

APPENDIX F

***Aboriginal Heritage Impact Assessment, RPS Australia East Pty Ltd,
June 2010***

Aboriginal Heritage Impact Assessment

Lot 32, DP 1014864 Masonite Road, Heatherbrae

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Executive Summary

RPS Australia East Pty Ltd has been commissioned by Sandvik (the Proponent) to conduct an Aboriginal Heritage Impact Assessment (AHIA) in relation to a “Major Development” lodged under the Major Development SEPP (and Part 3A of the EP&A Act, 1979) for Lot 32 DP 1014864 Masonite Road, Heatherbrae (The Study Area). The Study Area is situated on the Tomago Coastal Plain and is wholly included in the Port Stephens Local Government Area. The Proponent proposes to develop its Regional Headquarters on the site, which will include specialist mining equipment production and manufacturing, after market maintenance and repair, equipment storage, and management, administration and training facilities.

This assessment comprised of a detailed review of the preliminary archaeological assessment completed for the Study Area, analysis of previous archaeological reports, environmental data, and search results from the Aboriginal Heritage Information Management System (AHIMS) as well as a detailed site survey of an archaeologically sensitive landform identified in the previous assessment. This assessment has been conducted in accordance with the Department of Environment, Climate Change and Water’s (DECCW) *Interim Community Consultation Requirements for Applicants* (2004). Aboriginal community members were contacted and present during the survey and this report reflects their comments and views.

No Aboriginal sites were identified during the survey. It has been recommended that no further archaeological investigation is required in advance of the proposed development, although the Proponent should provide the opportunity to inspect the Study Area after vegetation clearance has taken place.

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I Introduction

RPS Australia East Pty Ltd (RPS) has been commissioned by Sandvik to undertake an Aboriginal Heritage Impact Assessment (AHIA) in relation to a “Major Development” lodged under the Major Development SEPP (and Part 3A of the EP&A Act, 1979) for Lot 32 DP 1014864 Masonite Road, Heatherbrae. This particular report draws upon an earlier document completed by RPS HSO covering the same development site in October 2009. Since that time the proponent commissioning the original archaeological research has changed and as such RPS has prepared this new report to reflect the new proponent. The original AHIA (2009) was prepared in addition to a preliminary assessment by RPS HSO, which identified potential Aboriginal heritage constraints within the Study Area.

1.1 The Study Area

The Study Area comprises a 16.04 hectare portion of land adjacent to Masonite Road and is located in the Port Stephens Local Government Area (refer to Figure 1-1).

1.2 Background

In June 2009 RPS HSO conducted a Preliminary Archaeological Assessment of the Study Area. The preliminary assessment formed part of a development application which was submitted to Port Stephens Council. During the preparation of the preliminary assessment, an archaeological survey of the Study Area was undertaken by an Archaeologist from RPS in partnership with representatives from Worimi Local Aboriginal Land Council, Mur-Roo-Ma Inc and Nur-Run-Gee Pty Ltd. The purpose of the preliminary assessment was to identify any potential Aboriginal heritage constraints and if any further Archaeological assessment was required in advance of the proposed development.

The preliminary assessment identified that the Study Area was situated on a potentially archaeologically sensitive landform and that there were other registered Aboriginal sites located on similar landforms in close proximity to the Study Area. As a result, it was recommended that an Aboriginal Heritage Impact Assessment be undertaken to consider in detail the potential impact of the development on Aboriginal heritage within the Study Area. This AHIA report was completed in October 2009 by RPS HSO and provides the basis for this new report by RPS for Sandvik.

1.3 Scope of Assessment

This assessment has been prepared to meet the heritage assessment requirements for the proposed subdivision. It draws on the environmental and archaeological context of the study area including known sites to provide an archaeological predictive model, against which survey results are compared. This report provides an archaeological sensitivity map and assesses the archaeological significance of the study area. The

proposed impacts of the development are then assessed in consideration to the survey results, sensitivity map and assessment of significance. This assessment report includes:

- Liaison and partnership with the Aboriginal community;
- A review of all relevant documentation and statutory requirements with regard to Aboriginal heritage;
- Review of data from the DECCW Aboriginal Heritage Information Management System (AHIMS) to identify known Aboriginal sites;
- A review of environmental information and previous archaeological work to develop a predictive model for Aboriginal archaeological site patterning within the Study Area;
- An assessment of archaeological sensitivity within the Study Area;
- An archaeological survey; and
- Recommendations for the management for Aboriginal and non-Indigenous

This Aboriginal Heritage Impact Assessment has been prepared accordance with:

- The *National Parks and Wildlife Act* (1974);
- *The Heritage Act* (1977); and
- The National Parks and Wildlife Service *Guidelines for Archaeological Survey and Reporting* (1997)

WARNING
No part of this plan should be used
for critical design dimensions.
Confirmation of critical positions
should be obtained from RPS Newcastle.



TITLE: FIGURE 1-1 SITE LOCATION

LOCATION: MASONITE ROAD

DATUM: DATUM
PROJECTION: MGA ZONE 56 (GDA 94)

DATE: 2/6/2010
PURPOSE: ARCHAEOLOGY

LAYOUT REF: J:\JOBS\PR1104\1104099 Masonite Rd\10_g126229 Figure 1-1 Site Location B A4
VERSION (PLAN BY): A A4 (SC), B A4 (NW/PH)

CLIENT: SANDVIK PTY LTD
JOB REF: 104099

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RPS

1.4 Legislative Context

Aboriginal heritage (places, sites and objects) within NSW are protected by *National Parks and Wildlife Act (1974, as amended)*. In some cases, Aboriginal heritage may also be protected under the *Heritage Act (1977)*. The *Environmental Planning and Assessment Act (1979)*, along with other environmental planning instruments, trigger the requirement for the investigation and assessment of Aboriginal heritage as part of the development approval process.

1.4.1 National Parks and Wildlife Act (1974)

In NSW, National Parks and Wildlife (NPW) Act (1974) protect Aboriginal cultural heritage. It is overseen by the Department of Environment, Climate Change and Water (DECCW), and specifically the Director-General of DECCW.

Protection for Aboriginal sites is provided under Part 6 of the NPW Act (1974). It is an offence for a person or company to:

- knowingly destroy, deface, damage, cause or allow the destruction/defacement to an Aboriginal object or Aboriginal place (Section 90);
- disturb, move, excavate for the purposes of finding Aboriginal objects, or take possession of Aboriginal objects (Section 86) unless a valid Permit under Section 87 of the Act has been issued by the Director General of the DECCW; and
- be aware of the location of an Aboriginal object and fail to report it to the DECCW (Director-General) within a reasonable timeframe (Section 91).

The Aboriginal Heritage Management System (AHIMS) is part of the regulatory framework for the implementation of the NPW Act (1974) and is maintained by DECCW. AHIMS comprises a database which identifies the spatial location of Aboriginal sites, as well as indexing information about the site in the form of a site card. For the assessment of development proposals, heritage consultants are required to search AHIMS as part of heritage best practice and in accordance with the *NPWS Aboriginal Heritage Guidelines* (DEC 1997).

In the assessment of Aboriginal heritage, DECCW encourages consultation with relevant Aboriginal stakeholders. If an Aboriginal Heritage Impact Permit (AHIP) is required for an Aboriginal site, then specific DECCW guidelines (*Aboriginal Cultural Heritage Consultation Requirements for Proponents* [ACH guidelines, DECCW 2010]) are triggered for Aboriginal consultation. As this report provides an initial assessment for the study area the ACH guidelines are not triggered for this stage of archaeological investigation.

1.4.2 The Heritage Act (1977)

Historical archaeological relics, buildings, structures, archaeological deposits and features are protected under the Heritage Act 1977 (as amended 1999) and may be identified on the State Heritage Register (SHR) or by and active Interim Heritage Order. Certain types of historic Aboriginal sites may be listed on the SHR or subject to an active Interim

Heritage Order; in such cases they would be protected under the Heritage Act 1977 and may require approvals or excavation permits from the NSW Heritage Council.

There are no Aboriginal sites in the study area which are listed on the SHR or are subject to an Interim Heritage Order.

1.4.3 Environmental Planning & Assessment Act 1979 (EP&A ACT)

This Act regulates a system of environmental planning and assessment for NSW. Land use planning requires that environmental impacts are considered, including the impact on cultural heritage and specifically Aboriginal heritage.

Part 3A of the EP&A Act relates to major projects, and if applicable, obviates the need to conform to other specific legislation. In particular, s75U of the EP&A Act explicitly removes the need to apply for s87 or s90 permits under the NPW Act. Although artefact collected during archaeological investigations, under Part 3A must be transferred to an appropriate authority or Aboriginal organisation under s85 of the NPW Act 1974. In considering approvals for development applications under Part 3A the Director-General of Planning is still obliged to consult with other government agencies, including DECCW and National Parks & Wildlife regarding Aboriginal heritage issues, such consultations generally trigger the requirement for the investigation of Aboriginal sites, prior to development.

1.5 Authorship and Acknowledgements

This report was written by Lisa Campbell, Philippa Sokol with assistance from Anna Nardis and reviewed by Darrell Rigby.

1.6 Terms and Definitions

Term	Definition
AHIMS	Aboriginal Heritage Information Management System
DECCW	Department of Environment, Climate Change and Water
LEP	Local Environment Plan
MRM	Mur-Roo-Ma Inc
NRG	Nur-Run-Gee Pty Ltd
REP	Regional Environment Plan
REF	Review of Environmental Factors
RPS HSO	RPS Harper Somers O'Sullivan
RPS	RPS Group P/L (Newcastle)
WLALC	Worimi Local Aboriginal Land Council

1.7 Aboriginal Consultation

The purpose of Aboriginal community consultation is to provide an opportunity for the relevant Aboriginal stakeholders to have input into the heritage management process. RPS conducted the preliminary archaeological assessment in consultation with representatives of the Worimi Local Aboriginal Land Council (WLALC), Mur-Roo-Ma Inc (MRM) and Nur-Run-Gee Pty Ltd (NRG). Because the Study Area was identified as having potential Aboriginal heritage constraints, the DECCW *Interim Community Consultation Requirements for Applicants* (2004) were enacted as a method for identifying the widest possible range of Aboriginal stakeholders who may have cultural knowledge regarding the Study Area. WLALC, MRM and NRG registered their interest in the project and have therefore been included in the assessment process.

An Aboriginal consultation log for the project is located in Appendix 3.

