Archaeological investigation for a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area

Aboriginal cultural heritage assessment report

Sue Feary
August 2014

Report to Shoalhaven City Council.
Cover photo: Looking east along the route of the shared path.

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Executive Summary

Shoalhaven City Council (Council) intends to construct a 500 metre long section of shared path, to extend an existing path built within public reserve land between Huskisson and Vincentia, at Jervis Bay on the NSW south coast. The new section is located on a cliff top at the eastern end of Orion Beach between a row of houses and the cliff edge. A Due Diligence assessment was conducted by Council that concluded there was a possibility for Aboriginal objects to be present; given that site 58-2-0383 is immediately adjacent to the eastern end of the route. Sue Feary of Conservation and Heritage Planning and Management was engaged by Council to undertake an Aboriginal cultural heritage assessment of the proposed development.

Field investigation was undertaken by Sue Feary, Council staff and Gerald Carberry (Heritage Officer from the Jerrinja Local Aboriginal Land Council). The survey identified five locales of Aboriginal objects, collectively comprising a low density of stone artefacts and dispersed remnants of shell midden. These have been assigned a low cultural significance due to their highly disturbed and minimal nature. There is however, some potential for less disturbed midden and artefacts to be present beneath leaf litter/grass in the vicinity some locales.

Following discussions with Jerrinja LALC members, it has been recommended that Shoalhaven City Council apply for a s.90 Aboriginal Heritage Impact Permit to be issued with a condition that, due to the heavy leaf litter/grass possibly obscuring artefacts or shell material, monitoring occurs during excavation of the cliff top footings for the three elevated walkways and in the vicinity of four recorded sites on or adjacent to the path alignment. The monitoring is to involve Jerrinja LALC members noting, recording and collecting any objects exposed by the excavations. All collected material is to be analysed and then repatriated on country together with other artefacts recorded during the survey.

One recorded site, comprising a small amount of shell in a small rock overhang on the small promontory lookout will not be impacted by the new path.
1. INTRODUCTION

This document describes the Aboriginal cultural heritage assessment undertaken in respect of a proposal by Shoalhaven City Council to construct a 500 metre section of shared path (walking and cycling) at Orion Beach in the coastal village of Vincentia on the western shores of Jervis Bay in New South Wales. Included in path construction are vegetation clearing, building three sections of elevated walkway, steps down to the beach, installing bollards, and environmental rehabilitation.

The shared path at Orion beach is a small section of a longer path between Huskisson and Vincentia, the majority of which has already been constructed. The aim of the path is to encourage both locals and visitors to adopt a healthier lifestyle by providing public facilities for bike riding and walking while enjoying the natural beauty of the area. It also provides disabled and limited mobility access.

The Shoalhaven City Council is responsible for undertaking both the works and the assessments for the new path and associated features. Council used the NSW Office of Environment and Heritage’s (OEH) Due Diligence process to assess the impact of the proposed development on Aboriginal objects (DECCW 2010a). Although no Aboriginal objects are recorded on AHIMS for the subject area, a large Aboriginal site, 58-2-0383 is recorded adjacent to Plantation Point Parade, immediately east of Orion beach. Several artefacts were previously noted at the junction of the two sections of path (Feary, 2013). The presence of objects and the environmental setting (cliff top above a rocky shore platform) suggests a high potential for other objects to be present and Council decided to conduct a full archaeological investigation.

A Review of Environmental Factors is being prepared by Council for the Orion beach shared path, to meet the requirements of Part 5 of the Environmental Protection and Assessment Act 1979.

The objective of the archaeological assessment is to establish whether or not the shared path will result in impacts to Aboriginal heritage and to determine the need, or otherwise, for an Aboriginal Heritage Impact Permit (AHIP) and any associated conditions where appropriate.

Potential impacts to any Aboriginal objects present would arise from a shallow excavation of 2.5 metre width to allow cement to be laid for the path, installation of bridge footings and other minor activities, ongoing maintenance of the path and, increased public use of the area.

Investigator and contributors

This assessment has been undertaken by Dr Sue Feary, Director, Heritage and Conservation Planning and Management, with contributions from Geoff Young, Shoalhaven City Council, who
2. ABORIGINAL CONSULTATION

The consultation process for this project has been in accordance with Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW 2010b). The steps taken in the consultation process are as follows:-

2.1. Notification

1. An advertisement seeking expressions of interest for being consulted in regard to the proposed pathway and a potential Aboriginal Heritage Impact Permit (AHIP) application was placed in the South Coast Register and the Milton-Ulladulla Times on 18th December 2013 with a closing date of 15 January 2014 (see Appendix 1 for newspaper advertisement).

2. A list of registered Aboriginal groups with a potential interest in being consulted regarding the proposed works was sought from and provided by the NSW Office of Environment and Heritage’s Queanbeyan office on 30th October 2012. Table 1 is the list provided by OEH. The area falls within the boundaries of the Jerrinja LALC, who are also registered for the area. The Wreck Bay Aboriginal Community Council is known to have an interest in the area, although they are not a registered group.

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1 The list was initially provided in respect of the shared path at Plantation Point, immediately adjacent to Orion Beach. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
### Table 1: List of registered Aboriginal groups provided by OEH.²

<table>
<thead>
<tr>
<th>Organisation/Individual Name</th>
<th>Address</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerrinna Local Aboriginal Land Council Coordinator: Adelle Hislop</td>
<td>PO Box 167, Culburra Beach NSW 2540</td>
<td>Ph: (02) 44474207&lt;br&gt;Fax: (02) 44474230&lt;br&gt;Mobile: 0417 402271&lt;br&gt;<a href="mailto:jilc@bigpond.com">jilc@bigpond.com</a></td>
</tr>
<tr>
<td>Jerrinja Consultants Pty Ltd Primary Contact: Graham Connolly, representing the Jerrinja Traditional Owners</td>
<td>PO BOX 5009, Nowra DC NSW 2541</td>
<td>Ph: (02) 44480980&lt;br&gt;Fax: (02) 44223878&lt;br&gt;Mobile: 0421457090&lt;br&gt;<a href="mailto:jerrinja@welldone.com.au">jerrinja@welldone.com.au</a></td>
</tr>
<tr>
<td>Merrimans Local Aboriginal Land Council</td>
<td>13 Umbarra Rd, Wallaga Lake NSW 2546</td>
<td>Ph: (02) 44737288&lt;br&gt;Mobile: 0408 116798&lt;br&gt;Fax: (02) 44737478&lt;br&gt;merrimanslalc.ozinet.net.au</td>
</tr>
<tr>
<td>Ulladulla Local Aboriginal Land Council</td>
<td>66 Deering Street, P.O. Box 520 ULLADULLA NSW 2539</td>
<td>Ph: (02) 4455 5833&lt;br&gt;Fax: (02) 4454 0440&lt;br&gt;<a href="mailto:ulladulla_lalc@aho.tci.com.au">ulladulla_lalc@aho.tci.com.au</a></td>
</tr>
<tr>
<td>South Coast Aboriginal and Elders and Friends Group Organisation Secretary: Lena Blosome</td>
<td>6 Ernest Street, Nowra NSW 2541</td>
<td>Ph: (02) 44214026&lt;br&gt;Mobile: 0417 691679</td>
</tr>
<tr>
<td>South East Coast Gadu Elders Aboriginal Corporation</td>
<td>193 Vulcan Street, PO Box 219, Moruya NSW 2537</td>
<td>Ph: (02) 4474 4188&lt;br&gt;Fax: (02) 4474 4181&lt;br&gt;Mobile: 0412 089 968</td>
</tr>
<tr>
<td>Mr Lionel P Mongta, Yuin Traditional Owner</td>
<td>137 Princes Highway, PO Box 143, Bodalla NSW 2545</td>
<td>Mobile: 0405 216 690</td>
</tr>
<tr>
<td>Chairperson, Walbunja Aboriginal Corporation</td>
<td>11 Jeffrey Place, Moruya NSW 2537</td>
<td>mob:0410 749 993 Email. <a href="mailto:walbunja@gmail.com">walbunja@gmail.com</a></td>
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<tr>
<td>Nowra Local Aboriginal Land Council</td>
<td>PO Box 528 Nowra NSW 2541 59 Beinda St Bomaderry NSW 2542</td>
<td>Ph: 02 44233163 Fax: 02 44233161</td>
</tr>
<tr>
<td>Batemans Bay Local Aboriginal Land Council</td>
<td>PO Box 542, Batemans Bay NSW 2536</td>
<td>Ph: (02) 4472 7390&lt;br&gt;Fax: (02) 4472 8622</td>
</tr>
</tbody>
</table>

² Note that Jerrinja Consultants PL address is out of date and Gadu Elders no longer exists and telephone numbers for Shoalhaven Elders are incorrect.

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. **FINAL REPORT August 2014.**
3. A letter was sent to all registered groups and the Wreck Bay Aboriginal Community Council, asking if they wanted to be consulted in regard to the development proposal (see Appendix 2).

4. All the organisations listed on page 10, Section 4.1.2, in the consultation requirements report (DECCW 2010b) were contacted by letter, with the exception of Southern Rivers CMA who previously advised the author that they do not pass information provided to them by Aboriginal people on to other parties (see Appendix 3 for the letter).

2.2. Outcome of notification process

- The Jerrinja LALC and the Shoalhaven Elders and Friends Group Organisation Corporation (Shoalhaven Elders) were the two respondents to the advertisement and letters to registered groups. Graham Connolly, A/Chair of Jerrinja LALC contacted Council by telephone on 8/1/2014, and Gordon Wellington representing Shoalhaven Elders contacted Council by telephone on 19/12/2013.
- The National Native Title Tribunal advised that no native title claims were pending, in a letter to Shoalhaven City Council, dated 2 January 2014 (Appendix 4).
- NTSCorp advised Shoalhaven City Council in a letter dated 20th December 2013 that privacy laws prevented them from providing contact details of traditional owners. NTSCorp undertook to inform traditional owners about the project and make a response to Council by 1 January 2014 (Appendix 5). No responses were received.
- The Office of the Registrar of the NSW Land Rights Act did not respond. However, it advised Council in regard to a previous request that it had a listing for the Booderee National Park as registered traditional owners in the Jervis Bay region, and advised Council to contact the Wreck Bay Community Council. The Wreck Bay Community Council was contacted by letter as part of the referral to registered Aboriginal groups. No response was received.

2.3. Stage 2: Presentation of information about project

Council wrote and emailed an invitation to registered Aboriginal parties (RAPs) to attend an on-site meeting on 6 February 2014. The aim of the meeting was to provide detailed information to RAPs on the proposed development and also to learn of any issues or concerns in regard to potential impacts on the Aboriginal cultural values of the area. Shoalhaven Elders Chair Gordon Wellington telephoned Council to ask if there would be payment for attending the meeting and was informed this would not be the case. This group did not attend the meeting. Graham

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3 This CMA no longer exists, replaced by another organisation, OEH report should be amended accordingly.

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Connelly, Acting Chair of the Jerrinja LALC arrived one hour late and went to the wrong location; hence the meeting did not occur.

Another meeting was called for 1 May 2014, by letter and email (see Appendix 4 for a copy of the letter). This meeting was attended by Brenton Shivas and Gerald Carberry from Jerrinja LALC, Geoff Young and Craig Milburn from Council, and Sue Feary.

Council staff explained the project and Sue Feary explained the proposed approach for conducting field work. The LALC was in the process of appointing a new CEO and had recently appointed a new Chair and were not in a position to provide feedback on the proposed path or on any particular cultural values associated with the Orion beach area. LALC representatives supported construction of the pathway, providing appropriate archaeological investigations were conducted and Aboriginal consultation was adequate.

