Environmental Resources Management Australia

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Our Reference:

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APPENDIX

RE: GWANDALAN LOWER HUNTER ESTATES DEVELOPMENT, PRELIMINARY HERITAGE ENVIRONMENTAL ASSESSMENT

Environmental Resources Management Pty Ltd (Australia) (ERM), were commissioned by Catylis Pty Ltd on behalf of Coal & Allied Industries Limited (Coal & Allied) to prepare the heritage component of a Preliminary Environmental Assessment (PEA) for lands at Gwandalan. The report has been prepared in accordance with the provisions of Part 3A of the *Environmental Planning and Assessment Act*, 1979, (EP&A Act) to assist in the preparation of the Director Generals' Requirements (DGRs) for the project.

This letter style report presents the results of preliminary desktop review and constraints analysis for the Gwandalan project application area.

1. DESCRIPTION OF THE PROPOSAL

It is proposed that the entire Coal & Allied owned Gwandalan site be rezoned/listed as a 'State Significant Site' (SSS) in Schedule 3 of State Environmental Planning Policy (Major Development). A draft Schedule 3 listing will be prepared with the Concept Plan Application.

The Concept Plan for a residential subdivision of the Gwandalan site will apply to the entire 268ha Gwandalan site. The key parameters for the proposed development of the site are as follows:

- Dedication of 205.75ha of conservation land to the New South Wales Government (NSWG) that is identified in the Lower Hunter Regional Strategy and Lower Hunter Regional Conservation Plan, comprising approximately 77% of the Gwandalan site.
- Maximum dwelling yield of 623 dwellings over 62.24ha.





- Indicative development staging. The number of lots and extent of staging for release areas will be largely dictated by the service infrastructure requirements as well as responding to market forces.
- The provision of associated infrastructure.
- Torrens title subdivision of the Gwandalan site. The Torrens title subdivision and boundary realignment of Coal & Allied land will enable land 205.75ha in area that is owned by Coal & Allied to be excised and dedicated to NSWG for conservation land.

Approval will not be sought under the Concept Plan for a specific lot layout. An indicative lot layout will indicates how the maximum dwelling yield of 623 dwellings could be achieved on the site.

Similarly, approval will not be sought under the Concept Plan for subdivision or construction of individual houses. However, the desired future character of the proposed concept plan will be included in Urban Design Guidelines. Urban Design Guidelines will be prepared to inform the Concept Plan in respect of urban form, built form, open space and landscape, access and movement and visual impact for the site.

It is proposed to dedicate land for conservation purposes as part of the Major Project Application via a Voluntary Planning Agreement (VPA) between Coal & Allied and the NSWG in accordance with s.93F of the EP&A Act.

The proposed Concept Plan and a Plan showing the proposed development areas and conservation areas is included in the PEA prepared by Urbis.

1.1 AIM AND OBJECTIVES

The aim of this analysis was to ascertain from desktop research whether there are any Aboriginal and European heritage constraints to the proposed development. To achieve these aims the following objectives were established:

- identify known Aboriginal sites in the project application area;
- undertake preliminary predictive modelling to identify the potential for additional unrecorded Aboriginal sites in the project application area;
- identify known and potential European heritage places in the project application area;

- assess the heritage values of the project application area; and
- prepare statements of recommendations that can assist in establishing DGRs.

1.2 NOMENCLATURE

"Project application area" refers to the development footprint of the project. "Study area" refers to the wider area surrounding the project application area that has been considered to provide environmental and historical context that will inform considerations for the project application area.

2. ABORIGINAL HERITAGE

2.1 BACKGROUND

Prior to European settlement of the region, the Lake Macquarie area was inhabited by the Guringai and Awabakal people. Although information about the Aboriginal occupation of the Gwandalan area is somewhat limited, the abundance of food resources (particularly around the lake's foreshore) indicates that this region would have been 'attractive' to the groups living in the area (EJE 2005:15). By the start of the twentieth century only a small number of Aboriginal people remained in the area living on the outskirts of settlements including Cams Wharf. However, the community remained in the region and has since grown to be one of the most dynamic and largest in NSW (Turner and Blyton 1995:51-52).