It should be noted that since the original report (RPS HSO Oct. 2009) the Interim Community Consultation Guidelines for Applicants (ICCR) have been superseded (originally released by DEC in 2004 to guide Aboriginal consultation processes). These guidelines have now been replaced by the Aboriginal Cultural Heritage Consultation Requirements for Proponents (ACH guidelines, DECCW 2010) effective of 12th of April 2010. In the release of the of the ACH guidelines specific transitional arrangements have been stipulated in a supporting document, Questions and Answers 2: Transitional Arrangements. Section 1 (Q1) of this document indicates that if Aboriginal consultation was commenced prior to the 12th of April 2010 (including advertising and notification of stakeholders) then consultation is to be continued under the previous ICCR guidelines. Aboriginal consultation was commenced as stipulated in Section 1 of the transitional guidelines and therefore consultation for this assessment has been undertaken in accordance with the ICCRs.

2 Environmental Context

An understanding of environmental context is important for the predictive modelling of Aboriginal sites, as well as, for their interpretation. It provided natural resources for local Aboriginal people, such as, stone (for manufacturing stone tools), food and medicines, wood and bark (for implements such as shields, spears, canoes, bowls, shelters, amongst others), as well as areas for camping and other activities. The nature of Aboriginal occupation and resource procurement is related to the local environment and it therefore needs to be considered in cultural heritage assessment. The NP&W Standards and Guidelines kit (1997) also requires the reporting of environmental context as part of the heritage assessment process.

2.1 Geology and Soils

During the preliminary survey it was confirmed that the soil landscape across the Study Area was comprised of soils from the Tea Garden landscape. The Study Area occurs as a variant to the Tea Gardens landscape caused by Aeolian reworking of the sand plain (Matthei 1995). The soils encountered within the Study Area are described within Table 2-1 below.

Table 2-1: Details of the Tea Garden soil landscape

	Tn1	Tn2	Tn3	Tn4	Tn5
Colour	Black	Brownish black – brownish grey	Greyish yellow brown moist/bleached light grey dry	Black dark brown to brown. Dull yellow-orange or iron stained sands may occur at the base of this material	Mottled sand
Landform element	O horizon	A1 Horizon	A2 horizon	Bh Horizon	Substrate C Horizon
Features	Sandy peat – organic loam soil	Loamy sand to sand loam when organic matter is high	Sandy with increasing gritty/course texture with depth	Coarse loamy sand to sand	Coarse, fine gravelly sand
Structure	Fibrous – strong	Sandy single grained, weak	Single grained	Massive, with localised very dense cemented patches, hard iron nodules or cemented iron nodules at the base of this horizon	Loose
pH level	Moderately acidic (pH 5.0)	Moderately – slightly acidic (pH 5.0-5.5)	Moderately – slightly acidic (pH 5.0 – 6.5)	Moderately-slightly acidic (5.0-6.0)	Strongly acid to neutral depending on salinity (pH 4.5-7.0)

	Tn1	Tn2	Tn3	Tn4	Tn5
Permeability	High	High	High	Low - Localised	High
Fertility	Low	Low	Very low	Very low	Very low
Exposed Condition	Soft	Loose	Loose	Often very hard-setting but occasionally soft	Loose

2.2 Topography and Hydrology

The local landscape contains predominantly low lying flats with a broad, irregular sandy rises and occasional aeolian deflation basins. The sand plain relief will rarely exceed one metre with a slope gradient of <5%. Where local ridges are evident they tend to be broadly well drained, except for troughs between the ridges that can become seasonally waterlogged with the watertable at <100 cm below the surface (Matthei, 1995: 212).

The Study Area is bordered by three reliable water sources. The largest of the water sources is the Hunter River that is situated to the north of the Study Area extending from the north east to north west. Windeyer's Creek is immediately north of the Study Area as a tributary of the Hunter River that will generally flow from the east to the north west. Situated to the south east of the Study Area are Siddons Swamp and Blind Harrys Swamp at approximately 1.5-2 kilometres away.

The proximity of water courses and swamps would have meant that the Study Area was situated in a resource rich area that Aboriginal people may have exploited in the past.

2.3 Flora and Fauna

The vegetation communities present within the Study Area include; Smooth-barked Apple/Blackbutt Open Forest, Blackbutt Moist Forest and Cleared/Scattered Trees.

The Smooth-barked Apple/Blackbutt Open Forest dominates the majority of the Study Area with canopy species including; *Angophora costata* (Smooth-barked Apple) and *Eucalyptus pilularis* (Blackbutt). This community has a diverse understorey dominated by *Banksia serrata* (Old Man Banksia), *Lambertia formosa* (Mountain Devil) and *Leptospermum laevigatum* (Coast Teatree), with a dense groundcover of native grasses and ferns.

The Blackbutt Moist Forest occurs in the northeast corner of the Study Area and is dominated by *Eucalyptus pilularis* (Blackbutt). This community also has a dense midstorey dominated by *Ceratopetalum gummiferum* (New South Wales Christmas-bush) and lacks understorey and ground layers.

These vegetation communities provide foraging and refuge habitat for a wide range of fauna species including; woodland birds, reptiles, arboreal and ground-dwelling mammals, microchiropteran and megachiropteran bats, owls and birds of prey. The flora and fauna

as described above would have offered Aboriginal people a diverse range of resources in the past.

2.4 Climate

The climatic conditions started to alter approximately 18,000 years ago, affecting the movement and behaviour of past populations within their environs. During this time, notably at the start of the Holocene (10,000 years ago), the melting of the ice sheets in the Northern Hemisphere and Antarctica caused the sea levels to rise, with a corresponding increase in rainfall and temperature. The change in climatic conditions reached its peak about 6,000 years ago (Short, 2000: 19-21). Up until 1,500 years ago, temperatures decreased slightly and then stabilised about 1,000 years ago, which is similar to the temperatures currently experienced. Consequently, the climate of the study area for the past 1,000 years would be much the same as present day, providing a year round habitable environment.

The climatic conditions impact upon the soils, vegetation and potential occupation of an area. They may also affect the durability of associated cultural materials. The area in which the Study Area occurs experiences a warm temperate climate with hot dry summers and cool wet winters. The minimum mean rainfall occurs in September (61.3mm), the maximum mean rainfall occurs in February (123.2mm) and the average annual rainfall for the area is 1128.4mm. During summer the temperatures range from between an average maximum of 27.9°C and an average minimum of 18.1 °C. In winter the average maximum drops to 17.0°C and the average minimum to 6.3°C (Australian Bureau of Meteorology, 2009). The temperate climate would be suitable for occupation for the majority of the year providing suitable shelter could be obtained during the wet periods.

2.5 Condition of the Study Area

The Study Area is a portion of land adjacent to and located to the west of Masonite Road, Heatherbrae. Analysis of aerial maps and preliminary inspections indicate that land within the north east corner of the Study Area has been disturbed by previous agricultural/commercial disturbances and building activity relating to an old disused shed and mulch storage facilities. The remainder of the Study Area is covered with vegetation and is relatively undisturbed with the exception of vehicle tracks.

2.6 Discussion

Analysis of the data research obtained for this AHIA and gathered during the preliminary assessment indicates strongly that the local area would have provided favourable conditions for regular occupation by Aboriginal people in the past. The gentle gradients and low local relief would have made transit through the area easy, with the exception of times of seasonal flooding when the elevated crests would have been the only feasible access route. There are several fresh water sources in the region which could have

sustained Aboriginal occupation in the past, although there are no permanent sources of water within the Study Area.

The wide diversity of flora and fauna species in the local and regional context would have supported small groups or communities moving throughout the region, with resources required for everyday needs within a comfortable days walk from the Study Area. In addition to providing a source of food, plants and animals provided material useful for tool manufacture and had a considerable role in the social and ceremonial aspects of Aboriginal life. The rich resources found in swamp lands within two kilometres of the Study Area would have made the local area particularly appealing for Aboriginal occupation, which is evidenced by the high frequency of Aboriginal sites in the area dating back into the Pleistocene era.

3 Archaeological Context

This chapter presents a review of documentary and physical evidence pertaining to Aboriginal and European occupation of the region and in particular the Study Area. This information was gathered during the preliminary assessment and has been refined to assist with discussions relating to the potential impact of the proposed development on Aboriginal heritage. This information provides context and accuracy to predictions made about the potential for archaeological remains in the Study Area and any potential impact on such sites. Numerous archaeological investigations have been conducted across the region as a result of residential subdivisions, sand mining, electrical transmission and road upgrades. Consequently, archaeological information and knowledge regarding the region is detailed and comprehensive.

3.1 Regional Archaeological Context

The Study Area is situated on the Tomago Coastal Plain which is a Pleistocene coastal sand barrier of the Newcastle Bight Barrier System. The archaeological resources of the Newcastle Bight Region have a high regional and potentially national archaeological significance in terms of their site form, content and the potential to clearly demonstrate the relationship between the archaeological record and land use patterns in the surrounding landscape. Of substantial archaeological significance is the antiquity of many sites located within the Newcastle Bight Barrier System.

Aboriginal occupation of the Hunter Valley and specifically the Newcastle Bight region dates back well into the Pleistocene period, as evidenced by many Carbon 14 dates retrieved during archaeological excavations. One site with early dated evidence is Moffats Swamp, located about 8.5 kilometres north east of the Study Area. Extensive excavations were conducted by Baker (1994) across a dune at Moffats Swamp, from which small charcoal fragments were retrieved. These charcoal fragments returned a calibrated date of 17 376 years BP (Baker 1994).

The large majority of dated sites are less than 5,000 years old. It has been argued that this is a result of increased populations and 'intensification', during this period. The frequency of sites dating to the last 5000 years may also be a result of the last significant rise in sea level, approximately 6000 years ago. The sea level rise would have submerged many of the older sites along the coastal fringe and forced Aboriginal groups westward to occupy the current coastline.

There have been various key studies undertaken in the Newcastle Bight Region. Two of the most significant studies were managed by Pam Dean-Jones (1990, & Resource Planning 1992) and highlighted the area as having considerable archaeological sensitivity. These results were reiterated in the Newcastle Bight Aboriginal Management Plan (Sullivan and Hibberd 1994).

The (1990) Newcastle Bight Study undertaken by Dean-Jones provides a concept pattern for past Indigenous land use throughout the region. The report highlights that there would have been a wide range of environmental landscapes that would have facilitated Aboriginal populations to prosper due to the abundant resources. Sand dunes stabilized by open dry sclerophyll woodlands provided habitat for numerous fauna species of which the Aboriginal people were able to exploit, while freshwater wetlands would have provided an abundant habitat for bird, animal and plant life. The rich resources of these habitats are reflected in the density of artefacts recorded during the Bight Survey (Dean-Jones 1990).

Generally, previous archaeological research of the region reveals that freshwater resources such as Galloping, Campvale and Moffats Swamp have been extensively utilised by Aboriginal people in the past. Such freshwater wetlands would have provided excellent food and water resources for the Aboriginal population. Such research is supported by the detection of numerous sub-surface artefacts at Galloping Swamp (10 kms away) and Moffats Swamp (8.5 kms away) (Baker 1994).

