

Prepared for:  
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# Aboriginal Heritage Assessment: Stage 2 Approval, Hunter River Remediation Project Kooragang Island, Newcastle, NSW



# Distribution

## Aboriginal Heritage Assessment: Stage 2 Approval, Hunter River Remediation Project Kooragang Island, Newcastle, NSW

17 December 2008

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## Glossary of Terms

<b>Activity Area</b>	A pattern of artefacts in a site indicating that a specific activity took place.
<b>Archaeological Potential</b>	The likelihood of the presence of archaeological evidence ascertained through physical evaluation (survey, test excavations) and historical research.
<b>Artefact Scatter</b>	A collection of artefacts usually distributed across the surface of the ground.
<b>Artefact</b>	Any object which is physically modified by humans.
<b>Assemblage</b>	A collection of artefacts associated by a particular place or time and assumed generated by a single group of people. An assemblage can comprise different artefact types.
<b>Attribute</b>	A well defined feature of an artefact that cannot be further subdivided. Archaeologists identify types of attributes, including form, style and technology, in order to classify and interpret artefacts.
<b>Burra Charter</b>	The Burra Charter provides guidance for the conservation and management of places of cultural significance Australia. It sets a standard of practice for those who provide advice, make decisions about, or undertake works to places of cultural significance, including owners, managers and custodians. The most recent version of the Burra Charter was adopted by Australia ICOMOS (the Australian National Committee of ICOMOS) on 26 November 1999.
<b>Conservation</b>	As defined in The Burra Charter, conservation means all the processes of looking after a place so as to retain its cultural significance.
<b>Conservation Management Plan</b>	A document that outlines the cultural heritage significance of an object or area and policies, guidelines, maintenance and strategies for the conservation of the object or area.
<b>Contact Site</b>	A site that displays an interaction between early colonists and Aboriginal Australians.
<b>Country</b>	A term used by Aboriginal people to refer to the land to which they belong.
<b>Crown land</b>	Crown land is a class of public land, provided for the enjoyment and benefit of the people. See also Reserves.
<b>Cultural significance</b>	Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations (Australia ICOMOS Burra Charter Article 1.2).

<b>Desktop Survey</b>	A study that does not involve any field-based activity and only involves background research and reporting.
<b>Diffusion</b>	The spread of a cultural trait from one area to another by means of contact between people.
<b>Excavation</b>	An archaeological field method that involves the disturbance of the earth to reveal previously buried archaeological materials.
<b>Feature</b>	An artefact that cannot be normally removed from a site, e.g. foundations.
<b>Heritage</b>	The word 'heritage' is commonly used to refer to our inheritance from the past. Heritage can be used to cover natural environment as well, for example the Natural Heritage Charter. In this document, cultural heritage refers to all Indigenous and non-Indigenous places and objects, and associated values, traditions, knowledge and cultures.
<b>Holocene</b>	The geological period covering the last 10,000 years.
<b>ICOMOS</b>	ICOMOS (International Council on Monuments and Sites) is linked to UNESCO, with national committees in some 100 countries with the headquarters in France. ICOMOS promotes expertise in the conservation of cultural heritage. Australia ICOMOS was formed in 1976. Its fifteen member executive committee is responsible for carrying out national programs and participating in decisions of ICOMOS.
<b><i>In Situ</i></b>	In the natural or original position. Applied to a rock, soil, or fossil when occurring in the situation in which it was originally formed or deposited.
<b><i>In situ</i> conservation</b>	Strategies and initiatives designed for the preservation and conservation of historical archaeological materials without the need to collect or excavate materials from their archaeological context.
<b>Interpretation</b>	A way of communicating meaning and relationships using original artefacts, by first-hand experience and by illustrations.
<b>Isolated Find</b>	A single artefact not located with any other.
<b>Koori</b>	Koori is an Aboriginal term used to describe Indigenous people from southeastern Australia.
<b>Lithics</b>	Of, or pertaining to, stone.
<b>Manuport</b>	An object that is unmodified but has been transported to its location by humans.
<b>Midden</b>	A deposit of occupation debris, rubbish, or other by-products of human activity.



<b>Object</b>	An object means a moveable article, artefact or relic, and may include furniture, ornaments, cutlery, glass, crockery, works of art, honour boards, jewellery, and vehicles. Groups of objects are commonly referred to as a collection if there is a shared theme that links the objects.
<b>Pleistocene</b>	The geological period equivalent to the last ice age and preceding the Holocene from ca 2 million years to 10,000 years ago. The Late Pleistocene generally refers to the period of time from 40,000 – 10,000 years ago.
<b>Post-depositional</b>	After deposition. A term commonly used with reference to factors affecting the preservation of artefacts and archaeological features.
<b>Salvage Excavation</b>	The systematic documentation and recovery of an archaeological site immediately prior to its destruction.
<b>Shell Midden</b>	A mound or deposit typically defined by the presence of shells, but may also contain animal bones and other refuse that indicates a site of a human settlement.
<b>Significance</b>	A term typically used in conjunction with the term 'heritage value' to define the level of importance of a heritage site or place.
<b>Site</b>	An area where archaeological evidence is observed.
<b>Surface Site</b>	A site where artefacts are found on the ground surface.
<b>Test Excavation</b>	Excavation of small sections of an area to determine the archaeological remains and significance.
<b>Watching Brief</b>	The monitoring of works in progress at a known or potential archaeological site.

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# 1.0 Introduction

## 1.1 Project Background

ENSR Australia Pty Ltd (ENSR) was engaged by BHP Billiton Pty Ltd to prepare an Environmental Assessment (EA) for Stage 2 of the Hunter River Remediation Project. The primary focus of Stage 2 of the project is the treatment of contaminated river sediment at a site at Mayfield and subsequently the transport and emplacement of treated sediments to a purpose built waste emplacement facility on Kooragang Island. Stage 2 of the project includes the following elements:

- treatment of contaminated sediments by a cement stabilisation process onshore at the Mayfield Site;
- construction of the Kooragang Island Waste Emplacement Facility (KIWEF);
- transport of treated sediment to the KIWEF; and
- placement of treated sediment in KIWEF.

Previous project approval has been granted by the Minister for Planning for the extension of shipping channels within the Port of Newcastle including dredging, excavation, treatment and disposal of sediments from the south arm of the Hunter River. (Refer Development Approval for the Proposed Extension of Shipping Channels: Port of Newcastle (DA-134-3-2003-i)). Stage 2 focuses on the full scale treatment, transport and placement of the dredged contaminated sediments in a purpose built emplacement facility on Kooragang Island.

As part of the approval process specialists from ENSR were engaged to prepare an Aboriginal heritage assessment of the proposed works associated with the construction and operation of the Kooragang Island Waste Emplacement Facility. This assessment discusses the potential impacts to Aboriginal cultural heritage values as a result of the development.

Relevant legislation, summarised further in **Section 0**, is the *Environmental Planning and Assessment Act 1979* and the *National Parks and Wildlife Act 1974*. Relevant guidelines include the *Aboriginal Cultural Heritage: Standards & Guidelines Kit* (National Parks and Wildlife Service 1997) and the *Burra Charter* (Australia ICOMOS 1999). The Aboriginal consultation process for this project followed the DEC *Interim Community Consultation Requirements for Applicants* (2004).

## 1.2 Study Area

The project land, hereafter referred to as the 'study area,' is located in the industrial area at the southern-central area of Kooragang Island, near Newcastle, NSW. Kooragang Island is located in the estuary of the Hunter River. Specifically, the study area is located immediately to the north west of Tourle Street Bridge. The northern boundary abuts the easement for the proposed Newcastle Coal Infrastructure Group (NCIG) railway spurs and sidings (**Figure F1** and **Figure F2**). The southern arm of the Hunter River is within 100 m south of the study area.

## 1.3 Project Team

The Project Team consists of an archaeologist and other specialists from ENSR. Neville Baker (ENSR Principal Archaeologist) directed the assessment and provided technical and QA review of this report. Rick Bullers (ENSR Project Archaeologist) managed the assessment and wrote this report. Susan Connolly and Tim Osborne provided administrative and drafting support. Carly Ellis (ENSR Acting Environmental Services Workgroup Manager) was the overall project manager for the EA. Carl Bagnall (BHP Billiton Environment & Community Manager) was the client's representative.

## 1.4 Aboriginal Community Consultation

Aboriginal community consultation was undertaken in general accordance with the DEC (2004) *Interim Community Consultation Requirements for Applicants*. These guidelines outline a process of inviting Aboriginal groups to register their interest in being party to consultation (including local newspaper advertising), seeking responses on proposed assessment methodology, and seeking comment on proposed assessments and recommendations. The guidelines require proponents to allow ten working days for Aboriginal groups to respond to invitations to register, and then 21 days for registered Aboriginal parties to respond to a proposed assessment methodology, unless all groups respond earlier.

The proponent wished to take a proactive approach to consultation with the Aboriginal community. Advertisements were run in the local newspapers and invitations to register were sent to known Aboriginal groups in the area. Given very tight timeframes for the project, the results of DECC, Council, Office of the Registrar and Native Title searches were taken from a search conducted on Kooragang Island six months previously (ENSR 2008b).

**Table 1: Initial Community Consultation**

Method of Consultation	Organisation/Publication	Date Sent	Final Response Date
Public Advertisement	<i>Newcastle Star</i>	Ran 8 October 2008	22 October 2008
	<i>Newcastle Herald</i>	Ran 11 October 2008	24 October 2008
Notification Letter	Awabakal Local Aboriginal Land Council (ALALC)	29 October 2008	30 October 2008
	Newcastle Council	18 April 2008	No response
	DECC	18 April 2008	5 May 2008
	Office of the Registrar of Aboriginal Owners	18 April 2008	No response
	Native Title tribunal	18 April 2008	No response

As a result of this process, four Aboriginal community groups initially registered their interest in being consulted during the project (ALALC did not initially respond, but were automatically registered). Previous knowledge of Aboriginal community groups with interest in the Kooragang Island area, suggested that at least two other groups – Awabakal Traditional Owners Aboriginal Corporation (ATOAC) and Awabakal Descendents Traditional Owners Aboriginal Corporation (ADTOAC) – would be interested. In all, six Aboriginal community groups registered their interest in being involved (**Table 2**).

**Table 2: Registered Aboriginal Stakeholder Groups**

Aboriginal Community Group	Representative
ALALC	Cheryl Kitchener
Nur-Run-Gee Pty Ltd	Leanne Anderson
Mur-Roo-Ma Inc	Anthony Anderson
Gidawaa Walang Cultural Heritage Consultancy (GWCHC)	Ann Hickey
ATOAC	Kerrie Brauer
ADTOAC	Shane Frost

A meeting was arranged to discuss the proposed methodology for the Aboriginal heritage assessment and, following initial telephone calls to determine availability, a combined methodology statement and methodology meeting invitation was sent to each community group on 29 October 2008. The meeting was held as a proactive approach to discussing the issues directly with the registered groups rather than waiting for responses to written notification. All registered groups indicated they would attend.

A series of three meetings was held at the BHP Billiton Property Services Group offices in Selwyn Street, Mayfield, on 3 November 2008. Five groups were represented at the meetings – GWCHC was scheduled to attend but due to unforeseen circumstances on the day of the meeting was unable to attend. A presentation was given to the groups which included a detailed synopsis of the project background, as well as a briefing on the proposed Aboriginal heritage assessment methodology, with emphasis on the reasoning behind the proposed methodology (see **Section 0**).

All groups gave verbal agreement to the methodology at the meeting. During the meeting, the tight timeframes for the project were discussed and a request was made for groups to expedite their comments on the methodology and, if possible give written agreement by 6 November 2008. All groups agreed to this request.

A copy of the methodology presentation was emailed to all groups on 4 November 2008 with a fax back response form for agreement/comments regarding the proposed methodology.

Since GWCHC did not attend the meeting, the presentation slides were sent for their records/information and a follow up telephone call was made on 5 November 2008 to discuss the methodology and request comments. Comments/feedback on the methodology are provided in **Table 3** below.

**Table 3: Aboriginal Community Feedback on Proposed Methodology**

Aboriginal Community Group	Representative	Date Feedback Received	Summary of Comments
ALALC	Cheryl Kitchener		Provided verbal agreement with methodology at the meeting. No written comments received at the time of writing.
Nur-Run-Gee Pty Ltd	Leanne Anderson	6 Nov 2008	Agreement with methodology. Consider spiritual/cultural values to be considered in the draft report.
Mur-Roo-Ma Inc	Anthony Anderson	6 Nov 2008	Agreement with methodology. Expressed disagreement with desktop studies in general, but accepts the rationale in this case.
GWCHC	Ann Hickey	10 Nov 2008	Agreement with methodology. No other comments received.
ATOAC	Kerrie Brauer	7 Nov 2008	Agreement with methodology, although recommends protocols be put in place to ensure further studies if dredging into the natural river base reveals any artefacts.
ADTOAC	Shane Frost	6 Nov 2008	Agreement with methodology. No other comments received.

Consultation with the Aboriginal community has been ongoing throughout this project and all registered stakeholders were invited to comment upon the draft of this report prior to its finalisation. A copy of the draft report was sent to registered Aboriginal groups on 11 November 2008. After allowing 10 working days for review, and subsequent to an on-site meeting as requested by three of the stakeholder groups, the following comments on the draft report were received (**Table 4**).

