

## Appendix I

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# Preliminary Cultural Heritage Assessment

**DAVIES HERITAGE CONSULTANTS PTY LTD**

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**PRELIMINARY  
CULTURAL HERITAGE ASSESSMENT**

**NORTHERN PORTION  
OF  
LOT 260 DP1110719  
GRAHAM DRIVE  
SANDY BEACH  
COFFS HARBOUR  
NORTHERN NEW SOUTH WALES**

by  
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for

**Sandy Beach Mill Pty Ltd**

**May, 2009**

**Report Reference JD406**

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Preliminary Cultural Heritage Assessment  
Northern Portion of Lot 260 DP1110719, Sandy Beach

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## **1.0 INTRODUCTION**

This report presents the results of a preliminary assessment to identify whether there are cultural heritage values (Aboriginal and Non-Indigenous) associated with the northern portion of Lot 260 DP1110719 (hereafter referred to as the Project Area), Graham Drive, Sandy Beach, Coffs Harbour Local Government Area (LGA), northern New South Wales (**Figure 1**).

The preliminary assessment was undertaken by Susan Davies (Davies Heritage Consultants Pty Ltd).

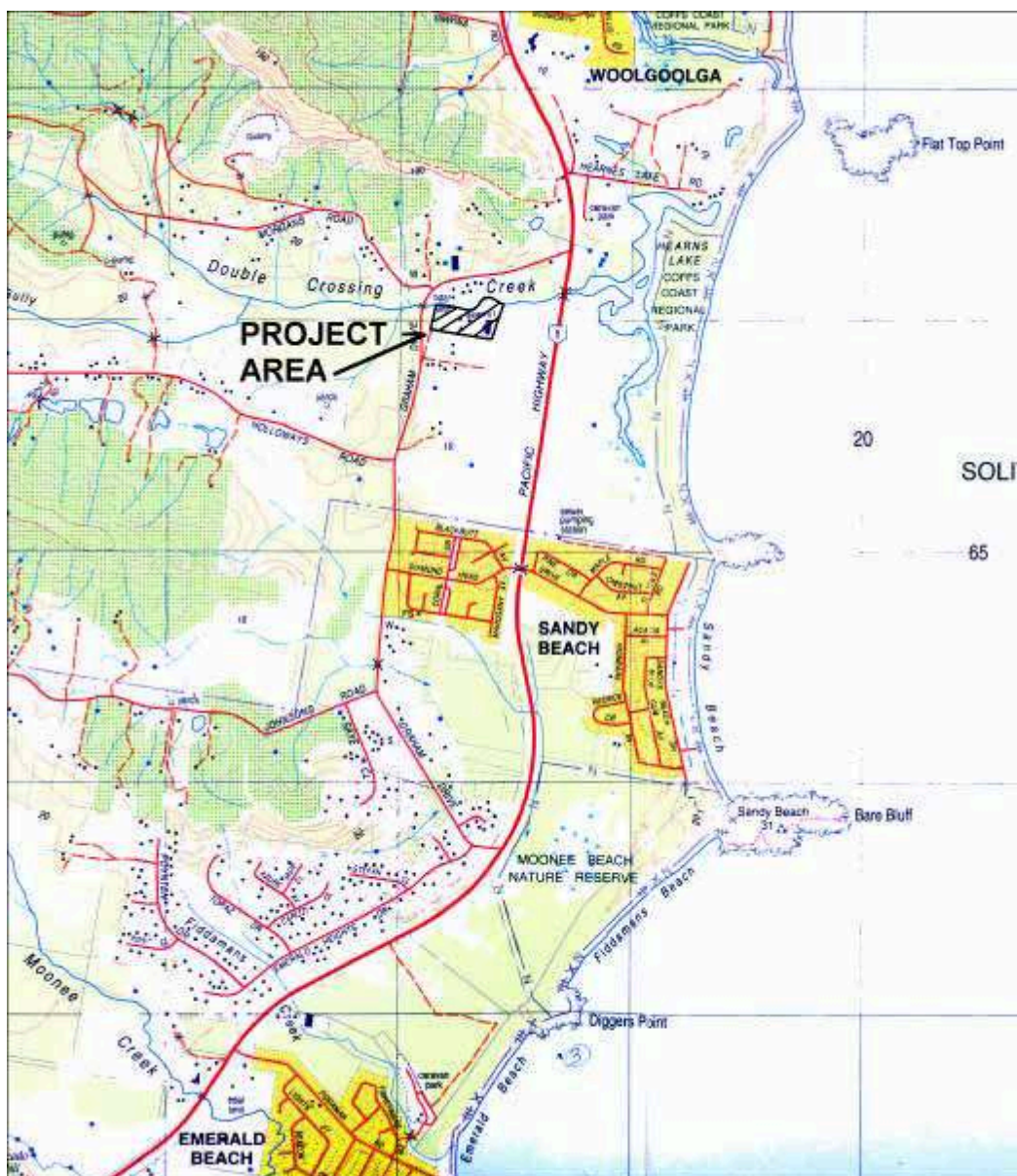
### **1.1 The Scope of the Study**

The proposed development application for the above property is to be assessed under Part 3A of the *Environmental Planning and Assessment Act 1979*. The Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation issued by the Department of Environment and Climate Change identifies the important factors of consideration that need to be considered by proponents and consultants when assessing potential impacts on Aboriginal cultural heritage for development applications assessed under Part 3A. The Preliminary Assessment, which is primarily a desktop exercise, is the first step in this process. The main purpose of this step is to identify whether there are Aboriginal cultural heritage values associated with the Project Area. The Department of Environment and Climate Change note that the Preliminary Assessment should include:

1. A description of the location and nature of the proposed development;
2. A description of any social and cultural values including the spiritual, traditional, historical or contemporary associations and attachments which the place or area has for the present-day Aboriginal community; and
3. An assessment of which of the Aboriginal cultural heritage values that are known or likely to occur are likely to be directly or indirectly affected by the proposal.

Hence the scope of the study includes these three tasks.

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**Figure 1. Location of the Project Area**

## 2.0 LOCATION OF THE PROJECT AREA

The Project Area is located in the Parish of Woolgoolga, County of Fitzroy within the Coffs Harbour LGA. The southern boundary abuts a residential area within the southern portion of Lot 260; the eastern boundary abuts swamp land to the west of the Pacific Highway; the northern boundary abuts Double Crossing Creek and the western boundary is adjacent to Graham Drive (**Figure 2**).



**Figure 2. The Project Area (adapted from Coffs Harbour City Council)**

### 3.0 THE PROPOSED DEVELOPMENT

The developer (Sandy Beach Mill Pty Ltd) proposes to establish 43 Residential Lots, open space areas and roads within the Project Area (see **Figure 3**). This development comprises Stage II of the development of Lot 260 DP1110719; Stage I, which abuts Stage II to the south, has not been completed. However, consent to subdivide for residential purposes was issued on the 19<sup>th</sup> February, 2008.

In summary, the key elements of the proposed development of Stage II include:

- Creekside parkland;
- Acoustic mound and tree planting from Graham Drive to western boundary,
- Acoustic fencing along eastern boundary;
- Creation of 43 residential lots based on a local street network connecting to Stage I and Graham Drive; and
- Provision of all normal urban infrastructure.



**Figure 3. The Proposed Development**

## 4.0 DESCRIPTION OF THE PROJECT AREA

This Section of the report outlines the environment and natural resources of the Project Area (Sub-section 4.1). The possible implications of these factors for the Aboriginal archaeological and cultural record are discussed in Sub-section 5.4.2.

### 4.1 Environment and Resource Background

The following sections outline the topography, geology, vegetation, and fauna patterns within the Project Area. These aspects of the environment are indicators for archaeologically sensitive areas (primarily relating to Aboriginal cultural heritage). For example, the archaeological implications for these related factors include:

➤ **Topography**

This factor relates specifically to access and available camping locations.

➤ **Geology and Soils**

An understanding of the geology of the region provides information related to the types of lithic materials available for exploitation by Aboriginal people. Soils are derived from the underlying geology or from fluvial or alluvial processes which have the potential to conceal or expose sites (both Aboriginal and Non-Indigenous). In areas where a deep soil profile is present the potential for stratified archaeological sites is greater. Soils can also influence vegetation patterns.

➤ **Vegetation**

The type of vegetation communities present in the region relate directly to the types of plant species available for exploitation (primarily by Aboriginal people) and indirectly to the faunal species supported by the available plant species.

➤ **Fauna**

The type of faunal species present relates to various factors including vegetation type and water availability. Additionally, terrain types (e.g. open coast, estuarine, valleys, ranges, etc) also affect the presence/absence of particular species.

All these factors affected the types of exploitation strategies employed by Aboriginal people and hence the formation of the Aboriginal archaeological record. Additionally, these factors also affect the survival and present detectability of sites (see Sub-section 5.4.1).

#### 4.1.1 Topography

The Project Area is comprised of low-lying terrain with elevations below 10m AHD (Australian Height Datum) bordered to the east lower lying terrain (swamp land). Double Crossing Creek is located along the northern boundary.

## 4.1.2 Geology and Soils

The geology of the Project Area is comprised of Quaternary deposits of alluvial mud, silt, sand, gravel and swamp deposits (Dorrigo-Coffs Harbour 1:250,000 Metallogenic Series Sheet SH/56 10-11).

## 4.1.3 Vegetation

The majority of native vegetation has been removed as a result of previous uses of the Project Area (see Sub-section 4.1.5). Vegetation now present is primarily regrowth although older trees are present in the far north western corner and adjacent to Double Crossing Creek in the far north eastern corner.

## 4.1.4 Fauna

As mentioned above (Sub-section 4.1), the appearance and distribution of fauna within an area relates to factors such as vegetation communities, water availability and terrain types. It is considered that prior to Non-Indigenous settlement the study area would have contained a diverse range of faunal species. Non-indigenous settlement and associated economic activities have disrupted the area's original faunal communities.