2.4. Stage 3: Gathering information about cultural significance

The field survey took place after the on-site meeting on 1 May 2014, with Gerald Carberry from Jerrinja LALC participating in the survey. During the field recording, there were discussions regarding the cultural significance of the area to the local Aboriginal community. Gerald Carberry was not aware on any particular significance associated with Orion beach, but undertook to speak with Jerrinja community members thought to have cultural knowledge of the area.

2.5. Stage 4: Review of ACHAR

The draft assessment report was sent to Jerrinja LALC and Shoalhaven Elders for comment and feedback in late June 2014. The report was sent by post. Both parties received the report and had no specific concerns or comments (see Appendix 6).

3. DESCRIPTION OF THE AREA

3.1. Location

Orion Beach is located on the western shores of the Jervis Bay embayment, within the small township of Vincentia, approximately 25kms southeast of Nowra on the NSW south coast. Canberra is 200 kms to the west and Sydney 200 kms to the north (Figures 1 and 2).
Figure 1: Locality map, showing location of Jervis Bay

Figure 2: Map showing location of Orion Beach (in red) within Jervis Bay
The subject area is located in the Parish of Bherwerre, County of St Vincent, within the Shoalhaven City Local Government Area. The area is on the Huskisson 1:25,000 topographic map (GDA). The shared path is to be built within public reserve land, Lot 7022, DP 1117369, between Plantation Point Parade (289287E/ 6116450N) and Minerva Avenue (288819E / 6116660N), a distance of 500 metres (Figure 3).

Figure 3: Map showing location of proposed pathway (red line), (Huskisson 1:25K topographic map).

### 3.2. Landscape

**Regional**

The regional landscape comprises a large embayment, Jervis bay, enclosed by the peninsulas of Beecroft and Bherwerre to the north and south respectively. St Georges Basin lies to the southwest and reaches the ocean through Sussex Inlet. The Jervis Bay region lies in the coastal plain of Australia’s eastern seaboard, backed to the west by steep sandstone escarpments and coastal ranges.

The geology of the Jervis Bay region can be described as undulating sandstone mass overlain by varying depths of windblown and water deposited sands. The base rock is made up of geological units belonging mainly to the Permian Shoalhaven group of sedimentary rocks which form the southern edge of the extensive Sydney Basin system. These ancient sandstones (c. 280 - 225 million years) are overlain by Tertiary aged alluvial sediments in low lying areas (Cho *et al* 1995).
Water and wind deposited sediments of Quaternary age capped the older landscape with fine alluvium and formed the sandy beaches.

Formation of the bay in its present appearance occurred around 6000 years ago when the sea level reached its current height. Before this time, during the last ice age (20 - 15,000 years ago), the sea level was about 120 metres lower than today and the land extended 15 kilometres further eastward. The headlands would have been low mountain ranges and Bowen Island a hill. ‘Jervis Bay’ was an open vegetated valley, with a creek flowing seawards between what are now Bowen Island and Beecroft Peninsula (Booderee National Park Board of Management and Director of National Parks 2002). Rising sea levels carried sand landward, forming two major sand barriers, cutting off St Georges Basin and Beecroft Peninsula and depositing sand in the extensive dune sheets along Bherwerre Peninsula.

The geology of the region is very relevant to Aboriginal occupation as weathering of the sandstone cliffs has created the rock shelters where people lived and left their artwork on the walls. The eroded marine rock platforms are the habitat for many shellfish species and, under the sea, ‘bombies’ and other submarine features support a diverse range of fish and crustacean species. Knowledge of these species – their ecology and lifecycles – and how to hunt and gather them is a significant component of the traditional and local knowledge of Jervis bay’s Aboriginal communities (Moorcroft and Feary 2008).

One major creek, Currambene Creek, flows into Jervis Bay at Huskisson, associated with extensive and scientifically significant wetlands and salt marshes. Several other smaller creeks also reach the bay, the largest being Carama Inlet and Moona Moona creek, both also associated with significant wetlands. The western shores of Jervis bay are characterised by long sweeping beaches and small bays, protected by rocky headlands. The area is largely naturally vegetated with tall open forest, patches of temperate rainforest and coastal heath, as development has been constrained by the presence of a suite of protected areas in both NSW and adjacent commonwealth lands on the Bherwerre peninsula. As a result the Jervis bay region is nationally and internationally recognised for its biological diversity, being situated at the northern and southern limits of several species of fauna and flora. Numerous endangered species, both marine and terrestrial exist in region.

Prior to white settlement the subject area would have comprised coastal forest/woodland dominated by \textit{E. botryoides} with \textit{Banksia serrata}, \textit{B. integrifolia} and \textit{Casuarina}, with an understory of \textit{Melaleucas}, and ground cover dominated by \textit{Lomandra longifolia}. Most of the vegetation was cleared for residential development in the 1970s, with the exception of forest on public land between the houses and the edge of the cliff.
The Regional Environmental Plan for Jervis Bay attempts to protect the natural and cultural values of the region by constraining residential development to infill of existing villages in the region (Department of Planning 1996), although one new large subdivision has commenced at the junction of Wool Road and Jervis Bay Road and another is planned for the northern side of Currambene Creek (Navin Officer 2012).

The cultural heritage of Jervis Bay’s Aboriginal people is deeply embedded in the surrounding natural landscape and seascape. The spiritual and social significance of the Jervis bay landscape and seascape is described in numerous publications, by Aboriginal people from Wreck bay and Jerrinja communities, anthropologists and archaeologists (e.g. Lowe 2001, Egloff 1995, Cane 1988). Many Aboriginal people also have strong historical associations with Jervis bay, from living at official Aboriginal reserves at Orient Point and Wreck Bay or unofficial reserves on both sides of Currambene Creek (Navin 1991, Egloff 1981).

The sentient value of the landscape is kept alive today through story telling and transfer of knowledge across generations and also in local schools through an Aboriginal language revitalisation programme. The coordinated campaign of Aboriginal people and conservation groups and the concomitant marriage of natural and cultural values was a major factor in stopping the re-location of the Australian fleet base and armaments depot to Jervis Bay in the 1990s and demonstrated the strength of attachment to place (Feary 2001; Moorcroft and Feary 2008; Lowe 2001). The place continues to be of great cultural significance to Aboriginal people (Longbottom 2001).

Figure 4: Poster relating to protests over the Commonwealth Government’s proposal to put the fleet base and armaments depot at Jervis Bay.

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4 The Jervis Bay REP has been repealed by the Shoalhaven LEP 2014.
Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. **FINAL REPORT August 2014.**
Bundarwa (Beecroft Peninsula) is the most significant spiritual and mythological landscape for Jervis bay’s Aboriginal people, but there are many other more localised places of great spiritual, cultural and historical significance around the shores of Jervis bay (see Cane 1988 and Navin Officer 2012).

Local landscape
The proposed shared path is located in a residential part of Vincentia, at the eastern end of Orion Beach and west of Plantation Point. Plantation Point (once known as Lambs Point) is a prominent headland jutting into Jervis Bay, with Barfleur beach tucked in on its northern side, with a small headland between it and Orion Beach, which extends west to meet Collingwood Beach at the boat ramp (see Figure 3).

The landform comprises steep sandstone cliffs rising from the back of Orion beach to a height of approximately 20 metres, intersected by three short, steep gullies. A narrow promontory extends into the bay in the approximate centre of Orion beach. Behind the cliff top, the land is flat or gently undulating and contains a residential subdivision, with a row of houses and several ‘battle-axe’ blocks between Elizabeth Drive and the edge of the cliff.

The natural drainage from the cliff top into the bay has been altered by the presence of houses, and installation of stormwater drains and other infrastructure. The cliff top supports a thin sandy humic layer overlying thin orange clays sitting directly on sandstone bedrock. The thin soils have limited capacity for subsurface cultural deposits.

The shared path would be built in a public reserve owned by the Crown and managed by the Shoalhaven City Council as the Trust Manager. The public reserve extends from the residential boundaries down to high water mark and includes the land between the edge of the residence to the cliff edge, the cliffs and the gullies. The public reserve varies in width from just few metres to up to 10 metres, being the narrowest at the top of the gullies where there is less than a metre between cliff edge and private land. A row of bollards marks the boundary between private land and public reserve.
The public reserve area is still vegetated in many locations with bangalays (*E. botryoides*) and *Casuarinas* with a *Lomandra* and *Pittosporum* dominated understorey. Several landholders have extended their unfenced back yards into the public reserve, with extensive grassed areas, seating, gardens, rubbish, weeds and rows of steps down to the beach (Figure 6).
A rough, narrow footpad is visible in some parts of the reserve, including out to the small headland, but historically the public reserve has not been used by the general public because of the terrain, thick vegetation, backyard encroachments and uncertainty about the location of the residential/reserve boundary.

### 3.3. History of peoples living on the land

Apart from the infrequent, but occasionally detailed observations of the earliest white explorers, such as those of Governor Macquarie and Charles Throsby, census reports of blanket distributions for the years 1833 to 1842 are the main source of written information on traditional Aboriginal life. Blankets were distributed annually at predetermined collection points and the distributor kept records of name, age, sex, number of wives, place of residence, and name of tribe. Blanket distribution centres in the Shoalhaven district recorded Aboriginal people from the following ‘tribal affiliations’ or named groups in the Jervis Bay region – Jervis Bay, Erowal, Bherewarrie with the Jeniwangle further inland (Egloff et al 1995:40)(Figure 7).
Wesson’s interpretations of the blanket records give a slightly different picture of the distribution of named groups. Figure 8 shows that although Bherewarrie is the same as in Egloff, Wesson places Jerriwangualgie much closer to the coast and includes three additional named groups; Corramy on the northern shores of Sussex Inlet, Wagamy on the northern side of the bay and Wandawandahan inland from Jervis Bay (Wesson 2000). Aboriginal people who identified themselves as coming from the Jervis Bay region were also counted in censuses in many other collection points in the wider region, reflecting the mobility of the Aboriginal population and/or responses to impacts of white settlement and an increasing dependence on government hand-outs.
Figure 8: Named Aboriginal groups (after Wesson 2000). 25 = Wagamy; 28 = Wandawandahan; 12 = Jerriwangalie; 8 = Corramy; 3 = Bherewarrie/Perrywerry/Berruar

Tindale (1974) identified the Wodi Wodi (also spelt/or known as Wodiwodi, Woddi Woddi, Illawarra, Tharawal) people as occupying the area from (approximately) Stanwell Park in the north to the northern bank of the Shoalhaven river, with the river forming a boundary between the Wodi Wodi and the Wandandian (also referred to as Tharumba, Kurialyuin, Murraygaro, Jervis Bay) people on the south side of the river. The term Wodi Wodi was first recorded in 1875 from the testimony of Lizzy Malone, daughter of a woman of the Shoalhaven tribe, who said it was the language spoken by the Aboriginal people of the Illawarra (Navin Officer 2007).

The Wandandian people appear to be a subgroup of large Yuin tribes whom Howitt in his late 19th century work on Aboriginal life in south-eastern Australia, describes as occupying the land between the Shoalhaven River and Cape Howe (NSW/Victorian border) and inland to the coastal range (Howitt 1996). Conversely he also states that Yuin was the general name for all tribes between Merimbula and Port Jackson, which is similar to RH Mathews, who placed the Yuin from south of Sydney to the Victorian border (Thomas 2007).

