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Your Ref: PSC2007-3891

18th August 2010

The General Manager
PORT STEPHENS COUNCIL
P.O Box 42
Raymond Terrace NSW 2324

Attention: Mr Matthew Borsato

Subject: Planning Proposal for the Rezoning of Lots 411 – 413 DP 1063902, Medowie Road, Medowie

Dear Matthew,

Please find enclosed 2 hard copies and 1 electronic copy of the final Aboriginal Heritage Due Diligence Assessment in relation to the above site.

I trust this information will satisfy Council's requirements, however, if further information or assistance is required, please do not hesitate to contact our office.

Yours faithfully
HDB Town Planning & Design

K. Blackmore
Keith Blackmore
Principal Planner

Enclosures – 2 x bound copies of Aboriginal Heritage Due Diligence Assessment
1 x CD containing electronic copy

Myall Coast Archaeological Services

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Aboriginal Heritage
Due Diligence Assessment

Lots 411,412,413 DP 1063902
Medowie Road, Medowie, NSW

Report to
Hunter Development Brokerage
Maitland. NSW
Thursday 5th August, 2010

By Len Roberts B.A. (Arch/Hist.); Grad. Dip. Comp; Dip. Sp. Ed;
("Tall Pines", Tea Gardens. 2324 Ph: 49 971011)

Myall Coast Archaeological Services

Aboriginal Heritage Due Diligence Assessment

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1. Introduction

1.1 Background

This report has been prepared by Myall Coast Archaeological Services at the request of Hunter Development Brokerage, Maitland, NSW, to assess the possible impact a proposed mixed use development may have on Aboriginal Cultural Heritage at **Lots 411,412,413 DP 1063902 Medowie Road, Medowie, NSW** in order to demonstrate due diligence by :

1. Identifying whether or not Aboriginal objects are, or are likely to be, present in an area;
2. Determining whether or not their activities are likely to harm Aboriginal objects (if present); and
3. Determining whether an Aboriginal heritage Impact Permit (AHIP) application is required.

Due diligence amounts to taking reasonable and practicable steps to protect Aboriginal objects. The Department of Environment Climate Change and Water (DECCW) has developed a draft generic code that provides one process for satisfying the due diligence requirements under the *National Parks and Wildlife Act 1974 (*as amended*).* It is not mandatory to follow this code. An individual or corporation can take other measures, provided that such measures are objectively reasonable and practicable and meet the ordinary meaning of exercising due diligence. However, according to DECCW there are three essential issues to consider when undertaking a due diligence process:

1. Nature of the proposed activity
2. Land condition and prior land uses
3. Knowledge and available information.

DECCW will not approve or certify a person's compliance with their due diligence requirements carried out under this or any other code. It is the responsibility of the individual or proponent to ensure that they have undertaken due diligence.

1.2 Legislative Context

The *National Parks and Wildlife Act 1974*, administered by DECCW, is the primary legislation for the protection of some aspects of Aboriginal cultural heritage in NSW. Section 86 of that act has been amended and comes into force on 1/10/2010 and deals with harming and desecrating Aboriginal Objects.

'Aboriginal object means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.'

Under section 86 of the NPW Act, it is an offence to 'harm' an Aboriginal object. 'Harm' means any act or omission that:

- destroys, defaces, damages or desecrates the object
- moves the object from the land on which it had been situated, or
- causes or permits the object to be harmed.

There are now two types of offences for harming an Aboriginal object:

1. An offence of harming an object which a person knows is an Aboriginal object (a 'knowing offence')

2. An offence of harming an object whether or not a person knows it is an Aboriginal object (a 'strict liability offence').

The NPW Act provides several defences to prosecution for both types of offence. Where a person either knows or does not know they are harming an Aboriginal object, a person has a defence where:

1. the harm was authorised by an Aboriginal heritage impact permit (AHIP), and all the permit's conditions are complied with
2. the harm occurred during the exercise of a power or function under the *State Emergency and Rescue Management Act 1989* (for emergencies as defined under that Act)
3. the harm was specifically required or permitted under the terms of a conservation agreement entered into under the NPW Act (only where the agreement was entered into or modified after the commencement of the *National Parks and Wildlife Amendment Act 2008*).

Where a person does not know they are harming an Aboriginal object, they have an additional defence to prosecution if:

*'… [*They] exercised due diligence to determine whether the act…would harm an Aboriginal object and determined that no Aboriginal object would be harmed' (a 'due diligence defence').

The NPW Act provides exemptions to harming Aboriginal objects in the following circumstances:

- Aboriginal people and their dependants are exempt from being prosecuted for harming an Aboriginal object if, in carrying out any traditional cultural activities, they would otherwise harm an Aboriginal object within the meaning of the Act.
- Emergency fire fighting activities authorised under the *Rural Fires Act 1997*.

There is an additional strict liability offence related to harming an Aboriginal Place. An Aboriginal Place, declared under section 84 of the NPW Act, is 'a place that, in the opinion of the Minister, is or was of special significance with respect to Aboriginal culture'.

2. The Due Diligence Process

The following information is taken from the DECCW Website:
(http://www.environment.nsw.gov.au/legislation/DueDiligence.htm#responsibility).

The purpose of due diligence is to identify whether Aboriginal objects are present in an area, and to determine whether a proposed activity will have impacts on Aboriginal objects. Therefore it is essential to identify and understand all the expected impacts of the proposed activity. There are two categories of activity used for assessing impacts:

1. *activities involving no additional surface disturbance*
2. *activities causing additional surface disturbance. For activities causing additional surface disturbance, it is necessary to determine whether an activity is proposed for:*
   a) a developed area or a previously disturbed area, or
   b) an undisturbed area.

For activities in previously developed or disturbed areas, it is then necessary to determine whether the new activity will create significant additional surface disturbance. If it will, then the process for undisturbed areas will apply.

Disturbed land has been defined in the DECCW draft due diligence process as Land that has been previously subjected to any activity that has resulted in clear and observable changes to the land's surface. Examples include: soil that has been ploughed; urban development that has occurred; existing rural infrastructure such as dams and fences; existing roads, trails and walking tracks; and other existing infrastructure such as pipelines, transmission lines and stormwater drainage.

The following flowchart also from the DECCW webpage illustrates the process.