## 4.1.5 Prior Land Use

It is understood that at some time in the past the Project Area was cleared of vegetation and a timber mill constructed (see Section 6.0). Part of the terrain was excavated for the installation of underground facilities; the majority of terrain was covered with fill and structures erected. The far north western corner does not appear to have been covered with fill; however, over the remaining terrain fill varies from two to six metres deep. Most of the buildings were removed in 2006 (see Section 6.0). The structure visible in **Figure 2** in the eastern portion of the Project Area is no longer extant. **Plates 1** and **2** provide an understanding of the current environment of the Project Area and the impacts that have occurred as a result of prior land use activities.



**Plate 1. View west southwest from North East corner of Project Area**

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**Plate 2. View West from Eastern Side of Project Area**

## 5.0 ABORIGINAL CULTURAL HERITAGE

This Section of the report provides an overview of Aboriginal cultural heritage (Sub-section 5.2), the Aboriginal archaeological record (Sub-section 5.3) for the region of and a predictive model of site location (Sub-section 5.4) for the Project Area. Based on consultation with the identified Registered Stakeholders for the Project (see Sub-section 5.1), the social and cultural values of the Project Area are outlined (see Sub-section 5.5).

### 5.1 Aboriginal Consultation

Aboriginal consultation commenced with the proponent seeking to identify stakeholder groups or people wishing to be consulted about the project. The Interim Community Consultation Requirements (Department of Environment and Climate Change) were followed. Hence, written notification was provided to:

- Coffs Harbour and District Local Aboriginal Land Council (LALC);
- Registrar of Aboriginal Owners;
- Native Title Services;
- Coffs Harbour City Council; and
- Department of Environment and Climate Change.

In addition, the Department of Environment and Climate Change provided a list of Aboriginal community groups for the north coast / far north coast of New South Wales. A subset of groups for the Coffs Harbour area was selected from this list. Hence, written notification was also provided to:

- Garby Elders;
- Gumbila Julipi Elders;
- Mudjay Elders; and
- Bagawa Birra Murri Aboriginal Corporation.

All the above notification letters were forwarded on the 23<sup>rd</sup> March, 2009. A public notice was inserted in the Coffs Harbour Advocate on Wednesday 25<sup>th</sup> March, 2009.

The notification letters and advertisement advised that the closing date for registration of interest was Thursday 9<sup>th</sup> April, 2009 (i.e. 10 working days).

Responses received by the closing date were from:

- Coffs Harbour and District LALC; and
- Yarrawarra Aboriginal Corporation (Garby Elders).

A letter dated the 9<sup>th</sup> April, 2009, outlining the proposed methodology for the study, was forwarded by mail to the identified Registered Stakeholders. The Registered Stakeholders were also contacted numerous times by phone in relation to the project. A copy of the draft report was forwarded on the 20<sup>th</sup> May, 2008, so that the Resisted Stakeholders could review and provide comment prior to finalising the report. Their comments are documented in Section 5.5.2 of this report.

In 2005, prior to this Project commencing, both the Coffs Harbour and District LALC (Michael Rodgers, Coordinator) and the Yarrawarra Aboriginal Corporation (Anthony Perkins, General Manager), had advised Sapphire Beach Properties Pty Ltd (now Sandy Beach Mill Pty Ltd) that a parcel of land which included the present Project Area “did not contain areas of cultural significance” and was “highly unlikely to contain any Aboriginal objects”. A copy of these two letters is also within **Appendix 1**. Additionally,

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in 2006, the Coffs Harbour and District LALC (Chris Spencer, Coordinator) advised Sapphire Beach Properties that a cultural heritage assessment of the Project Area was not warranted; “suitably qualified members of our organisation completed an assessment as part of the Development Control Plan (DCP) for the Coffs Harbour City Council in this area. As a result of that assessment it was deemed that this particular property would have an extremely low likelihood of containing any objects that could be of Aboriginal origin” (see **Appendix 1**).

## **5.2 Aboriginal Cultural Context**

This Section provides a brief outline of the settlement patterns (Sub-section 5.2.1), social interactions (Sub-section 5.2.2), economy (Sub-section 5.2.3), material culture (Sub-section 5.2.4) and population density (Sub-section 5.2.5) of the Indigenous people whose traditional land did and still does cover the present study area. Post-contact history is briefly outlined in Sub-section 5.2.7. The information summarised below does not necessarily relate specifically to the Project Area rather encompasses the broader region.

The purpose of this Section is to outline the intensity of land use activities and the items that may now form part of the archaeological record for this area. This information has relevance for the significance assessment of individual sites and places.

### **5.2.1 Settlement Patterns**

There has been considerable debate in relation to the extent of movement between northern New South Wales coastal and inland Aboriginal groups. McBryde (1976) argued that there was large-scale relocation of people on a seasonal basis, with summers spent on the coast fishing and collecting shellfish and winters spent hunting in the hinterland. Observations by non-indigenous people in the mid-nineteenth century support this position. For example, Oakes (1842:65) commented that aboriginal people from the Macleay River Valley traversed “the coast during the season favourable for fishing, and the interior during the hunting season”. Similarly Hodgkinson (1845:26) stated that the Macleay River aborigines had little contact with groups to the north in the Nambucca Valley but had “a widespread and persuasive tradition of contact with the tablelands” to the west. There was also a “set time” for the Nymboida Aborigines to go to the coast for mullet (see Rich 1989a). MacFarlane (cited in Ryan 1964:156) stated that “up river Blacks occasionally made winter month visits to the coast in the vicinity of Red Rock where they spent their time quietly till the spring denoted that return to the old haunts was desirable”. Additionally, Holder (1984:20) notes that the groups from the area of Bucca Creek – Nana Glen spent the winter months on the coast around Moonee, returning to Bucca Creek – Nana Glen in the summer.

In contrast, Coleman (1978, 1982) and Belshaw (1978) suggested that coastal populations were semi-sedentary, living in villages or base camps and being dependent on estuarine and littoral resources throughout the year. Captain Perry, who anchored off the mouth of the Clarence River in 1839, recorded Aboriginal huts in a ‘village’ at the head of the estuary where they had ‘considerable command of fishing’. In 1882 in the Ballina area, Rous reported seeing huts 30 feet long and six feet high.

Godwin (1991) has reviewed the question of the relations between coastal and New England Tableland groups. He concluded that although Tableland groups did interact moderately with sub-coastal groups on the eastern margins of the Tableland (the

eastern falls area), they did not interact with groups based on the coastline. This pattern of coastal/inland interaction appears to have been different to the south of the study area. Brayhaw (1986:41) has noted that the Birpai along with the Worimi to the south had economic, social and religious links with inland groups of the Hunter Valley.

It would seem therefore, that groups along the coastal strip had a range of settlement options involving both seasonal and short term movement. Dawson (cited in Ryan 1964:155) notes that Aboriginal camps were apparently relocated on a regular basis (approximately monthly) to allow the resting of favoured sites and to take advantage of different foodstuffs. Ryan (1964) states that the huts in 'villages' were generally semi-circular bark huts and lean-tos, whereas the shelters built in temporary camps were not substantial. For example, MacFarlane (cited in Ryan 1964:156) notes that:

...their camps merely low lean-to or an arched projection of bark supported on slender brushwood rods or twigs, just sufficient to accommodate a few occupants from the rigours of the weather. The roofing was generally the light outer bark of the small leafed tea-tree, quite rain proof and texture akin to delicate paper. It also served for the camp flooring and was immune from damp.

## 5.2.2 Social Interactions

The present study area is within the bounds of the Gumbaingirr speaking people (see Tindale 1974). As is the case in Australia generally, inter-group social gatherings were a feature of Aboriginal life in this region. Coleman (1982) has reviewed the ethnohistorical literature and concluded that movements of large groups of people within the coastal region were made in order to attend social gatherings, rather than to mainly take up residence in another location.

## 5.2.3 Economy

The Aboriginal groups in this region lived in an environment where "they were able to exploit, within a comparatively small area, a coastal and estuarine or riverine environment, bordered by sub-tropical rainforest, swamps and lightly timbered country. This environmental diversity resulted in a very favourable food supply, which was plentiful, varied and dependable" (Sullivan 1978:104).

Marine and freshwater fish and shellfish, reptiles, mammals, birds and plant food provided a diverse diet. For example, plant species included the rhizomes of bracken (*Pteridium esculentum*) and the roots of the Gynea Lily (*Doryanthes excelsa*), Milkmaids (*Burchardia umbellata*) and Yams (*Dioscorea transversa*).

The fruit of many species of plants were eaten including Fig (*Ficus* spp.), Native Guava (*Eupomatia laurina*), Pigeon Berry (*Monotoca elliptica*), Rough Tree Fern (*Cyathea australis*), Apple-berry (*Billardiera scandens*), Lance Leaf Geebung (*Persoonia lanceolata*), Lillipilli (*Acmena smithii*), wild grapes (*Vitis hyperglauca*) and wild cherries (*Excarpua cupressiformis*). The nuts of the Moreton Bay Chestnut (*Castanospermum australe*), were also eaten.

Animal species exploited included possum, koala, bandicoot, pademelon, wallaby, kangaroo, flying fox, turkey, snake, lizard, echidna and turtle. Birds, fish and many varieties of shellfish were also part of the diet. Shellfish species gathered included cockle (*Anadara trapezia*), club whelk (*Pyrazus ebeninus*), rock oyster (*Crassostrea*

*commercialis*), mud oyster (*Ostrea angas*), hairy mussel (*Trichomya hirsuta*) and pipi (*Plebidonax deltoides*).