Dyall's earlier 1971 assessment, examined sites from Port Stephens in the north to Swansea in the south which provided an overview of ocean, estuarine and freshwater wetland archaeological site types. Overall, Dyall (1971) made observations of the Aboriginal populations of the Port Stephens region and outlined a preference for establishing camp sites with access to abundant food resources and freshwater. Dyall further identified that a greater concentration of campsites were to be found on sand dune ridges, although acknowledging that it may have been a result of differential site preservation of the locality.

From a regional perspective there is a high potential for Indigenous archaeological sites to be preserved in Pleistocene sand beach ridges and sand sheets, particularly when located within the vicinity of wetlands and swamps. Typical site types that may occur in proximity to such landforms include middens as discussed above and also artefact scatters. Artefact scatters are the most frequently recorded site type in Australia and are common across the Newcastle Bight Barrier System. This is likely due to the fact that stone tools are easily identified and may occur on any landform in any context. Furthermore, stone tools preserve well in the archaeological record whereas other site types containing organic material (eg: bone, timber) decompose over time.

Stone artefacts are an important source of information for archaeologists. Information about trade routes, raw material exploitation as well as manufacturing technology can be obtained through the study of these tools. Stone tools are also used by archaeologists to obtain relative dates for archaeological sites. A widely accepted system for the dating of sites containing stone tools on the east coast of Australia was introduced by Fred McCarthy in 1948 and is known as the Eastern Regional Sequence (ERS). Debates over the accuracy of the ERS system continue (Bird & Frankel 1991, Hiscock & Attenbrow 2002), and the sequence has been refined in recent years (Hiscock & Attenbrow 2004). However, it is generally accepted that the phases within the ERS are as follows:

Pre- Bondaian (previously Capertian) – Artefacts from this phase are typically of silicified Tuff, although where this material was difficult to obtain quartz and unheated silcrete were also utilised. Artefacts and cores vary widely size and are typically characterised by unifacial flaking. No backed artefacts, eloueras or ground stone implements have been identified within this phase. This phase generally dates to pre 8,000 years before present (BP).

Early Bondaian – Artefacts of this phase tended to be manufactured from local raw materials and a reduction in use of silicified Tuff is apparent. Both unifacial and bifacial flaking were dominant techniques, with bi-polar flaking becoming more widely used in the later stages. This phase dates from 8,000 to 4,000 BP.

Middle Bondaian – Raw materials used in stone tool manufacture vary widely between sites during this phase, although the use of quartz increases. Backed artefacts are most frequent in this phase in comparison to others. Tools and core size is reduced and the use of bi-polar flaking increases. This phase is generally dated from 4,000 to 1,000 BP.

Late Bondaian - Use of raw material types continues to diversify, whilst quartz is the dominant material type in use. Artefacts were typically manufactured through the use of bipolar flaking. Eloueras, bone artefacts and shell fishhooks are common in this phase. This phase is dated from 1,000 BP to European contact.

It is a common pattern in the Newcastle Bight region, and along the east coast of Australia, that the majority of Aboriginal sites are found within close proximity to water sources, such as deflation basins and swamps. It is possible that such patterns may be the result of increased ground surface visibility or survey sample bias in these areas. However, archaeological studies have shown that in the Newcastle Bight region, that this is an actual pattern rather than a product of sample bias or increased exposure of ground surfaces along creek-lines (Dean-Jones 1990).

3.2 Local Archaeological Context

Archaeological surveys and subsurface investigations have been conducted previously in the region of the current Study Area. Summaries of relevant archaeological studies completed in the local area were reviewed during the preliminary assessment. These summaries have been reproduced below to provide context to the findings of this AHIA.

Smith 1988. Archaeological Survey of the Tomago to Karuah Section of the Tomago to Taree 132kV Transmission Line

An archaeological survey was conducted by Smith (1988) in relation to the Tomago to Karuah section of the Tomago to Taree 132kV transmission line reconstruction. The line runs from the Tomago Sub-Station to Reedy Creek which is about 2kms west of Karuah, with the entire route approximately 22km long (located south-east of the current Study Area). The site survey was undertaken on foot.

The survey route between Tomago and Medowie is located on Quaternary deposits of sand, gravel, silt and clay with outcrops of the Tomago Coal Measures, consisting of shale, mudstone, sandstone, tuff and coal exist. Three creek lines all with high banks are crossed during the route; Pipeclay, Twelve Mile and Reedy Creek. Several swamps were also crossed with extensive areas between Pipeclay and Twelve Mile Creek and around Reedy Creek.

Two artefact scatters (TK1 and TK2) and one isolated artefact were found within the proposed easement. Artefacts found at TK1 (more than 50) were scattered over a large area inside and outside of the easement, thought to be transported there during dumping of sand along a vehicle track. Maximum artefact density was 3 per square metre with the average density being 1 artefact per 5-10 square metres. Artefacts found at TK2 (upwards of 1,000) were extensively scattered within the existing transmission easement eroding out of a sandy knoll. The maximum artefact density was 10 per square metre. The isolated artefact was found on south facing slopes within the existing transmission line easement.

None of the sites or artefacts found were to be affected by the proposed transmission line works and no further archaeological works were required.

Brayshaw McDonald Pty Ltd 1990. Archaeological Survey of Proposed Raymond Terrace By-Pass, Pacific Highway, New South Wales

An archaeological survey was commissioned by the Road and Traffic Authority (RTA) and undertaken by Brayshaw McDonald Pty Ltd for the route of the proposed Raymond Terrace (relief route) By-Pass on State Highway No. 10 (the Pacific Highway). The survey was undertaken on foot with the exception of approximately 800m in the vicinity of Windeyers Creek and the Sewage Treatment Works (area impractical to survey, considered unlikely to contain intact deposits). Sections of the route are within less than 1km from the current Study Area.

The study route traversed mainly Quaternary sands, related to sea level rises. Towards the northern end of the route, near the catchment of the Grahamstown Dam there were Permian sandstones, conglomerates and shales of the Branxton Formation.

Three open sites (RT 1-3), an isolated stone artefact and one (possibly Aboriginal) scarred tree (RT4) were located on a creek terrace during the survey.

Further work was recommended at sites RT1 and RT3 to establish the nature, context and extent of the sites. Excavation was recommended at RT1 to establish whether the site was situated on a relict, undisturbed dune.

Brayshaw McDonald Pty Ltd 1990. Additional Archaeological Survey of Proposed Variation along Raymond Terrace By-pass Pacific Highway, New South Wales.

Brayshaw undertook an archaeological survey relating to an amended route for the Raymond Terrace By-Pass on behalf of the RTA. One new site and an extension to a previously identified site (RT3) were located during the survey. An open site was found (RT5) located east of RT3 on the bank of Windeyers Creek (east of the current Study

Area). In the previously identified site (RT3) located north of Masonite Road (within 1km of the current Study Area), two more artefacts were identified some 60m east of the original site. One is a grey silcrete flake, the other a very good quality red silcrete amorphous flaked piece.

The further artefacts found at the previously identified site (RT3) indicated that the site extended over a greater distance than originally found. Therefore further archaeological investigations were required to define the nature and extent of the site. No further work was required at RT5 and it was recommended that the RTA obtain Consent to Destroy.

Resource Planning Pty Limited 1991. Raymond Terrace Traffic Relief Route Additional Archaeological Investigations – Sites RT1 and RT3.

This study was an extension of the original report and appendix conducted by Brayshaw McDonald Pty Ltd (1990) and detailed above. The Roads and Traffic Authority (RTA) commissioned Resource Planning Pty Limited to undertake further investigation of the two Aboriginal sites identified within the proposed road corridor (RT1 and RT3).

A preliminary research permit was granted with a grid pattern of shovel pits to be used in investigation of Site RT3. A total of 19 pits were excavated, with a 5m grid selected for shovel testing. No additional artefacts were observed on the surface. Artefact densities (flakes only) within the pits ranged from 20 - 312 flakes/m³ and were concentrated in an area of 35m by 20m. Overall RT3 was considered to have high scientific and cultural significance. At site RT1 investigations indicated that there was a very low probability that in-situ archaeological material remained with few artefacts recorded on the surface during previous studies (Brayshaw and McDonald Pty Ltd). Overall RT1 was considered to have low scientific and cultural values.

Consent to Destroy was required for site RT1. It was recommended that site RT3 was fenced to protect it from further disturbance and conserved in-situ.

Effenberger 1996. Archaeological Monitoring Report Mineral Sand Mining Lease Tomago near Masonite Road Port Stephens LGA, NSW.

A preliminary archaeological surface survey was conducted by Effenberger (1996) in relation to a proposed mineral sand mine on the Tomago Sandbeds, for RZM Pty Ltd. The study area of approximately 6ha was located off Masonite Road, between Deep Swamp and Blind Harrys Swamp, approximately 3kms south of the current Study Area.

Effenberger's study area was situated on the inner margin of the Stockton Bight barrier dune system and Tomago Sand Beds, with low lying wetland and stabilised sand sheets with medium to scatter timber. The study area was largely disturbed with the remaining sections of the site situated on the Pleistocene sand sheets of the Tomago coastal plain with a local relief of up to 1m.

A previously registered artefact scatter site was examined with the raw material comprised of yellow chert and grey tuff with some grey/buff silcrete. It was concluded that the scatter had no context and low significance as it would have been industrially screened with the

ground having been cleared, mined and revegetated over a 20 year period. A large grey silcrete artefact was removed in 1996 by the person who originally found the scatter. An application for Consent to Destroy was recommended.

No further sites were identified during the course of the archaeological survey. It was however concluded that with the existence of the previously registered site and the results from studies conducted in the immediate area, sub-surface testing of the undisturbed lands was required prior to ground disturbance.

ERM, 2003. Indigenous Cultural Heritage Assessment for Electricity Supply Access Road – Tomago to Salt Ash.

ERM were commissioned by Energy Australia to conduct an Indigenous Cultural Heritage Assessment as a component of a Review of Environmental Factors. The study extended from Tomago substation to Salt Ash, approximately 3.5 kilometres south east of the current Study Area.