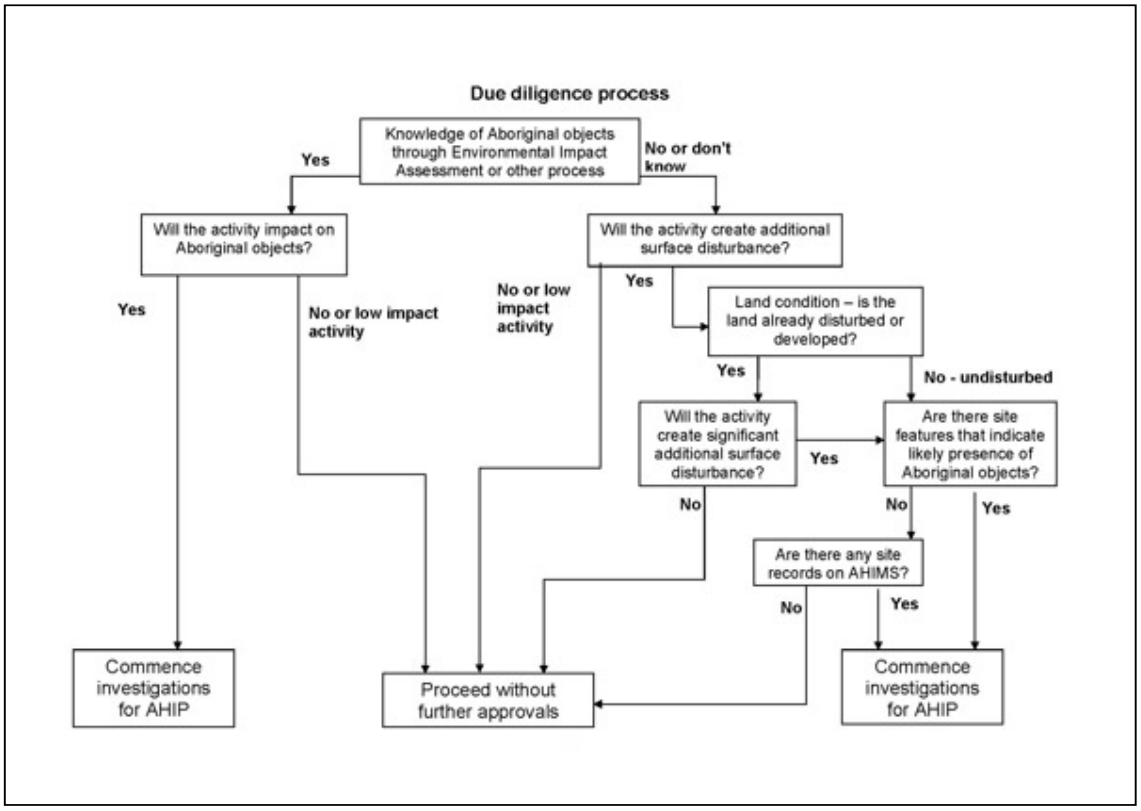

Figure 1 Due Diligence Process according to DECCW website

This Due Diligence Assessment follows the draft due diligence guidelines as per the DECCW website. (*http://www.environment.nsw.gov.au/legislation/DueDiligence.htm#purpose*)

2.1 Assessment Personnel

The research and report was compiled by Len Roberts, (BA [Arch.], Grad. Dip. Comp., Dip Sp. Ed.,) consulting archaeologist who holds a certificate in Archaeological fieldwork, from Tel Aviv University, Israel. Len has worked on archaeological projects in Australia and overseas.

The field survey was carried out by this archaeologist in conjunction with site officers for; the Local Aboriginal Land Council (Jamie Merrick), Nur-run-gee (Len Anderson) and Mur-Roo-Ma (Anthony Anderson), who have extensive experience in archaeological fieldwork and a recognised right to speak on country. The fieldwork was carried out on 24/5/2010

3.0 The Assessment

3.1 Description of Land and Activity

It is proposed to develop Lots 411,412,413 DP 1063902 Medowie Road, Medowie for mixed use purposes.

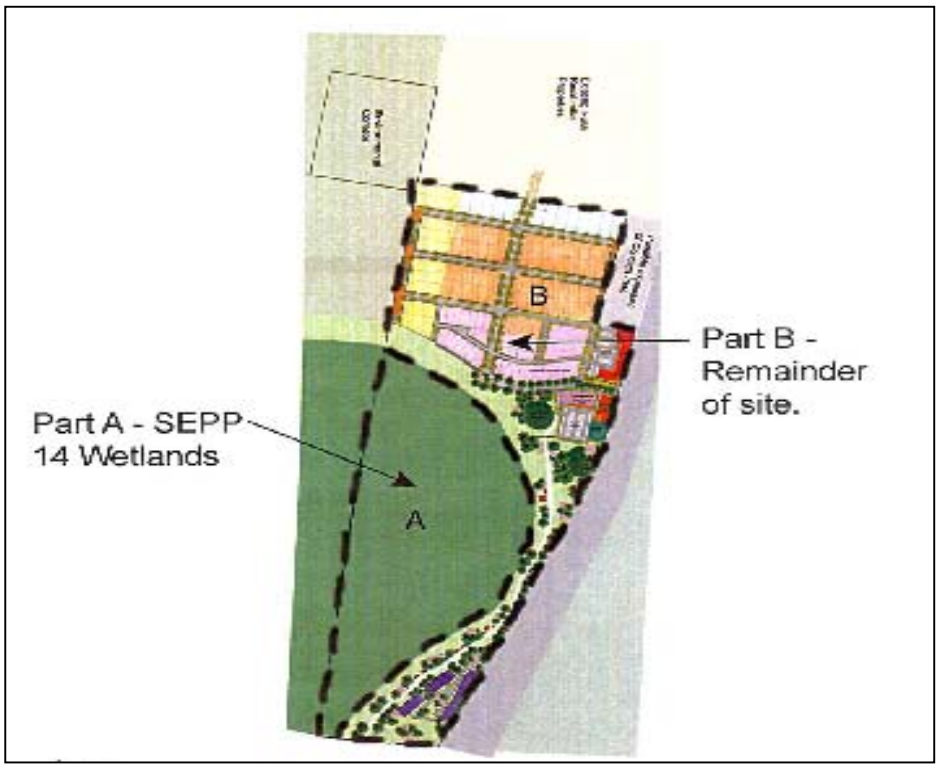

Figure 2 Land and activity concept

The land is bounded by Medowie Road on the East, Richardson Road to the South, Large Lot Rural residential to the north and rural land to the west

3.2 Is the Land defined as "Disturbed Land" or an exempt or complying development?

The activity is not exempt or complying, but it is disturbed land as there are "clear and observable changes to the land's surface".

The land has been filled and affected by Medowie Road development. The property contains 2 houses and associated rural infrastructure such as sheds and access roads and tracks. It also contains a large area competitive asphalt go kart track. The land is generally level and looks like a "golf course" in appearance. The vegetation consists of imported grass that has developed into a manicured lawn. The landscape has been affected by long term modification, cultivation and mowing.

3.3 Is the activity exempt?

No

3.4 Will the activity involve harm that is trivial or negligible?

No

3.5 Is the activity in an Aboriginal Place or are you already aware of Aboriginal objects on the land?

No. It is not an Aboriginal Place and according to AHIMS there are no known Objects on the land.

3.6 Is the activity a low impact activity for which there is a defence in the regulation?

No

3.7 Will the activity disturb the ground surface?

Yes, but the land is already disturbed and filled.

3.8 Does the Aboriginal Heritage Information Management System suggest potential?

Yes. The AHIMS indicates occupation nearby in similar undisturbed landscapes.

3.9 Is there archaeological potential because the proposal is:

- **within 200m of waters;**
  Yes, the land contains wetlands however the activity will not occur near or within that wetland

- **located within a sand dune;**
  No

- **located on a ridge top, ridge line, or headland;**
  No

- **located within 200m below or above a cliff face;**
  No

- **within 20m of or in a cave, rock shelter, or a cave mouth;**
  No

3.10 Can harm be avoided to the object or disturbance of the landscape feature?

Yes. The wetland will not be impacted by the activity and there are no known objects on the land which is heavily modified and disturbed

3.11 Is Desktop assessment and visual inspection required?

Yes. Given that the activity is adjacent to a wetland (irrespective of whether it is natural or not) it would be prudent to inspect the land. In addition there is the possibility that Objects could have been imported with the fill or transported on site from adjacent areas through natural or anthropogenic processes. The desktop assessment is contained in section 4 and the field assessment in section 5 of this report

3.12 Are Further investigations and impact assessment required?

No. The land is disturbed land, the activity will be undertaken away from the margins of the wetland and the desktop and field assessment did not reveal any objects or potential for objects to be discovered.

4.0 Desktop Assessment

4.1 Methodology

The analysis and assessment of the study area's archaeological potential and the impact of the proposal required the completion of the following;

- *Research*

This involved a review of primary and secondary sources including written material, maps, plans, AHIMS database and other reports.

- *Predictive modeling;*

This involved an analysis of the research to produce a model of possible archaeological deposits within the study area. In order to conduct the analysis of the research material in an effective and consistent manner the following aspects were examined:

1. Aboriginal heritage values
2. Archaeological record
3. Previous Studies
4. Landscape
5. Soils
6. Geological Features
7. Past land use

- *Site Inspection*

This involved evaluation of the above research with the study area's potential to reveal/conceal archaeological evidence.