**Table 4: Comments Received from Aboriginal Stakeholder Groups Following Review of the Draft Aboriginal Heritage Assessment**

Group	Date Received	Comments
ALALC		No response received at time of writing.
Nur-Run-Gee Pty Ltd	14 November 2008	Letter received 14/11/08. Initial response provides full agreement with report and its recommendations.
Mur-Roo-Ma Inc	14 November 2008	Letter received 14/11/08. Initial response provides full agreement with report, its conclusions and that the wishes and beliefs of the local Aboriginal people have been acknowledged.
GWCHC		No response received at time of writing.
ATOAC	18 November 2008	Letter received 18/11/08. Concern over affects of dredging into river base [not part of this project]; desktop studies do not highlight spiritual values of study area; ethnographic writings can confuse Nation boundaries, with possibility of disinheriting Awabakal descendents; term Aboriginal "community" should be replaced by "stakeholders".
ADTOAC	15 November 2008	Letter received 15/11/08. European disturbance may not have destroyed all evidence of Aboriginal occupation; drainage channel may disturb (possible) extent of DECC site 38-4-0041 (requests Aboriginal stakeholder monitoring); general comments on spiritual connection to Country.

Copies of Aboriginal community comments are presented in **Appendix B**. In addition, specific comments regarding the cultural significance of the study area (and any associated "sites") and report recommendations where given incorporated into **Sections 0** and **0** respectively.

## 1.5 Limitations

Predictions have been made about the probability of subsurface archaeological materials occurring within the study area. It is possible that materials may occur in any landscape context, and the assessment of subsurface materials refers to the likelihood of occurrence based on surface indications and environmental context.

ENSR has undertaken a search of the Aboriginal Heritage Information Management System (AHIMS) held by the Department of Environment and Climate Change (DECC). The search results are provided in **Appendix A**. Register searches are constrained by the amount of data in the register and the quality of that data (for example grid references can be inaccurate). Large areas of NSW may not have been systematically searched and may contain Aboriginal objects and other heritage values not recorded on AHIMS. Additionally, the AHIMS reports database can only be searched by the title of the report, which may not indicate the geographical location of the area covered. This means that it is possible that some known sites and some reports may have been omitted from this study. Sites and reports are regularly added and removed from AHIMS and therefore the accuracy of information provided from AHIMS is only valid on the day the register is searched.

A summary of the statutory requirements regarding Aboriginal and historic heritage is provided in **Section 0**. This is provided based on experience with the heritage system in NSW and does not purport to be legal advice. It should be noted that legislation, regulations and guidelines change over time, and users of the report should satisfy themselves that the statutory requirements have not changed since the report was written.

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## 2.0 Assessment Methodology

The most appropriate methodology for Aboriginal heritage assessment of the study area was deemed to be a detailed desktop assessment, given:

- the record of land use in the study area and the extent of disturbance and modification to the landscape (**Section 3.2**);
- a review of previous Aboriginal cultural heritage assessments in the vicinity of the study area indicating that there is little likelihood of compromising the cultural heritage values of the study area (**Section 4.3**); and
- the predicted limited archaeological potential of the study area (see **Section 4.4**).

On that basis, an Aboriginal heritage survey of the study area was not conducted. This methodology was agreed to by the local Aboriginal community (**Section 1.4**).

It should be noted, however, that the concept of Aboriginal heritage is not confined to material evidence, i.e. archaeological sites. Instead, it is much broader in scope, encompassing such factors as language, stories and ritual. To investigate Aboriginal heritage values not related to archaeological sites relies on contact with the local Aboriginal community for advice. The method adopted to explore this issue was to consult the local Aboriginal community using DECC's *Interim Community Consultation Requirements for Applicants* (see **Section 1.4**).

Existing Aboriginal site records and previous assessments were reviewed to allow sufficient background information to provide an assessment of cultural significance to the extent that desktop survey allows.

### 2.1 Specific Actions

The methodology comprised:

- a search of the DECC AHIMS database;
- a review of relevant archaeological reports lodged in DECC's archaeological reports library at Hurstville;

consultation with Aboriginal community groups following DECC's interim guidelines (discussed further in **Section 1.4**), with emphasis on the social cultural heritage values of the study area.

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## 3.0 Environmental Context

### 3.1 Landscape History

The study area lies within Lower Hunter region of New South Wales; specifically within the broad physiographic area known as the Lower Hunter Plain (Matthei 1995a). The region occurs on a complex of Carboniferous to Permian hard rock geologies with overlying unconsolidated Quaternary alluvium. The surface alluvium deposits in the study area form a thin veneer over an underlying belt of deposits from the Tomago Coal Measures consisting of shale, mudstone, sandstone, tuff and coal (NSW Department of Mines 1966).

The project area is located on the south eastern edge of Stockton Bight, a dual barrier system that extends along the coastline from the south arm of the Hunter River to Birubi Point and inland as far as Grahamstown reservoir (Umwelt 2006: 5). Stockton Bight is composed of an Inner Barrier formed during the Pleistocene period, and an Outer Barrier formed during the Holocene period. The Outer Barrier formed as a result of aeolian action on sands that had accumulated along the coast, pushing them landwards. A series of beach ridges and sand plains were formed, blocking drainage from low-lying areas and increasing lagoon siltation to form a low-lying, swampy area known as the Inter Barrier Depression. About 3,000 years ago increased siltation occurred and tidal mud flats developed. The islands that now form Kooragang Island (**Section 3.2**) were tidal mud flat islands, formed probably less than 3,000 years ago (Thom et al 1992: 124).

Kooragang Island comprises two soil landscapes (Matthei 1995b: 191, 224-5). The north and western quadrants of the island lay on the Fullerton Cove soil landscape comprising tidal flats and creeks with deep, very poorly-drained Solonchaks. The south eastern quadrant of the island, including the whole of the study area, is designated Disturbed Terrain where soils are highly variable, extensively disturbed by human activity including complete disturbance, removal or burial of soil.

The study area is entirely a modified landscape comprised of introduced industrial waste. No insitu natural soils or landforms are present.

### 3.2 Past Land Use and Disturbance

Prior to European settlement, and well into the 20<sup>th</sup> century, the area now known as Kooragang Island was a series of tidal mud-flat islands (Hexham, Ash, Moscheto, Dempsey, Goat, Spectacle, Table, Pig and Walsh Islands) separated by narrow tidal inlets (Williams et al 2000: 16-18). Ash and Dempsey Islands were settled for agriculture fairly early; the first dairy was established on Dempsey Island in about 1845. By 1892 Dempsey Island and much of Moscheto Island had been subdivided into small landholdings (**Figure F3**) and presumably largely cleared as a result (Umwelt 2006: 5).

Kooragang Island, as it is today, is the result of land reclamation efforts by Broken Hill Pty Ltd (BHP), commencing in 1951. It is a composite island formed by reclaiming of the channels separating the various islands. Dredge material from the river channel was dumped in the tidal inlets, and by 1966 the inlets had been filled, forming a single landmass (Williams et al 2000: 24). The area was then renamed Kooragang Island in 1968 (Geographical Names Board 2008). The study area is located near the south eastern end of the former Ash Island (**Figure F3**). This area of Ash Island has been heavily disturbed since the late 19<sup>th</sup> century when the land was cleared for early settlement. During the reclamation process during the 1950s and 1960s, efforts were made to raise the level of the low-lying swampland that characterised the former Hunter River islands (HLA-Envirosciences 2005). This means that the upper-level soils in the study area are largely imported dredge-fill.

The level of land disturbance is visible when a sequence of aerial photos is analysed from 1954, 1974 and 2004 (**Figure F4**).

The island covers an area of approximately 2,600 hectares and large areas of the island have been designated for industrial development and port related activities. In 1972, BHP commenced operating an industrial landfill on Kooragang Island. Industrial waste materials (e.g. coal washery rejects, steel manufacturing waste and construction waste) were used to reclaim land in addition to the deposition of dredged material from the Hunter River estuary and its tributaries. The eastern section of Kooragang Island is also populated by industrial development. In relation to the study area, surrounding land uses are described in **Table 5**.

**Table 5: Surrounding land uses to the proposed Kooragang Island Waste Emplacement Facility**  
(adapted from ENSR 2008a)

Direction	Surrounding Land use
North	Directly to the north is vacant land that has previously been used as an industrial landfill, predominately coal washery rejects and, to a lesser extent, steel making byproducts such as fly ash. Northeast of the site lies the former Delta EMD Australia Pty Ltd landfill site. Additionally, the NCIG railway links are currently being constructed adjacent to the northern boundary of the site.
East	Directly to the east is vacant land that has previously been used as an industrial landfill, predominately steel-making byproducts such as fly ash. Further to the east, approximately 1.7 km, is the proposed coal storage area for the proposed NCIG coal export terminal.
South	Directly to the south is the Hunter River and to the south east is the Tourle Street Bridge.
West	To the immediate west of the site is vacant land that is a former general refuse landfill site. Further to the west is a railway line. To the west and north, generally, lies the Kooragang Wetlands and Ash Island. The Kooragang Wetlands is the location of the Kooragang Wetlands Rehabilitation Project (KWRP). The KWRP is a project of the Hunter-Central Rivers Catchment Management Authority.

The disturbed nature of soils in the area was confirmed by several geotechnical investigations on southern Kooragang Island. Geotechnical results for the Cleanaway site east of the study area showed the generalised geology for the area consisted of three layers: a loose to medium dense sand (1 to 2.5 m) thick, formed by dredge fill from the Hunter River; below this a soft organic clay layer (1 to 4 m thick); and below this dense sand. Sandstone bedrock was found at a depth of 20 to 30 m. The top 2 to 3 m of dredge fill was found to be well settled and graded (HLA-Envirosciences 1995: 52). A similar survey on the Cargill oilseed facility adjacent to the study area found similar results (D. J. Douglas and Partners 1994). SMEC (2005, cited in Umwelt 2006: 5) conducted geotechnical investigations at the nearby Tourle Street Bridge, establishing a stratigraphic sequence to a depth of seven metres. The investigation found a duplex stratigraphy with a two metre deep layer of fine to coarse sand, with shell fragment inclusions, overlying sandy clays, clays and gravels. They concluded that the upper sand unit may consist of redeposited dredge fill.

This review suggests that the soil profile of the study area has an A horizon that probably consists of soils introduced and deposited as part of the land reclamation process and industrial waste deposition. The landform is entirely comprised of introduced coal rejects and slag. No natural soil is evident on the study area.

## 4.0 Cultural Context

### 4.1 Ethnography

Prior to European settlement, the Lower Hunter River district was inhabited by people of the Awabakal and Worimi language groups. These groups covered relatively small geographic areas; the Worimi lands commenced at the Hunter River and extended north to around Cape Hawke (just south of Forster) and west to the dividing range around Maitland and Martins Creek. The Awabakal lands abutted the southern boundary of the Worimi and extended southwards to around Norah Head near Wyong (Tindale 1974). However, there is a certain level of uncertainty about the Aboriginal groupings in the Lower Hunter Region, and accounts of the Awabakal are confused. Gunson (1974: 30) suggests that the name Awabakal became the general term for the whole tribe based on Threkeld's studies of the area, whereas early government documents indicate that the larger tribe was comprised of a number of smaller clans, of which the Awabakal clan was the largest (Umwelt 2003: 6). Those clans included the Awabakal clan (Lake Macquarie and Newcastle region), the Five Islands clan, the Ash Island clan, the Kurunbong clan (Corranbong) and the Pambalong clan (swamps district and near Newcastle).

Both Tindale (1974) and Elkin (1932: 359) agree that the Hunter River formed the natural boundary for the Awabakal and Worimi groups. However Enright (1932: 75) believed that the Worimi lands extended south to Norah Head (covering the Awabakal lands) and highlights the inherent difficulties in defining pre-European distribution of Aboriginal people using ethnographic data alone. This was reiterated in feedback to the draft of this report by ATOAC, who believe there is a need for sensitivity in using ethnographic material because of the potential to confuse the cultural boundaries between the Awabakal and Worimi Nations. They believe that such confusion has the potential to misrepresent Awabakal presence in the region and disinherit Awabakal descendants from their ancestral lands (**Appendix B**).

Ethnographic accounts of burial practices suggest that both the Worimi, around Port Stephens, and the Awabakal, around Lake Macquarie, buried their dead wrapped in tea tree (*Melaleuca* spp.) bark and covered the graves so as not to leave any noticeable trace on the surface (Brayshaw 1987: 86-87).

Spiritual authority for the Aboriginal peoples of south-eastern Australia was vested in a large number of supernatural beings, but there was a common belief in an All-Father sky deity who held various names. To people of much of inland NSW, including the Gamilaroi, he was *Baayama* ('The Great Shaper,' 'Thunder-God' or 'Great One'), who formed the world by shaping the cosmos from a pre-existing primeval void (O'Rourke 1997: 173). To the peoples of the Central Coast, he was *Daramalan* or *Goin*. These deities were said to be able to return to earth to punish transgressors of marriage rules, and could also return during certain initiation rituals (Berndt 1947: 334-336).

Brayshaw (1987: 74-82) provides an ethnographic account of the diet of the people of the Lower Hunter. They consumed a variety of foods. Plant foods included yams, giant lily's, various fruits, and seeds which were soaked for weeks, pounded and then roasted. As would be expected of coastal peoples, fish and shellfish were a significant element of the diet, particularly mullet, freshwater eels, cockles, oysters and crayfish. Mammalian animals hunted included macropods, echidnas, possums and goannas. The people of the Lower Hunter used bark extensively to erect huts and construct canoes.

