

14 December, 2006

Brian Rose
Rosecorp
51 Riley Street
WOOLLOOMOOLOO NSW 2011

Our Reference: 0059261L02 INSPECTION RESULTS.DOC

Dear Brian,



**RE: CATHERINE HILL BAY & GWANDALAN ABORIGINAL
HERITAGE INSPECTION AND INTERIM RECOMMENDATIONS**

This letter presents a summary of Aboriginal heritage issues on land owned by Rosecorp at Catherine Hill Bay and Gwandalan on the NSW Central Coast. The results of background research and a short familiarisation inspection of the land area are described. This letter is a preliminary presentation of results prepared as an initial contribution to the Environmental Assessment Report for the development application under Part 3A of the Environmental Planning & Assessment Act 1979. An Aboriginal heritage assessment report detailing the ongoing Aboriginal consultation and planned heritage survey is to follow.

1. THE STUDY AREA

The study area comprises two area of land proposed for residential development: one at Catherine Hill Bay and another at Gwandalan.

1.1 CATHERINE HILL BAY

The Catherine Hill Bay land comprises approximately 80 ha of the old Moonee Colliery land at the south end of Catherine Hill Bay. Land owned by Rosecorp and subject to the development concept plan extends from the southern end of the village to the south for approximately 1 km and from the edge of the relict coal loader structure at the eastern coastal cliff top edge back to the west for just over 1 km.

1.2 GWANDALAN

The Gwandalan land comprises approximately 26 ha of land at Gwandalan in the south east part of Lake Macquarie. The land is roughly triangular in shape and approximately 500 m by 700 m in size. The eastern edge has a small 130 m frontage to Lake Macquarie. The western boundary runs along Kanangra Drive for approximately 570 m.

2. LANDFORM & DISTURBANCE

2.1 CATHERINE HILL BAY

The Catherine Hill Bay land comprises a largely modified landscape comprising a complex of abandoned buildings and hard surfaces from recently concluded underground coal mining operations. The land is a complex of rehabilitating coal dump pads, berms and constructed landforms mostly with no potential for Aboriginal material. All of the previously disturbed and modified landform occurs north of a creek just south of the development area. This unnamed third order creek flows to the north end of Moonee Beach where it cuts through the fore dune. The old colliery land is located on the coastal ridge between Middle Camp Beach at Catherine Hill Bay and Moonee Beach to the south. This ridge terminates in the cliffs and coastal conglomerate rock platforms between the beaches, all of which are protected from development. The Newcastle Coal Measures outcrop in the headland, although the most abundant rock is conglomerate. While tuffs form a part of the Newcastle Coal measures and have been previously reported as a significant raw material source for Aboriginal stone tool making, there are no obvious outcrops evident in the study area, nor any weathered cobbles of tuff at the cliff base.

The original landform comprises limited ridge top flat areas and predominantly sloping landform elements with minor first order drainage depressions, however all of these have been modified through colliery operations with the exception of the very small sloping areas along the southern margin. The present appearance is of abandoned buildings and open concreted surfaces with a complex of old coal storage pads covered in mulch and young plantings. Some large trees are evident in patches of Angophora woodland in the southern part of the land. Vegetation is otherwise extremely patchy and of recent regrowth. Where patches of intact soils were observed on the southern sloping area they comprise duplex soils formed from weathering conglomerate bedrock from the Narrabeen Formation.

The significant modification and disturbance to landform has resulted in negligible potential for archaeological evidence of Aboriginal occupation remaining. While middens on elevated landforms are known to occur, midden sites in the local area are more closely positioned to rock platforms and beach dunes in locales outside of the study area. If there were any evidence of midden material, it is likely that this would have been destroyed by landform modification.

2.2 GWANDALAN

The Gwandalan land is a partly modified private parkland landscape which presently serves as the backyard of a private dwelling complex on the Lake Macquarie edge. A minor first order watercourse flows from the north west corner through constructed ponds to the Lake. Carefully maintained lawn and some minor constructed features occur along the lake edge. From the lake the land slopes gently up to the west to Kanangra Road. The eastern part of the land is mostly cleared with carefully maintained lawns, yards, sheds and gardens. Land in the west is predominantly regrowth bushland with some tracks and structures.