4.2 Aboriginal Heritage Values

SOCIAL

The survival of prehistoric people stranded on islands has been studied by Jones who has come to the conclusion that "in hunter-gatherer conditions, the limiting viable population may be somewhere in the range of four hundred to six hundred depending on local circumstances and the vagaries of chance."

This estimated minimum viable population of about five hundred was also the average size of a so-called tribe in Australia. The term tribe, which was adopted from 19th century Europe, has often been used to describe the organisation of Aboriginal society in Australia. Several anthropologists feel that 'tribe' does not accurately reflect the interaction and make-up of Aboriginal Australia, preferring the term 'band' to be the most appropriate term to describe the basic social and economic unit of Aboriginal society. It is described as a small-scale population, comprising between 2 to 6 extended family units, who together occupied and exploited a specific area.

The band was by no means a social or cultural isolate but, rather, interacted with other bands in a variety of ways. Typically these interactions involved visits, marriage, ceremonies and trade. As a result of these interactions, clusters of bands were formed; wherein there was a sense of collective identity, often expressed in terms of common and distinctive language.

LOCATION

In recent times the territories of Aboriginal tribes generally encompassed the drainage basin of one river and stretched from the shoreline up to the top of an escarpment, another River or prominent landform feature. There is no way of knowing how far back in time this territorial organisation goes, but it may well be quite ancient.

The evidence suggests a comparatively small early population, spread thinly around the Continent and concentrated in the places where food was most abundant: the coast and large inland lakes and rivers. Thousands of Aboriginal middens have been found on the south-eastern coast of Australia. The least inhabited parts of mainland Australia were the snowy mountains and the desert centre of the Continent. According to Flood (p.219), “We now know that people were camping at least occasionally on the fringes of the snowy mountains, in treeless country at 730 metres above sea level and in the region North of Uluru, at Puritjarra, around 30 thousand years ago.”

The bands developed into regional groupings or cultural areas of interacting Aboriginal societies possessing broadly similar languages, social organisation and customs, material culture and art styles, ways of life and environment. According to the work by Peterson (1986), there is a general correlation between culture areas and major drainage basins, which has been explained on the grounds that a drainage basin is unified by its river system and bounded by its catchment. Water supply determines plant cover and therefore the availability of food and consequently, Aboriginal population density.

On the coast, according to Flood (p.219), “The most favoured campsite was a foredune close to a rock platform on the north side of a headland. Such a site, offered easy access to shellfish, a landing place for canoes, proximity to drinking water, shelter from prevailing winds, and soft sand for a bed.” Inland, the camps would have been near reliable watercourses and protected from prevailing winds. If hills were nearby, they may have had winter camps in rockshelters or caves. JW Fawcett (1898, p.152), stated of the Wonnaruah "in choosing their site [camp] proximity to freshwater was one essential, some food supply a second, whilst a vantage ground in case of attack from an enemy was a third. Pearson (1981), made similar observations of the Wiradjuri (Western Plains, NSW) for suitable camp site location: accessibility to water; Level ground with good drainage; Elevation above cold air currents and lingering frost prone valley systems often with good views of the river flats and water courses; Sheltered from cold winter winds and with adequate summer cooling breezes; and, Adequate fuel supplies.

Aboriginal people were able to exploit, and to survive in, a wide range of environments where European agriculture failed. They tended to congregate in bands of about 500 consisting of family groupings, generally limiting themselves to a river, lake or bay drainage basin, living off the abundant food supply that was easily available. Each family grouping would be about 8 miles (12-15km) apart (Bennett, 1926). They were not nomadic in the clinical sense, however they did move from campsite to campsite on a rotational basis, mainly for reasons of hygiene (Bennett, 1926). Extensive use was made of fire as a hunting tool, modifying the Australian vegetation. There was regular contact with other bands for social and economic purposes. Many of the paths followed would be along watercourses or from one water source to another.

According to Horton (1994), the Band that would be of interest to this survey, would be the family groupings of the Worimi. The first reported sightings of Aboriginal people in the Port Stephens area was by the crew of the Endeavour, Captained by James Cook, on May 11th, 1770, who wrote;

"… as we sailed along the shore we saw many smokes and signs of the inhabitants"
(Historical Records of Australia, Vol.1 p216)

The Aborigines around Port Stephens were numerous and healthy, as they had abundant food supply. The earliest inhabitants were hunters and gatherers living off the abundant wildlife.

“The Aboriginal population was controlled by the food resources available, which in turn was related to water resources." (Flood 1995, p265)

The varied environment - terrestrial, rivers and estuaries, sand dunes and mountains provided a diet of oysters, fish, turtles, kangaroos, wallabies, possums, pigeons, bats, wild fruits and roots. This would mean that Port Stephens could sustain a large and healthy population. The early historical records even dating back to Captain James Cook, notes the vitality and healthy appearance of the natives. However by the 1820's, records indicate that a large number of Aboriginals died from introduced diseases from which they had no immunity.

From the recollections of William Scott who was born at Carrington, his father being employed by The A.A. Company, it is obvious that the Aboriginal population was quite large, but declined rapidly in the years since white settlement By 1836 a smallpox epidemic and other introduced diseases had decimated the Aboriginal population. . It seems by 1890 the local bands had been virtually wiped out.

Most of the written sources refer to the Aborigines around Port Stephens and although the bands around Raymond Terrace were similar if not related, their lifestyle was different as one group were coastal dwellers, the other river. A picture of Aboriginal life around the Terrace and along the Williams River is well documented. Wetlands were a substantial source of food. Forays from nearby camping areas close to the river, into the wetlands, would have been a common day occurrence

They tended to live close to the River approximately 8 miles apart, frequently on the move within a specified area; “carrying few personal possessions and relying on caves or quickly built bark gunyahs. They were skilled canoe makers, sailors, hunters and gatherers. They used fire for cooking; pasture management, for warmth and light at night, for the manufacture of weapons and in ceremonies” (Hunter p2)

Regular burning would have occurred as a method of "firestick- farming'. It would appear that the land was lightly forested and cleared of scrub undergrowth.

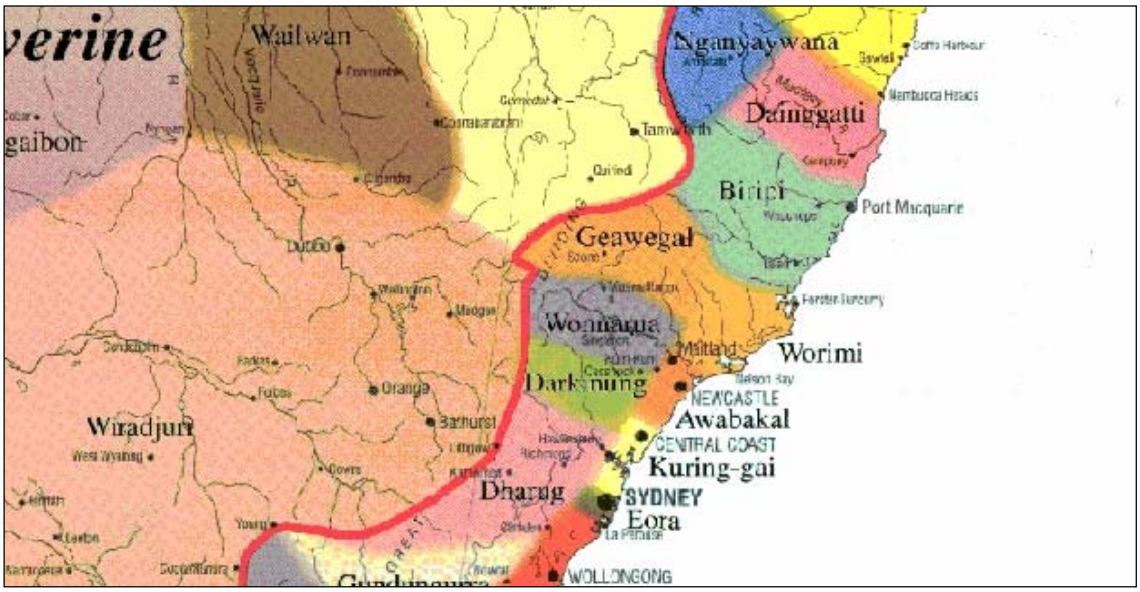

Figure 3 Horton's Map of Aboriginal Territorial Organisation

ENVIRONMENTAL IMPACT

Several researchers have shown that the Australian Aboriginal has had a huge impact on the vegetation through use of fire. There were many reasons for the extensive burning. It was used for

signalling and also to make travel easier by clearing undergrowth along the corridor. Aboriginal tracks were open by regular firing in the early timbered ranges. Throughout the Continent, burning was used as an aid to hunting, animals could be speared as they broke to escape the flames.