## 5.2.4 Material Culture

Material culture for the northeastern region of New South Wales is generally similar (see McBryde 1978). This similarity is manifested in the characteristic unbarbed spears and wooden shields (McBryde 1978:178). Sullivan (1978:107) notes that “no barbed, pronged, or bone or shell tipped spears were used for fishing in this area though they were quite common elsewhere on the east coast”. Other items included many artefacts made of wood or bark obtained from various trees. For example, shields were made from the wood of the Ironbark or Mangrove (*Avicennia officinalis*) trees and tea tree bark (*Melaleuca quinquenervia*) was used for the construction of huts. The bark from the Native Hibiscus was used to make cord for the manufacture of fishing lines and nets.

Cordage was also used for tying up the ends of canoes. Canoes were generally made from a sheet of stringy bark which was gathered and bound at the ends and had thwarts jammed across the centre to hold the bark apart. Maintenance tools included stone adzes and chisels, abrasive stones, bone awls and sharpened shell knives and scrapers. Boomerangs, clubs, spearthrowers and hafted axes were also manufactured. Vines were used to assist in climbing trees to capture possums or collect honey. The vine was used to support the climber and, if necessary, an axe was used to cut footholds.

The technology used to manufacture most of the above mentioned material culture items were based on stone. That is, artefacts made from stone were used to manufacture and maintain items of wood and other vegetable products as well as bone and shell artefacts. In some areas shell was also used to manufacture items of material culture. Stone would generally be procured from outcrops of suitable lithic material. Once procured the stone was manufactured into a variety of implements used for piercing (points), cutting (sharp flakes or knives), scraping, drilling, chiselling (adzes), gouging and chopping (axes). Sandstone was the preferred material for the making of milling and grinding equipment. All these kinds of implements were largely required for the manufacture of a variety of wooden artefacts such as spears, shields, boomerangs, digging sticks, clubs and various ornaments. Bone needles and awls were also made with stone implements. Stone axes were used to chop out bark from trees for a range of items and to gain access to resources. Ground-edge stone axes were generally manufactured from river pebbles. These pebbles were ground into shape on sandstone boulders which were generally situated in the bed of a watercourse as water is necessary for the grinding process.

## 5.2.5 Population Density

Population estimates for the coastal zone vary between 0.4 and 3 persons per square kilometre (Belshaw 1978; Coleman 1982; Brayshaw, cited in Davies 1991a:15). In the foothills, it is estimated there was only 1 person per 5 square kilometres (Belshaw 1978).

## 5.2.6 Implications for the Archaeological Record

As Hall (1996:17) notes:

Given such a range of tasks and activities at a number of levels, it is obvious that people would have left traces pertaining to most of them over much of the landscape; and when the temporal dimension is added, there would be very few localities ...that would not have been visited in the past. However, when one considers the kinds of material used and their preservational qualities, only a few physical traces would be expected to last the ravages of time...Thus, after hundreds of years, apart from localities which were most heavily used and which witnessed the accumulation of material in heaps (such as middens) only stone (in a form ranging from single artefacts to fish traps), some bone (including burials) and shell and fragments of charcoal (from cooking fires) remain distributed across the landscape.

In this article, However, Hall (1996) did not address the possibility of sub-surface material. Also over time, items may be covered as a result of natural processes (e.g. sheet wash, erosion, deposition, etc); this is especially applicable in sandy or aggrading environments. Hence, items may not only be distributed across the landscape but also below the present ground surface.

## 5.2.7 Post-Contact History

Initial incursion into the study region was generally along the major river systems such as the Tweed, Richmond and Clarence. In 1799, Flinders anchored his vessel at the mouth of the Clarence River and inspected deserted Aboriginal vine and bark huts located on the southern headland. Between 1824 and 1830, escaped convicts from the Moreton Bay Penal Settlement passed through the region on their journey south. A few of these convicts lived with Aborigines in the region for extended periods of time. For example, Richard Craig spent three and a half years (1832 to 1836) with Aborigines in the Clarence River region (Rich 1989a).

Timber was being obtained from the area in the 1840s and by the 1850s it was being taken from the Nambucca and Bellinger Rivers. Cedar was being taken from the area of Coffs Creek in the 1860s. Although there were reports of conflicts during this period, it was with the invasion of pastoralists, who came to take the land and stay, rather than the non-indigenous explorers or early timber getters, that contact became more extensive.

The typical pattern of initial friendly contact followed by Aboriginal population decline through open conflict and diseases was repeated time and time again as the frontier spread across the continent (ATSIC 1990). As settlement spread beyond the government-established areas, random shootings and premeditated massacres of groups of women, children and men were undertaken by squatters in an effort to clear their selections of Aborigines. Sometimes Aboriginal waterholes were poisoned, or Aboriginal people given flour, sugar or damper mixed with arsenic.

As Aboriginal people were dispossessed of their land many became dependant fringe-dwellers around the new settlements. Some were employed as stockmen, domestic servants and shepherds. Within the study region, the Aborigines were of great assistance to the colonisers in mustering bullocks before fences were erected, finding cedar trees, cutting the undergrowth for them and also for clearing undergrowth and vines before a selection was cleared of its trees. They also assisted with hauling timber. Aborigines became skilful in breaking in horses and as police trackers and were

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often on the staff at police stations. The women often took on jobs with households. However, wages were not always given for this work (England and Walker 1976: 17, 46).

Other Aborigines were forced into government reserves or church missions, where they had to rely on non-indigenous people for handouts of food and clothing. In the 1870s churches again became interested in the welfare of the Aborigines and set up more missions. In 1882 the Aborigines Protection Board of New South Wales was formed and the first reserves were established. For almost the next 100 years - until the 1960s - Aborigines were increasingly institutionalised and their rights restricted by legislation (ATSIC 1990).

In 1909, the *New South Wales Aborigines Protection Act* was passed (ATSIC 1990). The Board established by this Act owned all the improvements on reserves, had the power to move Aboriginal people out of towns, appoint police as local guardians for reserves and to control all aspects of the lives of Aboriginal people living on reserves. Amendments to the Act in 1915 and 1918 allowed the Board to remove children from their parents for training, and to force "half-castes" to leave the reserves. These actions led to a considerable loss of traditional knowledge from being passed on between generations, and the break up of families. The practice of traditional lifestyles, including language and religion, were actively discouraged or prohibited. From the 1920s, the official government policy changed from blanket 'protectionism' to forced assimilation for 'part-Aborigines' and in 1940 this assimilation policy was extended to all Aborigines. An implication of this policy was the eventual closure of all reserves. However, the Commonwealth policy of 'self-determination' for Aboriginal people was presented in 1972.

In 1983, the *Aboriginal Land Rights Act* was passed in New South Wales. This Act recognises that the State of New South Wales was traditionally owned and occupied by Aboriginal peoples and acknowledges the vital importance of land in Aboriginal culture. Under this Act, a system of Land Councils - at State, regional and local levels - were set up. The Act provided for the annual payment of 7.5% of gross State Land Tax revenue in a fund until 1998. Half of this fund was set aside as capital to finance Aboriginal development in future years, with the balance meeting the costs of land council administration and land purchases.

Aboriginal culture in New South Wales is thus being revitalised. An important issue is the management and protection of Aboriginal sites and heritage items. Land Councils and other organisations (e.g. Aboriginal Corporations) provide advice to the National Parks and Wildlife Service, museums and consulting archaeologists on community wishes on these matters.

In the case of the northern coast of New South Wales, Byrne (1986) notes that many of the mission communities were able to maintain close links with their former lands. Many of the older initiated people kept alive the traditions associated with sacred places and the communities have maintained a unique attitude to the land which is possibly more spiritual than economic. The impact of non-indigenous settlement has been marked, but despite the assimilationist policies of past Governments, Indigenous people have not lost their Aboriginality. There is a demonstrable continuity of Aboriginal culture, and it has adapted rather than perished (see Godwin and Creamer 1984).

### **5.2.7.1 Implications for the Cultural and Archaeological Record**

With the invasion of the area by non-indigenous people, the traditional lifeways of the local Aborigines were severely disrupted and this change is reflected in the archaeological record. The most obvious effect is a change in Aboriginal demographic patterns and as a result site distribution and frequency. Although some Aboriginal site types may have persisted into the post-invasion period (e.g. occupational camps), they generally ceased to be formed. Seasonal movements also ceased and fringe camps were established.

In the initial phase of this period non-traditional items were incorporated into subsistence activities. For example, steel axes replaced the traditional stone axe, and glass and electricity insulators were sometimes flaked to obtain sharp cutting implements. Hence, the archaeological record may reflect the use of such non-traditional items.

A variety of non-traditional sites from the post-invasion period can be of particular cultural heritage significance to Aboriginal people – in particular, places such as missions, reserves, massacre sites, fringe camps and places of work.

Another implication for the cultural and archaeological record is the destruction of sites that occurred after non-indigenous settlement.

## **5.3 Aboriginal Archaeological Context**

The aim of this section is to provide a general understanding regarding Aboriginal archaeological site potential within the Project Area. Sub-section 5.3.1 provides a broad outline of the results of archaeological research at a regional level. Sub-section 5.3.2 reviews archaeological consultancies undertaken within and in the vicinity of and Sub-section 5.3.3 discusses previously recorded or reported sites in the vicinity of the Project Area. The purpose of presenting the data is to provide a comprehensive background so that sound predictions regarding the archaeological potential of the Project Area can be formulated.

### **5.3.1 Archaeological Research in the Study Region**

Although Aboriginal occupation of Australia is dated to around 60,000 years ago, the oldest dated site in the region (northern New South Wales/southern Queensland) dates to at least 22,000 years (Neal and Stock 1986). There is also a relatively good archaeological record for the past 6,000 years.