A literature review of the NSW Department of Environment Climate Change and Water (DECCW) library was made to understand archaeological sites in the broader region. Key word searches were used to find reports for the locality in the Aboriginal Heritage Information Management System (AHIMS) Aboriginal Sites Database.

The general patterning of Aboriginal sites in the local area shows a strong association with the lake edges, and little recorded in the immediate hinterland. This reflects Aboriginal focus on lake resources, predominantly shellfish. There is a general pattern in Australian archaeology of stone artefact sites concentrated along watercourses.

The network of watercourses and Stranger Gully swamp have some potential for associated artefacts, although there is an absence of site records in comparable

contexts in the region. However, this may reflect a lack of survey effort in these areas.

2.2 AHIMS SEARCH

A search of the AHIMS sites Database at DECCW within a 13 km x 14 km area centred around the Gwandalan project application area was undertaken. The extended search area provided additional context with regard to the location of known Aboriginal sites and provided further clarification as to previous archaeological work on a regional basis.

The search identified a total of 94 recorded Aboriginal sites – although some are noted as duplicate recordings. The results comprise 67 middens (two middens associated with quarries, two middens associated with stone artefact scatters and one midden associated with burials [at Swansea]), 14 stone artefact sites (13 stone artefact scatters and one isolated find), four scarred trees and three Potential Archaeological Deposits (PADs). Pulbah Island is identified as an Aboriginal place.

The AHIMS search across the south of Lake Macquarie shows that middens are the main Aboriginal site type recorded in the area. Estuarine middens comprising mostly cockle shells with some oyster and whelk are found along many parts of the Lake Macquarie shore.

A midden site has been recorded along the foreshore adjacent to the project application area (45-7-0079). The site card for this midden recorded that it extends approximately 20-30 m along the shore. The preliminary site investigation undertaken in January 2006 revealed that the site may be more extensive than this and indicated that it may also extend at least 15 metres inland. Initial observations suggest that the midden is one of the larger and more intact middens remaining around Lake Macquarie. As this midden site has been recorded in close proximity to the proposed development area, a survey will be required to confirm the location and extent of the midden to determine if it may be affected by the proposed development.

Another midden site, 45-7-0184, has been recorded along the foreshore near the Bowling Club in the township of Gwandalan, approximately 1 km north of the project application area.

Site 45-7-0334 is also a midden, which has since been destroyed under Section 90 consent. Site 45-7-0178 comprises two scarred trees and a shell midden. These two sites are located approximately 1 km west of the project application area at Chain Valley Bay.

2.3 IMPLICATIONS & PREDICTIVE MODELLING

Due to the undeveloped nature of the project application area, and general occurrence of Aboriginal sites across the region, intact Aboriginal sites could occur at any location within the project application area. However, there is a higher probability that Aboriginal sites were created near to the lake foreshore and on the lower lying portions of the project application area, associated with an accumulation of water, i.e. the creeks or swamps/marshes. Sites most likely to be found are midden sites and stone artefact scatters, although a range of site types are possible. These sites could be extensive covering several hundred metres, as they could represent long term Aboriginal subsistence adjacent to the lake's edge.

It is predicted that shell middens and stone artefact sites (scatters and isolated finds) are the Aboriginal site types most likely to be found in the project application area. Stone artefacts are considered most likely to be found on ridges and flats adjacent to the small creeks and Stranger Gully swamp, while middens are most likely close to the foreshore. Scarred or carved trees may occur within the project application area.

3. HISTORIC HERITAGE

3.1 BACKGROUND

The establishment and growth of European settlement in the Hunter region is directly linked to the presence of coal. An 'abundance of coal' in the Lake Macquarie area was recorded in 1800 following Captain William Reid's journey to Newcastle to collect a small cargo of coal, where he mistakenly stopped at what is now known as Moon Island rather than Nobbys Island to collect the cargo (Barney 1999:1).