Other uses of fire were for longer term hunting strategies. After firing, the Bush would regenerate; new grass would spring up and attract kangaroos and other animals, on which the hunters could prey. Likewise, fire encouraged the regrowth of eucalyptus trees and of edible plant roots. The ashes acted like manure, and sweet, new green shoots would spring up after the first hard rain following the burn.

The term 'fire-stick farming' has been applied to this aspect of hunting.

There is an assumption that prior to European settlement the land was heavily forested. However, according to early settlers accounts and the Aboriginal oral history, this was not so. Walsh, (p26), cites extracts from the accounts of early explorers,

> "The extracts from letters, diaries and journals of early European settlers, explorers and government officials describe a parklike landscape of grasslands and grassed open forest lands with very few areas of thick forest. The cessation of regular burning following European settlement allowed a growth of thick forest of young trees that, together with an increasing understorey, choked out the grasses."

These grasslands provided perfect pastures for sheep, but when Aborigines were no longer present to maintain them with a regular fire regime, sour grass and scrub took over, gradually obliterating the open land, with considerable loss to the non- fire stick farmers.

Such regular, light burning was the pattern all over Australia at the time of first European contact. The fires were of low intensity, which meant that they consumed the litter of leaves and branches on the forest floors but did not burn down the trees.

Aborigines never put out their fires. Campfires were left burning, as were signal fires, including those lit in a sequence to indicate the direction of travel of humans or game.

Gould (p.82), "never encountered an occasion when a fire actually invaded an area that was already producing wild food crops". It seems that, as well as increasing their future food supply; the Aboriginals also protected their present food resources. As Flood (p.252) put it, "Fire is the most versatile and important tool of hunter-gatherers. It is used for warmth, light, cooking, hunting, signalling, track making, and, whether intentionally or not, had the effect of improving the food supplies of prehistoric Australia."

RESOURCES

The food resources available controlled the Aboriginal population, which in turn were related to water resources: the areas with the highest rainfall were generally richest in food. The number of mouths that could be fed was regulated by the food available at the leanest time of year.

When food was difficult to obtain, the food quest simply required more time and effort rather than new strategies. Thus when times were hard, the people could simply move more often and further afield.

The typical Australian Bands economy is flexible with a wide variety of foods being sought and advantages being taken of seasonal abundance or chance events, such as the stranding of a whale. Aboriginal Australia was not vulnerable to famine through the failure of one crop.

The simplicity and self-sufficiency of Aboriginal society was observed by Captain Cook in 1770, and cited in Beaglehole, 1955 (p.399).

> *"From what I have said of the natives of New Holland they may appear to some to be the most wretched people on earth, but in reality they are far more happier than we Europeans. They live in a tranquillity which is not disturbed by the inequality of condition: the air and sea of their own accord furnishes them with all things necessary for life, they covet not magnificent houses, household stuff etc., they lie in a warm and fine climate and enjoy a very wholesome air, so that they have very little need of clothing and this may seem to be fully sensible of, for many to whom we gave cloth etc. to, left it carelessly upon the sea beach and in the Woods as a thing they had no matter of use for. In short they seemed to set no value upon any thing we gave them, nor would they ever part with anything of their own for any one article we could offer them; this in my opinion argues that they think themselves provided with all the necessary's of life and that they have no superfluities."*

4.3 Archaeological Record

There are 28 Objects listed on the AHIMS database within a 5km radius of the study area. The majority of which are artefacts (27). One is a potential artefact deposit.

An examination of the location of the above relics not only places the study area in an overall archaeological context but also indicates the possible archaeological evidence to be found in the study area, if the study area was in an undisturbed state. This is important as it indicates the lifestyle of the Aboriginal people in a landscape context.

Te information shows that the overall area was used by Aboriginal People with particular reliance on wetlands.

Comment:

The AHIMS indicates that the study area in an undisturbed state could contain evidence of Aboriginal Occupation.

4.4 Previous Studies

Locally, many studies have been undertaken for residential, tourist and infrastructure development. Each study generally reinforced known occupation patterns with the work of Baker (1996) highlighting the correlation of wetlands and Aboriginal Occupation. Moffats Swamp is only a couple of kilometres from the study area.

On a state wide basis, several studies have been undertaken which have proven to be definitive works for understanding the correlation of landscape and archaeological potential.

- **Importance of wetlands**

Archaeological investigations by Kuskie (1994), Ruig (1995) and Effenberger and Baker (1996) on margins of various wetlands indicate that artefacts could be found on all types of landscapes abutting wetlands with density in direct correlation to distance from the margin.

- **Relationship of landform type and ceremonial areas**

Work by Klaver and Heffernan (1991) which was an assessment of sites in the Greater Taree Council area, identified landscape attributes for ceremonial sites. Citing an earlier work by Fitzpatrick (1986), they stated, "Ceremonial grounds were said to comprise two rings, one on top of a low ridge and the other in a level place below. The latter was…"established in a roomy place, so that all the gins could

camp there close to the ring." This aligns with this author's findings at North Arm Cove and Kings Hill, Raymond Terrace.

- **Relationship between Object type and landscape**

Brayshaw, in 1986 conducted a Study of Colonial Records of the Aborigines of the Hunter Valley and was able to present an account of the environment and way of life of the Aboriginals at the time of colonial settlement. Her study also indicated areas and landforms of Aboriginal use and occupation. Dean-Jones and Mitchell (1993) conducted a similar assessment of archaeological sites in the Hunter Valley.

The above studies indicated:

- Open campsites would be near water holes
- Grinding grooves are more likely to be found in rocky outcrops exposed by erosion or in creek beds.
- Scarred trees may be present in any type of landscape, but this would depend on the age and type of tree.
- Artefacts are more likely to be found along creek and drainage lines
- Stone arrangements and ceremonial artefacts are more likely to be found in significant landscape aspects such as caves and hills.
- Artefacts can be found in any landscape in proximity to an abundant food/water source.
- Archaeological evidence is more likely to occur in undisturbed areas.

- **Relationship of Objects and Distance from Water /Song trails**

A report for the Brigalow country undertaken by the Resource and Assessment Council titled Aboriginal cultural heritage assessment NSW western regional assessments final report September 2002 – Brigalow Belt South Stage 2. This large scale landmark study analysed the finding of separate independent studies and was able to establish an information base that highlighted Aboriginal association with forests, travelling stock routes (early roads), rural properties and towns.

The study showed that of the sites recorded, 50% were within 200 metres of water and Aboriginal occupation may have occurred for prolonged periods under the right conditions, made possible by a different array of water features (chains of ponds) that existed prior to European usage of the forests.