Accounts of the Ash Island clan are scarce. Grant (1803: 154-155) observed "the fires of the natives and many individuals" opposite Ash Island. He also observed, in the area of Ash Island, part of a net and the remains of fires on the banks of a creek, and also a weir within the creek itself.

By 1818 white settlement extended as far north as the Hunter Valley and brought a period of decline in Aboriginal population numbers, largely due to the smallpox pandemic that caused an unknown number of deaths between 1830 and 1832.

It may be noted that Kooragang Island means “Aborigines there” or “camp there” in the Awabakal and Kattang language terms. It is also the name of the 14 acre estate on Mosquito Island, purchased by Rev. Pleydell N. Wilton in 1845, which was incorporated into Kooragang Island (Geographic Names Board 2008).

## 4.2 Local Archaeological Context

The Lower Hunter Region contains a rich record of archaeological deposits comprising distributions of flaked stone artefacts. Stone artefacts are typically found in duplex soil exposures close to creeks where artefact concentrations are greatest. While a range of archaeological sites are known to occur, open archaeological deposits are by far the most common form of Aboriginal site recorded throughout the region.

It should be noted that the majority of Aboriginal implements such as nets, spears, canoes, etc., which were well-described in the ethnographic record, were made from organic materials, which are unlikely to survive in the archaeological record. In contrast, stone tools were not given much attention ethnographically, but now dominate the archaeological record due to their high survivability. Likewise, Aboriginal shell middens do not decompose and retain a high survival rate, except in areas of high land disturbance.

Management of open archaeological deposits (commonly termed “open sites”) within duplex soils is the typical Aboriginal heritage issue facing managers. Such sites are typically associated with stone artefact assemblages containing implements dating to the Holocene period (from 10,000 years ago to the present). In the case of Kooragang Island (or its original component islands), any surviving artefacts will probably be less than 3,000 years old, which is when the islands are thought to have formed (**Section 3.2**).

Where open sites are threatened with development a full significance assessment has sometimes required test excavation to fully understand the full extent and contents of Aboriginal stone artefacts hidden in the topsoil. Where these deposits are found to be of high significance due to social or scientific value, archaeological salvage is sometimes warranted to mitigate the loss of sites through development impact.

### 4.2.1 Registered Aboriginal Sites

A search of DECC’s AHIMS database revealed that there are 123 registered Aboriginal sites within a 14 x 14 km area centred over the study area (**Appendix A**). The search also revealed that there were no registered Aboriginal sites within the study area. The majority of sites are associated with developments occurring in Newcastle city, along Stockton Beach and Fullerton Cove. Only two Aboriginal sites have been recorded on Kooragang Island itself (**Figure F5**), a shell midden on what was formerly Moschetto Island (#38-4-0050) and a shell midden on the northern approach to the Tourle Street Bridge (#38-4-0041).

The majority of sites (n=70) were not formally categorised into site type. Of those, 28 have only artefact features and may be defined as open camp sites and 29 have various shell deposits, either alone or in combination with artefacts. These may be defined as middens, although only three were associated with the typical earth mound feature associated with middens.

The irregular distribution, with the majority of registered sites occurring in the developing areas of Stockton Bight, reflects the lack of systematic Aboriginal survey in the area. However, the industrialisation of Kooragang Island has seen a great deal of Aboriginal heritage assessment conducted on Kooragang Island (**Section 4.3**). The paucity of recorded Aboriginal sites in the industrial area of Kooragang island is more likely to be a function of previous land use, disturbance and land modification, rather than from a lack of sites originally occurring.

**Table 6: AHIMS Registered Sites within the Search Area**

Site Type	Site Feature(s)	Number of Sites
Open Camp Site	AFT (Artefact)	20
Midden	AFT, ETM, SHL	22
Combined Open Camp Site and Midden	AFT, ETM, SHL	5
Scarred Tree	TRE	1
Axe Grinding Groove	GDG	2
Isolated Find	AFT	1
Natural Mythological (Ritual)	ACD	2
None (Site type not defined)	Various combinations of AFT, SHL, PAD, BOM, ETM, BUR, ACD	70
	<b>Total</b>	<b>123</b>

However, from the available contextual information, it is clear that the two most common resources in the local area are middens, accounting for 41% of recorded sites (with a defined site type<sup>1</sup>), and open camp sites comprising stone artefacts, accounting for 39% of sites. Not surprisingly, the two recorded sites on Kooragang Island are shell middens.

#### 4.2.2 Site DECC No. 38-4-0041

This record is of a shell midden recorded as being south east of the study area, on the northern bank of the south arm of the Hunter River, just east of the Tourle Street Bridge (**Figure F5**). This record is the closest to the study area and is considered to be the most relevant. The site was originally recorded by David Moore of the Australian Museum in 1970. The site card (included in **Appendix A**) describes the site as:

*Midden by new bridge is almost completely bulldozed. In small undisturbed parts there are very marked lines of shells. Sample of shell types collected. No artefacts.*

This description indicates that it had been heavily disturbed when it was originally recorded, when the bridge was constructed in 1970. Subsequent archaeological surveys have failed to relocate the site (**Section 4.3**). Furthermore, the original recording was made using a small-scale map and conversion to MGA coordinates is problematic. Consequently there is some uncertainty as to whether the site is on the southern or northern banks of the south arm of the Hunter River.

<sup>1</sup> The AHIMS search returns identified 53 sites with the site type defined. A further 70 had no site type defined.



Despite this, one Aboriginal group – ADTOAC – is concerned that excavation of the drainage channel at the south east corner of the study area may impact on this site (since the original dispersal extent of the site is unknown). ADTOAC recommends Aboriginal site officers be present to monitor the construction of the channel.

ENSR considers that, due to the levels of previous disturbance, the likelihood of encountering in situ midden material is low (see **Section 0**). Furthermore, ENSR considers that there is sufficient spatial distance between the site (east of the Tourle Street Bridge) and the proposed drainage channel, that construction works are unlikely to encounter material from the site.

#### 4.2.3 Site DECC No. 38-4-0050

This record is of a shell midden on the north eastern shores of Kooragang Island, on what was formerly Moschetto Island, near the mouth of the north arm of the Hunter River (**Figure F5**). The site is located well away from the study area (approximately 4 km to the north east).

### 4.3 Previous Assessment of the Study Area

Several Aboriginal heritage assessments have been conducted on Kooragang Island, including areas immediately adjacent to the study site. The major findings of several of these assessments are presented in **Table 7**.

**Table 7: Major Findings of Previous Aboriginal Heritage Assessments**

Study/Project	Outcomes/Major Findings
PWCS, 1996. <i>Kooragang Coal Terminal Stage 3 Expansion</i>	<ul style="list-style-type: none"> <li>the area was originally occupied by Aboriginal people but it is likely that evidence of their occupation has been destroyed by the reclamation and redevelopment of the area; and</li> <li>the project would not impact items of Aboriginal cultural significance.</li> </ul>
Protech Steel, 2001. <i>Protech Proposed Cold Mill Facility</i>	<ul style="list-style-type: none"> <li>no evidence of Aboriginal occupation identified during a survey of the northern bank of the south arm of the Hunter River in conjunction with Worimi LALC;</li> <li>an attempt to relocate DECC No. 38-4-0041 near the Tourle Street Bridge was unsuccessful;</li> <li>the area was originally occupied by Aboriginal people but it is likely that evidence of their occupation has been destroyed by the reclamation and redevelopment of the area;</li> <li>the extension of the Hunter River shipping channels is unlikely to impact Aboriginal archaeology; and</li> <li>the findings were agreed to by Worimi LALC.</li> </ul>



Study/Project	Outcomes/Major Findings
Umwelt, 2003. <i>Proposed Extension of Shipping Channels, Port of Newcastle</i>	<ul style="list-style-type: none"> <li>the site has been highly modified and any evidence of Aboriginal occupation has been destroyed by the reclamation and redevelopment of the area;</li> <li>no significant Aboriginal sites on the project area confirmed by Awabakal LALC;</li> <li>the Protech facility would not impact items of Aboriginal cultural significance; and</li> <li>Awabakal LALC requested site officer presence during any excavation work.</li> </ul>
Insight Heritage, 2006. <i>Tourle Street Bridge Archaeological Assessment</i>	<ul style="list-style-type: none"> <li>an attempt to relocate DECC No. 38-4-0041 east of Tourle St Bridge was unsuccessful;</li> <li>the survey site was entirely fill material, specifically slag;</li> <li>the recorded site was disturbed by construction of bridge at time of recording (1970) and has been subject to further disturbance since;</li> <li>the recorded site is of low cultural significance due to disturbance and deposition of fill; and</li> <li>a Section 90 AHIP should be obtained prior to the project proceeding.</li> </ul>
Umwelt, 2006. <i>Section 90 Consent Application, Tourle Street Bridge Replacement</i>	<ul style="list-style-type: none"> <li>report based on Insight Heritage 2006 report above;</li> <li>project area has been subjected to significant impacts from past land uses;</li> <li>geotechnical investigations indicate that soils in the study area are redeposited sands dredged from the Hunter River;</li> <li>any archaeological material that may exist will be highly disturbed; and</li> <li>Section 90 consent recommended.</li> </ul>
NCIG, 2007. <i>NCIG Coal Export Terminal Environmental Assessment</i>	<ul style="list-style-type: none"> <li>project site has been subject to intense development including dredge spoil disposal, land reclamation and waste disposal activities for more than 50 years;</li> <li>previous surveys in project site and Kooragang Port &amp; Industrial Area have not identified any evidence of Aboriginal occupation;</li> <li>therefore no field survey conducted, and assessment was based solely on desk top survey;</li> <li>no significant cultural heritage values identified by Aboriginal community; and</li> <li>little likelihood of Aboriginal objects remaining as a result of past land disturbance.</li> </ul>

#### 4.4 Archaeological Potential of the Study Area

Without exception all previous assessments of lands in the vicinity of the study area have concluded that there is little likelihood for there to be any material (physical) evidence of Aboriginal occupation remaining, and that there is little likelihood that Aboriginal cultural heritage values will be compromised by the various proposed activities. All these assessments were conducted in full consultation with the Aboriginal community and with agreement to the reports.

Geotechnical investigations conducted by SMEC (2005, cited in Umwelt 2006: 5) indicate that the upper sand units of the stratigraphic sequence may be redeposited dredge spoil.

The review of historical land use, together with the results of previous surveys and geotechnical investigations on lands in the near vicinity of the study area, indicate that the lands within the study area have been subject to extensive disturbance and modification for more than 50 years. The upper sequences of soils within the study area consist of dredge spoil and industrial waste material.

Consequently it is considered that any physical evidence (artefacts) that may occur in the study area are likely be the result of secondary deposition and would no longer contain any contextual information. On that basis, it is considered that the study area has little or no archaeological potential and that no further archaeological investigation of the study area is required.

## 5.0 Legislative Framework

### 5.1 Commonwealth Legislation

#### 5.1.1 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The purpose of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Heritage Protection Act) is the preservation and protection from injury or desecration of areas and objects in Australia and in Australian waters that are of particular significance to Aboriginal people in accordance with Aboriginal tradition.

Under the Heritage Protection Act the responsible Minister can make temporary or long-term declarations to protect areas and objects of significance under threat of injury or desecration. The Act can, in certain circumstances, override state and territory provisions, or it can be implemented in circumstances where state or territory provisions are lacking or are not enforced. The Act must be invoked by or on behalf of an Aboriginal or Torres Strait Islander or organisation.

The Act is administered by the Department of the Environment, Water, Heritage and the Arts.

There are no areas or objects in the study area declared under this Act.

#### 5.1.2 Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act) provides for the establishment of two heritage lists:

- The National Heritage List is a list of places with outstanding heritage value to Australia, and includes places overseas.
- The Commonwealth Heritage List is a list of places managed or owned by the Australian Government, and includes places, or groups of places in Commonwealth lands or waters, or under Commonwealth control, and are identified by the Minister as having Commonwealth heritage values.

There are no items in the study area listed on either of these lists.

### 5.2 New South Wales Legislation

The following New South Wales legislation protects aspects of cultural heritage and is relevant to development activities in the study area.

#### 5.2.1 Environmental Planning and Assessment Act 1979

The EP&A Act requires that consideration be given to environmental impacts as part of the land use planning process. In NSW environmental impacts are interpreted as including cultural heritage impact. Three parts of the EP&A Act are most relevant to Heritage. Part 3 relates to planning instruments, including those at local and regional levels; Part 4 controls development assessment processes; and Part 5 refers to approvals by determining authorities.

Part 3A of the EP&A Act provides an approvals regime applying to all major projects. Major projects are defined under State Environmental Planning Policy (Major Projects) 2005 (SEPP 2005). It also applies to those projects which the Minister believes are required to deliver particular government plans or programs, known as critical infrastructure projects. Part 3A applies to all projects where the Minister has the approval role. Under Part 3A, the Minister can issue a project approval or a concept approval. Both maintain the requirement for consultation with the community and relevant State Government agencies, however the requirement for certain other permits and licences is removed under Part 3A.

The proposed project is not classified as a 'major project' under Part 3A. The development is classified as a 'State Significant Development', classified as Category 1 remediation work. This application seeks the Minister's consent for the project to proceed to Stage 2 in accordance with conditions of the original Minister's approval.