An old constructed depression occurs in the north west due to some minor historic quarrying activity. Archaeological sensitive landform is limited to the Lake edge and does not extend to the western area.

3. ARCHAEOLOGICAL BACKGROUND

A search of the Department of Environment & Conservation (DEC) Aboriginal Heritage Information Management System (AHIMS) Aboriginal site register for the south Lake Macquarie and Wallarah Peninsula area shows that middens are the main Aboriginal site type recorded in the area. Coastal middens have developed as a result of Aboriginal harvesting of shellfish from rock platforms. Coastal middens are generally found in nearby dunes or elevated ground in close proximity to the rock platforms. Estuarine middens comprising mostly cockle shells with some oyster and whelk are found in many parts of the Lake Macquarie shore. While there has been some misidentification of naturally occurring or dredge waste shell as midden in comparable contexts, many reliable midden records reflect the sensitivity of the Lake Macquarie shore for midden material.

3.1 CATHERINE HILL BAY BACKGROUND ARCHAEOLOGY

An archaeological survey of the western emplacements areas of the colliery site was conducted in 1985 by Laila Haglund. Haglund consulted with the Bahtahbah Local Aboriginal Land Council at the time and her consultations did not reveal any non-archaeological traditional significance specifically attributed to the study area. No archaeological sites were identified in the course of her survey.

Aboriginal midden sites have been previously recorded adjacent to the rock platform immediately east of the development area and along the Moonee Beach dunes to the south east. Both of these areas are separated from the development by abrupt landform changes. Site 45-7-16 is scattered midden material recorded at either end of Middle Camp Beach with no further specific location provided. Presumably this includes an observation in the vicinity of the rock platform immediately to the east of the development; however the DEC coordinates for this site card are an unreliable translation from imperial map coordinates to metric, and the AMG coordinates in AHIMS from such old records are notoriously inaccurate. A midden (site 45-7-216) recorded by Theresa Bonhomme along the Moonee Beach dunes occurs in association with sandy soil and does not appear to extend into the development area.

3.2 GWANDALAN BACKGROUND ARCHAEOLOGY

Many archaeological studies around Lake Macquarie have consistently identified Lake fore shore middens comprising predominantly cockle shell harvested by Aboriginal people from the inter-tidal zone. One midden site (45-7-183) has been recorded along the lake edge just north of the study area although the site card does not have sufficient detail on location and the natural occurrence of shell at the water's edge could easily match the site's description of a few shells along the shore edge. In contrast, an archaeological survey by Terry Griffiths (1992) on 100 ha of land fronting Lake Macquarie directly to the west of the study area identified a continuous distribution of dense cockle shell along the shore edge (site 45-7-176). This survey did not find any archaeological evidence further back from the lake edge.

These records combined with general records of midden occurrence along the shore of Lake Macquarie point to the potential sensitivity of the shore edge within the study area.

4. INSPECTION

An inspection was conducted on 13 December 2006 by Neville Baker. The inspection was conducted for familiarisation purposes to guide later formal heritage survey and does not constitute survey to meet DEC guidelines. The observations were sufficient to identify the main archaeological issues relating to Aboriginal heritage and identify the key Aboriginal heritage commitments for the Environmental Assessment Report. The inspection entailed vehicle and foot traverses over each of the properties over six hours.

4.1 CATHERINE HILL BAY INSPECTION

Air photo indications of gross disturbance and modifications across the majority of the study area were confirmed during inspection. The construction of large emplacement areas for coal stockpiles has resulted in significant landform modification not only on the pads, but in surrounding areas where large berms have been constructed to contain and conceal operations. The extent of modification is such that any ground exposure over the colliery inevitably displayed layers of introduced soil, gravel and coal waste. There are some areas of bush in the south east of the land although the signs of ground disturbance are almost everywhere along the tracks and ground exposures.

An inspection of the conglomerate rock platform to the east of the development area failed to identify any midden material along vehicle track exposures. Away from track exposures visibility was significantly hampered by vegetation, particularly the dense Bitou bush.