Burials

With respect to burials, work by Donlon 1990, where she analysed skeletons uncovered on beaches on the Central Coast of NSW, ethnographic reports by Bennett 1929, along with other research cited by Mulvaney and Kamminga 1999, has tended to indicate that whilst burials could be found almost anywhere and diverse in practice, intentional or formal burials, generally in Eastern NSW, consisted of isolated burials being placed in sandy type soil, near the high water mark, and sufficient soil depth to bury the person vertically in a sitting position and with various belongings. In the Central west of NSW according to Garnsey (1942: 23ff), the body was placed in a squatting position; with the elbows placed on the knees and the head between the hands. In this position, the body was placed at the foot of a Coolabah tree facing east. In the burial of an important individual, a strip of bark about five foot long and two foot wide was stripped from the eastern side of the tree and placed in a slanting position over the corpse. The blaze on the tree was also carved in tribal markings to show the man's status. These carved trees were apparently only associated with the graves of the spiritual leaders. For the period of mourning, the body remained out of the ground. The only recorded cemeteries are within the Murray River corridor or at Broadbeach in Queensland. Most burials are discovered by accident.

- **Relationship between Stream Order and occupation pattern**

A survey by Jo McDonald 1988 was an east west survey from Dubbo to Tamworth. The report found stream order influenced occupation pattern. Her analysis concluded that;

> *"the size (density and complexity) of archaeological features will vary according to the permanence of water (i.e. stream order), landscape unit and proximity to lithic resources in that density and complexity are greater in 4^{th} order (major creeklines and rivers."*

- **Occupation Pattern**

A general pattern is emerging that more concentrated remains of Aboriginal occupation are associated with wetland or swamp resources along the principal rivers of the region and/or where resources suitable for the manufacture of tools are present.

The pattern of Aboriginal occupation was underpinned by 2 tenets:

- Aboriginal camping areas were always situated in areas of good shelter and good resources
- Base campsites would be near reliable water.

The known archaeological evidence tends to suggest that base camps were located close to freshwater and food sources. The campsites were in favourable climactic conditions, safe, not only from intruders but also for young children. Campsites were therefore not near fast, flowing rivers, dangerous swampy areas or steep cliffs. Many Dreamtime stories were told of mythical creatures to keep children away from dangerous areas. Trails from campsites and to other clans were generally along creek lines or ridgelines.

Prior to European settlement the area was inhabited by Aboriginal people who roamed freely across the river flats and through the timbered hill country. They lived in harmony with the land, only taking what they required from the bounty of game available. They also adopted burning off practices as the new shoots which emerged after fire attracted kangaroos which they surrounded and killed with clubs and spears) barbed with sharp stones.

Comment:

The study area was probably used as a resource area with the possibility of transient and or seasonal camping. The ethnographic record identifies other areas as more favoured for intensive occupation and base camps.

4.5 Landscape

The differing landscape creates different land use. For instance swampy or poorly drained land would not be conducive to campsites or burial grounds. Whereas, caves and rock shelters would give rise to artwork, and practical purposes such as shelter or women's birthing areas.

Early roads, stock routes and river crossings during European settlement often followed Aboriginal Song Trails (walking trails) and natural features adjacent to such trails were of significance for various reasons. Over the years, the main highways and roads have been realigned and adjusted, but initially the roads between settlements which were generally established around Aboriginal camping grounds, followed the Aboriginal trails.

The landscape survey and classification followed in this report is that formulated by Speight and others in the Australian Soil and Land Survey, Field Handbook, Second Edition.

Landform is basically divided into 2 classifications, the classification covering a larger area is known as Landform Pattern, which can then subdivided into smaller areas known as Landform Elements. About 40 types of landform pattern are defined and include, for example, floodplain, dunefield and hills. Whereas, about 70 of the smaller landform elements are defined, including cliff, footslopes and valley flat.

Relative elevation classes have been standardised and used throughout Australia. The standard text used is called the "Soil and Land Field Handbook" (McDonald *et al*, 1990, Ed 2, p36). The landscape is divided into the following classes:

Landform	**Relative Elevation**
Plains	0-9 m
Rises	9-30 m
Low hills	30-90 m
Hills	90-300 m
Mountains	>300 m

Landforms as well as having morphological characteristics (surface dimensions) have been formed by processes. The formation processes can interact to produce an array of landforms. For example, plains can be separated into depositional plains of various kinds or erosional surfaces (peneplain). The formation process contributes to the concealing/revealing and the preserving/destroying of archaeological evidence. The identification of landform is paramount in predicting areas that have the potential to contain archaeological evidence.

The study area landform is part of the landscape and terrain of the northern end of the Sydney basin on Permian sediments, near the junction of the Lower Hunter Plain and the Tomago Coastal Plain.

The subject site is on the eastern side of a broad and gentle ridge <50 which generally runs toward the south east, connecting to a ridge system running from the Williams River toward the east and the north. This ridge tends to divide the wetlands of the Williams River floodplain and the now inundated wetlands of the Grahamstown (Ferodale) Dam.

The original main drainage is an ephemeral creek originating at the north of the site flowing east to the wetlands and then south to Campvale swamp which then flows west via Campvale Drain into Grahamstown Dam.

Comment:

The landscape tends to suggest that the study area was conducive to attracting and sustaining a variety of food and water resources at least seasonally. The study area would have at least been used for hunting and gathering.

4.6 Soils

Where an archaeological survey is only a surface investigation, any information relating to subsurface information is important, in that it indicates:

- The possibility of archaeological evidence beneath the surface.
- The possibility of archaeological evidence destroyed through erosion or other natural phenomena.
- The possibility of archaeological evidence preserved through soil/sand deposition.

The main soil features of interest are the depth of deposits, stability of the soil composition and the depositional age of the soil groups. Detailed analysis of the effects of different soils on the burial process of archaeological remains can only be carried out during an excavation.

The susceptibility of land to sheet and rill erosion is governed largely by the topsoil texture, slope of the land, length of slope and the probability of intense summer rainfalls. The topsoil or A horizon is where most nutrients, organic matter, seed and macroporosity so desirable for a seedbed exists. The first few centimetres of soil also generally contain artefacts.

The following map details the soil profile. It shows the soil in the study area classified as Cd2 which is a duplex soil with generally sandy loam with arrange from sand to loam.

Comment:

The implication for the study area is that there could be potential for subsurface archaeological deposits within the first 300mm provided the soil profile has not been disturbed.

Figure 4 Soil classification

4.7 Geological Features

The geological data allows for analysis of the landscape to determine any special features that may contribute to Aboriginal occupation in prehistory. There may be particular outcrops or features that would suggest significant Aboriginal use.

Comment:

There is no indication of a geological abnormality or feature that would suggest special significance to the landscape.

4.8 Past Land Use

Past Aboriginal activities are not well manifested by archaeological record because many activities did not leave material evidence or because the material evidence was not durable. Many of the implements were organic material, such as wood and bone and readily decayed when exposed to the elements. Even burials, are subject to the acidic condition of the soil.

Durable evidence, such as stone and rock implements, is affected by European land use. Easily recognisable implements such as stone axes, have found their way into many private collections, well before it became illegal to do so, with no record of the location of the find. Cultivation, with the

associated stick raking and stone gathering also tended to destroy surface evidence. However cultivation and pastoral land use also helped preserve the archaeological record. In some cases cultivation would expose evidence in others, cover the evidence.

In general, the archaeological record is dependent on the exposure of sites through erosion, weathering, fire, drought and anthropogenic activities.

Comment:
The landform of the study area has been so extremely modified that any archaeological evidence that may have existed on site is not able to be revealed. There is not even potential for intact subsurface evidence.

5.0 Field Assessment

A field inspection as conducted by car and on foot over the study area with representatives of the Aboriginal community as outlined at 2.1 previously. The margin of the wetland was examined intensively but as the lawns ran right to the edge and the wetlands were inundated nothing was or was likely to be observed. The field inspection reinforced the desktop assessment that the landscape had been heavily modified and existence of evidence would be extremely unlikely.

6.0 Impact Assessment

6.1 Key principles in determining Occupation Pattern

Roberts, 2009 formulated 7 key principles to determine probable Aboriginal land use of a particular area.