## 5.2.2 National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974* (NPW Act), administered by DECC, is the primary legislation for the protection of Aboriginal cultural heritage in NSW. One of the objectives of the NPW Act is:

*The conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including but not limited to: (i) places, objects and significance to Aboriginal people... (s. 2A(1)(b)).*

Part 6 of the NPW Act provides specific protection for Aboriginal objects and places by making it an offence if impacts are not authorised. An Aboriginal Heritage Impact Permit (AHIP) should be obtained if impacts on Aboriginal objects and places are anticipated. AHIPs can be issued under ss. 87 and 90 of the NPW Act. The following definitions from the Act apply:

- 1 An *Aboriginal object* is any deposit, object or material evidence (that is not a handicraft made for sale) relating to Aboriginal habitation of NSW, before or during the occupation of that area by persons of non-Aboriginal extraction (and includes Aboriginal remains).
- 2 *Aboriginal remains* means:  
*...the body or remains of the body of a deceased Aboriginal, but does not include:*
  - a) a body or the remains of a body buried in a cemetery in which non-Aboriginals are also buried, or
  - b) a body or the remains of a body dealt with or to be dealt with in accordance with a law of the State relating to medical treatment or the examination, for forensic or other purposes, of the bodies of deceased purposes.
- 3 An *Aboriginal place* is a place declared so by the Minister administering the NPW Act because the place is or was of special significance to Aboriginal culture. It may or may not contain Aboriginal objects.

Consultation with the Aboriginal communities is required under DECC policy when an application for an approval under Part 6 is considered and is an integral part of the process. Consultation undertaken as part of this assessment is outlined in more detail in **Section 1.4**.

### 5.2.3 Local Government

Under the provisions of the EP&A Act, LEPs and REPs are prepared by a Local Government Council. An LEP defines some of the rules relating to the development of an area or a particular site. It contains information on the zoning of land and any special provisions relating to the development of the land. An LEP is enforceable after it is published in the Government Gazette (i.e. “gazetted”) by the NSW Minister for Planning.

Typically, LEPs and REPs have provisions that protect items of environmental heritage. Newcastle Local Environmental Plan 2003 (NLEP 2003) is the comprehensive statutory (legal) planning document that applies to the whole of the Newcastle LGA.

Under the NLEP the study is zoned 4b – Port and Industrial.

Heritage in general is protected under Part 4 (Regulations 27 to 34) of that LEP and individual heritage items are listed in Schedule 6. Clause 31 specifically relates to developments that affect sites of Aboriginal significance:

*31 Developments affecting places or sites of Aboriginal heritage significance.*

*Before granting consent for development that is likely to have an impact on a place of Aboriginal heritage significance or that will be carried out on an archaeological site of a relic that has Aboriginal heritage significance, the consent authority shall:*

*(a) consider a heritage impact statement, which addresses the heritage impact of the proposed development, and*

*(b) notify local Aboriginal communities and the Director-General of National Parks and Wildlife of the proposed development and take into consideration any comments received in response within 28 days from the date of notification.*

There are no items of Aboriginal heritage significance in the study area listed in Schedule 6 of the NLEP.

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## 6.0 Cultural Heritage Assessment

This section considers the Aboriginal heritage values of the study area within a local, regional and national framework. Heritage significance of landscapes and Aboriginal sites is based on an assessment of three key aspects: a scientific assessment, an assessment of educational value and an Aboriginal cultural assessment of social value. Assessments of scientific value and educational value are normally undertaken by an archaeologist or heritage consultant and assessment of cultural/social value are usually provided via input from the relevant Aboriginal stakeholders.

### 6.1 Principles of Assessment

Heritage sites, objects and places hold value for communities in many different ways. The nature of those heritage values is an important consideration when deciding how to manage a heritage site, object or place and balance competing land-use options. The many heritage values are summed up in an assessment of "Cultural Significance".

The primary guide to management of heritage places is the Australia ICOMOS Charter for Places of Cultural Significance (The Burra Charter) 1999. The Burra Charter defines cultural significance as follows:

*Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.*

*Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.*

*Places may have a range of values for different individuals or groups.*

This assessment has sought to identify the heritage values for the study area.

### 6.2 Scientific Value

Scientific value is assessed according to the research potential of a site or the potential for a site or area to contribute to an understanding of Aboriginal cultural history. While there are many factors in determining the scientific value of a site or area, the integrity of a site is one of the most important. While disturbance of a topsoil deposit with artefacts does not entirely diminish research value, it may limit the types of questions that may be addressed. A heavily cultivated paddock may be unsuited to addressing research questions of small-scale site structure, but it may still be suitable for answering more general questions of implement distribution in a region and raw material logistics.

## Assessment

The impacts of more than 50 years of land reclamation, industrial waste deposition and dredge spoil deposition has resulted in a highly modified landscape. There are no known existing Aboriginal sites in the study area that can be assessed and it is likely that all material evidence of Aboriginal occupation has been destroyed by previous land use practices, and all original land surfaces have been destroyed by industrial dumping of coal rejects and slag. If artefacts were to be found in the study area, it is likely they would be the result of secondary deposition<sup>1</sup>, probably due to dredge spoil deposition. On that basis it is considered that the study area holds no scientific value.

### 6.3 Educational Value

The educational value of a site or area is its potential to be used by members of the wider community for on-site lectures, tours and displays.

## Assessment

Educational value is often aligned to a site or area's scientific value. Usually it relies on tangible evidence of occupation. Since there are no known Aboriginal objects at the site and little prospect of encountering them, the educational value of the study area is considered to be negligible.

### 6.4 Cultural Value

Aboriginal sites with archaeological evidence are all of value to the Aboriginal community because they represent a tangible connection with pre-European Aboriginal life. For this reason, we often report what we perceive to be the social value of a site to the Aboriginal community based on their comments and advice. ENSR has provided this report to the Aboriginal stakeholders involved in the project and sought their values, both social and cultural, prior to its finalisation.

Aboriginal heritage is a broad concept that encompasses not only tangible heritage such as places with physical remains (artefacts), but also intangible evidence such as language, stories and ceremony. The investigation of intangible heritage values relies on consultation with the relevant Aboriginal community groups, whose comments are included below.

ATOAC provided the following comments as part of a response to the methodology statement on 6 November 2008:

*We believe that Awabakal sites are interconnected which indeed reveals the traditional lifestyle of our ancestors. We are aware that there are artifacts [sic] that have been recorded within the Kooragang Island landscape. Although past findings by various archaeologists suggest that the survey site was highly modified, we believe that the original landscape is culturally significant to the Awabakal People and, with the evidence already retrieved and documented from the region, this would indicate this area being highly utilised by our Awabakal ancestors. Indeed, though there may not be any physical evidence of those particular sites in present day, this would not negate the historical presence or our spiritual connection with that landscape.*

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<sup>1</sup> Secondary deposition means that an object or assemblage has been removed from its original context and redeposited at another location. An object's original context is important for answering many research questions about the object and site formation processes. Conversely secondary deposition removes all original contextual information, leaving only the object itself capable of providing information.



*Although BHP Billiton assures us that all care will be taken with controlled dredging, we do recommend that protocols be put into place to ensure that further studies are undertaken if any dredging into the natural river base reveals any artifacts [sic].*

*As Awabakal descendants, we reserve the right and/or reluctance to share our cultural heritage with others in respect to aspects of the cultural significance that connects us to our country. We believe that those who shouldn't be privy to this cultural knowledge have no rights or entitlements to it.*

Prior to the methodology meeting, Len Anderson of Nur-Run-Gee Pty Ltd advised by telephone that just because there is a lack of material evidence it does not mean that the area was devoid of cultural significance.

ATOAC provided the following comments as feedback to the draft of this report (**Appendix B**):

*...we believe that a desktop study is unable to reveal the spiritual value of a study area and although anthropologists may have the ability to determine some past physical use of a location, they do not have the capability to adjudicate on the spirituality of any particular location or site. This is the exclusive right of the descendents of Traditional Owners who have a cultural and hereditary association with the land of their ancestors.*

*...Prior to colonisation and before modification of the Kooragang Island landscape, these islands were used by the Awabakal People for ceremonies, hunting and camping, these Islands being a reliable resource. It would be a significant and unfortunate oversight if BHP Billiton were to conclude that the cultural value and artefacts remnants [sic] within the Kooragang Island landscape are completely lost.*

ADTOAC commented that "...if the proposed development seems devoid of any visible signs of Aboriginal occupation or cultural heritage, this should not be considered an indicator that there is no evidence or presence of Aboriginal occupation still remaining at the proposed development site."

Several groups requested an on-site meeting to assess the social/spiritual values of the study area, and for this to be addressed in the report.

Consequently, an on-site meeting was held on 18 November 2008 with three Aboriginal stakeholder groups present. ALALC, Nur-Run-Gee and Mur-Roo-Ma all indicated that the study area definitely held social significance for the Worimi people, with areas of Kooragang Island (specifically lands near the western end of the study area) being part of an interconnected landscape associated with prominent landforms both north and south of the Hunter River. ALALC indicated that it would defer to the two Worimi traditional owner (TO) groups, regarding spiritual values of the study area.

No specifics were given during the meeting, but ALALC and the two TO groups advised that they would compile a report on the social values of the area, and submit it to ENSR by Wednesday 19 November 2008. At the time of writing, there has been no further comment from these groups despite repeated attempts to contact.

#### **6.4.1 Assessment**

During consultation there were several responses from Aboriginal stakeholders regarding their views on the cultural value of the study area. Correspondence from ATOAC and Nur-Run-Gee Pty Ltd indicate that Kooragang Island (and by implication the study area) has cultural heritage value to Aboriginal stakeholders. Those cultural heritage values derive from the fact that the area, like all other parts of the landscape, was used by Aboriginal people.

All comments from the Aboriginal community are attached in **Appendix B**.

## 6.5 Overall Assessment of Aboriginal Heritage Significance

This section presents the overall Aboriginal heritage significance of the study area. This significance assessment can be considered a combination of the scientific, educational and cultural values, or an overview of the importance of a particular area through Aboriginal heritage sites and places. The subsequent retention or manipulation of these values will be the rationale behind the management strategy presented in **Section 0**.

Whilst Aboriginal stakeholders regard the study area as having social/cultural value, no specific cultural heritage values were identified for the study area. Based on the combined scientific, educational and social/cultural value assessments, no cultural heritage values were identified specifically for the study area. This assessment does not imply that the site is devoid of all value; rather it suggests that the cultural heritage values are not significant when considered in the wider context of Aboriginal sites in the Lower Hunter region.

## 7.0 Impact Assessment

This section provides an assessment of the impacts of the development on the cultural heritage values of the study area.

The geographic extent of the KIWEF is graphically depicted in **Figure F2**. The proposed site layout runs in a westerly direction from the site entrance at the eastern boundary of the site. To the south of the site entrance road would be the leachate storage pond and the leachate treatment area. The footprint of the waste emplacement cell has been designed to minimize disturbance impact on the local ecology of the area and as such avoid as much as possible the significant Green and Golden Bell Frog habitat to the north of the site. The emplacement cell is approximately 800 metres long and approximately 260 metres wide to the east of the cell, and approximately 320 metres wide to the west of the cell and approximately 180 metres through the central section of the cell.

Ancillary facilities associated with the emplacement cell consist of:

- a southern access road;
- a sedimentation pond on the southern boundary of the cell, known as the South Sediment Pond;
- leachate storage pond and leachate treatment area;
- a contractor's staging area located to the east of the leachate pond; and
- a temporary western storage area and the construction contractors stockpile and staging area located to the west of the cell.

The study area covers an area of 36.35 ha and it is likely that the majority of the site will be directly affected by ground-disturbance activities during the project.

The method of construction of the emplacement cell will involve levelling the site and construction of the South Sediment Pond and the leachate pond, which will involve some excavation into the surface soils of the affected land. BHP Billiton have advised that bore tests to a depth of 15 m indicate that all excavation activities will be retained in the upper soil strata which is composed of previously deposited waste material and dredge spoil.

Excavation into the existing ground level will occur in order to level the site. Excavation depth will vary across the site but will average approximately to 6 m; excavation depth will be limited to avoid disturbance to the upper aquifer and kept within existing waste material and dredge spoil layers. The majority of the cell will be elevated above the surface of the ground surface by the construction of a substantial bund walls encircling the cell. The height of the bund above existing ground surface will vary across the site but will average approximately 8 – 9 m. The interior of the bund will be lined with an impervious geofabric liner to contain leachates within the cell. Treated contaminated sediment from the Hunter River will be deposited within the cell over an (approximately) nine month period, and then the cell will be capped (sealed) in readiness for further industrial site development at a later date.

Two Aboriginal stakeholder groups raised concern over possible impacts to Aboriginal cultural heritage values. Two issues, in particular, were raised:

- ATOAC raised concerns over the possibility of encountering Aboriginal artefacts should river dredging disturb the natural river base. The dredging of the Hunter River has been subject to previous environmental impact assessment with a valid development consent dated 9 August 2005 (DA-134-3-2003-i) in place granted from the NSW Minister for Planning. Dredging operations in the Hunter River are not a component of this application and are therefore not addressed as part of this heritage assessment; and
- ADTOAC raised concerns over the construction of drainage channels in the south east corner of the study area, and therefore possible impacts either to DECC site 38-4-0041, or comparable sites in that area that have not been previously identified. As described in **Section 4.2.2**, this site was recorded in 1970 and was heavily disturbed at that time. Subsequent developments are considered to have further disturbed the integrity of the site, and several surveys along that stretch of the river have failed to relocate the site. Furthermore, difficulties in conversion of old-format coordinates cast uncertainty on whether the site was on the northern bank or southern bank of the South Arm. Although the riverine margins are the most archaeologically sensitive areas of the study area, previous survey and assessment indicates that there is little likelihood of encountering Aboriginal objects.