Current theory holds that, as Pleistocene glacial ice melted and the seas rose, coastal people were forced to adjust to the changing landscape (Hall and Hiscock 1988). Seas reached their present levels sometime around 6,000 years ago. Through time regionally isolated settlement-subsistence systems and associated socio-political entities developed (McNiven 1991). Some groups fissioned and may have annexed territory from groups further west of the coast. By about 2,500 years ago, the region was populated by numerous named groups with diverging languages, similar to those recorded historically. These diverse groups were far from isolated entities and a great deal of social interaction (trade, marriage and other ceremonies) took place during the year. Thus, rather than taking the form of a patchwork quilt over the landscape, these

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different societies were more like a living interwoven mosaic due to extensive social ties through intermarriage and other socially-linking mechanisms (see Davies 2002).

The archaeological record does not contradict the contention, drawn from ethnohistorical observations, that the region had a high population density and that marine and estuarine shellfish and fish made a significant contribution to the diet of its Aboriginal inhabitants. Large numbers of shell middens occur along the coast and the lower reaches of the major river valleys. For example, the large middens at Clybucca on the Lower Macleay River (see Campbell 1969). Aboriginal exploitation of the inland environment behind the coastal plain has also been demonstrated (see Happ and Bowdler 1983; McBryde 1974, 1976). Other archaeological research has also been undertaken in the region (e.g. McBryde 1982; Coleman 1978, 1982) with excavations conducted mainly on the Clarence and Macleay River systems.

Excavations carried out at the Wombah midden on the Clarence River estuary revealed that this site was occupied between 4,000 and 1,000 years ago. Analysis of the excavated material from the Wombah midden reveal an economy based almost totally on shellfish. At this midden only small quantities of fish bone are present. McBryde (1976:52) suggested that, on the basis of the high percentage of shellfish (especially oyster), Wombah midden was probably occupied during the summer.

Seelands rockshelter in the Clarence River Valley (near Grafton) was first occupied some 6,500 years ago (McBryde 1974). The faunal remains excavated from Seelands provide information about Aboriginal subsistence along the Clarence River. The bone remains indicate that forest mammals (rainforest and sclerophyll) such as wallaby, kangaroo, possum, bandicoot and native cat were the main component of the diet with fish, tortoise and freshwater molluscs making a minor contribution (Byrne 1985a).

Dates obtained from another rockshelter excavated at Blaxlands Flat, some 25 kilometres south of Grafton, indicate that initial use of the shelter commenced between 1,030 years ago and 1,280 years ago. This date was obtained from wood and charcoal fragments which were associated with a number of Aboriginal burials located in the shelter (McBryde 1974:144).

In the Macleay River Valley a number of midden sites have been excavated (Campbell 1969; Connah 1975, 1976). All except one date between 1,000 BP (Before Present) and 6,000 BP. At Stuarts Point a large midden has been dated at 9,320 BP. However, as the association of the dated charcoal with definite human artefacts is dubious, this date may not be an accurate indication of when the site was initially occupied (Coleman 1978:52). Besides a dense deposit of mainly oyster (*Saccostrea commercialis*) and cockle (*Anadara trapezia*), this stratified midden also contains hearths, stone artefacts, bone points, fish and animal bones and plant remains.

As a result of analysis of fish species present in the Stuarts Point midden, Coleman (1978) suggested that the site was occupied during the summer. Oysters present in this site may also indicate summer occupation. Analysis of the excavated material from the Wombah midden on the Clarence River reveal an economy based almost totally on shellfish. At this midden, unlike Stuarts Point, only small quantities of fish bone are present. McBryde (1976:52) suggested that, on the basis of the high percentage of shellfish (especially oyster), Wombah midden was probably occupied during the summer. Excavated material from the inland sites (e.g. Seelands) reveals a subsistence pattern based on land mammals. The above analysis is therefore used to support the hypothesis of a seasonal occupation of coastal and hinterland sites. However, as marine shellfish are present at Seelands, the analysis can also be used to support Coleman's (1978) hypothesis that the apparent contact between coastal and

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inland groups may be a result of trade and/or exchange. However, Coleman (1978) does concede that inland groups may have been invited by coastal groups to procure fish at certain times of the year.

Research has been undertaken by the Yarrawarra Aboriginal Corporation, generally in conjunction with the University of New England, in areas to the north of the present Project Area. This research has included excavation of Arrawarra Midden 1 (Smith 1998a), Corindi Beach South 1 (Smith 1998b) and Red Rock Recreation Reserve Midden (Murphy 2000). Arrawarra Midden 1 was dated to around 1,300 years ago. This site, which is located in foredunes, contains fishbone, as well as a range of shellfish and land animal remains (Smith 1998a). Greywacke, which is locally available, was the dominant raw material in the artefact assemblage at Corindi Beach South 1. A large range of shellfish species was also present. Smith (1998b:16) suggests that this may reflect "evidence of an opportunistic approach to shellfish gathering and the exploitation of a range of environments".

### **5.3.2 Cultural Heritage Assessments within and in the Region of the Project Area**

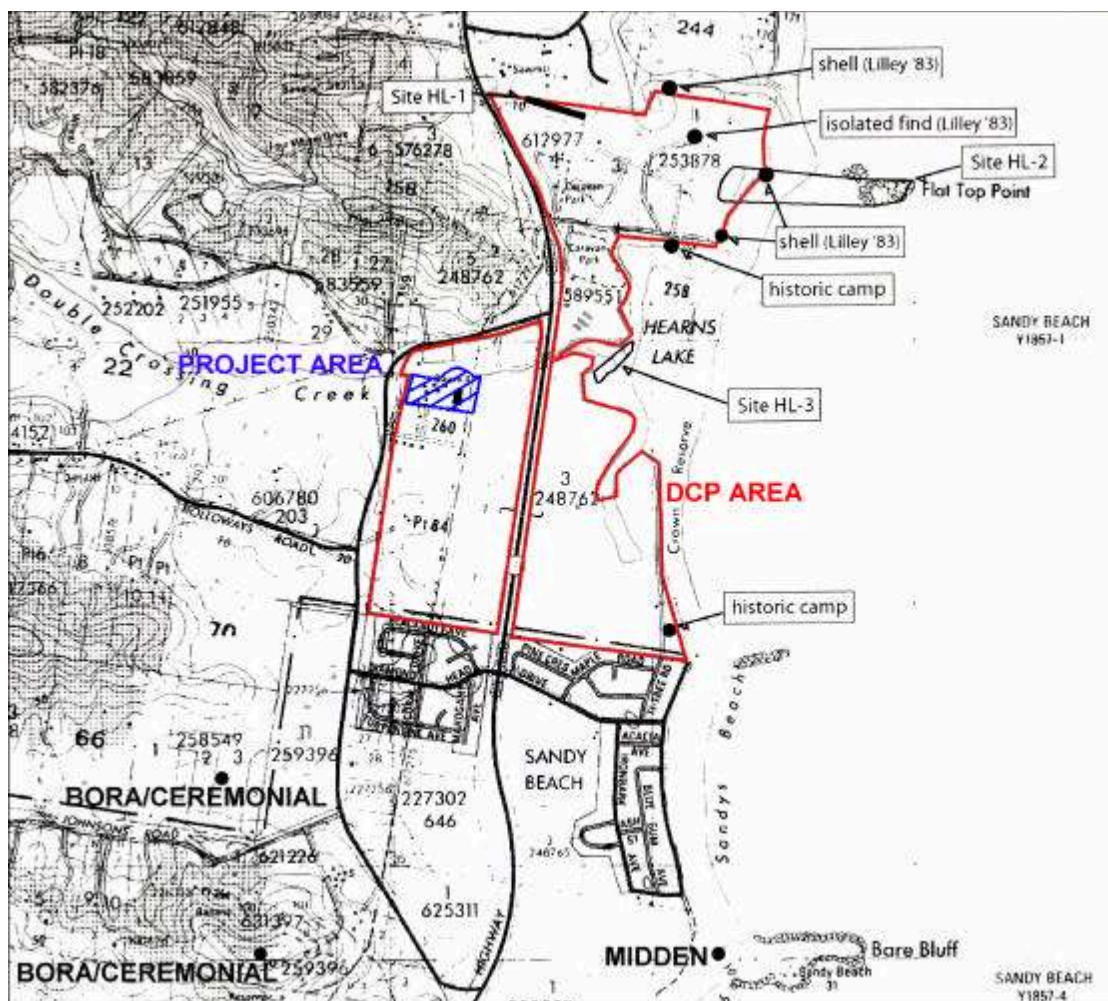
A number of archaeological assessments have been conducted in the coastal terrain and the subcoastal areas between Coffs Harbour and Grafton (e.g. Brayshaw 1988; Byrne 1985b, 1988; Comber 1991; Dallas and Tuck 2003, 2004; Davies 1991a, 1991b, 1998, 2004, 2005a, 2005b, 2006a, 2006b, 2007; Davies and Stewart-Zerba 1993; Djekic 1979; Godwin 1982, 1984a, 1984b, 1987; Hall and Lomax 1993; Kinhill n.d.; Kuskie 1993; McBryde 1967; Navin 1990, 1991; Navin and Cundy 1990; Navin and Officer 1990; Piper 1980, 1986; Rich 1989a, 1989b, 1989c; Starling 1974). However, only cultural heritage surveys that are in relative close proximity to the present Project Area are outlined below.