The earliest white settlers in the region were missionaries, led by Rev. Lancelot Threlkeld in the 1820s to the area named in honour of former NSW Governor Lachlan Macquarie. Threlkeld established several mission stations in the region along with the first coal mine, Ebenezer Colliery, at Coal Point on land granted in 1829 (Barney 1999:1).

The Hunter Valley was opened to free settlement in 1820 following John Howe's discovery of an inland route from the Hawkesbury River to Patrick Plains. Extensive land grants were made along watercourses, and farming for sheep and cattle commenced soon after (ERM 2006:5).

3.1.1 Historical Overview Of The Study Area

The project application area is adjacent to the Lake Macquarie State Recreation Area, which includes the Pulbah Island and Moon Island Nature Reserves. The 2005 Plan of Management for these Nature Reserves notes that the area now known as Chain Valley Bay, which is located to the south west of the project application area, is thought to have been part of a 500 acre land grant made to Richard Cape in 1825 for cattle farming. This area was sought and obtained by John Moore in 1835 after Richard Cape left the colony temporarily (NPWS 2005: 24).

The Parish Maps of Wallarah for 1914, 1920, 1925 and 1932 all indicate that the project application area is located on land held by John Moore through this period.

The preliminary desk-top review of the project application area indicates that no activity associated with historical settlement and expansion has occurred. The only indications of activity observed during the preliminary investigation of the site are fire trail tracks, minor trail bike tracks and evidence of illegal dumping.

The 1954 aerial clearly shows that the project application area is covered with dense vegetation. The main access road directly to the west of the project application area is clearly visible.

No historical features can be seen within the project application area suggesting that the area has not been subject to development by the mid-twentieth century.

3.2 IMPLICATIONS FOR THE PROJECT APPLICATION AREA

As the project application area has not been associated with any historical activities, there is low potential for any historical heritage or archaeology items to be discovered within its boundaries.

4. POTENTIAL HERITAGE IMPACTS & RECOMMENDATIONS

4.1 POTENTIAL ABORIGINAL HERITAGE IMPACTS

There are currently no known Aboriginal heritage constraints to project application area. The limited development on the project application area indicates that there is a potential for undisturbed or intact Aboriginal heritage sites within it.

4.2 POTENITAL HISTORIC HERITAGE IMPACTS

The project application area has not been subject to historical development activities.

4.3 HERITAGE RECOMMENDATIONS

Archaeological survey should be undertaken to determine if any heritage values, Aboriginal are present within the current project application area.

All Aboriginal heritage assessment and consultation should be undertaken in line with DECCW's "Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation", and "Interim Community Consultation Guidelines" 2004.

5. **REFERENCES**

The following references informed the preparation of this letter style report:

Barney N (1999) From Mistake to Millenium: A Pictorial History of Lake Macquarie over 200 years LMCC.

EJE Heritage (2005) Conservation Management Plan – Wallarah and Moonee Collieries, Catherine Hill Bay NSW Consultancy report to Rosecorp Pty Ltd.

ERM Mitchell McCotter (1996) **Flora, Fauna and Archaeology Survey for Lot 422 DP 791776 No 21A Forsythe Parade, Black Hill** Consultancy report prepared for Don Caldwell New South Wales National Parks and Wildlife Service (NPWS) (2005) Lake Macquarie State Conservation Area Pulbah Island Nature Reserve and Moon Island Na (Turner and Blyton 1995:51-52).

Turner J and Blyton G (1995) **The Aboriginals of Lake Macquarie – A Brief History.** The History of Lake Macquarie Series, LMCC.

6. SUMMARY

This report provides heritage considerations for the Gwandalan proposed development area that is to be included in the PEA under Part 3A of the EP&A Act.

Environmental Resources Management Australia Pty Ltd

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