Since all ground-disturbance activities will be confined to the disturbed upper soil levels and the majority of the cell constructed above the current ground level, it is considered that there will be no adverse impacts on the Aboriginal cultural heritage values of the study area.

## 8.0 Conclusions

The findings of this assessment can be summarised as:

- no previously recorded Aboriginal sites occur within the area affected by the development;
- Aboriginal people once lived in the area but physical evidence of their occupation is likely to have been destroyed by previous land management practices;
- there are no natural soils or landforms;
- although, the Aboriginal community has indicated that the area has cultural significance, there are no indications that the area is of archaeological significance; and
- on the basis of this assessment, the proposed development is not likely to encounter Aboriginal objects.

The following conclusions are made in light of the findings of the desktop survey, consultation with the Aboriginal community, the assessment of impacts, the assessment of significance and the relevant legislation protecting Aboriginal and historic heritage in NSW.

No impacts to identified Aboriginal objects are permissible without prior consent (AHIP under section 90 of the *National Parks and Wildlife Act 1974* from the Director General, DECC). No collection of artefacts is permissible without a permit under section 87 of the same Act.

Specific conclusions are as follows:

- the proposed excavation for the emplacement cell is not for the purpose of locating Aboriginal objects. Therefore an application for a AHIP (consent) under section 86 of the *National Parks and Wildlife Act 1974* is not required;
- there are no known Aboriginal sites within the study area. Therefore an application for a AHIP (consent) under section 90 of the *National Parks and Wildlife Act 1974* is not required;
- no further archaeological excavation, collection or monitoring is warranted for the construction project. One Aboriginal stakeholder group has recommended that Aboriginal representatives be present as observers during the excavation/ construction of the drainage channel in the south east corner of the study area, however, this is not considered necessary in lieu of the observations and findings noted in this report; and

should any Aboriginal objects be located during the project, work will cease and DECC and the local Aboriginal community informed prior to works continuing.

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## 9.0 References

- Berndt, R.H., 1947-8. Wuradjeri magic and 'Clever Men'. *Oceania* 17-18: 327-365; 60-94.
- Brayshaw, H., 1987. *Aborigines of the Hunter Valley: a study of colonial records*. Bicentennial Publication No 4, Scone and Upper Hunter Historical Society, Scone, NSW.
- DEC, 2004. *Interim Community Consultation Requirements for Applicants*. Department of Environment and Conservation, Sydney.
- DECC, 1997. *Aboriginal Cultural Heritage Standards and Guidelines Kit*. National Parks and Wildlife Service, Hurstville.
- D.J. Douglas and Partners, 1994. *Report on geotechnical appraisal. Oil seed processing plant site, Kooragang Island*. Report for Cargill Processing Ltd.
- Elkin, A.P., 1932. Notes on the social organisation of the Worimi, a Kattang-speaking people. *Oceania* 2: 359-363.
- Enright, W.J., 1932. The Kattang (Kutthung) or Worimi: an Aboriginal tribe. *Mankind*: 75-77.
- ENSR Australia Pty Ltd (ENSR), 2008a. *Hunter River Remediation Project – Stage 2 Environmental Assessment*. Report to BHP Billiton.
- ENSR Australia Pty Ltd (ENSR), 2008b. *Aboriginal heritage assessment: proposed lube-oil re-refinery, Kooragang Island, Newcastle, NSW*. Report to Laing O'Rourke.
- Geographical Names Board, 2008. *Geographical Names Register*, [http://www.gnb.nsw.gov.au/name\\_search/extract?id=anKqoeKmJP](http://www.gnb.nsw.gov.au/name_search/extract?id=anKqoeKmJP), accessed 5 November 2008.
- Geological Survey of NSW, 1966. Newcastle 1:250,000 Geological Series Sheet S1 56-2, 1<sup>st</sup> Edition. NSW Department of Mines, Sydney.
- Grant, J., 1803. *The narrative of a voyage of discovery, performed in his vessel the Lady Nelson... 1800, 1801, & 1802, to New South Wales*. London.
- Gunson, N., 1974. *Australian reminiscences and papers of L.E. Threkeld*. Australian Aboriginal Studies 40. AIAS, Canberra.
- HLA-Envirosciences Pty Limited, 1995. *EIS for oilseed processing plant on Kooragang Island*. Report for Cargill Australia Ltd.
- HLA-Envirosciences Pty Limited, 2005. *Expansion of the Cargill Oilseed Processing Facility, Kooragang Island, Environmental Assessment*. Report for Cargill Australia Ltd.
- Matthei, L.E., 1995a. *Soil landscapes of the Newcastle 1:100,000 Sheet* Report. Department of Land and Water Conservation, Sydney.
- Matthei, L.E., 1995b. *Soil landscapes of the Newcastle 1:100,000 Sheet* Map. Department of Land and Water Conservation, Sydney.

O'Rourke, M., 1997. *The Kamilaroi lands: north-central New South Wales in the early 19<sup>th</sup> century*. Published by the author, Griffith, ACT.

SMEC Australia Pty Ltd (SMEC), 2005. *MR108 Replacement of Tourle Street Bridge, Newcastle: geotechnical appraisal of bridge approaches*. Report to Roads and Traffic Authority.

Thom, B.G., Stephens, M., Ly, C.K., Roy, P.S., Bowman, G.M and Hesp, P.A., 1992. *Coastal geomorphology and Quaternary geology of the Port Stephens-Myall Lakes area*. Australian National University, Canberra.

Tindale, N.B., 1974. *Aboriginal tribes of Australia: their terrain, environmental controls, distribution, limits and proper names*. University of California Press, Berkely.

Umwelt (Australia) Pty Ltd, 2003. *Aboriginal cultural heritage assessment, proposed extension of shipping channels, Port of Newcastle*. Report to GDH Pty Ltd.

Umwelt (Australia) Pty Ltd, 2006. *Report to accompany a Section 90 Consent Application for the Tourle Street Bridge replacement, Kooragang Island, near Newcastle*. Report for the Roads and Traffic Authority.

Williams, R.J., Watford, F.A. and Balashov, V., 2000. *Kooragang Wetland Rehabilitation Project: history of changes to estuarine wetlands of the Lower Hunter River*. Report to NSW Fisheries Office of Conservation.



## Figures

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**Figure F1: Site Location**

**Figure F2: Site Layout**

**Figure F3: Historic Parish Plan with Emplacement Overlay**

**Figure F4: Historical Aerial Photos**

**Figure F5: AHIMS Registered Site Locations**

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## **Appendix A**

### **Results of AHIMS Search**

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Your reference : Kooragang Island, Newcastle  
Our reference : AHIMS #22248

ENSR Australia  
PO Box 726  
Pymble NSW 2073

30 APR 2008

Thursday, 24 April 2008

Attention: Rick Bullers

Dear Sir or Madam:

**Re: AHIMS Search for the following area at Kooragang Island, Newcastle;E:377181-392388;N:6353371-6368532**

I am writing in response to your recent inquiry in respect to Aboriginal objects and Aboriginal places registered with the NSW Department of Environment and Climate Change (DECC) at the above location.

A search of the DECC Aboriginal Heritage Information Management System (AHIMS) has shown that 123 Aboriginal objects and Aboriginal places are recorded in or near the above location. Please refer to the attached report for details.

The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.

The following qualifications apply to an AHIMS search:

- AHIMS only includes information on Aboriginal objects and Aboriginal places that have been provided to DECC;
- Large areas of New South Wales have not been the subject of systematic survey or recording of Aboriginal history. These areas may contain Aboriginal objects and other heritage values which are not recorded on AHIMS;
- Recordings are provided from a variety of sources and may be variable in their accuracy. When an AHIMS search identifies Aboriginal objects in or near the area it is recommended that the exact location of the Aboriginal object be determined by re-location on the ground; and
- The criteria used to search AHIMS are derived from the information provided by the client and DECC assumes that this information is accurate.

All Aboriginal places and Aboriginal objects are protected under the *National Parks and Wildlife Act 1974* (NPW Act) and it is an offence to destroy, damage or deface them without the prior consent of the DECC Director-General. An Aboriginal object is considered to be known if:

- It is registered on AHIMS;
- It is known to the Aboriginal community; or

- It is located during an investigation of the area conducted for a development application.

If you considering undertaking a development activity in the area subject to the AHIMS search, DECC would recommend that an Aboriginal Heritage Assessment be undertaken. You should consult with the relevant consent authority to determine the necessary assessment to accompany your development application.

Yours Sincerely



Freeburn, Sharlene  
Administrator  
Information Systems & Assessment Section  
Culture & Heritage Division  
Phone: (02) 9585 6471  
Fax: (02) 9585 6094





# List of Sites ( List - Short )

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377481, Easting to = 392388, Northing From = 6353371, Northing to = 6368532, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Eastng	Northing	Context	Site Features	Site Types	Recording	Reports	State Arch. Box No
								(recorded prior to June 2001)	(Primary)	(Catalogue Number)	(for office use only)
<u>38-4-0030</u>	<u>Waratah:Mavfield:</u>	AGD	56	380565	6360280	Open Site	AFT :-	Open Camp Site	ASRSYS		NRS/17798/1/252
		Status Valid									
		Primary Contact									
<u>38-4-0041</u>	<u>Dempsey Island:By New Bridge:</u>	AGD	56	381456	6361486	Open Site	AFT :-	Open Camp Site	ASRSYS	100352	NRS/17798/1/253
		Status Valid									
		Primary Contact							Permit(s) 2616		
<u>38-4-0048</u>	<u>Merewether:Dixon Park:</u>	AGD	56	384704	6354141	Open Site	AFT :-	Open Camp Site	ASRSYS		NRS/17798/1/253
		Status Valid									
		Primary Contact									
<u>38-4-0050</u>	<u>Moscheto Island:</u>	AGD	56	385457	6362659	Open Site	AFT :-	Open Camp Site	ASRSYS		NRS/17798/1/253
		Status Valid									
		Primary Contact									
<u>38-4-0051</u>	<u>Moscheto Island:Newcastle Golf Club:</u>	AGD	56	387112	6362141	Open Site	AFT :-	Open Camp Site	ASRSYS		NRS/17798/1/253
		Status Valid									
		Primary Contact									
<u>38-4-0052</u>	<u>Moscheto Island:Newcastle Bight:</u>	AGD	56	387214	6361595	Open Site	AFT :-	Open Camp Site	ASRSYS		NRS/17798/1/253
		Status Valid									
		Primary Contact									
<u>38-4-0054</u>	<u>Newcastle Bight:</u>	AGD	56	392377	6364161	Open Site	AFT :-	Open Camp Site	ASRSYS		NRS/17798/1/253
		Status Valid									
		Primary Contact							Permit(s) 1016		
<u>38-4-0065</u>	<u>Fullerton Cove:</u>	AGD	56	386919	6362686	Open Site	AFT :-	Open Camp Site	ASRSYS		NRS/17798/1/253
		Status Valid									
		Primary Contact									
		Primary Contact							Permit(s)		
		Primary Contact							ASRSYS		
		Primary Contact									



# List of Sites ( List - Short )

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377181, Easting to = 392388, Northing From = 6353371, Northing to = 6368532, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
38-4-0075	Tomago:	AGD	56	379380	6366800	Open Site	TRE :-	Scarred Tree	ASRSYS	533, 100499	NRS/17798/1/253
	Status Valid										
	Primary Contact										
38-4-0082	Lambton:	AGD	56	377918	6355201	Open Site	GDG :-	Axe Grinding Groove	ASRSYS	98458, 98459	NRS/17798/1/253
	Status Valid										
	Primary Contact										
38-4-0085	Lambton:	AGD	56	377918	6355201	Open Site	GDG :-	Axe Grinding Groove	ASRSYS	98458, 98459	NRS/17798/1/253
	Status Valid										
	Primary Contact										
38-4-0126	NRB10:	AGD	56	388500	6363950	Open Site	AFT :-, ETM :-, SHL :-	Midden	Koettig, Silcox	1269	NRS/17798/1/254
	Status Valid										
	Primary Contact										
38-4-0127	NRB9:	AGD	56	389360	6364400	Open Site	AFT :-, ETM :-, SHL :-	Midden	Koettig, Silcox	1269	NRS/17798/1/254
	Status Valid										
	Primary Contact										
38-4-0128	NRB8:	AGD	56	388300	6364750	Open Site	AFT :-, ETM :-, SHL :-	Midden	Koettig, Silcox	1269	NRS/17798/1/254
	Status Valid										
	Primary Contact										
38-4-0129	NRB7:	AGD	56	389850	6364380	Open Site	AFT :-	Open Camp Site	Koettig, Silcox	1269	NRS/17798/1/254
	Status Valid										
	Primary Contact										
38-4-0130	NRB6:	AGD	56	389260	6364220	Open Site	AFT :-, ETM :-, SHL :-	Midden	Koettig, Silcox	1269	NRS/17798/1/254
	Status Valid										
	Primary Contact										