Howitt identified two sub-tribes within the Yuin, called the Kurial (north) and Guyangal (south), as well as a division into coastal (Katung) and inland (Paiendra) people (Howitt 1996: 82). The Kurial-Yuin northern sub-tribe comprised three smaller groups, one called the Gurungatta-manji, described as being in the lower Shoalhaven river districts.
Untangling the connections between language boundaries and boundaries based on other social groupings is difficult. Using the records of Mathews and Tindale, Eades has drawn a linguistic boundary between the northern Dharawal and southern Dhurga speakers, from about the middle of Jervis Bay. There is good linguistic evidence that people of Jervis Bay spoke Dharawal, so making the lower Shoalhaven Aboriginal people speakers of the Dharawal language, although there would have been high level of overlap between the two large language groups (Eades 1976). According to some researchers, a language called Mudthung (Thurumba) was spoken between the Shoalhaven River and Ulladulla, reaching inland to the Great Dividing Range. The language is described as being a dialect of Thoorga (Dhurga) (Wesson 2000: 157), rather than of Tharawal, giving further support to the linguistic overlaps in the vicinity of the Shoalhaven. In her memoirs, Louisa Atkinson notes that the dialect of Shoalhaven and Berrima Aborigines was the same (Atkinson 1863b). This seems unlikely, as, although the highland and coastal groups would have interacted on a regular basis, they are recorded as coming from two distinct language groups (Tindale 1974).

The majority of local Aboriginal people today identify themselves as Dhurga speakers from the Wandandian/Wandrawandian cultural group.

Because of its high biodiversity, the Jervis Bay region would have been particularly rich in marine, estuarine and terrestrial resources and both the archaeological and ethnographic evidence suggests substantial numbers of Aboriginal people living in the area at white contact. Excellent descriptions of traditional Aboriginal life in the Jervis Bay region can be found in a number of publications, e.g. Egloff (1981, 1995); Cane (1988). Briefly, the ethnographic and archaeological records indicate that prior to white contact, up until about the 1820s, local Aboriginal people lived a traditional hunter-gatherer lifestyle, with an emphasis on harvesting of marine resources, particularly fish and shellfish (Bennett 2007). The range of fish and shellfish species represented in middens indicates extensive use of both marine and estuarine resource zones probably on a seasonal basis. Bark canoes would have been used on sheltered water bodies, with men using spears and women using a hook and line to catch fish. Shearwaters were probably collected as they landed on the beaches, exhausted after breeding, and stranded marine mammals including whales would have been a rare but important component of the diet.

Terrestrial resources would have also been important, especially plants, for food, medicine and as a source of raw materials for making baskets, fish nets, string and many other items of material culture. Forest and woodland fauna such as wallabies, kangaroos, and arboreal marsupials would have been hunted by men. Sustainable harvesting of these resources demanded an intimate knowledge of their location, ecology, seasonal availability, as well as techniques for harvesting and processing. Stone would have been traded in from further south, to make stone artefacts for spear points and scrapers for working animal skins. The complex association between Aboriginal people
and the natural environment was and still is, developed and maintained through ceremony and ritual when younger generations are taught cultural traditions through story telling.

The spiritual significance of the Jervis Bay region has been well documented, particularly creation stories associated with Bundoola and Spundula. Although these powerful figures are linked to places and activities on Beecroft Peninsula (Bundarwa) and are of particular significance to the Jerrinja Aboriginal Community at Orient Point, older men and women at Wreck Bay agree that Spundula is the most important and strongest spiritual being in the Jervis Bay area (Cane 1988). Today Jervis Bay Aboriginal people describe Bundoola in terms of a lightning man and frequently as the source of bad or rough weather. He is a great fisherman who lives in Devil’s Hole and is associated with the wellbeing of the fish and shellfish resources. Bundoola controls the sea, the rain and the weather. He is also known as the ancestral figure who created the thirteen tribes of the New South Wales south coast (George Brown, Illawarra Mercury 7/7/1990 in Egloff (1995)).

Traditional Aboriginal life at Jervis Bay was probably not changed to any great extent until after the 1830s when the first land grants were made and timber getting and boat building began in the region. Once the townships of Huskisson was established, access to traditional hunting and fishing grounds may have been restricted and local Aboriginal people began to be impacted by colonisation in more dramatic ways. An excellent detailed account of colonial history can be found in Dallas (2006).

3.4. Material evidence

3.4.1. AHIMS search

A search of AHIMS site register was conducted on 17 December 2013, for an area of 10 km x 10 km centred on the subject area. A total of 38 sites is recorded in this area of 100 km² (see Appendix 4 for the AHIMS list of recorded sites). Two sites are incorrectly listed and several sites have multiple listings.

Table 2 shows a breakdown of site types (once AHIMS errors were rectified). The most common site type is artefact scatter, ranging from one to several hundred artefacts. In some cases, artefacts occur in association with shell material (middens).

No sites are recorded within the subject area, the closest being 58-2-0383, immediately to the east of Orion Beach.
**Table 2: Summary of site types recorded in a 100 km² around Orion Beach**

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<tr>
<th>Site type</th>
<th>Frequency</th>
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<tr>
<td>midden</td>
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<tr>
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<tr>
<td>Rockshelter with art</td>
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<td>PAD</td>
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<td><strong>TOTAL</strong></td>
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</table>

### 3.4.2. Regional archaeological context

The Jervis Bay region is rich in archaeological sites and has been the subject of a considerable amount of archaeological research since the 1970s, including a number of important systematic excavations. The most significant natural event to impact on Aboriginal culture and history was the actual formation of Jervis Bay around 6000 years ago when the sea level rose and stabilised at its current level. This would have drowned the river valleys and created Jervis Bay and St Georges Basin and commenced the process of dune barrier formations. Aboriginal people may have been living around Jervis Bay before the sea level rose, but if so, the archaeological evidence is now submerged beneath the ocean. There is evidence for Aboriginal occupation 20,000 years ago further south in a rock shelter at Burrill Lake and further north in a shell midden at Shellharbour (Mulvaney and Kamminga 1999), but it is more likely that the Jervis Bay area was not occupied until the bay itself and the surrounding wetlands, lakes and lagoons were formed. Creation of these new resource zones would have attracted subsistence hunter/gatherer and fisher people, because of the presence of a diverse range of resources that were easily accessible without needing to travel long distances. The huge numbers of sites recorded by archaeologists since the 1970s, especially on Beecroft and Bherwerrre Peninsulas support the idea that the Jervis Bay region was able to support a large Aboriginal population.

Several archaeological sites have been excavated in the Jervis Bay region, with radiocarbon dating showing evidence for Aboriginal occupation from at least 2000 years ago. These excavations provided scientific evidence of the diets and subsistence economy of the original inhabitants. A large midden at Cemetery Point, near the Wreck Bay Community cemetery, was excavated in 1973 before being quarried for shell grit by the then Jervis Bay Nature Reserve (Collier 1975). The animal bones in the midden showed that mutton birds and a wide variety of fish species were hunted, including snapper. Some of the animal bones found in the midden were of species now extinct or very rare in the local area, such as the masked booby owl and a species of python. The site also contained evidence of a traditional tool kit including stone artefacts, bone points and...
shell fishhooks. Most of the midden was composed of shell and the sheer volume of shell in the Cemetery Point midden suggests that people were relying heavily on the shellfish locally available from the nearby rock platform. A wide range of species was collected, with blue mussel being the highest percentage by number, followed by tritons, abalone, mussel, whelks and turbans. Many other smaller shellfish species were also present, but they may have been collected incidentally, attached to the bigger specimens (Collier 1975). Charcoal samples from ancient fires were radiocarbon dated, which showed that the site was occupied continuously from nearly 1800 years ago until around 300 years ago. This is a similar basal date to one obtained from midden deposits in a rock shelter on Abrahams Bosom Reserve on Beecroft Peninsula, which was excavated in the late 1980s (Paton and McFarlane 1989). These dates also fit in with a theory that archaeologists have, of an intensification of use of the coastline from around 2000 years ago (Hughes and Lampert 1982).

When several middens on the western side of Bowen Island were excavated and analysed in 1980, they gave a completely different picture of the traditional diet. Although shell, again with mussel shell dominant, was present in the middens, the assemblage of faunal bones demonstrated a diet based on a wide range of fish and bird species, with a preference for snapper and mutton birds. Carbon dates showed it to be occupied from 1200 years ago until about 400 years ago during which time mutton birds seemed to have been the dominant food (Blackwell 1980). This is an interesting find as penguins are the dominant animal on the island today but few appear in the archaeological deposits. There are a number of possible explanations for the absence of penguin bones, the most likely being that it reflects a preference for the fattier and tastier mutton birds.

Excavation of a large shell midden on St Georges Basin demonstrated exploitation of a different suite of shellfish species from those found in the previous excavations. Bimbulas and pipi shells showed that the estuaries and open beaches were important for resource collection. Shell fishhooks and bone points were abundant in the midden, demonstrating the importance of fishing to the local economy (Barz 1977).

A number of archaeological surveys have been conducted on Bherwerre Peninsula, the earliest and most well known being Marjorie Sullivan’s investigation in 1977 (Sullivan 1977). This survey was undertaken during a major dune stabilisation program which unfortunately covered up some sites with many metres of introduced sand and destroyed other sites through use of heavy machinery. Sullivan considered that all of the sites she recorded post-dated the final rise of sea level, although some of the deeper sites may date back to 6000 years ago. A total of 56 sites were recorded with the majority being shell middens, with some of the deposits so extensive that it was impossible to distinguish between individual sites, especially in the Bherwerre sand dunes. Rock shelters, axe grinding grooves and stone artefact scatters were also recorded. In 1996, Sullivan’s recorded sites on Bherwerre peninsula were re-recorded by Katie Sachs as part of university research (Sachs 1996). This study showed that the condition of most sites had deteriorated during
the previous 19 years. Disturbance was due to both natural and humanly-induced processes and the best preserved sites were those with the deepest deposits and/or those in locations with limited public access.

In 1976, Peter White and a group of archaeology students from Sydney University conduct a training exercise on Beecroft peninsula which resulted in the detailed recording of hundreds of sites, including a suite of highly significant art sites (White 1977). Several of the sites were re-analysed and recorded by Kelvin Officer as part of a NPWS rock art recording project and also PhD research (Officer 1991). They are now part of an ongoing monitoring program by the Department of Defence.

In 1987, Scott Cane undertook an Aboriginal heritage investigation of the Jervis Bay area as part of the environmental impact assessment of the Defence Department’s controversial proposal to re-locate the Australian Navy’s fleet base and the armaments depot from Sydney to Jervis Bay. He recorded 50 archaeological sites, including 23 on the ‘Bherwerre side of the bay’(Cane 1988:6). Cane’s report contains useful syntheses of both the archaeological and historical evidence for Aboriginal use of the Jervis Bay region, and provides a detailed analysis of the distribution patterns, contents and condition of archaeological sites, as well as giving recommendations for future management. In particular, he noted that the density of sites/kilometre along the coastline between Hole in the Wall and Murrays Beach was 8.7 sites/kilometre, considerably higher than average site densities elsewhere along the east coast (Cane 1988), suggesting that the density of pre-contact Aboriginal populations at Jervis Bay was considerably higher than elsewhere on the south coast, possibly due to the existence of so many rich and varied resource zones, especially those of the marine environment.