An inspection at the north end of Moonee beach relocated the midden site reported by Bonhomme and registered as site 45-7-216. Midden shell and stone tools were observed in soil exposures at the highest point of the dune either side of the third order creek. The extent of this midden could not be ascertained due to dense Bitou bush growth but is unlikely to extend into the development area due to the marked slope that arises at the boundary. The extent of the midden site should be confirmed during the heritage survey, but is likely to correspond to the extent of dune sands. These sands stop well outside the development area. A walk from this midden site north west into the development area reveals a marked change from sand to clay soils and then, on entering the colliery land, to introduced soil and rock which make up the berms constructed to contain colliery activity.

The southern part of the lands extend close to the creek, although the land rises sharply from the creek edge and affords little opportunity for campsites on the sloping ground. No stone artefacts or midden material were observed in the vehicle track exposures through this area. Eucalypts and Angophora trees through this area appear sizeable, but may not be of sufficient age to bear Aboriginal scarring from the pre-contact and contact period.

There are two small areas of land in the north western part of the development area comprising modified land from a past emplacement area and an area of older regrowth on sloping land without water association and hence of negligible archaeological potential. Survey by Haglund (1985) in these areas failed to identify any Aboriginal sites.

The north eastern part of the study area includes part of the historic village complete with sealed roads, houses and grass lawns. The landform is well elevated above the beach and slopes down to the north from the coal preparation plant itself. There is no archaeological potential in this area which includes gravely soils developed from conglomerate bedrock.

There are no archaeological constraints to development identified in this inspection, nor are any anticipated from the formal survey. This is due largely to the landform which is atop a cliffed incline and significantly elevated over 40 m above the rock platform shellfish resource zone. Midden sites in association with this rock platform are located on the immediately adjacent lands and the Moonee Beach dunes, and not on the development land. Although archaeological material is not predicted (and was not identified in previous survey), any that might have occurred would have been destroyed by the land form modification which occurred as part of colliery development.

4.2 GWANDALAN INSPECTION

Particular attention was paid to the lake edge where carefully maintained lawns extend to the water's edge. While two large weathered cockle shells were observed in the soil section there was no evidence of concentrations of shell and dark soil normally associated with middens. Inspection along the foreshore area for 200 m north of the study area with the Lake Macquarie State Recreation Area land failed to identify any midden material exposed in either the water edge soil exposure or on patches of soil observed between the dense Bitou bush growth. This observation suggests that there is little potential for midden material within the lake edge land. If any midden material is present, it would be retained as is with the existing house and is not proposed for any development impact.

The western parts of the study area were observed briefly to an extent sufficient to confirm the absence of any sensitive landforms. The small first order watercourse flowing from the south west corner is a dry gutter-like trench draining the adjacent school grounds.

The inspection suggests that there are no Aboriginal objects present which may be impacted by development.

5. PRELIMINARY CONCLUSIONS

No Aboriginal sites are known to occur, nor is there a significant expectation for any to occur within the study area which comprises the Catherine Hill Bay and Gwandalan lands described above.

Heritage survey on both lands will confirm the extent of the 45-7-216 midden known to occur at the north end of Moonee Beach. Heritage survey will also confirm the presence or absence of Aboriginal scarred trees in the southern part of the Catherine Hill Bay colliery lands near Moonee Beach.

6. PRELIMINARY RECOMENDATIONS

Preliminary recommendations here are subject to revision after completion of the Aboriginal heritage assessment:

- ❑ while no Aboriginal sites have been identified and none are predicted to occur, should any Aboriginal objects be identified in the course of development all works should cease and an assessment and recovery of the material should be conducted by an archaeologist working with relevant local Aboriginal community groups; and
- ❑ in the unlikely event of discovery of skeletal material all works should cease, the police, relevant Local Aboriginal Land Council and a suitably experienced archaeologist or physical anthropologist should be contacted to assess the material before determining the correct management action.

Yours sincerely,
for Environmental Resources Management Australia Pty Ltd

A handwritten signature in black ink, appearing to read 'Neville Baker', with a long horizontal flourish extending to the right.

Neville Baker
Principal Archaeologist/ Heritage Team Leader