The study was located in the Newcastle Bight sand barrier system and included both the Pleistocene and Holocene dune barriers with sediments of marine, estuarine and Aeolian deposits. Six archaeological sites were identified during the survey. A1 (38-4-0647) is an open camp site with 29 microliths of silcrete and Nobby's tuff, comprised of flakes and flake pieces, bondi points, broken blades and cores. A2 (38-4-0468) comprised an open camp site with one scraper and two broken flakes of tuff. A10 (38-4-0676) comprised an open camp site nine microliths of silcrete and tuff, that consisted of flakes and a core. A3 (38-4-0649) comprised an open campsite that contained six flakes, one broken flake, and pipi shells. Mud oyster, oyster and pipi shells were scattered around the site. A4 (38-4-0643) comprised an open campsite that contained microliths of blades, cores, flakes, thumbnail scraper and bondi points. Raw materials used consisted of tuff, silcrete, chert and some quartz. A9 (38-4-0664) comprised an open campsite that contained a broken flake with evidence of use wear and scatters of pipi shells.

The location of the sites indicated a direct link to local resources. ERM concluded that the sites provided valuable information about prior occupation of the area, utilisation of environmental resources for diet, raw material acquisition and transport, stone tool manufacture and Aboriginal group movements along the dune systems.

ERM, 2003. Indigenous Cultural Heritage Assessment for Electricity Supply Upgrade from Tomago to Tomaree.

ERM were commissioned by Energy Australia to prepare an Environmental Impact Statement (EIS) for the proposed upgrading of electricity powerlines from Tomago to Tomaree and the associated access road from Salt Ash to Tomaree (as discussed above). The study was undertaken approximately 3.5 kilometres south east of the current Study Area.

The northern portion of the survey was conducted by vehicle with the remainder of the survey conducted on foot, with a total of fifteen sites found. Six of these sites were discussed above during the access road survey from Tomago to Salt Ash (sites A1-A4, A9

and A10). Three sites were identified during the survey (A6-A8), one site was a new recording (A5) and two sites were already registered on the AHIMS database (38-4-0313 and 38-4-0485). Three previously recorded sites were middens (38-4-0659, 38-4-0660 and 38-4-0661), however further examination concluded the features indicated a natural deposit rather than a cultural deposit.

Site A6 (38-4-0651) was on a dune crest, Site A7 (38-4-0652) was located on the next dune approximately 40m west and Site A8 (38-4-0653) approximately 40m east on the next dune. All sites had pipi shell pieces and fragments evident in areas of erosion, and it was considered that further subsurface materials were likely to be present at all sites. Site A5 (38-4-0650) was a previously recorded major shell midden/occupation site, with shell and artefacts exposed due to erosion. The size and depth of the artefacts indicated the area was extensively used over time, with raw materials transported to site possibly through trade networks.

McCardle Cultural Heritage, 2003. Proposed Residential Subdivision Development along Mount Hall Road, Raymond Terrace.

McCardle Cultural Heritage Pty Ltd was commissioned by Project Plan to conduct an Indigenous Cultural Heritage Assessment for Lot 2 DP 8584853 and Lot 2 DP 787819 Mount Hall Road Raymond Terrace. The Study Area was approximately 6.5 hectares which was allocated for 84 residential lots and was located about two kilometres north east of the current Study Area. The Study Area consisted of two landforms. The was north flat with previously cleared pasture and the south had a gentle slope with evidence of previous pasture clearing and open forest re-growth.

Two sites were identified during the survey, RT1 and PAD1. RT1 was located in the western dirt road reserve just outside of the Study Area. An isolated tuff flake was located amongst shell and pieces of bone. PAD1 was identified in the southern portion of the study area which included the gentle slope that declined towards a drainage area. The identification of these sites along with previously recorded sites in the region resembled strategic occupation patterns for areas in close proximity to water sources, food and plant resources.

3.3 Aboriginal Heritage Information Management System

A search of the DECC Aboriginal Heritage Information Management System (AHIMS) was conducted on the 3rd June 2009 comprising an area of ten square kilometres around the Study Area. This search is still considered current for the purposes of this report. A detailed list of all the Aboriginal cultural heritage sites recorded on the AHIMS database for that area totalled 35 which are listed in Table 3-1. A detailed list of the AHIMS sites can be found in Appendix 2 and a glossary of Aboriginal site types can be found in Appendix 4.

No Aboriginal sites have been registered in the Study Area.

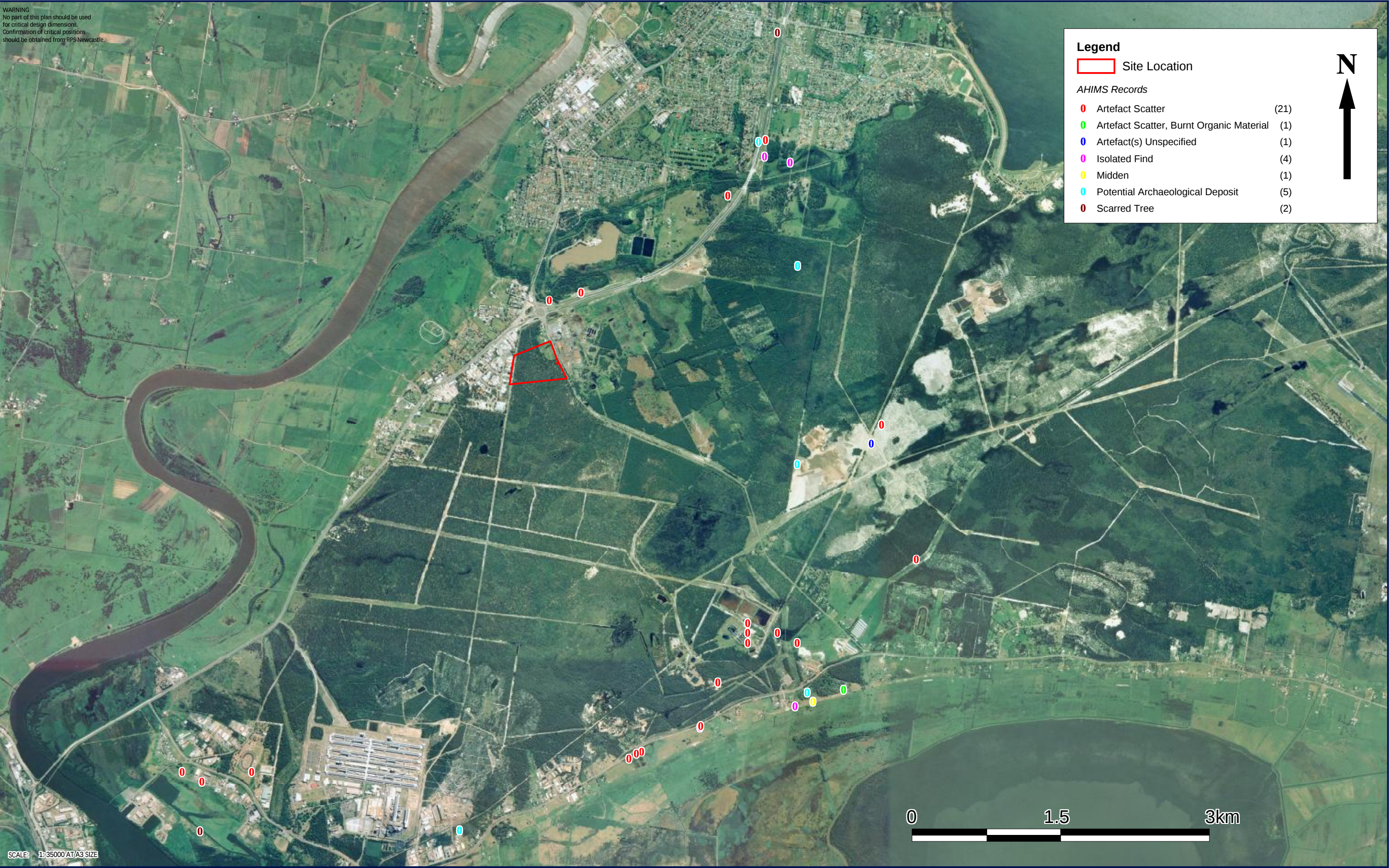
Table 3-1: Summary of AHIMS search results

Site Type	Sites within Search Area	Sites with Permits issued	Sites within Study Area
Artefact Scatter	21	5 (RT1 #275, 486 Tomago 1 T1 #2504 Tomago 8 T8 #2504 Tomago 7 T7 #2504 Masonite Rd #823)	0
Artefact Scatter; Burnt Organic Material	1	0	0
Artefact(s) Unspecified	1	0	0
Isolated Find	4	2 (A2 Tomaree/Tomago #1797 RT1 #1975)	0
Midden	1	1 (A1 Tomaree/Tomago #1797)	0
Potential Archaeological Deposit (PAD)	5	5 (PAD 1 #1807 PAD 3, PAD 4 #1882, 1883, 1886 Raymond Terrace PAD 1 #1763 Minmet PAD #3026)	0
Scarred Tree	2	1 (RT 4 #487)	0
Total	35	14	0

The AHIMS data and documented literature reviews are dominated by artefact scatters, Potential Artefact Deposits (PADs) and isolated finds. These site types are considered typical amongst the Pleistocene barrier dunes which overwhelmingly comprise stone artefact scatters and sub-surface stone artefact deposits. Generally shell midden sites will be located next to dominant water sources, as these reflect the exploitation of a variety of resource zones by Aboriginal people in the past. In this instance the midden is located in the Newcastle Bight dune system adjacent to Stockton Beach. Scar Trees are located in the locality of the Study Area (four to seven kilometres away) and have had various uses to the Aboriginal tool manufacturing industry. Scar trees will commonly be located in undisturbed areas that contain vegetation of appropriate age.

Aboriginal archaeological sites in the Newcastle Bight system and in particular across the Tomago Coastal Plain area have been broadly investigated. Many of the sites recorded in the Heatherbrae area and registered on the AHIMS database have been issued with permits for further archaeological investigation. These results provide a strong precedent for the types of sites that are likely to occur within the Study Area. Based on consideration of the findings of the preliminary assessment and careful review of the above information, there is potential for scarred trees, artefact scatters and isolated finds to be located within the Study Area. The likelihood for these sites to occur is further discussed in the Predictive Modelling section of this AHIA.

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TITLE: FIGURE 3-1 AHIMS SITES

LOCATION: MASONITE ROAD

DATUM: DATUM
PROJECTION: MGA ZONE 56 (GDA 94)

DATE: 2/6/2010
PURPOSE: ARCHAEOLOGY

LAYOUT REF: J:\JOBS\PR\104\104099 Masonite Rd\
10 ting\104099 Figure 3-1 AHIMS Sites B-A3
VERSION (PLAN BY): B-A3 (NW)

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4 Predictive Model

A predictive model for the Study Area was produced during the preliminary assessment. This model was reviewed and re-considered during the impact assessment. The findings of this review are presented below.

