	Register of the National Estate & Lighthouses Survey	Heritage Council
10615	Bundegi-Cape Well	Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10617	Cape Range No. 1 Oil Well	Shothole Canyon, Cape Range National Pk Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10619	Cape Range No. 2 Oil Well	Charles Knife Rd, Cape Range National Pk Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10620	Charles Knife Road	Lyndon Location 164	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10622	First Trees planted in Exmouth	Maidstone Cres Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10624	F J Reddy's Grave	Yardie Creek Rd Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10625	Giralia Station	Burkett Rd Lyndon Location	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
106260	Operation Potshot - Site	Lyndon	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth



Place No.	Names	Location	Listings	Custodian
10629	Pier - Pt Murat (Navy Pier)	Pt Murat Lyndon	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10630	Rough Range No. 1 Oil Well	Rough Range	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10632	Shire Library (Office of Civil Commissioner (fmr))	Maidstone Cres Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10636	Shothole Canyon and Road	Lyndon Location	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10637	Staff House	Cnr Bennett/Fyfe Sts Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10638	Tantabiddi Well	Cape Range National Park	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10639	Transit House	Lot 263 Christie St Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10640	Vlaming Head Radar (World War II Aircraft Warning Radar)	Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10641	VLF Towers, Harold E Holt Naval Communication Stn	14km N of Exmouth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth

Place No.	Names	Location	Listings	Custodian
10642	WAPET Jetty (ruin) (Learmonth Jetty)	Learmonth	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
10643	Yardie Creek	Cape Range National Park	Town Planning Scheme & Municipal Inventory	Heritage Council & Shire of Exmouth
12290	Exmouth War memorial	Maidstone Cres Exmouth	Statewide War memorial Survey	Heritage Council
14506	Exmouth Fire Station	Payne Street Exmouth	Fire & Rescue Service Heritage Inventory	Heritage Council
17339	Exmouth Police Station, Lockup & Quarters (Exmouth Police Station & Lockup)	Maidstone Crescent Exmouth	RHP - To be assessed	Heritage Council
18605	Cape Range National Park (Cape Range Geological Site)	Lot 106 Ningaloo Yardie Creek Rd, Cape Range National Park	Register of the National Estate, National Heritage List, Aboriginal Heritage Sites Register & Classified by the National Trust	Heritage Council
18617	Coastal Margin - Exmouth Gulf to Cape Preston	Exmouth Gulf to Cape Preston, Onslow	Register of the National Estate	Heritage Council
18635	Fairy Queen Shipwreck	Exmouth	Register of the National Estate	Heritage Council
18636	Fin Shipwreck	Point Cloates	Register of the National Estate	Heritage Council

<b>Place No.</b>	<b>Names</b>	<b>Location</b>	<b>Listings</b>	<b>Custodian</b>
<b>18677</b>	Learmouth Airi Weapons Range Facility	Learmouth	Register of the National Estate	Heritage Council
<b>18705</b>	Ningaloo Marine Park	Ningaloo	World Heritage List & Register of the National Estate	Heritage Council
<b>18710</b>	Perth Shipwreck	Ningaloo Reef Point Cloates	Register of the National Estate	Heritage Council
<b>18757</b>	Zvir Shipwreck	Two nautical miles North of Frazer Island	Register of the National Estate	Heritage Council
<b>23799</b>	Vlamingh Head Lighthouse Quarters	Yardi Creek Rd via Exmouth Exmouth	Municipal Inventory	Heritage Council & Shire of Exmouth
<b>24419</b>	Vlamingh Head Lighthouse	Yardie Creek Rd via Exmouth Exmouth	Municipal Inventory	Heritage Council & Shire of Exmouth