# List of Sites (List - Short)

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377181, Easting to = 392388, Northing From = 6353371, Northing to = 6365532, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
<u>38-4-0131</u>	<u>NR5:</u>	AGD	56	388920	6364080	Open Site	AFT :-	Open Camp Site	Koettig, Silcox	1269	NRS/17798/1/254
	Status Valid										
	Primary Contact										
<u>38-4-0132</u>	<u>NR4:</u>	AGD	56	388740	6363680	Open Site	AFT :-	Open Camp Site	Permit(s) Koettig, Silcox	1269	NRS/17798/1/254
	Status Valid										
	Primary Contact										
<u>38-4-0133</u>	<u>NR3:</u>	AGD	56	388600	6363790	Open Site	AFT :- ETM :- , SHL :-	Midden	Permit(s) 2026, 2355 Koettig, Silcox	1269	NRS/17798/1/254
	Status Valid										
	Primary Contact										
<u>38-4-0134</u>	<u>NR2:</u>	AGD	56	388450	6363700	Open Site	AFT :- ETM :- , SHL :-	Midden	Permit(s) 2026 Koettig, Silcox	1269	NRS/17798/1/254
	Status Valid										
	Primary Contact										
<u>38-4-0135</u>	<u>NR1:</u>	AGD	56	388390	6363780	Open Site	AFT :- ETM :- , SHL :-	Midden	Permit(s) 2026 Koettig, Silcox	1269	NRS/17798/1/255
	Status Valid										
	Primary Contact										
<u>38-4-0241</u>	<u>F C 1: Fullerton Cove:</u>	AGD	56	388600	6364800	Open Site	AFT :-	Open Camp Site	Permit(s) 2026 Dean-Jones	1845	NRS/17798/1/255
	Status Valid										
	Primary Contact										
<u>38-4-0242</u>	<u>I 1:</u>	AGD	56	383600	6368300	Open Site	AFT :-	Open Camp Site	Permit(s) Clemens, Ross, Dean-Jones	1845	NRS/17798/1/255
	Status Valid										
	Primary Contact										
<u>38-4-0248</u>	<u>I 7:</u>	AGD	56	378900	6367400	Open Site	AFT :-	Open Camp Site	Permit(s) Dean-Jones	1845	NRS/17798/1/255
	Status Valid										
	Primary Contact										



# List of Sites ( List - Short )

Kooragang Island, Newcastle

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Site ID	Site Name	Datum	Zone	Eastings	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
38-4-0249	<u>T 8:</u>	AGD	56	378200	6367400	Open Site	AFT :-	Open Camp Site	Dean-Jones	1845	NRS/17798/1/255
		Status Valid									
	Primary Contact										
38-4-0250	<u>T 8 A (T9):</u>	AGD	56	378400	6367300	Open Site	AFT :-	Open Camp Site	Dean-Jones	1845	NRS/17798/1/255
		Status Valid									
	Primary Contact										
38-4-0257	<u>Fern Hill 1:</u>	AGD	56	387600	6362100	Open Site	AFT :-	Isolated Find	Ross, Dean-Jones	1845	NRS/17798/1/255
		Status Valid									
	Primary Contact										
38-4-0258	<u>Fern Hill 2:</u>	AGD	56	389400	6362500	Open Site	AFT :-	Open Camp Site	Dean-Jones, Godwin	1845	NRS/17798/1/255
		Status Valid									
	Primary Contact										
38-4-0259	<u>Fern Hill 3:</u>	AGD	56	389600	6362700	Open Site	AFT :-, ETM :-, SHL :-	Midden	Godwin	1845	NRS/17798/1/255
		Status Valid									
	Primary Contact										
38-4-0260	<u>Fern Bay 4:</u>	AGD	56	391000	6363500	Open Site	AFT :-	Open Camp Site	Dean-Jones, Godwin, Heath	1845	NRS/17798/1/255
		Status Valid									
	Primary Contact										
38-4-0261	<u>Fern Bay 5:</u>	AGD	56	391200	6363700	Open Site	AFT :-, ETM :-, SHL :-	Midden	Dean-Jones, Godwin, Heath	1845	NRS/17798/1/255
		Status Valid									
	Primary Contact										
38-4-0262	<u>Fern Bay 6:</u>	AGD	56	391500	6363900	Open Site	AFT :-, ETM :-, SHL :-	Midden	Dean-Jones, Godwin, Heath	1845	NRS/17798/1/255
		Status Valid									
	Primary Contact										



# List of Sites ( List - Short )

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377181, Easting to = 392388, Northing From = 6353371, Northing to = 6368532, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types	Recording	Reports	State Arch. Box No
								(recorded prior to June 2001)	(Primary)	(Catalogue Number)	(for office use only)
38-4-0263	<u>Fern Bay 7:</u>	AGD	56	391800	6364000	Open Site	AFT : -, ETM : -, SHL : -	Midden	Dean-Jones, Godwin, Heath	1845	NRS/17798/1/256
	Status Valid										
	Primary Contact										
38-4-0264	<u>Fern Bay 8:</u>	AGD	56	391800	6364100	Open Site	AFT : -, ETM : -, SHL : -	Midden	Dean-Jones, Godwin, Heath	1845	NRS/17798/1/256
	Status Valid										
	Primary Contact										
38-4-0265	<u>Fern Bay 9:</u>	AGD	56	391900	6364200	Open Site	AFT : -, ETM : -, SHL : -	Midden	Dean-Jones, Godwin, Heath	1845	NRS/17798/1/256
	Status Valid										
	Primary Contact										
38-4-0266	<u>Fern Bay 10:</u>	AGD	56	392100	6364200	Open Site	AFT : -, ETM : -, SHL : -	Midden	Dean-Jones, Godwin, Heath	1845	NRS/17798/1/256
	Status Valid										
	Primary Contact										
38-4-0267	<u>Fern Bay 11:</u>	AGD	56	392200	6364300	Open Site	AFT : -, ETM : -, SHL : -	Midden	Dean-Jones, Godwin, Heath	1845	NRS/17798/1/256
	Status Valid										
	Primary Contact										
38-4-0268	<u>Fern Bay 12:</u>	AGD	56	392300	6364400	Open Site	AFT : -, ETM : -, SHL : -	Midden	Dean-Jones, Godwin, Heath	1845	NRS/17798/1/256
	Status Valid										
	Primary Contact										
38-4-0321	<u>Newcastle Blight 2:</u>	AGD	56	390050	6364760	Open Site	AFT : -	Open Camp Site	Barber	2250	NRS/17798/1/256
	Status Valid										
	Primary Contact										
38-4-0322	<u>Newcastle Blight 1:</u>	AGD	56	391670	6364600	Open Site	AFT : -, ETM : -, SHL : -	Midden	Barber	2250	NRS/17798/1/256
	Status Valid										
	Primary Contact										



# List of Sites ( List - Short )

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Site ID	Site Name	Datum	Zone	Eastings	Northing	Context	Site Features	Site Types	Recording	Reports	State Arch. Box No
38-4-0333	Fullerton Cove Road:site 1:	AGD	56	388000	6364100	Open Site	AFT : -, ETM : -, SHL : -	Midden	Davies, Davies Heritage Consultants Pty Ltd	2604	(for office use only) NRS/17798/1/257
		Status Valid									
		Primary Contact									
38-4-0334	Fullerton Cove Road 2:	AGD	56	388150	6364390	Open Site	AFT : -, ETM : -, SHL : -	Midden	Davies, Davies Heritage Consultants Pty Ltd	2604	NRS/17798/1/257
		Status Valid									
		Primary Contact									
38-4-0340	Williamtown 1:WT-1:	AGD	56	391100	6365500	Open Site	AFT : -	Open Camp Site	Giles Hamm Archaeology		NRS/17798/1/257
		Status Valid									
		Primary Contact									
38-4-0359	Site 1	AGD	56	388050	6363290	Open Site	AFT : -, ETM : -, SHL : -	Midden	Curran		NRS/17798/1/257
		Status Valid									
		Primary Contact									
38-4-0454	Yirannali:	AGD	56	386150	6355450	Open Site	ACD : -	Natural Mythological (Ritual)	Bluff	1333	NRS/17798/1/258
		Status Valid									
		Primary Contact									
38-4-0455	Nobby's:	AGD	56	387500	6356950	Open Site	ACD : -	Natural Mythological (Ritual)	Bluff	1333	NRS/17798/1/258
		Status Valid									
		Primary Contact									
38-4-0525	Catholic Education Site	AGD	56	385680	6355710	Open Site	AFT : -	Open Camp Site	Koettig	100771	NRS/17798/1/260
		Status Valid									
		Primary Contact									
38-4-0542	Site 2	AGD	56	388290	6363790	Open Site	AFT : -, SHL : -	None	Curran	2958	NRS/17798/1/261
		Status Valid									
		Primary Contact									
		Permit(s)							Permit(s) 2026		



# List of Sites ( List - Short )

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Site ID	Site Name	Datum	Zone	Eastings	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
38-4-0544	700 Hunter Street	AGD				Open Site	AFT : -	None	Dominic Steele Archaeological Consulting		NRS/17798/1/261
		Status Valid									
		Primary Contact				Northern HTO					
38-4-0559	The Broadwalk-Newcastle 1	AGD	56	385000	6356250	Open Site	PAD : 0	None	Permit(s) Mary Dallas Consulting Archaeologists	98887	
		Status Valid									
		Primary Contact									
38-4-0563	Fullerton 1	AGD	56	391352	6363717	Open Site	SHL : -	None	Permit(s) 1298, 2043, 2453 Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									
38-4-0564	Fullerton 3	AGD	56	391828	6364079	Open Site	SHL : 1	None	Permit(s) Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									
38-4-0565	Fullerton 4	AGD	56	391904	6364081	Open Site	SHL : 1	None	Permit(s) Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									
38-4-0566	Fullerton 5	AGD	56	392065	6364201	Open Site	SHL : 1	None	Permit(s) Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									
38-4-0567	Fullerton 7	AGD	56	392285	6364371	Open Site	SHL : 1	None	Permit(s) Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									
38-4-0585	Fullerton 25	AGD	56	388446	6361575	Open Site	AFT : 52	None	Permit(s) Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									



# List of Sites (List - Short)

Kooragang Island, Newcastle

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Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
<u>38-4-0586</u>	<u>Fullerton 26</u>	AGD	56	388514	6361643	Open Site	AFT : 10	None	Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									
<u>38-4-0587</u>	<u>Fullerton 27</u>	AGD	56	388604	6361714	Open Site	AFT : 1	None	Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									
<u>38-4-0588</u>	<u>Fullerton 28</u>	AGD	56	388642	6361884	Open Site	AFT : 1	None	Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									
<u>38-4-0589</u>	<u>Fullerton 29</u>	AGD	56	388977	6362047	Open Site	SHL : 1	None	Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									
<u>38-4-0590</u>	<u>Fullerton 30</u>	AGD	56	389216	6362255	Open Site	AFT : 3	None	Umwelt (Australia) Pty Limited		NRS/17798/1/261
		Status Valid									
		Primary Contact									
<u>38-4-0644</u>	<u>Fullerton Site 36</u>	AGD	56	391496	6363762	Open Site	AFT : 1	None	Umwelt (Australia) Pty Limited		NRS/17798/1/262
		Status Valid									
		Primary Contact									
<u>38-4-0647</u>	<u>A1 - Tomaree/Tomago</u>	AGD	56	384559	6368106	Open Site	AFT : 2, SHL : 2	None	MCH - McCardle Cultural Heritage Pty Ltd		NRS/17798/1/262
		Status Valid									
		Primary Contact									
<u>38-4-0648</u>	<u>A2 - Tomaree/Tomago</u>	AGD	56	384377	6368060	Open Site	AFT : 1	None	MCH - McCardle Cultural Heritage Pty Ltd		NRS/17798/1/262
		Status Valid									
		Primary Contact									
		Permit(s) 1797									
		Permit(s) 1797									





# List of Sites ( List - Short )

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377181, Easting to = 392388, Northing From = 6353371, Northing to = 6368532, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
38-4-0663	<u>BRA 1</u>	AGD	56	380750	6354500	Open Site	PAD : 1	None	Meberson	98300
		Status Valid								
		Primary Contact								
38-4-0676	<u>Tomaree/Tomago A10</u>	AGD	56	384867	6368228	Open Site	AFT : 9, BOM : -	None	Permit(s) 1472	NRS/17798/1/262
		Status Valid								
		Primary Contact								
38-4-0679	<u>PAD 1: Tomaree to Tomago</u>	AGD	56	384500	6368200	Open Site	PAD : 0	None	Permit(s)	
		Status Valid							ERM-Thornton, MCH - McCardle Cultural Heritage Pty Ltd	98386, 98387
		Primary Contact								
38-4-0692	<u>Stockton Rifle Range 1</u>	AGD	56	387366	6361937	Open Site	AFT : 7	None	Permit(s) 1807	
		Status Valid							McAdam	98719
		Primary Contact								
38-4-0693	<u>Stockton Rifle Range 2</u>	AGD	56	388034	6361743	Open Site	AFT : 22	None	Permit(s)	
		Status Valid							McAdam	98719
		Primary Contact								
38-4-0698	<u>Newcastle Golf Club 1</u>	AGD	56	387241	6362951	Open Site	AFT : 20, SHL : 20	None	Permit(s)	
		Status Valid							Mayers	
		Primary Contact								
38-4-0699	<u>Newcastle Golf Club 2</u>	AGD	56	386981	6362480	Open Site	AFT : 20, SHL : 20	None	Permit(s) 1780	
		Status Valid							Mayers	
		Primary Contact								
38-4-0700	<u>Newcastle Golf Club 3</u>	AGD	56	387043	6362410	Open Site	AFT : 20, SHL : 20	None	Permit(s) 1780	
		Status Valid							Mayers	
		Primary Contact								
		Primary Contact							Permit(s) 1780	