It appears that the Project Area is within the bounds of two and possibly three previous cultural heritage studies:

- Lilley (1983) surveyed a 200ha parcel of land which extended from the coast (including Hearn's Lake) to the western side of the Pacific Highway up to the property boundary adjacent to Graham Road and including both sides of Double Crossing Creek. The only archaeological material located were three small disturbed scatters of midden shell and an isolated stone artefact. Two of the shell scatters occurred in a large eroding coastal dune, while the third occurred near the mouth of Willis Creek (see **Figure 4**). The isolated artefact had been exposed on the margin of a dam dug into sandy ground (cited in Collins 2002). Hence, as a result of Lilley's (1983) study, no archaeological material was recorded within the present Project Area.
- Collins (2004) undertook a cultural heritage study for the Development Control Plan (DCP) for the Hearn's Lake / Sandy Beach area. Collins (2004) describes the DCP area as comprising 157.85 hectares of land surrounding Hearn's Lake and Double Crossing Creek; "it stretches south from Willis Creek and Graham Drive to the northern limits of Sandy Beach Village, and west across the Pacific Highway from the inland margin of the coastal dune system to Graham Drive". Hence, the Project Area was included within the bounds of this study (see **Figure 4**; Sub-section 5.1 and **Appendix 1**). Collins (2004) recorded one low-density stone artefact scatter (HL-1). This site comprised thirteen stone artefacts distributed at intervals within an area 300m long along the crest of a spur. Artefacts included flakes and cores of

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mudstone, greywacke and chert. Also recorded (HL-2; HL-3) were two unmodified natural mythological sites and two historic campsites (see **Figure 4**).



**Figure 4. Location of Project Area in Relation to DCP Area and Previously Recorded Sites (adapted from Collins [2004])**

- Collins (2000a) undertook an archaeological survey of a five metre wide water main corridor. Within the Sandy Beach locality, the corridor was located along the inland periphery of the dune system between Willis Creek and Hearns Lake, then west along Hearnes Lake Road and the northern bank of Hearns Lake / Double Crossing Creek to reach Graham Drive. Collins (2000a) notes that the survey also included the margins of Graham Drive and banks of Double Crossing Creek; hence, this survey may have included terrain that is within the present Project Area. No archaeological material was located.

At least three cultural heritage assessments have been undertaken in the immediate vicinity of the Project Area, including:

- Collins (2000b) undertook a cultural heritage assessment in the vicinity of Double Crossing Creek ('Morgans Road Farm') on the northern side of Graham Drive and Double Crossing Creek. No archaeological evidence was found across either the creek flats or the crest of an adjoining banana-covered spur.

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- Macdonald and Collins (1999) have undertaken a cultural heritage assessment of a ten metre wide reclaimed water pipeline corridor extending west from the western boundary of the Pacific Highway road reserve from Coffs Harbour to Bucca Road and the eastern road reserve boundary from Bucca Road to the northern limit of the Coffs Harbour City LGA near Corindi. This corridor passes the Project Area to the east. As a result of the assessment a total of six open campsites, three isolated stone artefacts and three shell middens were recorded. None of these sites are located in proximity to the Project Area.
- Collins (2002) undertook an Aboriginal heritage assessment of the upgrade of a section of the Pacific Highway between Sapphire and Woolgoolga. The present Project Area is located to the immediate west of the Highway within this section. Collins (2002) discusses several sites, one in particular to the south of the present Project Area. Collins (2002:52) notes that “during the mid-1880s a tribal fight and a corroboree were reportedly held on coastal flats inland of Look-At-Me-Know Headland. The site is located on the crest and northern upper slope of a low east-tending spur which has been cut by the Pacific Highway. The terminal end of the spur is occupied by the Coffs Harbour Gun Club and is flanked by poorly drained coastal flats (Collins 2002:47). Artefacts located at this site include flakes, flaked pieces, cores and a scraper manufactured from a variety of lithic material including chert, quartzite, greywacke, quartz and siltstone.

Several cultural heritage assessments have been undertaken to the south of the Project Area, including:

- Piper (1986) surveyed a parcel of land on the southern side of the intersection of Bucca Road and the Pacific Highway. The land comprises low-lying swampy terrain surrounded on three sides by low ridgelines. Indigenous archaeological sites were not located during this survey.
- Collins (1994) has undertaken a cultural heritage survey of a parcel of land opposite Bucca Road intersection with the Pacific Highway. Three open campsites (#22-1-0072; #22-1-0074 and #22-1-0075), three isolated stone artefacts and a site comprising two adjacent scarred Blackbutt trees (#22-1-0073) were recorded by Collins (1994). One open campsite was located on a gentle slope just downslope from the crest of a spur line, while the other two open campsites were located on the bank of Skinners Creek. The two isolated stone artefacts and the scarred trees were also located adjacent to a creek.
- Appleton (1995) undertook an archaeological investigation of the site of a proposed subdivision at Emerald Beach. No artefactual material was observed but Appleton re-recorded the midden on Diggers Point.
- Brayshaw and Byrne (1993) undertook an assessment of the archaeology of Look At Me Known Headland. Archaeological inspection of the headland revealed that artefacts were occurring within the topsoil and also within the underlying sandy clayey silt. The impression gained from a preliminary analysis of artefacts suggested that they constituted part of a previously existing site complex centered on the destroyed Moonee Beach site (#22-1-19). This site was described as ‘an implement-bearing midden horizon’ covering an area of around six hectares at the north end of Moonee Beach. The site was situated between the foredunes and a high back dune formation. McBryde (1967, 1972) described the artefacts from this sites as belonging to a ‘pebble tool industry’:

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These include complete pebble chopper implements, among which...the side-chopper seems dominant, large core, broken blocks of roughly worked stone, and flakes, which suggests that there was extensive use of the site for stone working.

McBryde collected around 1.75 tons of artefacts from the Moonee Beach site indicating a density of roughly 100-1,000 artefacts/m<sup>2</sup>. The highest density of stone artefacts on the headland was around 2/m<sup>2</sup>. A “significant collection of artefacts from the area” (Brayshaw and Byrne 1993:9) of the Moonee Beach site is held by Mr Ben Holder. Only four artefacts however were collected from the Headland including two pebble flakes, a pebble with abrasion at one end and negative scars at the other and a side-flaked pebble chopper. There were also two stones 20-30cm long with no clear signs of being artefactual. Although the archaeological material located on the Headland was not assessed as being of significance, the Headland itself is regarded as a sacred site (Brayshaw and Byrne 1993:12).

At least one study has included terrain to the north of the Project Area;

- Bonhomme Craib and Associates (2003) undertook a desktop cultural heritage study of two parcels of land within the bounds of the DCP study (see above), to the north of Hearn Lake. The desktop study concluded that past land-use practices had potentially disturbed surface archaeological materials and that there was a low probability of sub-surface sites or scarred trees occurring within their study area.

### 5.3.3 Recorded Aboriginal Cultural Heritage Sites in the Vicinity of the Project Area

A search of the New South Wales Department of Environment and Climate Change Aboriginal Heritage Information Management System (AHIMS) has shown that three recorded sites are located in the vicinity of the Project Area. These sites are listed below in **Table 1** and their location highlighted on **Figure 4**.

**Table 1. Recorded Sites in the Vicinity of the Project Area**

AHIMS SITE No.	SITE NAME	DESCRIPTION	COMMENT
22-1-0232	HL-2	Open Site; Natural Mythological	Recorded by Collins (2004); see Sub-section 5.3.2
22-1-0233	HL-3	Open Site; Natural Mythological	Recorded by Collins (2004); see Sub-section 5.3.2
22-1-0234	HL-1	Open Site; Stone Artefact Scatter	Recorded by Collins (2004); see Sub-section 5.3.2

However, from background research, it is apparent that other site types are also in the vicinity of the Project Area including shell scatters, an isolated stone artefact and historic sites. Additionally, two bora/ceremonial sites are recorded to the south southwest of the Project Area (see **Figure 4**).

### 5.3.4 Summary of Archaeological Context

From the above overview of archaeological context, it has been ascertained that the Project Area has been included in at least two and possibly three previous cultural heritage assessments and that although there are no previously recorded cultural

heritage sites specifically within, several have been recorded in the vicinity of the Project Area.

Based on the results of various archaeological surveys in the area, inferences may be made regarding site location patterns. It is therefore considered that archaeological knowledge regarding possible site types, the contents of these sites and potential areas for site location in areas of similar environment to the Project Area, has been outlined. Based on information contained within this Section, a predictive model of site location for the study area can be proposed (see Sub-section 5.4)

## 5.4 Archaeological Predictive Modelling

This Section outlines the landscape archaeology approach employed in this study as well as archaeological site location predictions.

### 5.4.1 Landscape Archaeology Approach

One useful approach to generating predictive models for Aboriginal archaeological site location employs the notion of landscape archaeology (see Rossingnol and Wandsnider 1992). This approach follows the tenets of predictive modelling in hunter-gatherer archaeology whereby different environmental zones are seen to have provided distinctive sets of constraints on land-use patterns, particularly in terms of foraging behaviour and camp placement. Predictions are based on the known pattern of site distribution in similar land systems. The division into environmental zones relies on factors such as landforms, soils, vegetation, etc. These factors are assumed to have provided distinctive sets of constraints, which influenced prehistoric land use patterns in each zone. Hence, site types and their distribution should differ between zones. However, the detection of sites in each zone often depends on the following factors:

➤ **Ground surface Visibility**

This factor is determined by the nature and extent of the ground cover (e.g. vegetation).

➤ **Burial of Original Land Surfaces** (e.g. by aggrading flood alluvium or slope wash).

➤ **Exposure of Prior Land Surfaces** (e.g. surfaces eroded by water or wind erosion forming features such as gullies and sheet-eroded surfaces or washouts along vehicle tracks).

Exposure can also be enhanced by activities which disturb the ground surface (and at the same time disturb the site). Ploughing and logging are two examples of this form of disturbance. Research has demonstrated that ploughing / cultivation does not destroy artefacts but rather results in horizontal and / or vertical displacement, changes in the condition and preservation of artefact assemblages, changes in type frequencies and in the destruction or alteration of features and layers (see Boismier 1991:17). The depth of the cultivation zone is also relevant. Stratified archaeological deposits in alluvial areas have the potential to extend undisturbed below the disturbed cultivation zone (around 30 - 40cm).