Using those principles it is possible to place the study area into Aboriginal occupation context and use.

1.
2. Proximity to water

   There is water on site. It would have been generally reliable however it is not known what affect the creation of nearby Grahamstown dam had on what is there now.
3. Food resource

   The study area does not appear to contain any unusual favourable, seasonal or special food resources but the wetlands would have supported abundance and variety.
4. Geological features

   There are no unusual, unique or prominent geological attributes within or adjacent to the study area.
5. Ease of access

   The study area is easily accessible on foot for all age groups however the swampy conditions of the wetland would not have been conducive to adjacent camping on safety and health grounds.
6. Connectivity

   The study area does not appear to be linked to significant landscape features or unite other areas.
7. Safety

   The study area in its natural state, would have been dangerous for small children and thus inhibit camping. Aboriginal people did not like camping near mosquitoes. Dreamtime stories were used to remind children to stay away from swamps. Ellalong

Lagoon (Catch a boy swamp) near Cessnock is a good example of such a story. There does not appear to be natural protection from harsh and extreme weather. There is no particular view.

8. Archaeological evidence

   Whilst there are many objects identified in the Medowie area there are no objects on site or adjacent. This is perhaps due to both the lack of surveys in the immediate area and an indication of less intensive use of the Area. Due to the disturbed nature of the land, the information from AHIMS cannot be relied upon to reach any definitive conclusion regarding archaeological potential of the study area.

The lack of significant and extensive artefacts is probably more indicative of the occupation of the total area landscape rather than just the immediate area itself. It is likely the study area was only used in a transitory and occasional way and suffers from more favourable areas along the Stockton Bight/Tomaree peninsula through to The Williams River. Some ethnographic records suggest an extensive occupation area at Ferodale, now inundated by Grahamstown Dam.

6.2 Landscape Significance Assessment

It is important to stress that the significance of a cultural landscape is not dependent on archaeological evidence being significant in itself but the interrelatedness of the individual objects to the cultural landscape as a whole. Through understanding the cultural landscape in an holistic manner one may be able to appreciate the associations that may exist between Aboriginal objects and other features within the landscape.

Using the criteria outlined earlier the significance of the study area in an Aboriginal cultural heritage context can be assessed as follows:

- *Social value*

Much of the oral tradition and knowledge has been lost to the Aboriginal communities today. However as research and surveys discover and reveal greater understanding of the past, communities are rediscovering and appreciating what has gone before. At the present time, there does not appear to be spiritual, traditional, historical or contemporary associations and attachments which the place or area has for the present-day Aboriginal community. Similarly there does not appear to be associations with tragic or warmly remembered experiences, periods or events. However that is not to say that discovery of evidence or knowledge of past spiritual connection to the place will not rekindle such association.

- *Historic value*

At this time, there does not appear to be an association of the study area with a person, event, phase or activity of importance to the history of an Aboriginal community.

- *Scientific value*

There is absolutely no scientific value to the study area

- *Aesthetic value*

The sensory, scenic, and creative milieu of the adjacent and surrounding landscape does not readily evoke feelings of a sense of place and its past use.

7.0 Recommendations

1. Further investigation is not warranted

2. Application for a permit to harm an Aboriginal object is not required

3. Whilst it is considered extremely unlikely that archaeological evidence will be uncovered through the activity due to the disturbed nature of the land and whilst the activity will be conducted away from the wetlands it may be prudent to consider the following:
   - During any excavation that a representative/s of the Aboriginal community be on site.

According to DECCW draft due diligence code, harm does not include something that is trivial or negligible. Examples of what might be a trivial or negligible act are picking up and replacing a small stone artefact.

4. If Aboriginal objects are later found when carrying out the activity, work must cease, DECCW notified and application for an AHIP if objects are likely to be harmed.

8.0 Certification

This report was prepared in accordance with the brief given by HDB to assess of the impact of the proposed development on Aboriginal heritage and was undertaken to demonstrate due diligence.

To the best of our knowledge the report accurately reflects the archaeological survey, findings and results, as well as the input and recommendations of the Local Aboriginal Land Council and/or the registered Native Title Holders. The attached correspondence from the Aboriginal community forms part of this certification and report.

Whilst every care has been taken in compiling this report to determine the impact the proposal may have on Aboriginal Heritage and to demonstrate a due diligence process, neither MCAS nor the Local Aboriginal Land Council and Aboriginal stakeholder groups can warrant or guarantee that due diligence has been met. It is the responsibility of the individual or proponent to ensure that they have undertaken due diligence.

Signed

(Archaeologist)
26/07/2010

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10.0 Glossary

Aboriginal Site

I. Occupation Sites

Evidence of human occupation, which includes food remains, stone tools, baked clay, fire-blackened and fire-cracked stones and charcoal, is found in a range of sites known collectively as occupation sites

- *Shell middens.* These sites are found on the coastline and along the edges of rivers and lakes, It is a deposit composed of the remains of edible shellfish and also usually contains fish and animal bones, stone tools and campfire charcoal.

- *Rock shelters with archaeological deposit.* In rock outcrops such as sandstone and granite, overhangs sometimes form creating useable shelters. Sediments from fires, roof fall. discarded stone tools and food remains form a deposit protected within the shelter and this deposit can be excavated by archaeologists to study patterns of Aboriginal life.

- *Open campsites.* These sites are mostly surface and associated subsurface scatters of stone artefacts, sometimes with fireplaces. They exist throughout the landscape and are the most common site type in rural areas, While found in all environmental locations larger and denser sites tend to be found on riverbanks and lower slopes racing watercourses, as well as ridgelines and other areas that offers movement routes. The study or open sites can assist in understanding patterns of Aboriginal land use.

- *Base camp* This is the name applied to the major or main area of habitation. They tended to be close to a permanent water source and food source. Generally well sheltered. These camps would be rotated for hygiene reasons. They are different to smaller open campsites, which were mainly camps on transport routes or overnight areas on hunting forays.

2. Aboriginal Reserves and Missions

These places are very important to Aboriginal people today. Although Aboriginal people were often moved to reserves by force and were restricted by harsh regulations, the reserves became home to many people, where they and their families were born, lived and died. Historic cemeteries at many reserves are still cared for by the local Aboriginal community.

3. Rock Paintings

Aboriginal paintings are found on the ceilings and walls of rockshelters, which occur wherever suitable rock surfaces and outcrops, exist. Figures include humans, kangaroos, emus, echidnas, grid patterns, animal tracks, boomerangs, axes, hand stencils and other motifs. Paintings are made with white, red, yellow and black pigments. The motifs may be drawn, painted or stencilled, and charcoal drawings are common as well.

4. Rock Engravings

These occur usually where there is a suitable exposure of fairly flat, soft rock or in rock overhangs. The outlines of motifs were made by hitting the rock surface with a sharp stone to make small holes or pits. Sometimes the pits were jointed to form a groove, by rubbing with a stone. People, animal shapes and tracks are common as well as non-figurative designs such as circles.

5. Grinding Grooves

Grooves are located on flat rock exposures close to a stream or rock hole. They vary in size but are generally long (about 30-40cm in length) and elliptical in shape. Stone axes were ground into the softer stone allowing a working edge to be created or sharpened- Deeper grooves may have been used to work spears or other thin implements.

6. Quarries

Quarry sites occur wherever there are outcrops of siliceous or igneous rock. Stone material was used in creating stone tools, which in turn were used to work wood and provide people with tools to assist in hunting and gathering activities. Siliceous rock is easily flaked and made useful cutting and scraping tools whereas igneous rock was preferred for edge-ground tools, particularly axes.

7. Ceremonial grounds

These sites were used for initiation ceremonies, marriages, tribal meetings and other important functions and are of great significance to Aboriginal people. Bora rings, which are one or more raised earth rings, were used for male initiations.