# List of Sites ( List - Short )

Kooragang Island, Newcastle

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Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types	Recording	Reports	State Arch. Box No
								(recorded prior to June 2001)	(Primary)	(Catalogue Number)	(for office use only)
38-4-0701	Newcastle Golf Club 4	AGD	56	387102	6362786	Open Site	AFT : 20, SHL : 20	None	Mayers		
		Status Valid									
		Primary Contact									
38-4-0702	Newcastle Golf Club 5	AGD	56	386985	6362738	Open Site	AFT : 20, SHL : 20	None	Mayers	1780	
		Status Valid									
		Primary Contact									
38-4-0703	Newcastle Golf Club 6	AGD	56	387256	6362849	Open Site	AFT : 20, SHL : 20	None	Mayers	1780	
		Status Valid									
		Primary Contact									
38-4-0704	Newcastle Golf Club 7	AGD	56	387040	6362458	Open Site	AFT : 20, SHL : 20	None	Mayers	1781	
		Status Valid									
		Primary Contact									
38-4-0705	Newcastle Golf Club 8	AGD	56	387014	6362663	Open Site	AFT : 20, SHL : 20	None	Mayers	1781	
		Status Valid									
		Primary Contact									
38-4-0706	FC 1	AGD	56	390580	6365650	Open Site	AFT : 9	None	Mayers	1781	
		Status Valid									
		Primary Contact									
38-4-0723	Fullerton Cove Site 1	AGD	56	387730	6364200	Open Site	AFT : 13, SHL : 1	None	Mayers	98868	
		Status Valid									
		Primary Contact									
38-4-0772	710 Hunter Street Newcastle PAD	AGD	56	384350	6356250	Open Site	PAD : -, SHL : -	None	Mayers	1981	
		Status Valid									
		Primary Contact									



# List of Sites ( List - Short )

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377181, Easting to = 392388, Northing From = 6353371, Northing to = 6368532, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
38-4-0773	<u>Fern Bay PAD - Rankin RD</u>	AGD	56	387200	6361900	Open Site	PAD :-	Naden		
		Status	Partially Destroyed							
		Primary Contact	Northern HTO					Permit(s) 1998, 2168, 2274, 2337		
38-4-0784	<u>Fern Bay Site D</u>	AGD	56	388560	6363570	Open Site	AFT :-	Wheeler		NRS/17798/1/263
		Status	Valid							
		Primary Contact						Permit(s) 2026		
38-4-0785	<u>Fern Bay Site E</u>	AGD	56	388170	6363400	Open Site	AFT :-, SHL :-	Wheeler		NRS/17798/1/263
		Status	Valid							
		Primary Contact						Permit(s) 2026		
38-4-0786	<u>Fern Bay Estate 7</u>	AGD	56	388400	6363670	Open Site	AFT :-, ETM :-, SHL :-	Wheeler		NRS/17798/1/263
		Status	Valid							
		Primary Contact						Permit(s) 2026		
38-4-0787	<u>Fern Bay Estate 9</u>	AGD	56	388790	6363344	Open Site	AFT :-	Wheeler		NRS/17798/1/263
		Status	Valid							
		Primary Contact						Permit(s) 2026		
38-4-0788	<u>Fern Bay Estate 10</u>	AGD	56	388950	6363900	Open Site	ETM :-, SHL :-	Dean-Jones		
		Status	Valid							
		Primary Contact						Permit(s) 2355		
38-4-0789	<u>Fern Bay Estate 11</u>	AGD	56	388850	6363850	Open Site	AFT :-	Dean-Jones		
		Status	Valid							
		Primary Contact						Permit(s)		
38-4-0790	<u>Fern Bay Estate Site C</u>	AGD	56	388452	6363647	Open Site	AFT :-, ETM :-, SHL :-	Wheeler		NRS/17798/1/263
		Status	Valid							
		Primary Contact						Permit(s)		



# List of Sites (List - Short)

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377181, Easting to = 392388, Northing From = 6353371, Northing to = 6368532, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
38-4-0791	<u>Fern Bay Estate 8</u>	AGD	56	388750	Open Site	AFT : -, SHL : -	None	Dean-Jones		
		Status Valid								
		Primary Contact								
38-4-0796	<u>200 Hunter Street PAD</u>	AGD	56	385787	Open Site	PAD : -	None			
		Status Valid								
		Primary Contact								
38-4-0797	<u>Fern Bay PAD</u>	AGD	56	387275	Open Site	AFT : -, ETM : -, SHL : -	None			
		Status Valid								
		Primary Contact								
38-4-0831	<u>Palais Royale PAD</u>	AGD	56	384300	Open Site	PAD : -	None			
		Status Valid								
		Primary Contact								
38-4-0832	<u>Empire Hotel PAD</u>	AGD	56	384300	Open Site	PAD : -	None			
		Status Valid								
		Primary Contact								
38-4-0851	<u>710 Hunter St Newcastle, PAD</u>	AGD	56	384350	Open Site	PAD : -	None			
		Status Valid								
		Primary Contact								
38-4-0857	<u>Fern Bay Estate 5</u>	AGD	56	388220	Open Site	AFT : 2	None			
		Status Valid								
		Primary Contact								
38-4-0858	<u>8</u>	AGD	56	388400	Open Site	SHL : 100	None			
		Status Valid								
		Primary Contact								

NRS17798/1/263



# List of Sites ( List - Short )

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377181, Easting to = 392388, Northing From = 6353371, Northing to = 6368532, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Eastings	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
<u>38-4-0859</u>	<u>Fern Bay Site E</u>	AGD	56	388170	6363400	Open Site	SHL : 400	None	Wheeler		NRS/17798/1/263
		Status Valid									
	<u>Primary Contact</u>										
<u>38-4-0860</u>	<u>FERN Bay Site F</u>	AGD	56	388560	6363570	Open Site	STQ : 100	None	Wheeler		NRS/17798/1/263
		Status Valid									
	<u>Primary Contact</u>										
<u>38-4-0861</u>	<u>Fern Bay Estate 9</u>	AGD	56	388790	6363440	Open Site	SHL : 1	None	Wheeler		NRS/17798/1/263
		Status Valid									
	<u>Primary Contact</u>										
<u>38-4-0895</u>	<u>Fern Bay Complex</u>	AGD	56	387000	6362000	Open Site	ACD : -, AFT : -, BUR : -, SHL : -	None	McCardle		NRS/17798/1/264
		Status Valid									
	<u>Primary Contact</u>										
<u>38-4-0940</u>	<u>NU - OS -1</u>	AGD	56	379160	6360070	Open Site	AFT : 2	None	Mills		NRS/17798/1/264
		Status Valid									
	<u>Primary Contact</u>										
<u>38-4-0948</u>	<u>Fern Bay Estate 15</u>	AGD	56	389847	6364460	Open Site	AFT : 1	None	Environmental Resources Management Australia		NRS/17798/1/264
		Status Valid									
	<u>Primary Contact</u>										
<u>38-4-0949</u>	<u>Fern Bay Estate 16</u>	AGD	56	389772	6364185	Open Site	AFT : 4	None	Environmental Resources Management Australia		NRS/17798/1/264
		Status Valid									
	<u>Primary Contact</u>										
<u>38-4-0950</u>	<u>Fern Bay Estate 17</u>	AGD	56	389785	6364535	Open Site	AFT : -, SHL : -	None	Environmental Resources Management Australia		NRS/17798/1/264
		Status Valid									
	<u>Primary Contact</u>										



# List of Sites ( List - Short )

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377181, Easting to = 392388, Northing From = 6353371, Northing to = 6368532, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
<u>38-4-0951</u>	<u>Fern Bay Estate 18</u>	AGD	56	389035	6364110	Open Site	AFT : 81, SHL : 2	None	Environmental Resources Management Australia	NRS/17798/1/265
		Status Valid								
		Primary Contact								
<u>38-4-0952</u>	<u>Bellevue Hotel PAD</u>	AGD	56	384250	6356200	Open Site	PAD : -	None	Permit(s) Steele	99845, 99874
		Status Valid								
		Primary Contact			Northern HTO			Permit(s) 2382 Dean-Jones		
<u>38-4-0953</u>	<u>Fern Bay Estate 6</u>	AGD	56	388370	6363836	Open Site	AFT : -	None		NRS/17798/1/265
		Status Valid								
		Primary Contact						Permit(s) Curran		
<u>38-4-0957</u>	<u>NCL 931</u>	AGD	56	386400	6356000	Open Site	AFT : -	None		
		Status Valid								
		Primary Contact						Permit(s) Skene, Mckay	100057	
<u>38-4-0961</u>	<u>Tomago 1 (T1)</u>	AGD	56	382833	6367605	Open Site	AFT : 42	None		
		Status Valid								
		Primary Contact			Worimi Local Aboriginal Land Council			Permit(s) 2504 Skene	100057	
<u>38-4-0962</u>	<u>Tomago 2 (T2)</u>	AGD	56	382779	6367583	Open Site	AFT : 3	None		
		Status Valid								
		Primary Contact			Worimi Local Aboriginal Land Council			Permit(s) Skene, Mckay	100057	
<u>38-4-0963</u>	<u>Tomago 3 (T3)</u>	AGD	56	382703	6367533	Open Site	AFT : 4	None		
		Status Valid								
		Primary Contact			Worimi Local Aboriginal Land Council			Permit(s) Skene, Mckay	100057	
<u>38-4-0964</u>	<u>Tomago 4 (T4)</u>	AGD	56	383419	6367848	Open Site	AFT : 2	None		
		Status Valid								
		Primary Contact			Worimi Local Aboriginal Land Council			Permit(s)	100057	



# List of Sites (List - Short)

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377181, Easting to = 392388, Northing From = 6353374, Northing to = 6368532, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Eastings	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
<u>38-4-0965</u>	<u>Tomago 5 (T5)</u>	AGD	56	383419	6367848	Open Site	AFT : 1	None	Skene, Mckay	100057	
		Status Valid									
		Primary Contact				Worimi Local Aboriginal Land Council			Permit(s)		
<u>38-4-0966</u>	<u>Tomago 8 (T8)</u>	AGD	56	383428	6367863	Open Site	AFT : 13	None	Skene, Mckay	100057	
		Status Valid									
		Primary Contact				Worimi Local Aboriginal Land Council			Permit(s) 2504		
<u>38-4-0967</u>	<u>Tomago 7 (T7)</u>	AGD	56	383428	6367863	Open Site	AFT : 47	None	Skene, Mckay	100057	
		Status Valid									
		Primary Contact				Worimi Local Aboriginal Land Council			Permit(s) 2504		
<u>38-4-1020</u>	<u>Courts Sailors Home PAD1</u>	AGD	56	386358	6355971	Open Site	PAD : -	None	Archaeological & Heritage Management Solutions Pty Ltd		
		Status Valid									
		Primary Contact							Permit(s) 2734		
<u>38-4-1035</u>	<u>Fullerton Cove Extraction 1</u>	AGD	56	391149	6366046	Open Site	AFT : 100	None	McCardle		
		Status Valid									
		Primary Contact							Permit(s)		
<u>38-5-0157</u>	<u>Fullerton Site 1: Newcastle Bight</u>	AGD	56	389930	6362840	Open Site	AFT : -, ETM : -, SHL : -	Midden, Open Camp Site	Dagg		NRS/17798/1/267
		Status Valid									
		Primary Contact							Permit(s) 845, 916		
<u>38-5-0158</u>	<u>Fullerton Site 2: Newcastle Bight</u>	AGD	56	390260	6363040	Open Site	AFT : -, ETM : -, SHL : -	Midden, Open Camp Site	Dagg, Dagg		NRS/17798/1/267
		Status Valid									
		Primary Contact							Permit(s) 845, 916		
<u>38-5-0159</u>	<u>Fullerton Site 3: Newcastle Bight</u>	AGD	56	390640	6363260	Open Site	AFT : -, ETM : -, SHL : -	Midden, Open Camp Site	Dagg, Dagg		NRS/17798/1/267
		Status Valid									
		Primary Contact							Permit(s) 845, 916		



# List of Sites ( List - Short )

Kooragang Island, Newcastle

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 377181, Easting to = 392388, Northing From = 6363371, Northing to = 6368632, Requestor like 551%, Service ID = 22248, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
38-5-0160	<u>Fullerton Site 4:Newcastle Bight;</u>	AGD	56	390960	6363500	Open Site	AFT : -, ETM : -, SHL : -	Midden, Open Camp Site	Dagg		NRS/17798/1/267
		Status	Valid								
		Primary Contact							Permit(s) 916		
38-5-0161	<u>Fullerton Site 5:Newcastle Bight;</u>	AGD	56	390090	6363090	Open Site	AFT : -, ETM : -, SHL : -	Midden, Open Camp Site	Dagg		NRS/17798/1/267
		Status	Valid								
		Primary Contact							Permit(s) 916		
38-5-0162	<u>Fullerton Site 6:Newcastle Bight;</u>	AGD	56	391040	6363460	Open Site	AFT : -, ETM : -, SHL : -	Midden	Dagg		NRS/17798/1/267
		Status	Valid								
		Primary Contact							Permit(s) 916		



## **Appendix B**

### **Aboriginal Community Consultation**

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## Aboriginal Consultation Process

Project: BHP Kooragang Island: Emplacement Cell

### Stage 1 - Advisory Requests Sent

	Contact	Date Sent	Comment
Local Newspaper Ad	Newcastle Herald Newcastle Star	Ran 11-Oct-08 Ran 8-Oct-08	
DECC		18-Apr-08	Responded 5/5/08.
LALC		29-Oct-08	No response
Registrar Aboriginal Owners		18-Apr-08	No response
Native Title Services		18-Apr-08	No response
Local Council		18-Apr-08	No response

### Aboriginal Group Notifications Sent (DATE) - see "addresses" sheet

### Aboriginal Group Registrations & Communications

Organisation	Contact person	Date Rec'd	Comments
Nur-Run-Gee	Leanne Anderson	13-Oct-08	Received by email
Mur-Roo-Ma Inc	Anthony Anderson	15-Oct-08	Received by email
Gidawaa Walang Cultural heritage Consultancy	Ann Hickey	16-Oct-08	Received by mail
Awabakal Descendents Traditional Owners Aboriginal Corporation	Shane Frost	30-Oct-08	Received verbally by telephone
Awabakal Traditional Owners Aboriginal Corporation	Kerrie Brauer	30-Oct-08	Received verbally by telephone
Awabakal Local Aboriginal Land Council	Cheryl Kitchener	30-Oct-08	Automatically registered

### Stage 2 - Briefing & Methodology Advice Sent

Organisation	Contact person	Date Sent	Comments
Nur-Run-Gee	Leanne Anderson	29-Nov-08	Methodology advice sent in conjunction with invitation to briefing meeting. Meeting held 3/11/08.
Mur-Roo-Ma Inc	Anthony Anderson	29-Oct-08	Methodology advice sent in conjunction with invitation to briefing meeting. Meeting held 3/11/08.
Gidawaa Walang Cultural heritage Consultancy	Ann Hickey	29-Oct-08	Methodology advice sent in conjunction with invitation to briefing meeting. Initially advised attendance, but did not due to conflicting commitments.
Awabakal Descendents Traditional Owners Aboriginal Corporation	Shane Frost	29-Oct-08	Methodology advice sent in conjunction with invitation to briefing meeting. Meeting held 3/11/08.
Awabakal Traditional Owners Aboriginal Corporation	Kerrie Brauer	29-Oct-08	Methodology advice sent in conjunction with invitation to briefing meeting. Meeting held 3/11/08.
Awabakal Local Aboriginal Land Council	Cheryl Kitchener	29-Oct-08	Methodology advice sent in conjunction with invitation to briefing meeting. Meeting held 3/11/08.