These early, academically oriented investigations established the Aboriginal occupation models for Jervis Bay and provided critical information on traditional diet and resource collection strategies. There have been numerous investigations since, but most have been of a smaller scale, and primarily associated with environmental impact assessment for specific developments, rather than driven by research questions. As a result they have not contributed greatly to the archaeological knowledge base. Table 2 gives a summary of the most relevant reports for the region.

### 3.4.3. Local archaeological context

The highlighted reports in Table 2, together with data from AHIMS provide a picture of traditional Aboriginal occupation and use of the landscape and resources immediately surrounding Orion Beach. Intensive surveys, test pitting and monitoring of large areas of land approximately 3 kms west of Orion Beach, including Heritage Estates (Dallas 2006), Bayswood estates (Dallas 2003, Dallas and Wright 2005 ) and the Bay and Basin leisure centre (Avery 1997, Navin Officer 1999a)
found very little archaeological evidence, apart from a few small artefact scatters. However, just to the east of these areas, a large axe grinding groove site with associated extensive artefact scatters [58-2-0256] and rockshelters with art [unrecorded] occur adjacent to a small, unnamed creek, known locally as Vincentia Creek. This pattern suggests that Aboriginal people avoided the low lying poorly drained areas and camped on elevated land near water courses, a model that has been proven over many decades of archaeological endeavour.

Three kms northwest of the subject area, within the wetlands of Moona Moona creek, extensions to the sewerage treatment plant resulted in detailed investigations and excavation of an immense estuarine shell midden and associated artefacts (Silcox 1992, Navin Officer 1999b and c), showing a focus on estuarine species, despite the presence of abundant marine resources very close by.

Navin Officer (1991) recorded an artefact scatter and a possible scarred tree behind Collingwood beach, northwest of Orion Beach during a survey for another section of the shared pathway. Monitoring of the development was recommended but it is not known whether this occurred or whether any further objects were found. Oakley found no sites within a small parcel of land adjacent to the boat ramp leading to Barfleur beach (Oakley 2002). Oakley re-located 58-2-0001, a midden recorded in 1973 by Poiner, which must refer to the large midden on top of the headland, as it is described as being 15 metres above sea level. Also included in the same site card is a 1975 recording by Austen, although this appears to refer to a midden at sea level, at the base of the cliffs which define the eastern end of Barfleur beach. Oakley did not re-locate this lower midden, which is extant although partly obscured by grass.⁵

Archaeological investigations for the proposed shared path at Barfleur beach, immediately east of Orion beach were conducted in 2012 (Feary 2013). Previously recorded site 58-2-0383 was identified and recorded in more detail and found to contain 100 visible artefacts, whose nature and extent was interpreted as being typical of south coast artefact assemblages. The report on the investigation concluded that the sheltered nature of Barfleur beach, natural access to the beach, and the presence of extensive shell middens on Plantation Point headland pointed to the high likelihood for a site being present behind the cliff top above Barfleur Beach (Feary, 2013a). Site monitoring and salvage were conducted as a condition of the AHIP issued to Shoalhaven City Council on 10 May 2013. Monitoring removal of surface vegetation and topsoil revealed very little, whereas the more thorough process of surface collection and sieving samples of scraped soil recovered an additional hundred or so artefacts (Feary, 2013b).

Construction of a new apartment block on the northern banks of Moona Moona creek disturbed an unrecorded midden and in early 2013 OEH ordered works to cease to allow a full investigation of the site. The investigation identified a shell midden (58-2-0435), approximately 4 metres x 4 metres, and approximately 50 cm deep. It comprises estuarine molluscan species, collected from

⁵ Feary, pers. obs.
Moona Creek and is disturbed and discontinuous and similar to other middens recorded on the southern side of Moona creek (Dallas & Goward, 2013). The developers amended their plans to avoid the need for salvage or monitoring of the site and protect it from further damage. All headlands extending into Jervis bay contain recorded and unrecorded middens, some of considerable depth, all reflecting exploitation of the rocky shore platforms.
Table 3: Selected archaeological consultancy reports from Jervis bay region

<table>
<thead>
<tr>
<th>Report name</th>
<th>Author (Date)</th>
<th>Location/landform</th>
<th>Type</th>
<th>Results</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeological investigation of a proposed leisure centre complex, the Wool Road, NSW</td>
<td>Avery R (1997)</td>
<td>Leisure centre site, swamp/heath/coastal woodland, 3kms west of PP</td>
<td>areal</td>
<td>1 small artefact scatter</td>
<td>Generally low lying area</td>
</tr>
<tr>
<td>An archaeological survey of a proposed urban development at Vincentia, south coast of new South Wales</td>
<td>Colley S (1988)</td>
<td>West of Collingwood beach, swamp/heath</td>
<td>areal</td>
<td>2 artefact scatters</td>
<td>Large area, only a very small portion surveyed, results very inconclusive but some areas with high potential.</td>
</tr>
<tr>
<td>Vincentia Master Plan. Archaeological Assessment of Lot 801 &amp; 802 in DP 102286 and Lots 72-75 in DP 87404 Cnr naval College Road and the Wool Road, Vincentia, NSW</td>
<td>Dallas M 2003</td>
<td>Bayswood subdivision</td>
<td>areal</td>
<td>No sites found</td>
<td>Poor visibility, recommended a test pitting program</td>
</tr>
<tr>
<td>Vincentia Master Plan. Archaeological test excavation of site 58-2-0392 (PAD1) and site 58-2-0393 (PAD2) in the project area comprising Lot 801 &amp; 802 in DP 102286 and Lots 72-75 in DP 87404 Cnr naval College Road and the Wool Road, Vincentia, NSW</td>
<td>Dallas M and Wright RVS 2005</td>
<td>Bayswood subdivision</td>
<td>Test excavation</td>
<td>A few artefacts in one of the PADs</td>
<td>Low lying, low potential</td>
</tr>
<tr>
<td>Aboriginal and European Cultural heritage Assessment. The heritage estates, Worrowing heights, NSW</td>
<td>Dallas M 2006</td>
<td>Heritage estates</td>
<td>areal</td>
<td>Re-location of 2 previously recorded artefact scatters</td>
<td>Area extensively damaged</td>
</tr>
</tbody>
</table>

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. **FINAL REPORT August 2014.**
<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Location</th>
<th>Method</th>
<th>Findings</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>An archaeological assessment of proposed works by NPWS at Red Point</td>
<td>Dibden J and Kuskie P 1999</td>
<td>Red Point, northern side of Jervis Bay</td>
<td>Linear and areal</td>
<td>3 artefact scatters, 2 shell middens, 1 isolated artefact</td>
<td>Extensive midden previously recorded was re-located.</td>
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<tr>
<td>and hammerhead Point, Jervis Bay.</td>
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</tr>
<tr>
<td>Investigation of a possible Aboriginal site at the Huskisson Hotel,</td>
<td>Feary S 2012</td>
<td>Huskisson</td>
<td>Single site assessment</td>
<td>Identification of a midden noted by McDonald in 2002</td>
<td>Highly disturbed and may not be in-situ</td>
</tr>
<tr>
<td>Jervis Bay, New South Wales</td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Assessment of a possible Aboriginal site, RTBU camp, Jervis Bay</td>
<td>Feary S 2011</td>
<td>RTBU</td>
<td>Single site assessment</td>
<td>Possible midden remnants</td>
<td></td>
</tr>
<tr>
<td>Territory</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>The burial at Mary Bay</td>
<td>Feary S 2009</td>
<td>Wreck Bay</td>
<td>Salvage</td>
<td>Secondary burial of juvenile human</td>
<td>Buried at top of a steep dune face behind beach</td>
</tr>
<tr>
<td>Investigation of a possible Aboriginal site at the Huskisson Hotel,</td>
<td>Koettig M 1989</td>
<td>Tomerong</td>
<td>Linear</td>
<td>1 artefact scatter, 4 PADs</td>
<td></td>
</tr>
<tr>
<td>Jervis Bay, New South Wales</td>
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<tr>
<td>Sub-surface archaeological investigations of site 58-2-0298,</td>
<td>Kuskie P 1995</td>
<td>Worrowing</td>
<td>Test excavation</td>
<td>1 additional artefact</td>
<td></td>
</tr>
<tr>
<td>Worrowong estate, Old Erowal bay, NSW south coast</td>
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<tr>
<td>Archaeological survey of ocean outfall pipeline routes, Jervis Bay</td>
<td>Lance A and Fuller N (1988)</td>
<td>Jervis bay hinterland</td>
<td>Linear</td>
<td>1 large artefact scatter</td>
<td></td>
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<tr>
<td>and New South Wales.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Archaeological survey for Aboriginal sites, Jervis Bay hotel,</td>
<td>McDonald J 2002</td>
<td>Huskisson</td>
<td>Areal</td>
<td>No sites recorded, presence of shell observed in a trench</td>
<td></td>
</tr>
<tr>
<td>Huskisson, NSW</td>
<td></td>
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<tr>
<td>An archaeological assessment of alternative by-past routes for the</td>
<td>Navin K 1990</td>
<td>Tomerong</td>
<td>Areal</td>
<td>4 small artefact scatters, 2 axe groove site, 2 middens, and 1</td>
<td></td>
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<td>princes Highway at</td>
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</table>

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
<table>
<thead>
<tr>
<th>Location</th>
<th>Project Description</th>
<th>Author(s)</th>
<th>Site Type</th>
<th>Findings</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomerong, NSW</td>
<td>An archaeological investigation of proposed Currambene creek crossing and associated road routes from Woollamia to Callala beach, Jervis Bay, NSW</td>
<td>Navin K 1991</td>
<td>Currambene creek</td>
<td>linear</td>
<td>Important contact site at Bilong. 4 scarred trees, 2 artefact scatters, isolated finds, 1 midden</td>
</tr>
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<td></td>
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<tr>
<td></td>
<td>An archaeological investigation of a proposed pathway, Currambene creek crossing and associated road routes from Woollamia to Callala beach, Jervis Bay, NSW</td>
<td>Navin K 1993</td>
<td>Huskisson Pine forest</td>
<td>areal</td>
<td>No sites</td>
</tr>
<tr>
<td></td>
<td>A preliminary archaeological assessment for the St Georges Basin/Jervis Bay regional effluent management scheme.</td>
<td>Navin K and Officer K (1998)</td>
<td>Collingwood beach</td>
<td>linear</td>
<td>1 artefact scatter, 1 scarred tree, 1 isolated find</td>
</tr>
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<tr>
<td></td>
<td>Proposed extension to Vincentia STP. Archaeological Assessment</td>
<td>Navin Officer Heritage Consultants (1999b)</td>
<td>Vincentia STP extension, Moona Moona creek</td>
<td>Desktop and areal</td>
<td>Re-location of site investigated by Silcox in 1992. No new sites</td>
</tr>
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<tr>
<td></td>
<td>Proposed extension to Vincentia Sewerage Treatment Plant. Archaeological subsurface</td>
<td>Navin Officer Heritage Consultants (1999c)</td>
<td>Vincentia STP extensions, Test excavations</td>
<td>173 artefacts from 20 of 35 test pits</td>
<td>No outstanding features of assemblage</td>
</tr>
</tbody>
</table>