8. Stone arrangements

These range from simple stone mounds to complex circles and pathways. Arrangements are found throughout inland New South Wales as well as the coast, where fish traps were sometimes constructed.

9. Carved and scarred trees

Tree bark was used for constructing canoes, shelters, coolamons and shields. Distinctive scars are left from bark removal and can usually be differentiated from natural scars. Carved trees are more distinctive, exhibiting patterns etched into the wood of the tree. They can occur throughout the state although clearing and forestry practices have greatly reduced numbers.

A range of diagnostic criteria has been developed to assist in the identification of Aboriginal scarred trees. The following criteria are based on archaeological work conducted by Simmons (1977) and Beesley (I989) It should be noted that these criteria have never been quantitatively tested or quantified using non-relative criteria such as absolute dating or an analysis of pre-occluded scar morphologies. This is because radiocarbon dating or dendrochronology is mostly inconclusive. and the removal of regrowth exposes trees to further damage.

1. **The scar does not normally run to ground level**: (scars resulting from fire, fungal attack or lightning nearly always reach ground level). However, ground termination does not necessarily discount an Aboriginal Origin (some ethno-historic examples of canoe scars reach the ground);

1. (A). **If a scar extends to the ground, the sides of the original scar must be relatively parallel**: (natural scars tend to be triangular in shape):

2. **The scar is either approximately parallel sided or concave, and symmetrical**: (few natural scars are likely to have these properties except fire scars which may be symmetrical but are wider at the base than their apex. Surveyors marks are typically triangular and often adzed);

3. **The scar should be reasonably regular in outline and regrowth**: scars of natural origin tend to have irregular outlines and may have uneven regrowth:

4. **The ends or the scar should be shaped, either squared off, or pointed** (often as a result of regrowth): (a 'keyhole' profile with a 'tail' is suggestive of branch loss);

5. **A scar which contains adze or axe marks** on the original scar surface is likely to be the result of human scarring. Their morphology arid distribution may lend support to an interpretation of an Aboriginal origin: (marks produced after the scarring event may need to be discounted):

6. **The tree must date to the time of Aboriginal bark exploitation within its region**: (an age *of at least* I00 years is prerequisite)

7. **The tree must be endemic to the region**: (and thus exclude historic plantings).

Field based identification of Aboriginal scars, is based on surface evidence only and will not necessarily provide a definitive classification. In many cases the possibility of a natural origin cannot be ruled out, despite the presence or several diagnostic criteria or the balance or interpretation leaning toward an Aboriginal origin. For this reason interpretations of an Aboriginal origin are qualified by the recorder's degree of certainty. The following categories are used

Definite Aboriginal scar - This is a scar that conforms to all of the criteria and/or has in addition a feature or characteristic that provides definitive identification, such as diagnostic axe or adze

marks or an historical identification. All conceivable natural causes of the scar can be reliably discounted.

Aboriginal origin is most likely - This is a scar that conforms to all of the criteria and where a natural origin is considered unlikely and improbable.

Probable Aboriginal sear - this is a scar that conforms to all of the criteria and where an Aboriginal origin is considered to be the most likely. Despite this, a natural origin cannot be ruled out.

Possible Aboriginal scar - This is a scar which conforms to all or most of the criteria and where an Aboriginal origin cannot be reliably considered as more likely than alternative natural causes. The characteristics of this scar will also be consistent with a natural cause.

10. Burials

Aborigines feel equally as respectful about prehistoric burials as modern cemeteries. As Aborigines have lived in Australia for over 30 000 years burials are seen as part of a continuing culture and tradition as well as offering valuable archaeological information. The dead wore sometimes cremated, sometimes placed in trees or rock ledges and sometimes buried. Burials exist throughout New South Wales and can be accidentally uncovered in construction work or become exposed through erosion. It is important that if a skeleton is found it be reported to the police, to a representative of the National Parks and Wildlife Service and to the relevant Aboriginal community group.

II. Natural sacred sites

Many features of the landscape, such as mountains, rocks, waterholes etc., are regarded as sacred sites by Aborigines. They are places associated with Dreamtime ancestors and usually can only be identified by Aboriginal people. They retain a high significance to Aborigines.

Fire- stick Farming

The process of burning to aid in hunting. Animals could be speared or clubbed as they fled to escape the flames. Other uses of fire were for long term hunting strategies. After firing, the bush would regenerate attracting animals on which the hunters would prey. (Flood, p250)

Flake fragment of stone that was used as a tool for weapons, scrapers etc.

Geographical

AHD (Australian Height Datum) Australian standard measurement from the mean high sea level.

Swamp. An almost level, closed, or almost closed depression with a seasonal or permanent water table at or above the surface, commonly aggraded by overbank stream flow (Speight1990: 33).

Legal

Activity means a project, development, activity or work (i.e. this term is used in its ordinary way, and does not just refer to an activity as defined by Part 5 EP&A Act)

Disturbed land or land already disturbed by previous activity. Land that has been previously subjected to any activity that has resulted in clear and observable changes to the land's surface. Examples include: soil that has been ploughed; urban development that has occurred; existing rural infrastructure such as dams and fences; existing roads, trails and walking tracks; and other existing infrastructure such as pipelines, transmission lines and stormwater drainage.

Due diligence Taking reasonable and practicable steps to avoid harm and protect Aboriginal objects.

harm an object or place includes any act or omission that:
(a) destroys, defaces or damages the object or place, or
(b) in relation to an object—moves the object from the land on which it had been situated, or

(c) is specified by the regulations, or
(d) causes or permits the object or place to be harmed in a manner referred to in paragraph (a), (b) or (c),
but does not include any act or omission that:
(e) desecrates the object or place, or
(f) is trivial or negligible, or
(g) is excluded from this definition by the regulations.

Sand Dune Refers to sand ridges and sand hills formed by the wind, usually found in desert regions, near a lake or in coastal areas. In areas of Western NSW, windblown dunes can occur along the eastern edges of ephemeral lakes (called lunettes dunes). They can also occur along the banks of rivers.

Waters means the whole or any part of: any river, stream, lake, lagoon, swamp, wetlands, natural watercourse, tidal waters (including the sea). Note: the boundary or tidal waters is defined as the high water mark.

11.0 Appendix

(A) AHIMS Search Results
(B)Aboriginal Community Correspondence

List of Sites (List - Short)

2705-1

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 390000, Easting to = 397000, Northing From = 6372000, Northing to = 6376000, 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)
19-4-0019	(REFER TO 38-5-0522)	AGD	56	394000	6373825	Open Site	AFT : -	Isolated Find	**Besant**		
		Status Valid									
		Primary Contact							Permit(s)		
19-4-0020	(REFER TO 38-4-0521)	AGD	56	391250	6373725	Open Site	AFT : -	Isolated Find	**Besant**		
		Status Valid									
		Primary Contact							Permit(s)		
38-4-0220	Galloping Swamp	AGD	56	391300	6372200	Open Site	AFT : -	Open Camp Site	**Dean-Jones**		NRS/17798/1/255
		Status Valid									
		Primary Contact							Permit(s)		
38-4-0254	M D 4	AGD	56	394800	6372400	Open Site	AFT : -	Open Camp Site	**Conyers, Dean-Jones, Heath**	1845	NRS/17798/1/255
		Status Valid									
		Primary Contact							Permit(s)		
38-4-0255	M D 5	AGD	56	394500	6372300	Open Site	AFT : -	Open Camp Site	**Conyers, Dean-Jones, Heath**	1845	NRS/17798/1/255
		Status Valid									
		Primary Contact							Permit(s)		
38-4-0256	M D 7	AGD	56	393100	6372300	Open Site	AFT : -	Open Camp Site	**Conyers, Dean-Jones, Heath**	1845	NRS/17798/1/255
		Status Valid									
		Primary Contact							Permit(s)		
38-4-0328	Moffats Dune;	AGD	56	396600	6374800	Open Site	AFT : -	Open Camp Site	**Barber**	2411, 2559	NRS/17798/1/256
		Status Valid									
		Primary Contact							Permit(s) 383, 403, 431		
38-4-0331	Moffats Swamp 2	AGD	56	394050	6373000	Open Site	AFT : -	Open Camp Site	**Baker**	2578	NRS/17798/1/257
		Status Valid									
		Primary Contact							Permit(s)		