Predictive models are developed and used to assist with the predictions for site types to occur in a given area. This process involves a review of existing archaeological literature and site data to determine the site distribution and occupation patterns in both the local and regional context. Environmental conditions in the past influenced how Aboriginal people lived and used the surrounding landscape. These land use practices formed differing spatial distributions of sites in the archaeological record. Based on this, predictive models can be used for planning and management of Aboriginal heritage, and for formulating survey strategies to target areas of maximum archaeological potential. The preliminary assessment was used to confirm aspects of the predictive model. Following this ground truthing, a detailed targeted survey was undertaken to inspect landforms considered to be archaeologically sensitive. The Predictive Model is outlined below and the results of the detailed survey are presented in Section 5.

4.1 Site Predictions

During the preliminary assessment it was found that the sites in Table 4-1: were likely to occur within the Study Area. As a result of a detailed review of environmental factors related to the Study Area during this AHIA, specific areas of archaeological sensitivity have been identified. There is a sand ridge across the southern margin of the Study Area, which would have offered an elevated area that could have been occupied by Aboriginal people in the past.

Generally, Aboriginal people utilised environments to obtain essential resources and will potentially exploit areas where resources are more abundant. These resources include a permanent water supply, raw material outcropping, floral and faunal food resources, and appropriate shelter from environmental elements. In addition to resources, suitable areas for occupation were also an important consideration for Aboriginal people in the past. There was a large range of flora and fauna available to Aboriginal people within the Study Area, and the sand ridge across the southern margin of the Study Area would have offered an excellent occupation site especially in times of flooding across the lower lying parts of the Study Area. The only draw back for sustained occupation within the Study Area is the lack of a permanent source of fresh water, the most reliable source of which is located 2 kilometres from the Study Area.

Table 4-1: Predicted Site Types and Distribution

Site Type	Discussion
Artefact Scatters	Artefact Scatters are the most common site to be recorded in Australia and this regional context. There is a lack of naturally occurring raw stone material in the area, Artefact Scatters in the region of the Tomago Coastal Plain tend to be dense and represent multiple stone material types. This reflects a sustained use of the landscape by Aboriginal people in the past. Artefact scatters are typically found on elevated landforms such as stabilised dunes and sand crests because these areas offered a dry and sheltered area for occupation. Artefact scatters also tend to be focused in areas near to water sources such as swamps and deflation basins. The Study Area is comprised primarily of low lying flats, with an elevated sand crest along the southern margin of the site. Artefact scatters would be likely to occur along this elevated sand crest and unlikely to occur across the low lying flat portion of the Study Area. Despite the presence of elevated landforms, the lack of a permanent source of drinking water in close proximity (less than 100 metres) lowers the potential for sites of sustained Aboriginal occupation to be located within the Study Area.
Isolated Finds	It is more likely that Isolated artefacts will be found across the southern elevated portion of the Study Area, since it is more likely that this area was used by Aboriginal people in the past. Isolated Finds typically represent a transitory use of the landscape and indicate that the landforms were not occupied for sufficient time in order to compile or discard multiple tools.
Scarred Trees	Culturally scarred trees will only be found in areas retaining old growth vegetation. Previous land uses in some areas involving vegetation clearance would reduce the frequency of these sites. Although there are very few Scarred Trees recorded on the Tomago Coastal Plain this does not discredit the potential for these site types to occur in the vegetated landscape of the Study Area.
Factor	Discussion
Site Size/ Frequency	The Study Area consists of low relief, low gradient terrain with an elevated sand ridge towards the southern boundary. The low lying flats may have provided suitable campsites for Aboriginal people in the drier seasons although would have been water logged and uninhabitable in the wetter months. The elevated ridge in the east would have been an excellent occupation site, especially in the wetter months when the ridge would have overlooked the surrounding water-logged flats. The size and density of sites located on elevated landforms and sand ridges in the region are likely to be influenced by the amount of usable space on each crest and the elevation and aspect of the crest (i.e. crests with higher elevation are more likely to have made suitable occupation sites owing to increased view and increased height above surrounding swampy areas). It is therefore predicted that sites are more likely to be located on the elevated crests in comparison to the low lying flats of the Study Area.
Preservation	The Study Area contains a portion of land in the north east corner that has been subject to modification and a multitude of disturbances. These include for recreational and commercial development and use. Any sites in the area will therefore have been impacted to varying degrees by such developments. Sites are likely to be better preserved in areas of low disturbance elsewhere in the Study Area.

5 Detailed Archaeological Survey

The detailed archaeological survey was conducted on Wednesday the 23rd of September by Lisa Campbell (RPS HSO Archaeologist), Stephen Ping (WLALC), Anthony Anderson (MRM) and Leanne Anderson (NRG).

5.1 Methodology

The field survey was conducted on foot in dusty windy conditions. The purpose of the survey was to inspect in detail landforms identified as sensitive during the preliminary assessment and to consider the potential impact of the development footprint on these landforms. All visible and exposed ground surface areas were examined for evidence of Aboriginal archaeological remains and old growth trees were investigated for cultural scarring. The survey also assessed the amount of disturbance caused by past land use which may have affected the natural soil profiles, in particular on the archaeologically sensitive sand crest in the south of the Study Area.

5.2 Survey Results

The sand crest which was identified as archaeologically sensitive during the preliminary assessment was covered in detail on foot. Remnant vegetation was observed across the sand crest, and it was noted that soil profiles would remain intact amongst this vegetation. Vegetation was open with a scattered under growth including *Pteridium esculentum* (bracken fern) and *Macrozamia communis* (cycad). Regular soil exposures between leaf litter and vegetation were observed. Soils were observed to be intact except in areas of obvious disturbance such as along tracks.

Exposed soil profiles were inspected, which corresponded with descriptions of the Tea Gardens soil landscape. A dark brown/black humic A-horizon was observed to overlay a bleached grey B horizon, which was situated above a yellow C horizon sub-soil. All old growth trees identified within the survey area were examined for signs of cultural scarring, although none were observed. No sources of raw stone materials were identified which could have been utilised by Aboriginal people in the past for Stone Tool manufacture. No permanent sources of fresh water or deflation basins were identified. No Aboriginal sites or objects were identified during the survey.

5.2.1 Discussion

Extensive background research has shown that the Tomago Plain and across the Newcastle Bight has been extensively used by Aboriginal people in the past. This is evidenced by the high frequency of open camp sites, some with extensive antiquity, located across the local area and broader region. The local area was well suited to camping, resource gathering and stone tool manufacture. An abundance of reliable fresh water along with a broad range a flora and fauna made sustained occupation in the area feasible.

Aboriginal sites in the vicinity of the Study Area have been identified on elevated crest landforms and sand ridges, within close proximity to or overlooking fresh water sources or waterlogged/swamp areas. Because of the high numbers of sites recorded on elevated sand crests in the area, these landforms are typically identified as having high archaeological sensitivity.

The Study Area comprises low lying flats to the west, a disturbed/modified area in the north-west, and an elevated sand crest along the southern margin. This sand crest was inspected in detail during this survey, and it was found that soils across the crest were likely to be intact owing to the lack of vegetation clearance and other disturbances. The integrity of soil profiles is an important consideration for archaeologists because it is within the intact A-horizon (topsoil) that archaeological sites will be found. This is because the original topsoil was once the 'living surface' in occupation sites. In addition to intact soil profiles observed across the site, several of edible plants were identified including *Pteridium esculentum* (bracken fern) and *Macrozamia communis* (cycad).

Although the crest in the east of the Study Area has indicators for archaeological potential including a suitable landform for occupation, intact soil profiles and sources of edible plants, it is not likely that this area was occupied by Aboriginal people for sustained periods of time in the past. There are no permanent water sources within close proximity to the Study Area, the closest source of which is 2 kilometres away. More suitable occupation sites would have been found in close proximity to swamp/waterlogged areas because a greater diversity of flora resources would have been located there. In addition, this plant diversity combined with a water source would have attracted a diversity of fauna species. It is therefore concluded that there are more suitable locations for occupation in the local area other than the Study Area. For this reason it is concluded that the low lying flats of the Study Area have low archaeological potential while the elevated sand crest has moderate archaeological potential.

The local Aboriginal community has indicated that the Study area holds significance to local Aboriginal culture as a place that may have been used by Aboriginal people in the past. Evidence of such use may be located across the Study Area, which was not identified during the preliminary or detailed assessment. For this reason the local Aboriginal community requested an opportunity to inspect the Study Area once vegetation has been removed.

6 Impact Assessment

The results of the detailed survey and review of environmental and archaeological data indicates that the Study Area has archaeological potential of varying degrees. The proposed development and the potential impact of such on Aboriginal heritage within the Study Area is outlined below. This assessment is crucial in developing appropriate management strategies and development approach to ensure that Aboriginal heritage is protected and managed during work in the Study Area in the future.

6.1 Proposed Development

Sandvik propose to construct their headquarters on the site, which will involve the following:

- Mining equipment manufacturing, maintenance and storage;
- Machinery and equipment testing;
- Corporate operations; and
- Training facilities to service Sandvik's Australia wide operations.

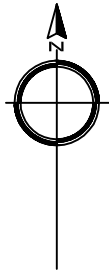
6.2 Impact Assessment

The potential impact of a development broadly corresponds with the archaeological potential of a particular landform or area. The potential impact of the proposed development within different areas of the Study Area is shown on Figure 6-2: and described below.

Proposed works within the area shaded yellow on Figure 6-2: are low to nil potential to disturb or destroy Aboriginal sites and/or objects because this area has been previously disturbed.

Proposed works within the area shaded green on Figure 6-2: has low potential to disturb or destroy Aboriginal sites and/or objects. This area comprises low lying flats which were generally unsuitable for Aboriginal occupation in the past.

Proposed works within the area shaded pink on Figure 6-2: has moderate potential to disturb and/or destroy Aboriginal sites and/or objects. This area contains an elevated sand crest with largely unmodified natural soil profiles. Although there are no sources of permanent water nearby to this landform, it is possible that temporary occupation may have occurred. However, it is more likely that Aboriginal people would have utilised other landforms offering a greater variety of resources elsewhere in the local area.