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. **FINAL REPORT August 2014.**
<table>
<thead>
<tr>
<th>Testing Program</th>
<th>Author(s)</th>
<th>Location</th>
<th>Type</th>
<th>Findings</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Bay and basin leisure centre, Vincentia, NSW. Archaeological inspection and monitoring Program</td>
<td>Navin Officer 1999a</td>
<td>Vincentia</td>
<td>Monitoring</td>
<td>Nothing found after vegetation clearing</td>
<td>Clearing also removed topsoil, bit area is low lying with low potential</td>
</tr>
<tr>
<td>An archaeological survey of the proposed 11kV overhead powerline route from Sanctuary Point across the Worroging waterway, Jervis bay, NSW</td>
<td>Paton R 1993</td>
<td>Sanctuary Point to Jervis bay Road</td>
<td>Linear</td>
<td>No sites</td>
<td></td>
</tr>
<tr>
<td>Archaeological survey of a proposed rural residential subdivision at Old Erowal bay, south coast, New South Wales</td>
<td>Silcox R (1992)</td>
<td>Worrowing estates; rolling hinterland, c. 4 kms SW of PP</td>
<td>Area</td>
<td>1 artefact scatter, 3 PADs</td>
<td>Recommended test excavation</td>
</tr>
<tr>
<td>Test excavations at Proposed sub-division, Old Erowal bay, South Coast, NSW.</td>
<td>Silcox R (1993)</td>
<td>Worroving</td>
<td>Test excavation</td>
<td>92 artefacts found</td>
<td></td>
</tr>
<tr>
<td>Archaeological investigation of midden and open campsite at Vincentia, New South Wales.</td>
<td>Silcox R (1992c)</td>
<td>Vincentia STP, 2kms northwest of PP</td>
<td>Test excavations</td>
<td>1000s artefacts recovered along ridge top and sides. Midden had 2 horizons, densely packed shell, mainly <em>bimbula</em> and <em>Pyrazus</em>. Estimated</td>
<td>Midden initially disturbed by fence construction and inspected by NPWS. Extensive and important site</td>
</tr>
</tbody>
</table>

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. **FINAL REPORT August 2014.**
| Test excavations on the Tomerong bypass, near Nowra, NSW | Silcox R 1989 | Tomerong | Test excavations of PADs | 3 test pits had artefacts | Concluded that ridge tops were preferred over alluvial flats for camping |
| Archaeological survey of Wrights beach sewerage system, St Georges Basin, NSW | Silcox R 1992 | Wrights beach | Areal survey | 2 artefact scatters, silcrete, | one had >100 artefacts |
4. ARCHAEOLOGICAL INVESTIGATIONS

4.1. Predictions

Models for Aboriginal occupation of Jervis Bay have been put forward by several archaeologists e.g. Cane (1988); Navin Officer (1991) and Dallas (2003; 2006). The large numbers of recorded Aboriginal sites associated with the immediate coastline indicate that sites are likely to be present almost everywhere around the embayment.

Orion Beach is a north facing sandy beach, with several small rocky shore platforms and is relatively sheltered from most winds. The beach is backed by steep sandstone cliffs with two small promontories at the centre and eastern end of the beach (Figure 9). However, it is less sheltered than the smaller Barfleur beach to the east where middens and artefacts are recorded. Based on landforms and the archaeological evidence in the immediate area, the following predictions can be made:

**Middens**: these are likely to occur in the subject area, as numerous shell middens are recorded around Jervis Bay, generally associated with headlands. The small promontories are specifically predicted to contain middens (Figure 9).

**Burials**: most likely to occur along in sandy deposits the banks of Currambene creek, Moona Moona Creek or in sand dunes behind beaches. Burials are unlikely to occur in the subject area as there are no sandy deposits.

**Scarred trees**: a small amount of original forest is present within the Council reserve and mature trees may contain scars or other cultural modifications.

**Artefact scatters**: there is a high potential for these to occur in the subject area, given the large artefact scatter present at Barfleur beach, in the same landform type (top of cliff).

**Rockshelters**: these are unlikely to be present in the subject area

**Axe grooves**: where flat sandstone platforms outcrop in or adjacent to water courses, not applicable in subject area.
The land behind the cliff top is flat to gently undulating with no sources of potable water, other than run-off. Large middens occur on the Plantation Point headland and an extensive artefact scatter exists at Barfleur beach. Overall, the subject area has a moderate-high potential for containing one or more shell middens and/or artefact scatters. However, the potential is considered lower than for the adjacent Barfleur beach due to its relatively greater exposure to the weather and the absence of a natural access to the rocky shore platforms at the base of the cliffs. The small promontory in the middle of the beach is considered to have a high potential for containing middens and/or artefacts.

4.2. Sampling strategy

The sampling strategy was informed by the following factors:-
- The small size of the area to be surveyed
- The presence of a known site immediately adjacent
- Lack of certainty of the precise final location of the shared path
- The impassability of some sections of the proposed route
- The absence of any ground visibility for some sections of the route.
- Lack of access to adjacent private land.

The field inspection involved a total survey of the entire public reserve between Minerva Street and Planation Point Parade, including the steep gullies across which elevated walkways are to be constructed. The survey area is approximately 500 metres long and 10 metres wide although the latter varied along the length of the path route, to less than 1 metre wide in some locations along the cliff top.
Figure 10: showing route of shared path proposal (pink and blue lines)

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Figure 10 shows the location of the proposed path in relation to extant vegetation and residential house blocks. The field inspection covered all lands between the boundaries of the residential blocks and the edge of the cliff (which cannot be seen in the image), and down into the steep gullies leading to the beach (not visible in the image).

4.3. Survey coverage variables

For the purposes of the field recording, the following environmental parameters are relevant – topography, geology, soil and geomorphological processes.

The area comprises three landform units:
1. Cliff top
2. Gullies which intersect the cliff in three locations

About half of the public reserve is still covered in native forest which supports a very thick layer of leaf litter and fallen branches and a thick shrubby understory, difficult to traverse in places. Visibility is reduced to zero in these locations (Figure 11).
In other locations, residents have cleared the vegetation, planted exotic lawns, constructed gardens or laid pavers. In a few locations there is a narrow footpad where bare ground is exposed. The gullies are very steep and short, flattening out somewhat toward their bases. They contain native forest, weeds and accumulated leaf litter, as well as piles of domestic rubbish dumped over many decades, and steps leading down to the beach in a few locations.

4.4. Field methods

The area to be impacted by the proposed path is 500 metres long and on average 10 metres wide, a total of 5000 sq. m along the top of a cliff behind Orion beach. It includes a small promontory and three short steep gullies which will be crossed by elevated walkways. Footings will be dug at the base of the three gullies to support the elevated walkways.

The primary aims of the field survey were to:-

- Traverse the entire route on foot and as much distance each side as possible, given the constraints of private property, steep banks and obstructions such as furniture and dumped rubbish. Inspect gullies where footings are likely to be dug to support the elevated walkways.
- Record all visible Aboriginal objects; these are likely to be stone artefacts and shell middens.
- Conduct recording, analysis and significance assessment of Aboriginal objects in accordance with OEH code of archaeological practice (DECCW 2010c) and OEH guidelines for investigating Aboriginal heritage (OEH 2011d).
- Ascertain the potential for subsurface cultural deposits, based on landform and disturbance history.
- Ascertain whether, and to what extent Aboriginal objects will be impacted by the proposed development and determine the need or otherwise for an AHIP and any relevant conditions.
- Seek views of Aboriginal representatives on the cultural values of Orion beach and seek their advice on future management of any Aboriginal objects with potential to be impacted by the proposed development.
- Gather data for assessing effective survey coverage.

The field survey was conducted by archaeologist Sue Feary over one day on 1 May 2014, accompanied by Jerrinja LALC Heritage Officer Gerald Carberry, and Geoff Young from Council. The survey involved direct visual inspection of the entire subject area, however, a good proportion of the route had limited or no ground visibility due to the presence of thick grass cover or thick leaf litter (Figure 12). All areas of bare ground were carefully inspected for artefacts and shell midden and mature trees were checked for scars. Ground visibility and relevant environmental
variables were also recorded. Locations of Aboriginal objects were recorded with a hand held GPS but as accuracy was only to 5 metres, it was more accurate to plot their location on the very accurate large scale plans provided by Council.

Figure 12: Gerald Carberry inspecting route of shared path

4.5. Recording methodology

The approach to detailed recording of artefacts has been guided by relevant sections of the ‘Code’ (DECCW 2010). The following questions have informed the recording methods for artefacts during this field inspection:

- Density of artefacts
- Spatial variation of artefacts
- Range of raw materials
- Range and relative proportions of artefact types
- Whether artefact manufacture was occurring at the site
- Comparison of lithic evidence at local and regional scales
- Nature and extent of taphonomic processes
- Significance of artefact assemblage
- Potential for subsurface cultural material

To address these questions the following measurements/observations were made:-

- Type of artefact: flake, flaked piece, core, manuport, fragment, tool, proximal fragment, amount of retouch/use.
- Raw materials and quality: silcrete, chert, quartz
- Dimensions: Length, width, thickness
- Cortex: present/absent and percentage.
- Qualitative data: platform preparation, flake scars
- Nature and extent of retouch

For middens the following questions are relevant:
- Position of midden relative to resource zones
- Seasonality of midden
- Intensity of harvesting
- Relative importance of foods
- Techniques of harvesting and processing
- Preservation bias
- Size and depth of midden deposits
- Antiquity
- Changes over time in species harvested
- Habitat of species in midden
- Taphonomy
- Comparison with other middens

In order to address these questions, the following variables were recorded where feasible:

- Dimensions of exposed material
- Shellfish species present
- Relative abundance of species
- Density of shell
- Degree of fragmentation
- Degree of disturbance/re-deposition
- Stratigraphy and temporal changes in species Presence of non-shell material, e.g. artefacts, bones, charcoal, etc.

### 4.6. Results and analysis

The field investigation identified five locales containing stone artefacts and/or midden material. The five locales comprise a total of seven flaked stone artefacts and three small areas of fragmented shell, interpreted as midden remnants. One area of midden was in a small, low overhang on the small promontory. Table 4 gives descriptions of all recorded artefacts and midden material. Detailed descriptions and measurements are at Appendix 8(Site Gazetteer) and Appendix 9.
Table 4: Site descriptions

<table>
<thead>
<tr>
<th>Landform</th>
<th>Site name</th>
<th>Grid coordinates (MGA 56)</th>
<th>description</th>
<th>Environmental context</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cliff top</td>
<td>OB1</td>
<td>288964 6116616</td>
<td>Grey silcrete flake</td>
<td>Slightly eroded footpad</td>
<td>Low potential for additional artefacts</td>
</tr>
<tr>
<td>Small promontory</td>
<td>OB2</td>
<td>288980 6116662</td>
<td>Small amount of fragmented shell</td>
<td>Promontory. Low sandstone overhang</td>
<td>Will not be impacted.</td>
</tr>
<tr>
<td>Cliff top</td>
<td>OB3</td>
<td>289209 6116482</td>
<td>Fragmented and dispersed shell, 3 stone flakes – 1 x silcrete, 2 x quartz</td>
<td>Grassed, minimal exposure, gently sloping land, cliff top setting</td>
<td>Some potential for additional midden/artefacts</td>
</tr>
<tr>
<td>Cliff top</td>
<td>OB4</td>
<td>289250 6116465</td>
<td>3 stone flakes – 2 x silcrete, 1 x chert</td>
<td>Base of tree, gently sloping grassed area some exposure.</td>
<td>Some potential for additional artefacts. Close to 58-2-0383.</td>
</tr>
<tr>
<td>Cliff top</td>
<td>OB5</td>
<td>288942 6116629</td>
<td>Small number of shell fragments</td>
<td>Small cliff top exposure in grassed area</td>
<td>Some potential for additional midden/artefacts</td>
</tr>
</tbody>
</table>

While the artefact sample is too small and too dispersed to allow any meaningful analysis, Table 4 shows that silcrete was the most commonly used raw material, followed by quartz and chert. Silcrete outcrops occur in this part of the south coast and the raw materials could have been obtained on country or from trading with other Aboriginal groups further afield.