List of Sites (List - Short)

2705-1

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 390000, Easting to = 397000, Northing From = 6372000, Northing to = 6376000, 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)
38-4-0332	Moffats Swamp 3	AGD	56	393800	6373100	Open Site	AFT : -	Open Camp Site	**Baker**	2578	NRS/17798/1/257
		Status Valid									
		Primary Contact							Permit(s) 469		
38-4-0517	Medowie Five	AGD	56	394075	6373725	Open Site	AFT : -	Open Camp Site	**Besant**	97535	NRS/17798/1/260
		Status Valid									
		Primary Contact							Permit(s) 1631		
38-4-0518	Medowie Four	AGD	56	394000	6373745	Open Site	AFT : -	Open Camp Site	**Besant**	97535	NRS/17798/1/260
		Status Valid									
		Primary Contact							Permit(s) 1631		
38-4-0519	Medowie Two	AGD	56	394050	6373735	Open Site	AFT : -	Open Camp Site	**Besant**	97535	NRS/17798/1/260
		Status Valid									
		Primary Contact							Permit(s) 1631		
38-4-0521	Medowie 1	AGD	56	391250	6373725	Open Site	AFT : -	Isolated Find	**Besant**	97535	NRS/17798/1/260
		Status Valid									
		Primary Contact							Permit(s) 1631		
38-4-0522	Medowie 3	AGD	56	394000	6373825	Open Site	AFT : -	Isolated Find	**Besant**	97535	NRS/17798/1/260
		Status Valid									
		Primary Contact							Permit(s) 1631		
38-4-0532	F1	AGD	56	393890	6373900	Open Site	AFT : -	Open Camp Site	**Mary Dallas Consulting Archaeologists**	97535	NRS/17798/1/260
		Status Valid									
		Primary Contact							Permit(s) 1631		
38-4-0614	MS1	AGD	56	394180	6374120	Open Site	AFT : 1	None	**Gay**		NRS/17798/1/261
		Status Valid									
		Primary Contact							Permit(s)		

List of Sites (List - Short)

2705-1

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 390000, Easting to = 397000, Northing From = 6372000, Northing to = 6376000, 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)
38-4-0615	MS2	AGD	56	394120	6374100	Open Site	AFT : 1	None	**Gay**		NRS/17798/1/261
		Status Valid									
		Primary Contact							Permit(s) 1378		
38-4-0678	Medowie ISF 1	AGD	56	393890	6373900	Open Site	AFT : 1	None	**Mary Dallas Consulting Archaeologists**		NRS/17798/1/262
		Status Valid									
		Primary Contact							Permit(s) 1631		
38-4-0680	PAD 2: Tomaree to Tomago	AGD	56	397000	6375000	Open Site	PAD : 0	None	**ERM-Thornton, MCH - McCardle Cultural Heritage Pty Ltd**	98386, 98387, 100959	NRS/17798/1/262
		Status Valid									
		Primary Contact							Permit(s)		
38-4-1206	EA Williamtown 1	GDA	56	393381	6373626	Open Site	AFT : 2	None	**Umwelt (Australia) Pty Limited**		
		Status Valid									
		Primary Contact							Permit(s) 3271		

WORIMI LOCAL ABORIGINAL LAND COUNCIL

Our Ref: 19.4.18_Rsps_AHDDA.docx

ABN 51 352 201 603

3rd August 2010

Myall Coast Archaeology Services
Attention: Len Roberts
"Tall Pines"
TEA GARDENS, NSW, 2324

2163 Nelson Bay Rd
Williamtown NSW 2318

PO Box 56
Tanilba Bay NSW 2319

Phone: 02 4965 1500
Fax: 02 4965 1799

info@worimi.org.au

Dear Len,

RE: Aboriginal Heritage Due Diligence Assessment

Thank you for consulting with the Worimi Local Aboriginal Land Council (WLALC) in determining the potential impact on Aboriginal Heritage, subject to the mixed use development at Medowie.

In finalising our comment we have taken into account the Aboriginal Heritage Due Diligence Assessment (AHDDA) supplied by you (inc. your views), along with:

- our knowledge & understanding of the Worimi people (inc movements, practices and activities);
- the AHIMS Register;
- The cultural significant landscape.

It is the view of the WLALC that the report supplied by Myall Coast Archaeology Services is an all-inclusive account of the field assessment undertaken on the 24th May 2010 and an accurate assessment of the likely impact to be placed on Aboriginal heritage subject to lots 411, 412, 413 DP 1063902, Medowie Road, Medowie.

In accordance with the Due Diligence process and as a result of above-ground surface inspections ONLY, being conducted by WLALC sites officer, we request that access be granted to participate and monitor 'all' earthworks involved within the project.

Whilst we have been involved in the Due Diligence process and have inspected the land we are unable to categorically state that no objects will be harmed by the proposal. It is the proponent's responsibility to ensure that Due Diligence has been met.

The WLALC is supportive of the recommendations **7.0 Recommendations** (page 18) and therefore it is our opinion that these recommendations do not restrict or adversely affect the proposed development and we look forward to further participation to ensure the integrity and cultural heritage significance of the area is not adversely compromised.

Please contact the WLALC on the numbers listed above if you have any further enquiries in relation to this matter.

Yours sincerely,

K. Finlay.

Kyle Finlay
Project Coordinator
Worimi Local Aboriginal Land Council

Nur-Run-Gee Pty Ltd
ABN 37 096 307 701

CULTURAL AND HERITAGE
CONSULTANT
LICENCED BUILDER

22 Popplewell Road
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Phone: 02 49 201578
Mobile: 0408 618 874 Leanne
Mobile: 0431 334 365 Lennie
Email:
goodman@kooee.com.au

3rd August 15th 2010

Myall Coast Archaeological Services
Attention Len Roberts
"Tall Pines"
Tea Gardens NSW 2324

Re; Aboriginal Due Diligence Report
Lots 411,412,413 DP 1063902 Medowie Road, Medowie, NSW

Dear Len

Thank you for the opportunity to comment on the draft report for the Aboriginal Heritage Due Diligence for Lots 411,412,413 DP 1063902 Medowie Road, Medowie, NSW.

Our organisation, Nur-Run-Gee P/L has read and discussed the report by Myall Cast Archaeological Services for Medowie Road Medowie. We confirm the following:

1. That a representative of our organisation attended the site inspection on 24th May 2010.
2. No artefacts (Aboriginal Objects) were observed, probably because of the highly disturbed nature of the land.
3. We endorse the recommendations within the report.
4. That to the best of our knowledge all reasonable care and action has been taken to identify any Aboriginal Objects or potential on the land.

As this is part of a Due Diligence process we believe it would be prudent to have a representative of our organisation on site when ground disturbance occurs to identify any Objects that may be uncovered, so that harm may be avoided.

Whilst it is acknowledged that we have been part of a Due Diligence process and have inspected the land we are unable to categorically state that no Objects will be harmed by the proposal. It is the proponents responsibility to ensure that Due Diligence has been met.

Nur-Run-Gee P/L would like consideration in regards to a "Keeping Place" should any Aboriginal artefacts be discovered during the development stage.

This letter has been written to be appended to the report by Myall Coast Archaeological Services and as a record of our involvement.

Please do not hesitate to contact us if further information is required.

Yours Sincerely

Lennie and Leanne Anderson
Directors
Nur-Run-Gee Pty Ltd