### Aboriginal Group Comments Received

Organisation	Contact person	Date Rec'd	Comments
Nur-Run-Gee	Leanne Anderson	06-Nov-08	Agreement with methodology. Requests on-site meeting to discuss spiritual/cultural values.
Mur-Roo-Ma Inc	Anthony Anderson	06-Nov-08	Disagreement with desktop surveys in general but agrees it is appropriate for this site. Would like a site walkover but agrees with methodology.
Gidawaa Walang Cultural heritage Consultancy	Ann Hickey		No comment received at time of writing
Awabakal Descendents Traditional Owners Aboriginal Corporation	Shane Frost	06-Nov-08	Agreement with methodology. No other comments received.
Awabakal Traditional Owners Aboriginal Corporation	Kerrie Brauer	07-Nov-08	Agreement with methodology. Provided generalised comments regarding the cultural significance of Kooragang Island.
Awabakal Local Aboriginal Land Council	Cheryl Kitchener		No comment received at time of writing

**Stage 3 - Draft Reports for Review - Sent**

Organisation	Contact person	Date Sent	Feedback Received & Date
Nur-Run-Gee	Leanne Anderson		TBA
Mur-Roo-Ma Inc	Anthony Anderson		TBA
Gidawaa Walang Cultural heritage Consultancy	Ann Hickey		TBA
Awabakal Descendents Traditional Owners Aboriginal Corporation	Shane Frost		TBA
Awabakal Traditional Owners Aboriginal Corporation	Kerrie Brauer		TBA
Awabakal Local Aboriginal Land Council	Cheryl Kitchener		TBA

Organisation	First_Name	Last_Name	Address_1	Address_2	Address_3	Phone	Fax	Mobile	Email
Nur-Run-Gee Pty Ltd	Leanne	Anderson	22 Popplewell Rd	Fern Bay NSW 2295		4920 1578		0408 618 874	<a href="mailto:goodman@koeee.com.au">goodman@koeee.com.au</a>
Mur-roo-Ma Inc	Anthony	Anderson	9 Vardon Road	Fern Bay NSW 2295		4928 1910	4928 1910	0402 827 482	<a href="mailto:murroomainc1@hotmail.com">murroomainc1@hotmail.com</a>
Gidawaa Walang Cultural heritage Consultancy	Ann	Hickey	76 Lang Street	Kurri Kurri NSW 2327		4937 1094	4936 4449	0411 196 991	<a href="mailto:barkumanc@hotmail.com">barkumanc@hotmail.com</a>
Awabakal Descendents Traditional Owners Aboriginal Corporation	Shane	Frost	PO Box 86	Clarence Town NSW 2321		4996 4325	4996 4325	0428 320 671	<a href="mailto:awabakal_to@bigpond.com">awabakal_to@bigpond.com</a>
Awabakal Traditional Owners Aboriginal Corporation	Kerrie	Brauer	PO Box 253	Jesmond NSW 2299		4958 8170		0412 866 357	<a href="mailto:klbrauer@bigpond.com">klbrauer@bigpond.com</a>
Awabakal Local Aboriginal Land Council	Cheryl	Kitchener	PO Box 437	Hamilton NSW 2303					<a href="mailto:awabaka@bigpond.net.au">awabaka@bigpond.net.au</a>

Attention Rick Bullers

## Response Form

### Aboriginal Heritage Assessment for BHP Billiton Hunter River Remediation Project: Acceptance of Methodology

Having attended the briefing meeting describing the Hunter River Remediation Project and the proposed methodology for the Aboriginal heritage assessment, I endorse the proposed methodology, unless otherwise stated below, or with the following amendments:

Nur-Run-Cee P/L agrees with the methodology as discussed with Rick Bullers, Neville Baker and Carl Bagnall

As discussed, at the meeting, for the spiritual and cultural values to be considered in the draft report

Name Leanne Anderson

Organisation Nur-Run-Cee P/L

Signature 

Please send this document signed back to Rick Bullers, ENSR Australia, via;

- Fax : 02 8484 8989
- Post: PO Box 726, Pymble, NSW 2073
- E-mail: [rickbullers@aecom.com](mailto:rickbullers@aecom.com)

**Conolly, Susan**

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**From:** Anthony Anderson [murroomainc1@hotmail.com]  
**Sent:** Wednesday, 5 November 2008 4:00 PM  
**To:** Bullers, Rick  
**Subject:** RE: Hunter River Remediation Project Aboriginal Heritage Assessment Methodology

Hi Rick

mur-roo-ma inc has read the methodology for the Hunter River Remediation Project although not agreeing with a desk top study and it would be unlikely that any material would be located in the very highly disturbed area we also recommended a walk over site therefore we fully understand and agree with the methodology for this project

Anthony J Anderson JP  
CEO  
Mur-roo-ma INC

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Subject: Hunter River Remediation Project Aboriginal Heritage Assessment Methodology  
Date: Wed, 5 Nov 2008 11:37:17 +1100  
From: Rick.Bullers@aecom.com  
To: murroomainc1@hotmail.com

Dear Participants

Firstly, I'd also like to take this opportunity to thank you for your participation in the consultation process for this project and for making your time available at yesterday's meetings.

As discussed at yesterday regarding the proposed methodology for the Aboriginal heritage assessment at the emplacement site on Kooragang Island, please find attached the Powerpoint Presentation for your records, and a standardised fax back form regarding acceptance of the proposed methodology.

As discussed, timelines for this project are extremely tight, so I would appreciate if you could send back your response by COB tomorrow 5 November 2008.

Kind regards

**Rick Bullers**  
Project Archaeologist

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18 November 2008

ENSR Australia Pty Ltd  
Attn: Rick Bullers  
Project Manager  
PO Box 726  
Pymble NSW 2073

**Re: Draft Aboriginal Heritage Assessment: Stage 2 Approval, Hunter River Remediation Project Kooragang Island, Newcastle, NSW.**

Dear Rick,

With regard to the Draft Aboriginal Heritage Assessment for the proposed Stage 2 Approval, Hunter River Remediation Project Kooragang Island, Newcastle, NSW, we recognise the evaluation by ENSR Australia Pty Ltd appears reasonably comprehensive.

Our comments to the contents and sections within the Draft Report are as follows:

Page 3, Table 3: Although these comments are recorded within the 6.4 "Cultural Value", we believe the Aboriginal Community Feedback on Proposed Methodology does not reflect the comments outlining our concerns regarding the care needed when the dredging into the river base ... "we do recommend that protocols be put into place to ensure that further studies are undertaken if any dredging into the natural river base reveals any artifacts ..."

Page 9, 4.2.2: We suggest when the dredging becomes close to the natural river base that Aboriginal stakeholder involvement is required for observation purposes. As previously recorded sites within the vicinity of the proposed project have been damaged, we recommend caution is needed, as a number of our sites have previously been destroyed.

With this in mind, we hold concerns pertaining to the protection of the recorded site on the northern bank of the south arm of the Hunter River just east of the Tourle Street Bridge, as this is the closest recorded site to the study area.

Page 16, 6.5: In regard to the Overall Assessment of Aboriginal Heritage Significance we believe that a "desktop" study is unable to reveal the spiritual value of a study area and although anthropologists may have the ability to determine some past physical use of a location, they do not have the capability to adjudicate on the spirituality of any particular location or site. This is the exclusive right of the descendants of Traditional Owners who have a cultural and hereditary association with the land of their ancestors.

Page 7, 4.1: The Draft seems to indicate that although previous ethnographers' reports positively identify Aboriginal occupation, there seems to be no regard for what importance cultural connection signifies. The subject concerning "Cultural Context", we believe that the variations of cultural boundaries between the Awabakal and Worimi Aboriginal Nations is problematic when these variations have the potential to misrepresent the Awabakal presence within this region to a point where it is even a part of the Worimi Nation. We would suggest that there is a need for sensitivity when referring to this material to avoid unnecessary conflict and quite possibly, inadvertently disinheriting Awabakal descendants from their ancestral lands.

Page 15, 6.4: The wider Hunter regions consist of many Aboriginal community members who have no cultural association with this land, although they may feel a sense of belonging. With regard to the comments concerning "Cultural Value" we believe that the reference made to 'Aboriginal community' in the report should be changed to 'Aboriginal Stakeholders', as the classification of 'community' has a wider group connotation and needs clearer definition as this description creates a homogenized "community" presence, whereas the meaning of 'Stakeholders' is that of independent parties and is more accurate and specific.

That said, Aboriginal protocols suggest that those Aboriginal people who have relocated for one reason or other into other Nations traditional lands, need to respect the culture and heritage of the region and be mindful the rights of the descendants of Traditional Owners of the area.

The Kooragang Island's landscape has been changed dramatically evident from the recently documentation of the 1801 Ensign Barrallier Map and the sketch by Captain Browne with the 1812 view of Newcastle including Port Stevens in the distance (see attached).

Kooragang Island primarily became an industrial suburb, and in 1993 the Kooragang Wetlands Rehabilitation Project was initiated to compensate and address the loss of wildlife habitat in the Hunter estuary caused by 200 years of clearing, filling, draining and polluting.

Prior to colonisation and before modification to the Kooragang Island landscape, these Islands were used by the Awabakal People for ceremonies, hunting and camping, these Islands being a reliable resource. It would be a significant and unfortunate oversight if BHP Billiton were to conclude that the cultural value and artifacts remnants within the Kooragang Island landscape are completely lost.

"Kooragang Island" was utilised by the Awabakal People repeatedly for many purposes including fishing and food gathering. This is substantiated by the vast amount of documentation recorded from the area. This evidence indicates a lifestyle of educational value of traditional occupation, and therefore inspires respect for the historical & cultural value this particular site provides.

Should you require further information please do not hesitate to call me.

Yours sincerely,

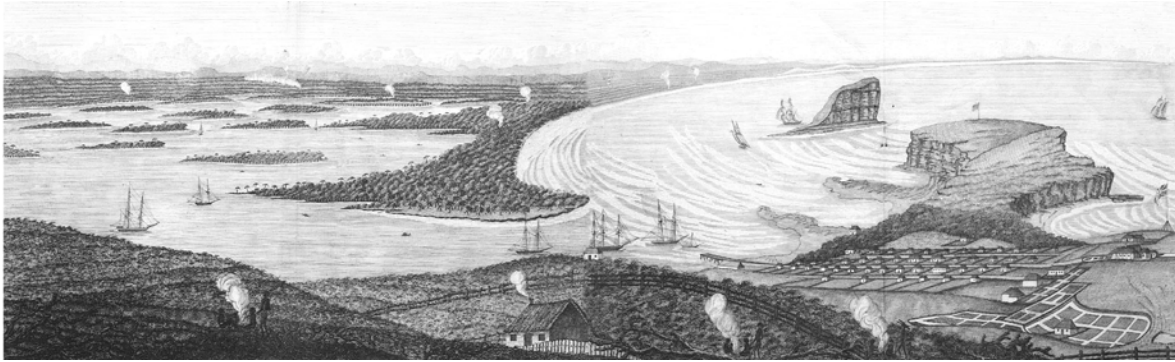


Kerrie Brauer  
Secretary/Public Officer

## Newcastle 1812

Browne 1812 60 x 202cm

Caption: Browne, T.R. (1776 - 1824). Newcastle, in New South Wales, with a distant view of Point Stephen, 1812 and View of Hunters River, near Newcastle, New South Wales, 1812. Copper Engraving. Photographer: Bruce Turnbull. Courtesy Newcastle Region Art Gallery



Reference Coal River Working Party, University of Newcastle, Australia,  
URL: <http://coalriver.wordpress.com/>





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