➤ **Site Obtrusiveness**

Some sites such as stone arrangements are easier to detect than (for example) sparse scatters of flaked stone artefacts, especially where the latter occur on well-vegetated surfaces.

➤ **Archaeological Visibility**

This factor relates to how observable archaeological material is on a given land surface. For example, stone artefacts will be easily observed on gravel free soils, whereas on stony terrain these artefacts will be less easily detected.

## 5.4.2 Archaeological Predictive Model

As noted in Sub-section 5.4.1, landforms, soils, vegetation, etc., are assumed to have provided distinctive sets of constraints, which influenced prehistoric land use patterns. The environment (i.e. topography, geology, soils, vegetation, and fauna) of the Project Area was described in Section 4.0; the implications for the Aboriginal archaeological record are discussed briefly below:

➤ **Topography**

The main elements that may have been utilised by Aboriginal people are the banks of Double Crossing Creek. Generally features such as high banks and terraces are the preferred topographic features utilised for site place. However, specifically within the Project Area, such features are not present adjacent to this creek. Nevertheless, if the creek banks were used, evidence would be in the form of one or more of the potentially occurring archaeological site types (see Sub-section 5.4.2.1). Although not always evident from the archaeological record, cultural factors may have affected the placement of camps within the Project Area.

➤ **Geology**

Lithic raw materials suitable for the manufacture of stone artefacts or other geological material utilised for manufacturing and maintenance purposes would not have been available within the Project Area. Hence, site types such as quarries / raw material source areas and axe grinding grooves would not be present within the Project Area.

➤ **Vegetation**

Vegetation types once present within the Project Area may have provided a variety of resources for exploitation (food and material culture items) (see Sub-sections 5.2.3 and 5.3.4). For example, the bark from some tree species were used for material culture items (e.g. containers, roof sheeting; see Sub-section 5.2.4). Honey and fauna (e.g. possum) were also removed from trees. The physical indications of these activities are likely to be visible as scarred trees (e.g. container scars, footholds, etc.). The implication of vegetation clearance that has occurred is that it is unlikely that this site type would now be present specifically within the area proposed for development. It should be stressed, however, that as a result of the significant modification to the vegetation pattern since non-indigenous settlement, it is difficult to draw inferences between current patterns and past Indigenous use.

➤ **Fauna**

Numerous faunal species were utilised by Aboriginal people and indicators of this activity may be present in the form of bone and shellfish remains. Shellfish remains may occur as both surface and sub-surface (or stratified) deposits, whereas generally bone remains are most likely to occur within stratified archaeological deposits or in a sub-surface context.

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➤ **Prior Land Use**

As a result of past Non-Indigenous land use, substantial alterations to the topography and vegetation within the Project Area have occurred. The implications for the potential archaeological record is that any archaeological material that may have been present would have been removed, displaced (dispersed) or damaged.

➤ **Summary Implications**

It is considered that, given the environment and resources (primarily flora and fauna) available, the terrain within the study area may have been exploited by Aboriginal people in the past. The exploitation strategies would have left visible markers in the landscape (i.e. specific site types - see Sub-section 5.4.2.1). However, the detection and survival of such visible markers is often conditional upon natural (e.g. sheet wash, erosion, deposition) and cultural processes (e.g. Non-Indigenous land use). As a result of prior land use activities, it is unlikely that scarred trees would be present and it would be unlikely that any surface archaeological material would be *in situ*.

#### **5.4.2.1 Archaeological Site Types**

Although Aboriginal people may have exploited all parts of the terrain present within the study area, their activities will only be reflected in the **archaeological** record if there are physical remains. However, many sites of significance to Aboriginal people do not contain such remains (cultural sites) (see Sub-section 5.5). Based on information provided in the previous sections of this report, it is considered that there are potentially only two archaeological site types that may be located within the Project Area:

➤ **Stone Artefact Scatters**

Stone Artefact Scatters are the remains of activity sites and contain evidence of Aboriginal activities such as the manufacture of stone artefacts. These sites may represent periods of variable duration and may reflect a variety of activities. Due to the resilient nature of stone material, Stone Artefact Scatters are also the most common archaeological site type.

Aboriginal people fractured fine-grained isotropic rocks to produce sharp cutting and scraping instruments. The raw material and form of stone tool artefacts can be quite varied, although fine-grained isotropic rocks, such as quartz, chert and silcrete, were preferred where sharp cutting and scraping edges were required. Crystalline volcanic rocks such as basalt, or pebbles of raw material such as argillite or greywacke, were flaked and then ground to form hatchet-heads for a variety of chopping and cutting tasks. The results of such activities as well as stone artefacts themselves, occur as scatters of modified stone (e.g. cores, flakes, flaked pieces, hammerstones, and anvils). Owing to site frequency and artefact density, Stone Artefact Scatters provide valuable information relating to past Aboriginal settlement and culture.

Stone Artefact Scatters often indicate the remains of occupational camp sites where other associated organic material has decayed, but they can also reflect the results of a specific activity (e.g. stone knapping site or food processing site). Sometimes Stone Artefact Scatters are recorded as Knapping Sites where only that specific activity is present. Knapping Sites and Stone Artefact Scatters, along with other site types such as hearths (fireplaces), shell middens, burials, shelters, etc., are often called Site Complexes.

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Stone Artefact Scatters have been found in various locations, although the majority tend to be located on reasonably level ground. Higher density artefact scatters will generally be located closer to permanent water, whereas lower density and background scatters may be found some distance from permanent water.

Scatters of stone artefacts can be found in varying concentrations either in open terrain, or in rockshelter settings. The designation "site" is most commonly applied to high-density concentrations of archaeological material, whilst the surrounding intermittent, low-density material is referred to as "background scatter". This "background scatter" often occurs in the form of isolated artefacts. Researchers often assume that all significant cultural information occurs within high-density concentrations of artefacts and areas of low artefact density or isolated items (background scatter) are of no value. A more accurate approach is to view the archaeological record as a more or less continuous artefact distribution of variable density across the landscape (see Dancey 1981; Dunnell and Dancey 1983:272; Dunnell 1992:34).

A stone artefact scatter and an isolated artefact have previously been recorded in the region of the Project Area (see Sub-sections 5.3.2 and 5.3.3).

➤ **Shell Middens**

In essence, Shell Middens are prehistoric food refuse heaps. They are deposits of shells of marine or freshwater molluscs that formed part of the Aboriginal diet. Midden sites can range considerably in size from large mounds to small, superficial scatters of shell. Middens may also contain the bones of terrestrial animals exploited for food as well as artefacts of stone, bone or shell (Bell 1986:28). These sites can occur close in inland lakes, swamps or rivers. Burials are sometimes located in middens (Bell 1986:30).

Shell scatters have been recorded in the vicinity of the Project Area (see Sub-sections 5.3.2 and 5.3.3).

#### **5.4.2.2 Site Location**

It is considered that the main site types that could be located within the study area would be stone artefact scatters, isolated stone artefacts and / or background scatter and / or shell middens / scatters. The area with the highest potential for such site types to be present would be relatively flat portions of the bank of Double Crossing Creek. This area may have been selected for the placement of short term or intermittent camp sites.

As this area has been previously heavily impacted by prior land use activities, it is most likely that, if any archaeological material remained, it would not be *in situ*.

#### **5.4.2.3 Site Potential**

Due to the low-lying nature of the terrain it is considered that prior to impacts from Non-Indigenous land use activities the Project Area would have had a low potential for the presence of archaeological material. As a result of these activities, this low potential has been severely compromised.

## 5.5 Social and Cultural Values

This Section of the report documents the social and cultural values of the Project Area to the Registered Stakeholders. Prior to providing this information, the type of cultural sites that may be present are outlined.

### 5.5.1 Cultural Site Types

The following site types generally do not have physical indicators of their presence:

➤ **Mythological Sites and Places of Significance to Aboriginal People**

Mythological Sites usually involve no alteration to the natural landscape. As such they are archaeologically invisible and can only be identified with the aid of Aboriginal consultants. Such sites hold particular cultural significance to Aboriginal people.

Despite assumptions to the contrary, there exists a vital knowledge of 'sites of significance' amongst Aboriginal people. The Aboriginal Sites of Significance Survey conducted in New South Wales during the 1970s resulted in the recording of over 500 sites of Aboriginal significance. A large proportion of these were mythological or ceremonial sites (Godwin and Creamer 1984). A case study by Godwin and Creamer (1984) at Yamba, at the mouth of the Clarence River, yielded numerous places of significance to Aboriginal people which were classified under a number of categories as follows:

Good Food Places

These were places from which good supplies of fish, yams, birds' eggs, and so on, can be obtained.

Recent Camping Places

These consisted of two kinds of places. First were those associated with the location of Aboriginal missions and reserves in the area over the past 100 years. Second were those associated with getting away from town, and these often served as base camps for food-gathering activities.

Dangerous Places

These were identified as being where there had been a manifestation of a spirit, or where such manifestation might occur. Usually it involved a person being physically harassed by a spirit.

Mythological Sites

These were identified by the presence of a feature central to a myth or that is explained by a myth. Mountains, rocks, swamps, and other natural places may be mythological places.

Ancestral Camping Places

These were usually identified by spirit harassment.

Archaeologists generally cannot predict the presence of Cultural Sites. However, from background research and Aboriginal consultation the presence of such sites may be revealed. Two natural mythological sites have been recorded to the east of the Project Area (see Sub-section 5.3.3 and **Figure 4**).