The quality of materials was generally good, although some silcrete artefacts contained many fracture lines and some quartz was of medium to poor quality. Appendix 6 shows the colour of the silcrete to be variable, but it is likely that all artefacts came from a source where colors varied and graded into each other, such as at Bendalong (Feary, 2013). All artefacts are primary flakes with no retouch or signs of use and have been interpreted as debitage.

The shell material is sparse and highly fragmented. It comprises small shell fragments of molluscan species collected from the rocky shore platforms below the cliff, including blue mussel (*Mytilus edulis*), mud oyster (*Ostrea angasii*) and marine gastropods.

Figures 13 – 16 show the location of the five locales/sites within the subject area. The evidence is too minimal to make any determinations regarding site distribution patterns. There is slightly more archaeological evidence in the eastern section of the path, perhaps reflecting the proximity to Plantation Point and site 58-2-0383.

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. **FINAL REPORT August 2014.**
It is difficult to determine whether each of the locales represent separate activities in space and/or time or whether they are ‘windows’ into a single extensive shell midden containing artefacts and midden material.

The highly fragmented nature of the shell and apparent absence of a dark matrix suggests that midden deposits may be sparse rather than being extensive deposits that have decayed or been destroyed by natural or human factors.

The presence of a large site at Barfleur beach (58-2-0383) suggests that a similar large artefact scatter might be present at Orion beach, but the results do not support this model. It should be noted however, that a considerable bias has been introduced through lack of visibility in grassed areas and thick leaf litter at some locations (see Table 5).

### 4.7. Effective survey coverage

Table 5: Effective survey coverage

<table>
<thead>
<tr>
<th>Survey Unit</th>
<th>Landform</th>
<th>Survey unit area (sq.m)</th>
<th>visibility</th>
<th>exposure</th>
<th>Effective coverage (sq.m.)</th>
<th>Effective coverage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orion Beach</td>
<td>Cliff top</td>
<td>3152</td>
<td>0% - 50%</td>
<td>50%</td>
<td>788</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Gullies</td>
<td>13420</td>
<td>0%</td>
<td>0%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Small promontory</td>
<td>1767</td>
<td>80%</td>
<td>50%</td>
<td>706</td>
<td>40%</td>
</tr>
</tbody>
</table>
Figure 13: Western end of path, showing location of OB1, OB2 and OB5

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Figure 14: Eastern end of path, showing locations of OB3 and OB4

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. **FINAL REPORT August 2014.**
Figure 15: enlarged section of plan showing site locations (eastern end)
4.8. Discussion

The archaeological evidence at Orion beach is too sparse and disturbed to enable any specific conclusions regarding pre-contact Aboriginal occupation and use of the area. The entire assemblage comprises only seven flakes with silcrete as the dominant raw material and a small amount of shell midden, comprising highly fragmented and sparse shell. The small size of the assemblage is in stark contrast to the large site behind the nearby Barfleur beach, which has suffered comparable levels of disturbance since the 1950s when the roads and subdivisions were created. The difference can perhaps be explained by the relatively more exposed nature of Orion beach or its distance from the archaeologically rich Plantation Point. Conversely, ground visibility is so poor due to leaf litter and lawns that the presence or absence of Aboriginal objects cannot be assessed with any level of reliability.

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
The history of disturbance suggests that none of the objects are in-situ, although relatively less disturbed sediments may exist underneath the grassed areas and leaf litter.

5. THE PROPOSED ACTIVITY

5.1. Land use history

Presence of archaeological sites indicates that Aboriginal people used the subject area prior to European contact but the extent to which their presence altered the landscape is unknown. No doubt there would have been some use of fire to manage the vegetation for a variety of purposes, but there are no data available to test these hypotheses.

Orion beach is part of an area once known as South Huskisson, whose early history is tied closely to the construction of the Wool Road from the tablelands (Braidwood) to Jervis Bay and the associated grand visions for development of a major port at Jervis bay. Prior to construction of the wool road in 1841, the land around Plantation Point was owned by Edward Deas Thomson, who was to become the Colonial Secretary in 1833. In 1831 he received a grant of 1036 hectares of land south of Moona Moona creek, known as Pierre Point, to be used as farmland. Thomson never lived there and in 1839 the land was advertised for sale as a grazing property. However, it did not sell (Walther 2003).

Subdivision of the land into smaller lots for a new town at the eastern end of the Wool Road was much more successful, as advertisements promoted the great future of Jervis Bay as a major harbor for transport goods from the inland, especially wool, to Sydney. By 1841, the town, South Huskisson had three hotels, a store and several other industries. By 1843 it had its own school. But, despite construction of a wharf between Collingwood and Orion beaches, and several ships arriving to load wool for Sydney, the economic boom times did not happen. By 1848 there were only two houses at South Huskisson (Walther 2003).

By contrast, the town of Huskisson on the northern side of Moona Moona creek flourished with industries of timber getting and especially boat building and the two areas were linked by a foot bridge that got regularly washed away. South Huskisson was renamed Vincentia in 1952 by developer Henry Halloran who also had grand visions for development of Jervis Bay, resulting in more clearing and residential development (Sant 2004). Impacts from historical activities such as land clearing, subdivision and road building would have been severe.

Much of the undeveloped and naturally vegetated land west of Vincentia was gazetted as Jervis Bay National Park in 1994.
As far as is known there have been no previous heritage or environmental assessments and no AHIPs have been issued in respect of the subject area.

The public reserve at the top of the cliff has prevented private land extending right to edge of the cliff. However, the public tend not to use it because parts of the reserve have an appearance of being in private ownership land, due to encroachments by residents adjacent to the reserve. Historically, the land has received high levels of disturbance from the activities of some adjacent residents, including clearing for gardens and lawns and rubbish dumping. There are also weed infestations. These activities would have had profound impacts on any Aboriginal objects present, but not as great as the earlier clearing and disturbance associated with building houses.

5.2. Description of development

The proposal relates to a shared path to be built behind Orion beach, as part of a longer path linking the coastal villages of Huskisson and Vincentia, much of which has already been constructed. The Orion beach shared path involves construction of a 2.5 metre wide concrete path, including three sections of elevated walkway, within public reserve between Minerva Avenue and Plantation Point parade. Figures 16 and 17 show detail of the proposed path.

Proposed works include:

- A minor amount of vegetation clearing, including tree removal.
- Levelling and excavation works to allow construction of concrete path of maximum depth of 150mm and maximum width of 2.5 metres.
- Excavation to subgrade, import, spread and compaction of 50 mm of road base for a concrete base and to assist in creating access and working platform.
- Installation of formwork in the concrete on-ground path areas.
- Construction of full depth sandstone oxide concrete shared path (2.5 metres wide maximum and approximately 324 metres in length) in the areas identified in the plans.
- Creation of batters and in some areas gabion and mattresses to support the path and protect drainage paths.
- Construction of an elevated path (approximately 184 metres in length) utilising composite fibre material and associated footings, posts, bearers, and handrails (in the areas identified in the plans as elevated walkway).
- Installation of ‘shared pathway’ and associated regulatory signage,
- Installation of traffic warning signs at intersections of the path and roads.
- Installation of erosion and sediment controls.
- Installation of bollards and other in-ground traffic management and safety devices.
- Installation of seats.
- Revegetation, rehabilitation and landscaping of pre-existing degraded areas in the vicinity of the path.
- Revegetation, rehabilitation and landscaping of areas disturbed during the construction of the path.
- Installation of hand railing along concrete path near steep batters and gabions
- Extension of stormwater pipes and installation of headwalls and energy dissipation systems (mattresses or rock rip-rap)
- Construction of a limited number of steps to connect the path to existing beach access paths.

The project would commence as soon as the AHIP is issued and is expected to take approximately six months to complete.

### 5.3. Potential harm

The proposed shared pathway and associated activities will directly impact the area shown in blue stripes in Figures 17 and 18. The harm area coordinates are 288825/6116715 and 288838/6116675 (western end) and 289286/6116485, 289286/6116453 and 289264/6116444 (eastern end). This includes the cliff top, small promontory and the gullies where piles are to be driven to support the elevated walkways. This area contains recorded sites OB1, OB3, OB 4 and OB5 and several areas of poor visibility with high archeological potential. OB2 will not be impacted by the proposed development, as it is in a low overhang beneath the path.

The impact will result from the activities described in Section 5.2 above. Current plans indicate that sites OB1 and OB3 will be directly impacted, whereas OB4 and OB5 are not on the alignment. However, the final route is still subject to more community and technical input, which may slightly alter the route. Furthermore, any recorded and unrecorded sites located on the cliff top are likely to be impacted during development, regardless of the final route of the path.

Construction of the path also has the capacity to protect some objects by covering them up. Formalising public access and use and controlling illegal uses such as clearing can also assist in protecting Aboriginal heritage.

The Aboriginal cultural heritage values of the subject area relate to the stone artefacts and shell material, as no other values are recorded or known. There is a medium-high likelihood for impacts to occur to unrecorded artefacts and shell midden in the vicinity of recorded sites, OB3, OB 4 and OB5 as the boundaries of these sites could not be accurately determined (Table 6).
Figure 17: Western end of proposed path showing area to be harmed (blue striped area)

Feary S.  An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Figure 18: Eastern end of path, showing area to be harmed (blue striped area).

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. **FINAL REPORT August 2014.**
### Table 6: Potential impacts on Aboriginal sites

<table>
<thead>
<tr>
<th>Site</th>
<th>Activity</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>OB1</td>
<td>Excavation for path</td>
<td>Direct, Move, break, bury, remove</td>
</tr>
<tr>
<td>OB2</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>OB3</td>
<td>Excavation for path</td>
<td>Direct, Move, break, bury, remove</td>
</tr>
<tr>
<td>OB4</td>
<td>Excavation for path</td>
<td>Indirect, Move, break, bury, remove</td>
</tr>
<tr>
<td>OB5</td>
<td>Excavation for path</td>
<td>Indirect, Move, break, bury, remove</td>
</tr>
</tbody>
</table>

There is also a potential for unrecorded objects to be impacted when footings are dug at the top of the cliff to provide support for the elevated walkways. The gullies have been assessed as having very low potential for containing objects where impacts will be limited to the position of the footings.

### 6. SIGNIFICANCE ASSESSMENT

#### 6.1. Criteria

The ICOMOS Burra Charter provides the framework for cultural significance assessment using the key criteria of social, aesthetic, scientific and historic values (ICOMOS 2000). The OEH assessment guidelines also provide some direction on how to apply these criteria in the context of an ACHAR report (OEH, 2011).

For the purposes of the Aboriginal Heritage Impact Permit (AHIP) application the found stone artefacts and shell recorded as OB1, OB3, OB4 and OB 5 and their immediate environmental setting are the subject of the following significance assessment.

**Social value:** The high social value of the Jervis Bay region to Aboriginal people, particularly communities living at Wreck Bay and Orient Point (Jerrinja LALC) is well known and well documented, e.g. Cane (1988), Egloff *et al* (1995) and Moorcroft and Feary (2008)). The rich archaeological and ethnohistoric record demonstrate that the Jervis Bay embayment and the enclosing peninsulas were and are of considerable social value, being associated with Dreaming stories, at least 2000 years of settlement and use, and a long history of contact between Aboriginal people and white settlers. However, knowledge-holders of the two Registered Aboriginal parties have not assigned any particular social value to the sites or to Orion beach generally.