DP 1014864
LOT 32 = 16 ha

(A) EASEMENT FOR WATER MAIN 6m, 11m & VARIABLE
(B) EASEMENT FOR ELECTRICITY TRANSMISSION LINES 15m WIDE & VARIABLE

7	CARPARKING AMENDED & TRAINING BUILDING MOVED	K.C.	K.C.	26.05.10
6	LEASE PROPOSAL	K.C.	K.C.	10.05.10
5	CLIENT AMENDMENTS	K.C.	K.C.	03.05.10
4	TEST TRACK ADDED, BUILDINGS & CARPARKING AMENDED	K.C.	K.C.	29.04.10
3	CLIENT CHANGES	K.C.	K.C.	27.04.10
2	BUILDINGS & ROADBASE AMENDED	K.C.	K.C.	20.04.10
1	ORIGINAL ISSUE	K.C.	K.C.	08.04.10
Amendment	Description	Drawn	App'd	Date



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Scale 1:1000 (A1 SHEET) 1:2000 (A3 SHEET)	
Project Approval IAN HILL (B.E.) Consulting Civil Engineer	

GEOFF CRAIG & ASSOCIATES PTY LTD
Consulting Engineers & Project Managers
A.B.N. 92 086 017 745

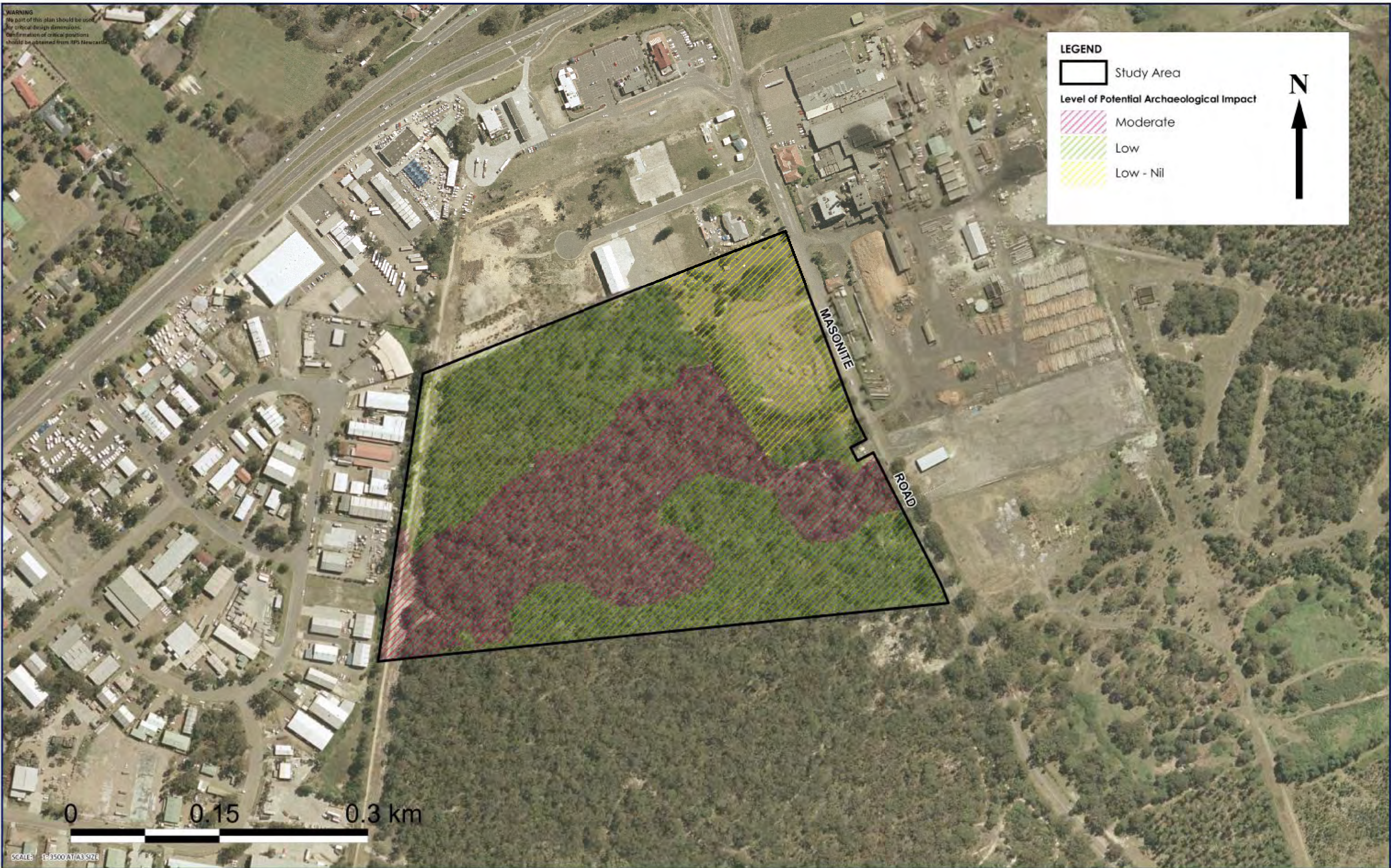
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FAX: (02) 4964 1822

1 HARTLEY DRIVE
THORNTON NSW 2322
PO BOX 3337
THORNTON NSW 2322

PROPOSED INDUSTRIAL DEVELOPMENT
431 (LOT 32) MASONITE ROAD, HEATHERBRAE
SITE PLAN
SANDVIK MINING AND CONSTRUCTION AUSTRALIA PTY LTD
PROJECT BY HUNTER LAND DEVELOPMENTS

Project No 10096A	Drawing No A01	Revision 7
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TITLE: FIGURE 6-2 : AREAS OF POTENTIAL
ARCHAEOLOGICAL IMPACT

LOCATION: MASONITE ROAD

DRAWN: DATE: 2/6/2010
PROJECT: DATUM: MGA ZONE 56 (GDA 94)
ABORIGINAL: ABORIGINAL HERITAGE IMPACT ASS.

DATE: 2/6/2010
ABORIGINAL: ABORIGINAL HERITAGE IMPACT ASS.

J:\JOBS\PR\1044\104099\Masonite Rd\
PROJECT REF: AL... 104099\2010\20100609_104099.dwg
VERSION (PLAN DATE): B - A3 (NW)

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7 Recommendations

The following recommendations are based upon:

- The findings outlined within this report;
- The requirements of the National Parks and Wildlife Act (1974);
- The views and recommendations of the Aboriginal community.

It is recommended that:

- No Aboriginal sites or objects were identified during this assessment; therefore, there are currently no Aboriginal constraints and the proposed works may proceed without further archaeological investigation;
- The proponent should ensure that all staff and contractors that will be working on the site are:
 - » made aware that Aboriginal sites are found in the local area;
 - » provided sufficient training so that they are able identify an Aboriginal site if uncovered;
 - » made aware of their legal obligations and who to report any such finds to.
- Aboriginal representatives from Worimi Local Aboriginal Land Council, Nur-Run-Gee and Mur-Roo-Ma should be offered the opportunity to inspect the Study Area, especially the sand crest along the southern margin, after the vegetation has been removed and before other earth moving works commence. If this is not feasible within the works schedule, the same Aboriginal community members should be offered the opportunity to be present on site whilst vegetation clearing/earth moving works take place.
- Liaison established with the Aboriginal Community as per the DECCW Interim Community Consultation Requirements for Applicants (2004) during this project should be maintained during the proposed works until all issues in relation to the management of Aboriginal cultural heritage have been resolved;
- If any Aboriginal sites or objects are identified during future works, works in the vicinity must cease immediately. A suitably qualified archaeologist should inspect the site and determine an appropriate course of action for the site. Works that will impact upon known Aboriginal sites or objects will require a permit under Section 90 of the National Parks and Wildlife Act (1974) from the Director-General of the Department of Environment, Climate Change and Water (DECCW);
- If any skeletal remains are identified at any stage during the proposed works, all works in the vicinity must cease immediately. A suitably qualified forensic archaeologist and the Police should be contacted immediately and a suitable course of action determined. If the remains are deemed to be of Aboriginal origin, a representative of Worimi Local Aboriginal Land Council, Mur-Roo-Ma and Nur-Run-Gee should also be contacted

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9 Plates



Plate 1: View across the sand crest. Note open vegetation with understorey of Bracken Fern and Cycads.



Plate 2: Example of surface visibility encountered across the survey area.



Plate 3: Disturbance noted along tracks within the survey area.



Plate 4: Soil profile observed during the survey which corresponds with descriptions of the Tea Gardens soil landscape.

APPENDIX I

Legislative Requirements

SUMMARY OF STATUTORY CONTROLS

The following overview of the legal framework is provided solely for information purposes for the client, it should not be interpreted as legal advice. RPS Australia Eat Pty Ltd will not be liable for any actions taken by any person, body or group as a result of this general overview, and recommend that specific legal advice be obtained from a qualified legal practitioner prior to any action being taken as a result of the summary below.

COMMONWEALTH

Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (ATSIHP Act), Amendment 2006

The purpose of this Act is to preserve and protect all heritage places of particular significance to Aboriginal and Torres Strait Islander people. This Act applies to all sites and objects across Australia and in Australian waters (s4).

It would appear that the intention of this Act is to provide national baseline protection for Aboriginal places and objects where State legislation is absent. It is not to exclude or limit State laws (s7(1)). Should State legislation cover a matter already covered in the Commonwealth legislation, and a person contravenes that matter, that person may be prosecuted under either Act, but not both (s7(3)).

The Act provides for the preservation and protection of all Aboriginal objects and places from injury and/or desecration. A place is construed to be injured or desecrated if it is not treated consistently with the manner of Aboriginal tradition or is or likely to be adversely affected (s3).

THE AUSTRALIAN HERITAGE COMMISSION ACT 1975

The Australian Heritage Commission Act 1975 established the Australian Heritage Commission which assesses places to be included in the National Estate and maintains a register of those places. Places maintained in the register are those which are significant in terms of their association with particular community or social groups and they may be included for social, cultural or spiritual reasons. The Act does not include specific protective clauses.

The Australian Heritage Council Act 2003 together with The Environment Protection and Biodiversity Conservation Act 1999 (Amended) includes a National Heritage List of places of National heritage significance, maintains a Commonwealth Heritage List of heritage places owned or managed by the Commonwealth and ongoing management of the Register of the National Estate.

STATE

It is incumbent on any land manager to adhere to legislative requirements that protect indigenous culture heritage in NSW. The relevant legislation includes but is not limited to:

National Parks & Wildlife Act 1974 (NPW Act), Amended 2001.

The DECCW issued their Interim Community Consultation Requirements in 2004 to replace all previous consultation guidelines that related to Part 6 of the NPW Act 1974. The requirement of the guidelines is for the proponent, or consultant for the proponent, to contact the Local Aboriginal Land Council(s), Registrar of Aboriginal Owners, Native Title Services, local councils and the DECCW, to request contact information for any/all potential Aboriginal people/groups with an ancestral interest in the cultural heritage of the project area.

The NPW Act provides statutory protection for all Aboriginal relics (not being a handicraft made for sale), with penalties levied for breaches of the Act. Part 6 of this Act is the relevant part concerned

Aboriginal objects and places, with the Section 86 and Section 90 being the most pertinent:

Section 91: Under Section 91 of the Act it stipulates that a person who is aware of unregistered Aboriginal sites must report these to the DECCW, regardless of the land status (Freehold, leasehold, Crown land).