Another cultural site type, which may contain physical remains, is:

➤ **Contact and Post-Contact Period Sites**

Aboriginal settlement patterns and lifestyles changed significantly as non-indigenous people moved into local areas. Destruction of major portions of the natural landscape forced Aboriginal groups into a dependent relationship with the non-indigenous settlers. Locations where violent and non-violent contact occurred, fringe encampments which began to develop after contact and places of work (e.g. pastoral stations), are often remembered by Aboriginal people living today (Goulding 1993). Because of the close and personal historic contact Aborigines may have with these camps and locations, they regard them as significant and part of their history to be documented and, in some cases, preserved. While some of these sites still have visible remains, other sites often have no physical alterations to the landscape (e.g. massacre sites). Although there is often no documentation in relation to some of these sites, sometimes records do exist (e.g. station records, diaries, newspaper articles, etc.). Additionally, consultation with local and Indigenous informants assists in the identification of such sites. Two post-contact period sites are located to the east of the Project Area (see Sub-section 5.3.2 and **Figure 4**).

It is important to note that **archaeological** sites (e.g. stone artefact scatters, scarred trees, shell middens, axe grinding grooves, etc.) generally have **cultural** significance as such sites constitute evidence of prior occupation of an area by Aboriginal people and for this reason alone can be considered to have significance value. These values are irrespective of whether the site is *in situ*, disturbed or displaced. As noted by Bowdler (1983:30), "identification of sacred sites and sites of significance to Aboriginal people is of necessity a matter for Aboriginal people. No-one else can decide whether the fact of significance or the degree of that significance to an Aboriginal community, except members of that community".

## 5.5.2 Statement of Cultural Values

As noted in Sub-section 5.1, in 2005, prior to this Project commencing, both the Coffs Harbour and District LALC (Michael Rodgers, Coordinator and Chris Spencer, Coordinator) and the Yarrawarra Aboriginal Corporation (Anthony Perkins, General Manager), had advised Sapphire Beach Properties Pty Ltd (now Sandy Beach Mill Pty Ltd) that a parcel of land which included the present Project Area "did not contain areas of cultural significance" (see **Appendix 1**).

Nevertheless, for this project, Registered Stakeholders were identified and consulted. A draft copy of the report was forwarded to the Registered Stakeholders so that their comments in relation to cultural values of the Project Area could be incorporated into the report. Both the Coffs Harbour and District LALC and Yarrawarra Aboriginal Corporation (Garby Elders) verbally advised that a further cultural heritage assessment of the Project Area was not warranted as it did not contain items of cultural significance.

## 5.6 Summary and Conclusion

This Section of the report summarises the results of the preliminary cultural heritage assessment of Aboriginal values (Sub-section 5.6.2) and provides a conclusion (Sub-section 5.6.3) in terms of the stated scope of the study as outlined in Sub-section 1.1. Prior to these two Sub-sections, the applicable legislation for Aboriginal cultural heritage is summarised.

### 5.6.1 Legislation

The two major pieces of legislation at the New South Wales state level are the *National Parks and Wildlife Act, 1974* and the *Environmental Planning and Assessment Act, 1979*.

➤ ***National Parks and Wildlife Act, 1974, as amended***

This Act provides for the protection of Aboriginal objects and Aboriginal places. An aboriginal object is defined as:

"...any deposit, object or material evidence (not being a handicraft made for sale) relating to Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with the occupation of that area by persons of non-Aboriginal extraction, and includes aboriginal remains (as defined with the meaning of the NPW Act)".

An Aboriginal place is defined as:

"...a place which has been declared so by the Minister administering the NPW Act because he or she believes that the place is or was of special significance to aboriginal culture. It may or may not contain aboriginal objects".

Archaeological relics do not have to be present at Aboriginal places. It is an offence under the Act (Section 90) to destroy, deface, damage or desecrate, or cause or permit the destruction, defacement, damage or desecration of, an Aboriginal object or Aboriginal place unless the Aboriginal object or Aboriginal place is dealt with in accordance with a heritage impact permit issued by the Director-General of the Department of Environment and Climate Change (NSW).

A Protected Archaeological Area may be dedicated (Section 65) where land is not unoccupied Crown land, and only with the consent of the owner and occupier.

The of the Department of Environment and Climate Change (NSW) may also enter into Conservation Agreements with land owners, providing that landowners give their written consent to the conservation agreement (Section 69B) where relics or Aboriginal Places of special significance are situated (Section 69C(1d)). Conservation agreements may contain terms binding on the owner and/or Minister, including, for example, financial assistance, technical advice and implementation of plans of management. Conservation Agreements are attached to the land, in so far as they are binding on subsequent land owners.

➤ ***Environmental Planning and Assessment Act, 1979***

In effect, this Act generates a broad spectrum of protection for Aboriginal sites by requiring that an Environmental Assessment, incorporating an assessment of anthropological and archaeological values be prepared for certain developments and activities. There are three main areas of protection under the EPA Act:

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1. Planning instruments allow particular uses for land and specify constraints. Aboriginal heritage is a value which should be assessed when determining land use.
2. Section 90 of the Act lists impacts which must be considered before development approval is granted. Aboriginal heritage is one of these possible impacts.
3. State Government agencies which act as the determining authority on the environmental impacts of proposed activities must consider a variety of community and cultural factors, including Aboriginal heritage, in their decisions.

### 5.6.2 Summary

Based on this assessment, although full assurance that cultural heritage will not be harmed by the proposed development cannot be provided, the following considerations are relevant:

- The terrain within the Project Area is considered to be of low archaeological potential;
- Previous cultural heritage assessments which incorporated the Project Area did not identify archaeological or cultural sites specifically within the Project Area;
- If archaeological sites were once present, they would be severely impacted by prior Non-Indigenous land use activities;
- There are no sites recorded on the AHIMS Database within the Project Area;
- Previous consultation with the Coffs Harbour and District LALC and Yarrawarra Aboriginal Corporation has revealed that Project Area “did not contain areas of cultural significance” and was “highly unlikely to contain any Aboriginal objects” (see **Appendix 1**) and
- Consultation with the Registered Stakeholders for this Project (i.e. Coffs Harbour and District LALC and Yarrawarra Aboriginal Corporation [Garby Elders]) has confirmed the above five considerations.

### 5.6.2 Conclusion

As noted in Sub-section 1.1, the Department of Environment and Climate Change note that the Preliminary Assessment should include three tasks. A summary of the results of these three tasks are outlined in **Table 2**:

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**Table 2. Summary of Tasks**

1	A description of the location and nature of the proposed development	This information is provided in Sections 2.0 and 3.0.
2	A description of any social and cultural values including the spiritual, traditional, historical or contemporary associations and attachments which the place or area has for the present-day Aboriginal community	<ul style="list-style-type: none"> <li>• The Project Area has been included in two and possibly three prior cultural heritage assessments which did not identify cultural heritage sites specifically within the Project Area;</li> <li>• There are no sites on the AHIMS Database within the Project Area;</li> <li>• In 2005 the Coffs Harbour and District LALC and Yarrowarra Aboriginal Corporation stated that the Project Area “did not contain areas of cultural significance” and was “highly unlikely to contain any Aboriginal objects”;</li> <li>• As a result of this project, the Registered Stakeholders (Coffs Harbour and District LALC and Yarrowarra Aboriginal Corporation [Garby Elders] have verbally stated the Project Area does not have any social and cultural values.</li> </ul>
3	An assessment of which of the Aboriginal cultural heritage values that are known or likely to occur are likely to be directly or indirectly affected by the proposal	<p>There do not appear to Aboriginal cultural heritage values that will be directly or indirectly affected by the proposal.</p> <p>Under the <i>National Parks and Wildlife Act, 1974</i> (as amended)(Section 90) it is an offence to destroy, deface, damage or desecrate, or cause or permit the destruction, defacement, damage or desecration of, an Aboriginal object or Aboriginal place. Hence, at any time during the Project it is suspected that an Aboriginal object has been uncovered, the developer must immediately contact the Department of Environment and Climate Change (Planning and Aboriginal Heritage – North East) on (02) 66515946</p>

## 6.0 NON-INDIGENOUS CULTURAL HERITAGE

This Section of the report provides an overview of the history of the Project Area (Sub-section 6.1) prior to summarising the results and providing a conclusion (Sub-section 6.2).

### 6.1 History of the Study Area

Coffey Geotechnics (2007) have documented a site history which included a review of aerial photographs, a historical land title search and interviewing available persons with knowledge of the site. The following information is based on this document.

It would seem that Lot 260 was crown land until 1964 when Oswald Hall bought the lot to construct a sawmill. The lot was passed onto Oswald Hall's wife, Olga Marie Hall in 1987 and it continued to be used as a sawmill until around 2000.

Aerial photographs also provided information about the site. For example, the 1958 aerial photograph showed that Lot 260 was generally heavily vegetated with no apparent structures or development. In 1964 the aerial photograph showed that the Lot was slightly less vegetated along the creek edge. By 1974 the whole of the Lot was cleared of vegetation and structures were evident on the northern and southern sides of the Lot.

An interview with Olga Marie Hall indicated that two mills may have been constructed on Lot 260; a sawmill was built on the southern side of Double Crossing Creek (within Lot 260) and later a more modern mill was constructed, which was located more on the eastern part of the Lot. All the water used on the site was pumped from the creek and they had a septic system. A diesel bowser was located on the southern side of the office building (near the middle of Lot 260). An underground storage tank was also present on the Lot. Mrs Hall also noted that three large fires had occurred on the site.

Most of the buildings and infrastructure (e.g. underground storage tank, etc.) were removed in 2006. One large shed remained on the Lot until recently. The location of this shed can be seen in **Figure 2**. Currently there are no structures, infrastructure or footings visible on the property (see **Plates 1** and **2**).

#### 6.1.1 Database Searches

Searches were undertaken of the following heritage registers:

- State Heritage Inventory (NSW Heritage Branch);
- State Heritage Register (NSW Heritage Branch); and
- Australian Heritage Database (Department of the Environment, Water, Heritage and the Arts).

There are no recorded heritage sites or places within the Project Area.

