

**Aboriginal site sensitivity:
Proto Resources proposed mining lease at Barnes Hill,
Beaconsfield**

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**ABORIGINAL SITE LOCATION INFORMATION CONTAINED IN THIS REPORT
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1. INTRODUCTION

Proto Resources are proposing a mining lease at Barnes Hill, approx. 4 km to the south west of Beaconsfield, in northern Tasmania (Figure 1). Future development of the proposed mining lease will probably incorporate plant and machinery sites, the installation of services and infrastructure, construction of a tailings pond, and disturbance of areas to be excavated during mining.

As part of the planning study preceding the mining lease application, Steve Stanton Pty Ltd was commissioned by Pitt & Sherry to undertake a desktop assessment of the lease area in order to identify known, and potential, Aboriginal sites. This assessment involved a search of the Tasmanian Aboriginal Site Index (TASI) and the collation of archaeological and environmental information for the broader region in order to identify areas within the proposed lease likely to contain Aboriginal sites.

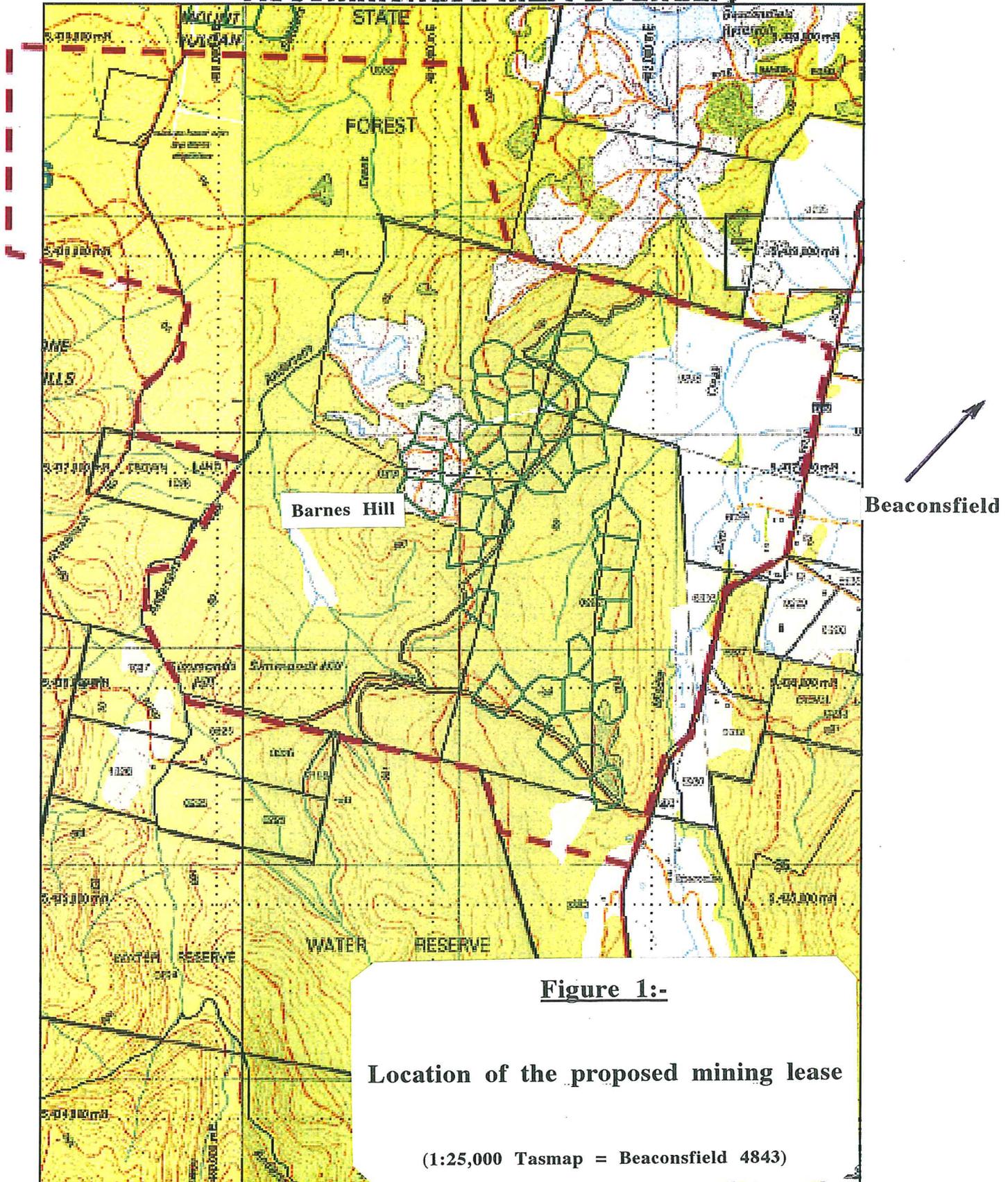
The aims of the study undertaken by Steve Stanton Pty Ltd were:-

- to assess the Aboriginal site potential of the entire proposed lease area in order to define any potentially sensitive sections, thereby facilitating the identification of potential sites prior to disturbance of the area. This process will enable a management strategy for Aboriginal sites to be developed during the initial planning and design phases of the project.
- and to assist Pitt & Sherry and the project proponents in compliance with legislative mechanisms for the management of Aboriginal cultural heritage resources.