Section 90: "A person who, without first obtaining the consent of the Director-General, knowingly destroys, defaces or damages, or knowingly causes or permits the destruction or defacement of or damage to, an Aboriginal object or Aboriginal place is guilty of an offence against this Act." Under s.5 of the Act "object" means any deposit, object or material evidence (not being a handicraft made for sale) relating to indigenous habitation of the area. This applies to habitation both prior to and concurrent with the occupation of that area by persons of non Aboriginal extraction, and includes Aboriginal remains.

Section 87: Preliminary Research Permits issued under Section 87 of the Act, allow the permit holder to conduct investigations of areas considered to be potential sites for the purpose of research, and also for conservation work associated with known sites.

Impact Permits issued under Section 90 of the Act are for salvaging sites prior to ground disturbance works associated with construction. Any disturbance, damage or destruction of Aboriginal sites, known or unknown, is considered to contravene the NPW Act (1974) and the DECCW will pursue the person/company responsible.

Penalties under these two sections are currently 50 penalty units, or 6 months in gaol, or both for an individual and 200 penalty units for a corporation. The DECCW record all S.87 and S.90 permits issued in order to manage Aboriginal sites and ensure representative samples of sites are left in situ for future generations. In order to achieve this, the DECCW need to be made aware of all Aboriginal sites located in NSW.

Section 86: This section of the Act states that "A person, other than the Director-General or a person authorised by the Director-General in that behalf, who:

- (a) disturbs or excavates any land, or causes any land to be disturbed or excavated, for the purpose of discovering an Aboriginal object,
- (b) disturbs or moves on any land an Aboriginal object that is the property of the Crown, other than an Aboriginal object that is in the custody or under the control of the Australian Museum Trust,
- (c) takes possession of an Aboriginal object that is in a national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve or Aboriginal area,
- (d) removes an Aboriginal object from a national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve or Aboriginal area, or
- (e) erects or maintains, in a national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve or Aboriginal area, a building or structure for the safe custody, storage or exhibition of any Aboriginal object,

except in accordance with the terms and conditions of an unrevoked permit issued to the person under section 87, being terms and conditions having force and effect at the time the act or thing to which the permit relates is done, is guilty of an offence against this Act."

Section 84: Aboriginal places of traditional significance (that may or may not contain archaeological material) are given protection under Section 84 of the NPW Act. To be an Aboriginal place for the

purposes of this Act, this is a place that, in the opinion of the Minister, is or was of special significance with respect to Aboriginal culture.

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979 (EP&A ACT)

This Act regulates a system of environmental planning and assessment for New South Wales. Land use planning requires that environmental impacts are considered, including the impact on cultural heritage and specifically Aboriginal heritage. Within the EP&A Acts, Parts III, IV, and V relate to Aboriginal heritage.

Part III regulates the preparation of planning policies and plans. Part IV governs the manner in which consent authorities determine development applications and outlines those that require an environmental impact statement. Part V regulates government agencies that act as determining authorities for activities conducted by that agency or by authority from the agency. The National Parks & Wildlife Service is a Part V authority under the EP&A Act.

In brief, the NPW Act provides protection for Aboriginal objects or places, while the EP&A Act ensures that Aboriginal cultural heritage is properly assessed in land use planning and development.

Part 3A of the EPA relates to major projects, and if applicable, obviates the need to conform to other specific legislation. In particular, s75U of the EPA Act explicitly removes the need to apply for s87 or s90 permits under the NPW Act. This means that although Aboriginal cultural heritage is considered during the planning process, a permit is not required to disturb or destroy an Aboriginal object or place. However, the Director-General of Planning must nonetheless consult with other government agencies, including DECCW and National Parks & Wildlife, prior to any decision being made.

THE HERITAGE ACT 1977

This Act protects the natural and cultural history of NSW with emphasis on non-indigenous cultural heritage through protection provisions and the establishment of a Heritage Council. Although Aboriginal heritage sites and objects are primarily protected by the National Parks & Wildlife Act 1974 (NPW Act), Amended 2001, if an Aboriginal site, object or place is of great significance, it may be protected by a heritage order issued by the Minister subject to advice by the Heritage Council.

Other legislation of relevance to Aboriginal cultural heritage in NSW includes the NSW Local Government Act (1993). Local planning instruments also contain provisions relating to indigenous heritage and development conditions of consent.

APPENDIX 2

AHIMS Registered Sites

Site ID	Site Name	Datum	Easting	Northing	Site Types
38-3-0037	Tomago 1;TK1;	AGD	385600	6369540	Artefact Scatter
38-4-0075	Tomago;	AGD	378380	6366800	Scarred Tree
38-4-0237	RT 2;	AGD	383700	6373210	Artefact Scatter
38-4-0238	RT 3;	AGD	381900	6372150	Artefact Scatter
38-4-0239	RT 4;	AGD	384200	6374850	Scarred Tree
38-4-0240	RT 1;	AGD	384080	6373770	Artefact Scatter
38-4-0242	T 1;	AGD	383600	6368300	Artefact Scatter
38-4-0243	T 2;	AGD	384400	6368700	Artefact Scatter
38-4-0244	T 3;	AGD	383900	6368700	Artefact Scatter
38-4-0245	T 4;	AGD	384200	6368800	Artefact Scatter
38-4-0246	T 5;	AGD	383900	6368900	Artefact Scatter
38-4-0247	T 6;	AGD	383900	6368800	Artefact Scatter
38-4-0248	T 7;	AGD	378900	6367400	Artefact Scatter
38-4-0249	T 8;	AGD	378200	6367400	Artefact Scatter
38-4-0250	T 8 1 (T9);	AGD	378400	6367300	Artefact Scatter
38-4-0320	RT 5;	AGD	382220	6372230	Artefact Scatter
38-4-0414	Masonite Road;	AGD	385250	6370900	Artefact Scatter
38-4-0647	A1 - Tomaree/Tomago	AGD	384559	6368108	Midden
38-4-0648	A2 - Tomaree/Tomago	AGD	384377	6368060	Isolated Find
38-4-0676	Tomaree/Tomago A10	AGD	384867	6368228	Artefact Scatter, Burnt Organic Material
38-4-0679	PAD 1: Tomaree to Tomago	AGD	384500	6368200	Potential Archaeological Deposit
38-4-0681	PAD 3: Tomaree to Tomago	AGD	384400	6370500	Potential Archaeological Deposit
38-4-0682	PAD 4: Tomaree to Tomago	AGD	384405	6372500	Potential Archaeological Deposit
38-4-0694	Raymond Terrace 1 (RT1)	AGD	384071	6373602	Isolated Find
38-4-0695	Raymond Terrace PAD 1	AGD	384010	6373750	Potential Archaeological Deposit
38-4-0961	Tomago 1 (T1)	AGD	382833	6367605	Artefact Scatter
38-4-0962	Tomago 2 (T2)	AGD	382779	6367583	Artefact Scatter
38-4-0963	Tomago 3 (T3)	AGD	382703	6367533	Artefact Scatter
38-4-0964	Tomago 4 (T4)	AGD	383419	6367848	Artefact Scatter
38-4-0965	Tomago 5 (T5)	AGD	383419	6367848	Isolated Find
38-4-0966	Tomago 8 (T8)	AGD	383428	6367863	Artefact Scatter
38-4-0967	Tomago 7 (T7)	AGD	383428	6367863	Artefact Scatter
38-4-1139	Minmet Pad	GDA	381100	6367000	Potential Archaeological Deposit
38-4-1140	Masonite Rd (Tomago)	GDA	385250	6370900	Artefact(s) Unspecified
38-4-1158	Mount Hall Road 1 (MHR1)	GDA	384432	6373729	Isolated Find

APPENDIX 3

Aboriginal Consultation Log

DECCW *Interim Community Consultation Requirements for Applicants* (2004). Aboriginal Consultation Log – Masonite Road, Heatherbrae Aboriginal Heritage Impact Assessment.

Date	Action	Method of Contact	Outcomes
07/08/2009	Sent Stage 1 Notification letter to DECCW, NSW Department of Aboriginal Affairs, NSW Native Title Services, Port Stephens Council and Worimi LALC	Post	
08/08/2009	Stage 1 Notification advertisement appeared in the Newcastle Herald	Newspaper Advertisement in 'Public Notices' section	
10/08/2009	Received registration of interest from Mur-Roo-Ma Inc (Anthony Anderson)	Post	Registered Stakeholder interest
11/08/2009	Received registration of interest from Worimi LALC (Kyle Finlay)	Email	Registered Stakeholder interest
12/08/2009	Received registration of interest from Nur-Run-Gee Pty Ltd (Leanne Anderson)	Email	Registered Stakeholder interest
21/08/2009	Stage 1 Notification Period Closes		
24/08/2009	Received list of parties with potential interest in the project from DECCW	Post	
26/08/2009	Received response from the Office of the Registrar	Post	No registered Aboriginal Owners of the Study Area
31/08/2009	Sent Stage 2 Information and Proposed Methodology sent to registered interest parties	Email	
02/09/2009	Received response regarding proposed methodology from Mur-Roo-Ma Inc (Anthony Anderson)	Email	Supports proposed methodology – no changes requested

02/09/2009	Received response regarding proposed methodology from Worimi LALC (Kyle Finlay)	Email	Supports proposed methodology – no changes requested
03/09/2009	Received response regarding proposed methodology from Nur-Run-Gee Pty Ltd (Leanne Anderson)	Email	Supports proposed methodology – no changes requested
21/09/2009	Stage 2 review period closes		
23/09/2009	Completed survey with representatives from WLALC, Mur-Roo-Ma Inc and Nur-Run-Gee Pty Ltd	In Person	No Aboriginal sites identified, Aboriginal community requested to inspect the site following vegetation clearance
15/10/2009	Draft version of AHIA report sent to WLALC, Mur-Roo-Ma Inc and Nur-Run-Gee Pty Ltd for review and comment	Email	
17/10/2009	Received comments from Anthony Anderson (Mur-Roo-Ma)	Email	Mur-Roo-Ma support findings and recommendations of report
25/10/2009	Received comments from Leanne Anderson (Nur-Run-Gee)	Email	Nur-Run-Gee support findings and recommendations of report
26/10/2009	Received comments from Kyle Finlay (WLALC)	Email	WLALC support findings and recommendations of report
26/10/2009	Stage 3 Review Period Closes		
29/10/2009	Report finalised. Final versions of report sent to WLALC, Mur-Roo-Ma Inc and Nur-Run-Gee Pty Ltd	Email	

APPENDIX 4

Glossary of Site Types

GLOSSARY OF SITE TYPES

The following is a brief description of most Aboriginal site types.