## 6.2 Summary and Conclusion

This Section of the report summarises the results of the preliminary cultural heritage assessment of Non-Indigenous values (Sub-section 6.2.1) and provides a conclusion in relation to any issues identified (Sub-section 6.2.2). Prior to these two Sub-sections, the applicable legislation for Non-Indigenous heritage is summarised.

### 6.2.1 Legislation

The applicable legislation covering places of Non-Aboriginal heritage in New South Wales is the New South Wales *Heritage Act 1977*.

➤ ***The Heritage Act 1977***

The purpose of this Act is to ensure that the heritage of New South Wales is adequately identified and conserved; it addresses all aspects of conservation extending from protection against damage and demolition to restoration and enhancement and contains measures to protect archaeological resources. It recognises two levels of heritage significance: state and local. Generally the Act provides protection to items that have been identified, assessed and listed on various registers including State government s170 registers, local government Local Environmental Plans (LEP's) and the State Heritage Register. Interim Heritage Order provisions allow the minister or delegates (local government may have delegated authority) to provide emergency protection to threatened places which have not be previously identified (Navin Officer 2008).

Section 139 of the Act specifically provides protection for any item classes as a relic. A relic is defined as "...any deposit object or material evidence which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement; and which is 50 or more years old".

Section 139 prohibits disturbance of a relic unless in accordance with an excavation permit from the Heritage Council (see below). This section of the Act also allows the Heritage Council to create exceptions to the requirement for an excavation permit with respect to certain types of relic, contexts, or types of disturbance. The Heritage Council of NSW was established under the NSW *Heritage Act 1977* and is an advisory body that includes members of the community, the government, the conservation profession and representatives of organisations such as the National Trust of Australia (NSW). The Heritage Branch (NSW Department of Planning) who administers the Act, is guided by the Heritage Council.

Under Section 146 of the NSW *Heritage Act 1977* "A person who is aware or believes that he or she has discovered or located a relic (in any circumstances, and whether or not the person has been issued with a permit) must:

- (a) within a reasonable time after he or she first becomes aware or believes that he or she has discovered or located that relic, notify the Heritage Council of the location of the relic, unless he or she believes on reasonable grounds that the Heritage Council is aware of the location of the relic, and
- (b) within the period required by the Heritage Council, furnish the Heritage Council with such information concerning the relic as the Heritage Council may reasonably require.

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Under Section 4A the interpretation of heritage significance (either State or Local) in relation to a place, building, work, relic, movable object or precinct, means significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item. An item can be both of State and local heritage significance. An item that is of local heritage significance may or may not be of State heritage significance.

If excavation works are being carried out on land where it is known that a relic will be disturbed or where there is a possibility that a relic will be disturbed, an excavation permit must be obtained from the Heritage Council. Section 139 of the *Heritage Act 1977* states that an excavation permit is required in certain cases:

- (1) A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.
- (2) A person must not disturb or excavate any land on which the person has discovered or exposed a relic except in accordance with an excavation permit.
- (3) This section does not apply to a relic that is subject to an interim heritage order made by the Minister or a listing on the State Heritage Register.
- (4) The Heritage Council may by order published in the Gazette create exceptions to this section, either unconditionally or subject to conditions, in respect of any of the following:
  - (a) any relic of a specified kind or description,
  - (b) any disturbance or excavation of a specified kind or description,
  - (c) any disturbance or excavation of land in a specified location or having specified features or attributes,
  - (d) any disturbance or excavation of land in respect of which an archaeological assessment approved by the Heritage Council indicates:
    - i. that there is little likelihood of there being any relics in the land, or
    - ii. that any relics in the land are unlikely to have State or local heritage significance.

Section 40 of the Act covers heritage agreements and what such agreements can provide for. Heritage agreements can include provisions relating to the conservation of the item, the restriction on the use of the item or the land on which it is situated, requirements for the carrying out of specified works or works of a specified kind, the restriction on the kind of works that may be carried out and such other matters as may be prescribed by the regulations.

In summary, the Act requires two main approval requirements (Navin Officer 2008):

1. A permit must be obtained for works which have the potential to interfere with a heritage item or place which is either listed on the State Heritage Register or the subject of an interim heritage order (s57); and
2. A permit must be obtained to disturb or excavate land where it is known (or there is reasonable cause to suspect) that such action will or is likely to uncover or affect a relic (s139). This permit is known as an excavation permit and can be applied for under s140 of the Act.

## **6.2.2 Summary**

It would appear that a saw mill complex was located within the Project Area. As at least three fires have occurred and at least two mills have been constructed, it is unlikely that any part of the original mill constructed around 1964 remain. Nevertheless, as noted in Sub-section 6.2.1, a relic under the *Heritage Act 1977* is "...any deposit object or material evidence which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement; and which is 50 or more years old". Hence, as the structures which were present on Lot 260 would not have been 50 or more years old, the provisions of this Act are not applicable.

## **6.2.3 Conclusion**

There are no Non-Indigenous heritage issues to be addressed within the Project Area.

## **7.0 RECOMMENDATIONS**

Based on information contained within this report, the following recommendations are provided:

### **7.1 Aboriginal Cultural Heritage**

- (1) That no further cultural heritage assessments (e.g. site inspection; cultural heritage survey) of the Project Area are required;**
- (2) Should future activities associated with the development of Lot 260 DP1110719, Graham Drive, Sandy Beach, uncover anything which may be interpreted as Aboriginal in origin, work in the vicinity of the find should cease immediately and the developer should inform the Department of Environment and Climate Change (NSW), Coffs Harbour, and the Registered Stakeholders, as soon as possible, for discussion, negotiation and direction. The provisions of the *National Parks and Wildlife Act of 1974* (as amended) state that it is illegal to damage, deface or destroy a relic without written permission of the Director of the Service. Those failing to report a discovery and those responsible for the damage or destruction occasioned by unauthorised removal or alteration to a site or to archaeological material may be prosecuted under the *National Parks and Wildlife Act 1974*, as amended.**

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## **9.0 APPENDICES**

### **9.1 Appendix 1: Correspondence from Coffs Harbour and District LALC and Yarrawarra Aboriginal Corporation**

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**Coffs Harbour & District  
Local Aboriginal Land Council**

Cnr Pacific Highway & Arthur Street, Coffs Harbour 2450  
PO Box 6150, Coffs Harbour Plaza NSW 2450

Phone: (02) 6652 8740

Fax: (02) 6652 5923

Attention: Mr. Anthony Cogle  
Sapphire Beach Properties Pty. Ltd.  
P.O.Box 9000,  
Moonee Beach, NSW.2450

6<sup>th</sup> April 2005.

Dear Anthony,

The Coffs Harbour & District Local Aboriginal Land Council wish to advise that they do not have any knowledge or records to state that there is anything of cultural significance or the possible location of Aboriginal objects to be found in the areas that are defined below.

LOT1 DP726077, LOT2 DP354878, LOT260 DP752853, LOT1 DP726076  
Nos 234-282B and 300 Graham Drive, Sandy Beach, NSW.

Yours Truly,

Michael Rodgers  
Coordinator  
C.H & D.L.A.L.C.

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**Yarrawarra Aboriginal Corporation**



Yarrawarra Aboriginal  
 Cultural Centre



Mr Michael Rodgers  
 Coffs Harbour & Districts Aboriginal Land Council  
 Wongala Estate  
 Coffs Harbour NSW 2450

Dear Michael

**SAPPHIRE BEACH PROPERTIES PTY LTD**

Please be advised that the Garby Elders and Jalumbo Cultural & Heritage Centre agree with the Coffs Harbour Land Council that the Lots and DP's that appear below do not contain areas of Cultural significance and is highly unlikely to contain any Aboriginal Objects.

Lot 1 DP 726077

Lot 2 DP 354878

Lot 260 DP 752853

Lot i DP 726076

Nos 234 - 282B and 300 Graham Drive, Sandy Beach NSW.

Yours sincerely

Anthony Perkins  
 General Manager

Mail Address: PO Box 1001 Coffs Harbour NSW 2450  
 Phone: (02) 6642 2669  
 Fax: (02) 6649 2381

Address: 170 Red Road, Coffs Harbour NSW 2450  
 Email: straw@sp.com.au

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 PO Box 6150, Coffs Harbour Plaza NSW 2450

Phone: (02) 6652 8740

Fax: (02) 6652 5923

23<sup>rd</sup> August 2006

Attention: Mr Anthony Cogle

Sapphire Beach Properties  
 PO Box 9000  
 Moonze Beach NSW 2450

**RE: CULTURAL HERITAGE ASSESSMENT**  
**PROPOSED DEVELOPMENT GRAHAM DRIVE SANDY BEACH**

Dear Mr Cogle,

Further to our conversation of today's date, in relation to your proposed development of the sawmill site on Graham Drive, Sandy Beach.

Coffs Harbour and District Local Aboriginal Land Council would inform you that due to the previous high disturbance that has transpired over a long period of time (e.g. Saw milling activities) that your request for an Aboriginal Cultural Heritage assessment of the property is not warranted at this time.

Previously suitably qualified members of our organisation completed an assessment as part of the Development Control Plan (DCP) for the Coffs Harbour City Council in this area. As a result of that assessment it was deemed that this particular property would have an extremely low likelihood of containing any objects that could be of Aboriginal origin.

However please note that if any objects suspected to be of possible Aboriginal origin are located during any earth disturbance work that take place for this development, that all works must cease immediately and Coffs Harbour and District Local Aboriginal Land Council notified immediately to enable for clearance to be given for works to recommence.

If you have any questions in relation to this matter please do not hesitate to call me on the above number.

Yours truly,



Chris Spencer  
 Coordinator

e-mail: [coffs.harbour.lalc@bigpond.com](mailto:coffs.harbour.lalc@bigpond.com)