**Historic value:** there is no archaeological evidence on which to evaluate historic value, as the artefacts and shell are most likely to reflect pre-contact occupation by Aboriginal people, who undoubtedly continued to live in the area following white settlement, attempting to continue a traditional lifestyle based primarily on fishing. Historical records indicate that Aboriginal people tended to live on unofficial
reserves and fringe camps on both sides of Currambene creek in the late 19\textsuperscript{th} and early 20\textsuperscript{th} Centuries, at Wreck Bay Aboriginal Station and the Aboriginal Reserve at Roseby Park.

\textit{Scientific (archaeological) value}: In regard to the specific artefacts and shell material to be impacted by the proposed pathway, they have some scientific value in that they represent a past lifestyle no longer practised. However, they exist in a very low density and are highly disturbed which diminishes their capacity to provide further information to contribute to archaeological knowledge. They are neither rare nor do they constitute a good representative sample of south coast artefact assemblages of which many fine examples exist elsewhere on the south coast e.g. >5000 artefacts collected in 2011 from a site at Shoalhaven Heads. Their educational value is also minimal for the same reason.

Similarly the shell material is too fragmented, dispersed and disturbed to have any scientific value, other than to confirm that Aboriginal people collected molluscs from marine rock platforms. Site OB2 contains the most visible shell midden material, which will not be impacted by the proposed path.

Based on landform characteristics, there is some potential for sites OB3, OB4 and OB 5 to be more extensive than what was visible during the survey, but evidence was obscured by thick grass.

\textit{Aesthetic value}: not applicable.

\textbf{6.2. Cultural significance assessment}

The artefacts and shell comprising sites OB1, OB3, OB4 and OB5 have been assessed as being of low cultural significance due to their sparse nature, high level of disturbance and lack of rarity or representativeness.

Based on written, oral and historical sources the cultural assessment process has concluded that sites OB1, OB2, OB3, OB4 and OB5 have low cultural significance overall.

The assessment has also concluded that the activity of constructing the pathway may assist in protecting the sites and any other as yet unrecorded sites by stabilising and covering the ground surface.

In summary, the principle values to be impacted by the proposed path are those associated with the material evidence. This has been assessed as being of low cultural significance overall, while recognising that Aboriginal people generally consider most archaeological sites to have cultural value.

\textbf{6.3. Statement of cultural heritage significance}

The significance of sites OB1, OB2, OB3, OB4 and OB5 behind Orion Beach, Vincentia, relates to the presence of flaked stone artefacts and shell midden material that represents a pre-contact Aboriginal
presence. Collectively the sites comprise seven artefacts and small amounts of highly fragmented shell midden material. There is a possibility for further artefacts or shell midden to be associated with OB3, OB4 and OB5 and a monitoring programme will be recommended to address this possibility. The sparse nature of the archaeological material, high levels of disturbance, lack of rarity or representativeness and limited educational capacity, give the Aboriginal objects a low scientific significance.

It is important to note that Aboriginal people do not ever consider Aboriginal sites to be insignificant, rather they appreciate the need for certain developments to proceed, particularly when there is also capacity to minimise harm to Aboriginal objects.

7. AVOIDING AND/OR MINIMISING HARM

7.1 Avoiding harm

The activities described in section 5 above will impact on OB1, OB3, OB4 and OB5 by disturbing the ground on and in which the artefacts and shell material occur. Although the proposed path and related features may not directly impact on every recorded artefact and shell the development overall and the ongoing use of the area by the public will continue to impact on the integrity of the sites as a whole. Even areas proposed for stabilisation and revegetation will be impacted in the initial stages. Harm to OB2 is avoided.

Alternative approaches to avoid harm include:-

- Shared path is not built – cannot be supported, given low significance of objects recorded thus far
- Move path to avoid recorded objects – the top of the cliff is very narrow in some places and re-routing is not an option. Re-routing may end up impacting other, unrecorded objects.

7.2. Mitigating harm

As discussed above there is some potential for artefacts and shell midden to be present under the grassed areas and leaf litter, but this is likely to be disturbed and low density. Test pitting is therefore not appropriate, given the minor nature of the development and the low potential for test pitting to recover evidence that would significantly contribute to the current level of archaeological knowledge. A targeted monitoring programme during excavation of the path would be useful for determining the boundaries of recorded sites.

Construction of the three elevated walkways is going to require excavation for footings each side of the gullies and supporting piles in the gullies. Monitoring while the cliff top footings are dug each side of the gullies will identify the presence of any artefacts or shell currently hidden by leaf litter.

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
The nine locations proposed for monitoring are at OB3, OB4 and OB5 and the six cliff top footings, once their locations have been finalised (Figures 19 and 20). Monitoring would occur during shallow excavation within a 3 metre radius of sites OB3, OB4 and OB5 and during excavation of the top 50 cms of the footings, or until heavy clay/solid rock is reached. Objects found during monitoring will be collected (excluding fragmented shell) and further analysed in accordance with the Office of Environment and Heritage’s (OEH) Code of Archaeological Practice (DECCW 2010b). Monitoring would be conducted by Jerrinja LALC heritage officers, with a watching brief by an archaeologist.
Figure 19: Map showing areas to be monitored – western end (yellow hatching)

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Figure 20: Map showing areas to be monitored – eastern end (yellow hatching)
Once artefact/shell analysis has been completed, it is the wish of the Jerrinja LALC that all the artefacts and shell collected during monitoring are returned to country by being buried in a safe place somewhere in the subject area. A new site card will be completed for repatriated artefacts. Artefacts already assigned to OB1, OB3 and OB4 will be either moved outside the development corridor or added to the artefacts collected during monitoring and reburied.

In considering the principles of ecologically sustainable development and matters of cumulative harm, it should be noted that the sites have already suffered a very high level of harm over many decades. While the activity will harm the objects in the legal sense of the word, in actuality, artefacts and shell not in the direct line of the path will remain for future generations to discover.

There are many hundreds of sites in the Jervis Bay region and over time many of them have been and will continue be destroyed by development, ignorance or neglect. There are also many sites within the protected areas of Jervis bay which will hopefully fare somewhat better.

Shoalhaven City Council will require an AHIP under Section 90 of the National Parks and Wildlife Act in order to build the shared path at Orion Beach.

8. POTENTIAL CONSERVATION OUTCOMES

Although none of the sites has a level of significance to warrant a conservation strategy, it is probable that formalising use of the public space, together with revegetation and stabilisation will result in active conservation of some of the artefacts and shell midden material. The Jerrinja LALC, Shoalhaven Elders, and OEH’s Aboriginal Cultural Heritage Officer Rod Wellington consider this to be a good outcome of the process. The small site OB2 will not be harmed by the path. No further action is necessary for this site, but Council will conduct annual inspections to monitor the condition of the site.

9. RECOMMENDATIONS

Sites OB1, OB3, OB4 and OB5 may be directly or indirectly impacted (depending on the final route of the path and the results of monitoring) by construction of a shared path by Shoalhaven City Council at Orion Beach. The archaeological investigation determined that the sites comprise a total of seven artefacts and three small exposures of fragmented shell midden with some potential for more objects to be present under leaf litter and/or grass. Targeted monitoring during initial stages of path construction will enable any additional objects to be identified and assessed. The sites have been assessed to be of low scientific significance based on their sparseness, high levels of previous disturbance and lack of rarity or representativeness. Registered Aboriginal parties concur with this assessment but also note that all archaeological sites have cultural significance.
Recommendations are:-

1. The presence of Aboriginal objects should not be a constraint to construction of the shared path, now that the objects have been adequately assessed and recorded.

2. Mitigation should involve a targeted monitoring programme during the initial stages of path construction, to be conducted by Jerrinja LALC with a watching brief by an archaeologist.

3. Artefacts collected from monitoring shall be repatriated on country at a location suitable to Council and Registered Aboriginal parties, and a new site card submitted. Other artefacts can be moved out of harm’s way.

4. Shoalhaven City Council will need to apply for a s.90 Aboriginal Heritage Impact Permit (AHIP) from OEH to allow harm to OB1, OB3, OB4, OB5 and all other objects revealed during construction of the path that are not assigned to these sites. The AHIP is to have a condition for monitoring of areas described in Section 7.2. A further condition would be that the AHIP would not extend to objects deemed to be significant - human skeletal remains, midden material that appears to be undisturbed and comprising densely packed whole shells, hearths, dense artefact assemblages. Works would stop and OEH notified in these circumstances. It is recommended that the s. 90 AHIP application includes the entire area of the public reserve Lot 7022 DP1117369 as shown in Figures 17 and 18.
10. REFERENCES
[see also references in Table 2]

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DECCW 2010c Aboriginal cultural heritage consultation requirements for proponents 2010. DECCW: Sydney.


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Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.


Walther H 2003 Billowing sails, fleecy wool and high hopes. Shoalhaven Historical Society: Nowra


White J.P. 1977 An archaeological survey of the Beecroft Peninsula. Unpublished report to NPWS.
Appendix 1: Newspaper advertisement

Invitation to Aboriginal Persons – Proposed Path Orion Beach Vincentia

Invitation to Aboriginal persons to be consulted regarding proposed path above Orion Beach Vincentia between Twyford Street and Plantation Point Parade, Vincentia.® Council invites Aboriginal people who hold cultural associations relevant to this area to be consulted regarding the proposed works. The purpose of this consultation is to assist Council in the preparation of an application for an Aboriginal Heritage Impact Permit. Any individuals or groups that wish to be consulted regarding the proposed path should contact Geoff Young on 44293399 before COB 15 January 2014.

<table>
<thead>
<tr>
<th>Newspapers / Media</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Coast Register (Mon, Wed, Fri)</td>
<td>18 December 2013 and 8 January 2013</td>
</tr>
<tr>
<td>Milton Ulladulla Times (Wed)</td>
<td>18 December 2013 and 8 January 2013</td>
</tr>
</tbody>
</table>

® The path was initially to be built in two stages, but they have now been combined into a single stage.

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Appendix 2: letter to registered Aboriginal groups

COUNCIL REFERENCE: 46712e  D13/317144
CONTACT PERSON: Geoff Young

17 December 2013

Dear Sir / Madam

Invitation to Aboriginal persons to be consulted regarding a proposed path above Orion Beach, Vincentia between Twyford Street and Plantation Point Parade

Shoalhaven City Council is proposing to construct a path above Orion Beach Vincentia [see attached map for location]. The proposed path would be constructed through a recorded Aboriginal archaeological site, consisting of a dispersed scatter of stone artefacts. An Aboriginal Heritage Impact Permit (AHIP) will be required for this site before works can proceed.

Council is intending to undertake a cultural heritage assessment of the project and is inviting Aboriginal people who hold cultural associations relevant to this area to express an interest in being consulted regarding the proposal. The purpose of this consultation is to assist Council in the preparation of an application for an AHIP to allow site/s to be impacted during construction of the path. The consultation will also assist the Director-General in the determination of the application.

Any individuals or groups that wish to be consulted regarding the proposed maintenance works or wish to comment on the following proposal should contact Geoff Young on 4429 3399 within 21 days of the date on this letter.