Artefact Scatters

Artefact scatters are defined by the presence of two or more stone artefacts in close association (i.e. within fifty metres of each other). An artefact scatter may consist solely of surface material exposed by erosion, or may contain sub-surface deposit of varying depth. Associated features may include hearths or stone-lined fireplaces, and heat treatment pits.

Artefact scatters may represent:

- Camp sites: involving short or long-term habitation, manufacture and maintenance of stone or wooden tools, raw material management, tool storage and food preparation and consumption;
- Hunting or gathering activities;
- Activities spatially separated from camp sites (e.g. tool manufacture or maintenance); or
- Transient movement through the landscape.

The detection of artefact scatters depends upon conditions of surface visibility, including vegetation cover, ground disturbance and recent sediment deposition. Unfavourable conditions obscure artefact scatters and prevent their detection during surface surveys.

Bora Grounds

Bora grounds are a ceremonial site associated with initiations. They are usually comprise two circular depressions in the earth, and may be edged with stone. Bora grounds generally occur on soft sediments in river valleys, although they may also be located on high, rocky ground in association with stone arrangements.

Burials

Human remains were often placed in hollow trees, caves or sand deposits and may have been marked by carved or scarred trees. Burials have been identified eroding out of sand deposits or creek banks, or when disturbed by development. The probability of detecting burials during archaeological fieldwork is extremely low.

Culturally Modified Trees

Culturally modified trees include scarred and carved trees. Scarred trees are caused by the removal of bark for use in manufacturing canoes, containers, shields or shelters. Notches were also carved in trees to permit easier climbing. Scarred trees are only likely to be present on mature trees remaining from original vegetation. Carved trees, the easiest to identify, are caused by the removal of bark to create a working surface on which engravings are incised. Carved trees were used as markers for ceremonial and symbolic purposes, including burials. Although, carved trees were relatively common in NSW in the early 20th century, vegetation removal has rendered this site type extremely rare. Modified trees, where bark was removed for often domestic use are less easily identified. Criteria for identifying modified trees include: the age of the tree; type of tree (the bark of many trees is not suitable, also introduced species would be unlikely subjects); axe marks (with the need to determine the type of axe - stone or steel – though Aborigines after settlement did use steel); shape of the scar (natural or humanly scarred); height of the scar above the ground (reasonable working height with consideration given to subsequent growth).

Fish Traps

Fish traps comprised arrangements of stone, branches and/or wickerwork placed in watercourses,

estuaries and along coasts to trap or permit the easier capture of sea-life.

Grinding Grooves

Grinding grooves are elongated narrow depressions in soft rocks (particularly sedimentary), generally associated with watercourses, that are created by the shaping and sharpening of ground-edge implements. To produce a sharp edge the axe blank (or re-worked axe) was honed on a natural stone surface near a source of water. The water was required for lubricating the grinding process. Axe grinding grooves can be identified by features such as a narrow short groove, with greatest depth near the groove centre. The grooves also display a patina developed through friction between stone surfaces. Generally a series of grooves are found as a result of the repetitive process.

Isolated Finds

Isolated finds occur where only one artefact is visible in a survey area. These finds are not found in apparent association with other evidence for prehistoric activity or occupation. Isolated finds occur anywhere and may represent loss, deliberate discard or abandonment of an artefact, or may be the remains of a dispersed artefact scatter. Numerous isolated finds have been recorded within the study area. An isolated find may flag the occurrence of other less visible artefacts in the vicinity or may indicate disturbance or relocation after the original discard.

Middens

Shell middens comprise deposits of shell remaining from consumption and are common in coastal regions and along watercourses. Middens vary in size, preservation and content, although they often contain artefacts made from stone, bone or shell, charcoal, and the remains of terrestrial or aquatic fauna that formed an additional component of Aboriginal diet. Middens can provide significant information on land-use patterns, diet, chronology of occupation and environmental conditions.

Mythological / Traditional Sites

Mythological and traditional sites of significance to Aboriginal people may occur in any location, although they are often associated with natural landscape features. They include sites associated with dreaming stories, massacre sites, traditional camp sites and contact sites. Consultation with the local Aboriginal community is essential for identifying these sites.

Rock Shelters with Art and / or Occupation Deposit

Rock shelters occur where geological formations suitable for habitation or use are present, such as rock overhangs, shelters or caves. Rock shelter sites generally contain artefacts, food remains and/or rock art and may include sites with areas of potential archaeological deposit, where evidence of rock-art or human occupation is expected but not visible. The geological composition of the study area greatly increases the likelihood for rock shelters to occur.

Stone Arrangements

Stone arrangements include lines, circles, mounds, or other patterns of stone arranged by Aboriginal people. These may be associated with bora grounds, ceremonial sites, mythological or sacred sites. Stone arrangements are more likely to occur on hill tops and ridge crests that contain stone outcrops or surface stone, where impact from recent land use practices has been minimal.

Stone Quarries

A stone quarry is a place at which stone resource exploitation has occurred. Quarry sites are only located where the exposed stone material is suitable for use either for ceremonial purposes (e.g. ochre) or for artefact manufacture.

APPENDIX 5

Aboriginal Community Responses

26th October 2009

RPS Harpers Somers O'Sullivan

PO Box 428

HAMILTON NSW 2303

ATTENTION: Lisa-Maree Campbell

Dear Madam,

**RE: ABORIGINAL HERITAGE IMPACT ASSESSMENT
FOR
LOT 32 DP 1014864**

I write in relation to the above noted survey and the recent report provided for our review and comment.

I confirm that on the 23rd September 2009, in partnership with your firm, the WLALC undertook an Aboriginal archaeological assessment to determine the occurrence of Aboriginal occupation over Lot 32 DP 1014864 on Masonite Road, Heatherbrae.

The field survey results revealed the site area to be unaffected as soils were observed to be intact and vegetation was open with a scattered under growth. All old growth trees were identified within the survey area and examined for signs of cultural scarring, although none were observed.

As recorded in your report under Section 5.2 Survey Results, no sources of raw stone materials were identified which could have been utilised by Aboriginal people and as a result we accept the recommendations supplied by your firm.

Recommendations

The survey identified no constraints significantly associated with Aboriginal archaeological occupation however; during the event of site regrading works, the proponent will maintain communication with the Worimi LALC and other (relevant) Aboriginal Stakeholders registering their interest to participate.

Following significant sites becoming uncovered during works, it is then recommended that the proponent, with regard to the proposed site regrading operations:

Recommendation 1

The proponent should ensure that all staff and contractors that work on site are made aware that Aboriginal sites are found in the local area, provided sufficient training so that they are able to identify an Aboriginal site if uncovered and made aware of their legal obligations and who to report any such find to.

Recommendation 2

Worimi Local Aboriginal Land Council and other (relevant) Aboriginal Stakeholders have the opportunity to inspect the Study Area, especially the sand crest along the southern margin, after the vegetation has been removed and before other earth moving works commence. If time constraints need to be kept and this is not feasible WLALC should be offered the opportunity to be present on site whilst vegetation clearing/earth moving works take place.

Recommendation 3

Contact shall be kept during proposed works until all issues relating to the management of Aboriginal cultural heritage have been resolved.

Recommendation 4

In the event that the proponent uncovers previously unidentified Aboriginal artefacts or archaeological sites, work must cease in that immediate area and they will need to consult with the Department of Environment and Climate Change (DECC) and relevant Aboriginal Community Stakeholders.

Further to this, works that will or may impact upon known Aboriginal sites or objects will require a permit under Part 6 of the National Parks and Wildlife Act (1974), from the Director- General of the DECC. Under the *National Parks and Wildlife Act (1974)*, it is an offence to destroy, damage or deface an Aboriginal site or object without obtaining the prior written permission of the Director General of the DECC.

Recommendation 5

In the event that skeletal remains are uncovered, work must cease immediately in that area and the proponent will need to contact the NSW Police Coroner to determine if the material is of Aboriginal origin. If determined to be Aboriginal, they must then contact the DECC and relevant Aboriginal Community Stakeholders in order to determine an action plan for the management of the skeletal remains prior to works re-commencing.

If you have any further queries, please do not hesitate to contact us

Lisa-Maree Campbell

From: Anthony Anderson [murroomainc1@gmail.com]
Sent: Saturday, 17 October 2009 12:06 PM
To: Lisa-Maree Campbell
Subject: Re: AHIA, Masonite Road, Heatherbrae

Hi Lisa

Mur-roo-ma Inc has read the draft report in which you have respected the wishes and beliefs of the local Aboriginal people and with a full understanding of the draft report Mur-roo-ma Inc therefore agrees with the report and the recommendations you have put forward.

Anthony J Anderson

CEO

Mur-roo-ma

On Thu, Oct 15, 2009 at 4:00 PM, Lisa-Maree Campbell <lisa-maree@rpshso.com.au> wrote:

Hello Anthony,

In accordance with Stage 3 of the DECCW *Interim Community Consultation Requirements for Applicants* (2004), please find attached a copy of the draft Aboriginal Heritage Impact Assessment for Masonite Road, Heatherbrae for your review and comment. Your comments will be incorporated into the final version of this report. Could you please provide comment on the report no later than Monday the 26th of October 2009.

If you would like to discuss any matter regarding the report with me, please do not hesitate to contact me on (02) 49616 500.

Kind Regards,

Lisa-Maree Campbell
BArts (Hons) (Arch)
Archaeologist

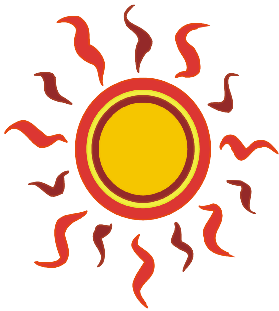
Ph:02 4961 6500
Fax: 02 4961 6794



archaeology - ecology - project management - planning - surveying - quantity surveying

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



**CULTURAL AND HERITAGE
CONSULTANT
LICENCED BUILDER**

22 Popplewell Road
Fern Bay 2295

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

23rd October 2009

RPS HSO
Attention Lisa Campbell
PO Box 428
Hamilton NSW 2303

**Re; Aboriginal Heritage Impact Assessment for Lot 32 DP 1014864
Masonite Road, Heatherbrae – Draft Report**

Dear Lisa

Thank you for the opportunity to comment on the draft report for the
Aboriginal Heritage Impact Assessment for Lot 32 DP 1014864
Masonite Road, Heatherbrae – Draft Report.

After reading the draft report, Nur-Run-Gee P/L understands the
recommendations and agreements that RPS HSO have stated in the
report and find that they are acceptable.

Nur-Run-Gee Pty Ltd wish it to be noted that we have found that this
report to be well written and informative as well as concise and as
accurate as possible.

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

Yours Sincerely

Leanne Anderson
Director
Nur-Run-Gee Pty Ltd