Yours faithfully

Ben Stewart
Director Assets and Works
Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Appendix 3: Letter to government agencies

COUNCIL REFERENCE: 46712EContainer (D13/317116)
CONTACT PERSON: Geoff Young

17/12/2013

Dear Sir /Madam

Aboriginal Consultation - Aboriginal Heritage Impact Permit Application

Shoalhaven City Council is proposing to construct a path above Orion Beach, Vincentia [see attached map for location]. The proposed path would be constructed through a recorded Aboriginal archaeological site. The site is recorded as artefact scatter 58-2-0383 by the regulatory authority, the NSW Office of Environment and Heritage (OEH), therefore an Aboriginal Heritage Impact Permit (AHIP) application is required.

OEH’s Aboriginal Cultural Heritage consultation requirements for proponents, requires the Council to contact «Title» in writing, for advice on Aboriginal organisations or individuals known to you, who may wish to be consulted in regard to this AHIP application. If such people are known to your organisation, and you are able to divulge this information, would you please respond to Geoff Young on 4429 3399 as soon as possible. If no response is received within 14 working days of the date on this letter, it is deemed to mean that your organisation has no relevant information in regard to this matter.

Thank you for your cooperation.

Yours faithfully

Ben Stewart
Director, Assets and Works
Appendix 4: Response from NNTT

National Native Title Tribunal

2 January 2014

Mr Ben Stewart
Director, Assets & Works
City Administrative Centre
Bridge Road
NOWRA NSW 2541

Dear Mr Stewart

Native Title Search Results for Shoalhaven City Council LGA

Thank you for your search request received on 20 December 2013 in relation to the above area.

Search Results
The results provided are based on the information you supplied and are derived from a search of the following Tribunal databases:

<table>
<thead>
<tr>
<th>Register Type</th>
<th>NNTT Reference Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule of Applications (unregistered claimant applications)</td>
<td>Nil</td>
</tr>
<tr>
<td>Register of Native Title Claims</td>
<td>Nil</td>
</tr>
<tr>
<td>National Native Title Register</td>
<td>Nil</td>
</tr>
<tr>
<td>Register of Indigenous Land Use Agreements</td>
<td>Nil</td>
</tr>
<tr>
<td>Notified Indigenous Land Use Agreements</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Please note that there may be a delay between a native title determination application being lodged in the Federal Court and its transfer to the Tribunal. As a result, some native title determination applications recently filed in the Federal Court may not appear on the Tribunal’s databases.

The search results are based on analysis against external boundaries of applications only. Native title applications commonly contain exclusions clauses which remove areas from within the external boundary. To determine whether the areas described are in fact subject to claim, you need to refer to “Area covered by claim” section of the relevant Register Extract or Application Summary and any maps attached.

Shared country, shared future.

Freecall 1800 640 501
www.nntt.gov.au

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Search results and the existence of native title
Please note that the enclosed information from the Register of Native Title Claims and/or the Schedule of Applications is not confirmation of the existence of native title in this area. This cannot be confirmed until the Federal Court makes a determination that native title does or does not exist in relation to the area. Such determinations are registered on the National Native Title Register.

Tribunal accepts no liability for reliance placed on enclosed information
The enclosed information has been provided in good faith. Use of this information is at your sole risk. The National Native Title Tribunal makes no representative, either express or implied, as to the accuracy or suitability of the information enclosed for any particular purpose and accepts no liability for use of the information or reliance placed on it.

If you have any further queries, please contact me on 1800 640 501.

Yours sincerely

Dianne Drake  CASE MANAGER
National Native Title Tribunal  Sydney Office, Operations East
Telephone (02) 9227 4007  Facsimile (02) 9227 4050  Email dianne.drake@nntt.gov.au
Freecall 1800 640 501  www.nntt.gov.au

Shared country, shared future.
Appendix 5: response from NTSCorp

20th December 2013 ref: OE&H:20-12-13/1 File No. 46712e
Shoalhaven City Council
The General Manager
PO BOX 42
Nowra NSW 2541.

Dear Sir Madam

Aboriginal Consultation – Aboriginal Heritage Impact Permit Application.

I refer to your letter on the 17th December 2013 concerning the above.

I advise that NTSCORP’s privacy guidelines restrict us from providing proponents with contact details of traditional owners. However, we will forward your correspondence to any individuals, groups and organisations, whom NTSCORP is aware assert traditional interests within, or hold cultural knowledge about the relevant area.

Please be aware that NTSCORP cannot make a guarantee or undertaking that the recipients of our correspondence represent the entirety of traditional owners for the relevant area.

To assist proponents in following the Aboriginal Cultural Heritage Consultation Requirements, recipients of our correspondence will be invited to register their interest in the project directly with you by 1st January 2014.

Yours faithfully

George Tonna
Land & Notifications Officer
Strategic Development Team

Head Office
Level 1, 44-70 Rosehill Street, Reffdon NSW 2016
PO Box 2156 Brandenburg NSW 2012
p: 3901 3148
f: 3901 4177
Email: info@ntscorp.com.au

Regional Office (Coffs Harbour)
Suite 2, 133 Woolloomooloo Bay Road, Coffs Harbour NSW 2460
p: 1800 111 844
f: 02 4665 4596

Shoalhaven City Council
Received
2 JAN 2014
File No. 46712e
Referred to: G Young

Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Appendix 6: Response to draft ACHAR from registered Aboriginal parties.

Sue Feary spoke by telephone with Gordon Wellington, Chair of Shoalhaven Elders, on 7/8/2014 at 12.20 pm. Gordon advised that he had received the draft report in July 2014 for comment. He advised that he had no concerns about the development but made a general comment that he would prefer developments to avoid Aboriginal sites where this was possible and/or sites were culturally important.

From: Brenton Chivers [mailto:jerrinjalal@bigpond.com]
Sent: Monday, 4 August 2014 3:12 PM
To: Young, Geoff
Subject: RE: Draft Aboriginal Cultural Heritage Impact Assessment Report - Orion Beach Vincentia

Hello Geoff,

Please be informed by this email that Jerrinja Local Aboriginal Land Council this invitation to comment on the draft Aboriginal Cultural Heritage Assessment and was recorded in the Correspondence register on the 2nd of July 2014.

If you have any questions in relation to this, please ask them.

Your Sincerely

Brenton Chivers
Book Keeper

From: Young, Geoff [mailto:Geoff.Young@shoalhaven.nsw.gov.au]
Sent: Monday, 4 August 2014 10:45 AM
To: Brenton Chivers (jerrinjalal@bigpond.com); Rhonda Connolly (jlalc@bigpond.com)
Subject: Draft Aboriginal Cultural Heritage Impact Assessment Report - Orion Beach Vincentia

Hello Brenton and Alfred,

Could you please confirm that you received an invitation for Jerinja LALC to comment on the draft Aboriginal Cultural Heritage Assessment report for the proposed path at Orion Beach, Vincentia. The letter as well as the draft report was sent from Council on the 26th June 2014.

As mentioned during our telephone conversation today and Friday, the NSW Office of Environment and Heritage will not issue an AHIP for the proposed path without demonstrated proof that Council sent the draft Aboriginal Cultural Heritage Assessment report and invite to comment.

Could you please confirm that you received the invite to comment and draft report and what date you received it. Thankyou.

Any question please give me a call.

Geoff Young
Environmental Operations Officer
Shoalhaven City Council
Appendix 7: AHIMS extensive site search
Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. **FINAL REPORT August 2014.**
Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Feary S. An archaeological investigation of a proposed shared path at Orion Beach, Vincentia, New South Wales, Shoalhaven Local Government Area. Aboriginal Cultural Heritage Assessment report. FINAL REPORT August 2014.
Appendix 8: Gazetteer of sites

**OB1**

Grid Reference: 288964E 6116616N  
Location: Orion beach cliff top, in public reserve adjacent to house # 322A, on narrow, eroded footpad, grey sandy soils.  
Description: Light grey silcrete primary flake  
Condition: Not in situ

![Photo of track showing location of OB1 (red arrow).]
OB2
Grid Reference: 288980E 6116662N
Location: Orion beach cliff top, in public reserve, low sandstone (coffee rock) overhang on northern side of small headland.
Description: A few shell midden fragments in sandy floor of overhang; blue mussel, marine gastropods.

OB2 – rockshelter with shell
OB3
Grid Reference: 289209E  6116482N
Location: Orion Beach, cliff top in public reserve, adjacent to house #350. Extensive grassed area, with c. 50% natural shell from old garden.
Description: 3 stone artefacts and a small amount of fragmented shell (mud oyster and blue mussel) in exposed areas. Also remains of a garden that contained shells brought up from the beach. Some likelihood for midden and artefacts beneath grassed areas.

Location of OB3, showing extensive exposed areas in lawn
Natural shells used in making a garden, OB3
OB4
Grid Reference: 289250E 6116465N
Location: Orion Beach, eastern end of path, behind small headland, gently grassed area, some exposure
Description: 3 stone flakes in small exposure at base of tree (not in situ). Likelihood for artefacts to occur under grassed areas. Site 58-2-0383, < 10 metres away.
OB5
Grid Reference: 288942E 6116629N
Location: Orion beach cliff top public reserve, small exposure in an area of lawn, next to # 314
Description: Very small quantity of highly fragmented shell, probably mud oyster. Some potential for midden to be larger.

Midden fragments, OB5
### Appendix 9: Lithic and shell analysis

#### Lithics

<table>
<thead>
<tr>
<th>ID</th>
<th>Easting</th>
<th>northing</th>
<th>material</th>
<th>quality</th>
<th>Artefact type</th>
<th>cortex</th>
<th>L (mm)</th>
<th>W (mm)</th>
<th>TH (mm)</th>
<th>retouch</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>OB1</td>
<td>288964</td>
<td>611616</td>
<td>Light grey silcrete</td>
<td>Good</td>
<td>Flake</td>
<td>no</td>
<td>167</td>
<td>117</td>
<td>31</td>
<td>No</td>
<td>Disturbed context</td>
</tr>
<tr>
<td>OB3</td>
<td>289209</td>
<td>6116482</td>
<td>Quartz Quartz Grey silcrete</td>
<td>Medium</td>
<td>Flake Flake</td>
<td>No</td>
<td>119</td>
<td>195</td>
<td>31</td>
<td>No</td>
<td>Disturbed context</td>
</tr>
<tr>
<td>OB4</td>
<td>289250</td>
<td>6116465</td>
<td>Red silcrete Red banded silcrete Grey chert</td>
<td>Good Good</td>
<td>Flake Flake</td>
<td>No</td>
<td>308</td>
<td>213</td>
<td>34</td>
<td>No</td>
<td>Disturbed context</td>
</tr>
</tbody>
</table>

#### Shell

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Easting</th>
<th>northing</th>
<th>Size of exposure</th>
<th>species</th>
<th>density</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>OB2</td>
<td>288980</td>
<td>6116662</td>
<td>1 m x 1 m</td>
<td>Blue mussel, marine gastropods</td>
<td>Low</td>
<td>A small amount of highly fragmented shell in a small rock overhang (&lt; 1 m long and c. 2 m long)</td>
</tr>
<tr>
<td>OB3</td>
<td>289209</td>
<td>6116482</td>
<td>2 small exposures, &lt; 4 m²</td>
<td>Oyster, blue mussel</td>
<td>low</td>
<td>Highly fragmented and highly dispersed/disturbed, mixed with natural shell brought up from beach. Associated with a few stone artefacts.</td>
</tr>
<tr>
<td>OB5</td>
<td>289250</td>
<td>6116465</td>
<td>&lt; 1 m²</td>
<td>unidentified</td>
<td>Very low, sparse</td>
<td>A few shell fragments</td>
</tr>
</tbody>
</table>