A review of the TASI revealed that no Aboriginal sites have been recorded within the boundaries of the proposed lease. The nearest registered site is a stone artefact scatter (TASI 6998) located 3.5 km to the north, near the lower reaches of Andersons Creek.

The proposed mining lease does, however, have potential to contain Aboriginal sites due the nature of the terrain and the local geology (see Section 5). It is recommended, therefore, that those sections of the proposed mining lease with Aboriginal site potential be subjected to a thorough Aboriginal site survey prior to finalisation of the mining lease application and the development footprint.

Recommended MLA Boundary



2. TYPES OF SITES

The types of Aboriginal site which have been recorded previously in northern Tasmania and which might be expected to occur in the vicinity of the proposed mining lease are described below.

Open campsites

Open campsites are one of the most commonly occurring types of Aboriginal site in the region. These sites are represented by scatters of stone artefacts lying on the ground surface. The remains of fire hearths may also be associated with the artefacts. In rare instances, open campsites which were used over a long period of time may accumulate sediments and become stratified. That is, there may be several layers of occupation buried one on top of another.

Open campsites are almost invariably located near permanent or semi-permanent water sources. Local topography is also important in that campsites tend to occur on level, well drained ground, elevated above the local water source. In northern Tasmania they are commonly located along rivers and creeks or around lakes and lagoons.

Rockshelter sites

Caves or shelters in clifflines and beneath boulder overhangs were often used by Aboriginal people as campsites. Because of the confined area in these shelters and because of repeated Aboriginal occupation of such sites, the occupation deposits that they contain are often richer than open campsites and are usually stratified.

Rockshelters will only be found where geological formations are present. They may occur as sandstone overhangs, shelters beneath granite tors or as limestone caves.

Quarry sites

These are locations where Aboriginal people obtained raw material for stone tools or ochre for art and decoration. Materials commonly used for flaking stone tools include chert, silcrete, quartz and quartzite. These materials were obtained from exposed sedimentary rock formations or picked up as cobbles on the surface. Stone quarries may also be associated with volcanic or metamorphic rock outcrops.

Stone arrangements and special places

Tasmanian Aboriginal stone arrangements include stones aligned on the surface. Sites of special significance to Tasmanian Aboriginal people are also present in the landscape. These need not show any archaeological traces.

3. PREVIOUS STUDIES

Archaeological excavation of limestone cave deposits in southwest Tasmania has demonstrated that Aboriginal people have been living in Tasmania for at least 35,000 years (Cosgrove, 1995). This period of occupation includes the Last Glacial Maximum (LGM) or “Ice Age” of 20,000 years ago. It was during this period that cooler temperature reduced the forest cover of the region (Kiernan *et al*, 1983).

Aboriginal people also occupied the Tasmanian Highlands during the LGM when ice sheets covered most of the Central Plateau. This is demonstrated by the site of ORS 7 in the upper valley of the Shannon River, which drains the plateau (Cosgrove, 1995a). Beginners Luck Cave in the Florentine River valley is another significant Ice Age site. It has stone artefacts and the remains of butchered animals dating back 20,000 years (Murray *et al*, 1980).

The LGM lowered sea levels by 150m causing a land bridge to form between Tasmania and the Australian mainland. In northern Tasmania, Aboriginal people occupied various rockshelters during this time, including Parmerprar Meethenar rockshelter in the Forth valley (Cosgrove, 1992) and Warragarra rockshelter in the upper Mersey valley (Lourandos, 1983). The majority of coastal sites in Tasmania date from 6-7,000 years ago when sea levels stabilised following the melting of glaciers and ice caps.

One of the earliest reports of an Aboriginal site near the Tamar estuary was that of David (1923) who located over 100 stone artefacts at Regatta Point on the east bank of the river. Sutherland (1972) re-interpreted this site as a stone quarry or raw material source. He recognised that the raw materials used by Aborigines for artefact manufacture reflected the local geology and that “exotic” stone was also used reflecting networks of trade. Gill (1968) obtained the first (and only known) radiocarbon date for the region. This was an age of 7,080 years Before Present which was obtained on charcoal from a fossil bone bed found in a limestone cave at Flowery Gully, south of Beaconsfield. According to Gill, the deposit was a midden formed by human agency and one of the bones was actually a bone implement.

The wider distribution of Aboriginal sites in the northern region remained poorly understood until systematic surveys undertaken by Kee (1990, 1991) and Bourke (1998) identified the general site pattern. Open campsites and rockshelters were found inland along rivers and creeks, and around freshwater lakes. Stone quarries followed the distribution of suitable stone sources. Overall, site density for the region is highest in coastal areas and around lowland lakes and lagoons.

The results of more recent, localised impact mitigation studies (Stanton 1999, 2006) near the proposed mining lease, suggest that the site pattern west of the River Tamar conforms to these regional studies.

4. ABORIGINAL SITE DISTRIBUTION & PREDICTIVE STATEMENT

TASI research revealed that no Aboriginal sites had previously been registered in the proposed mining lease. The nearest registered site is a small stone artefact scatter (TASI 6998) located 3.5 km to the north, near the lower reaches of Andersons Creek.

In terms of the site distribution pattern for the broader region, there are three main characteristics of the proposed lease area which suggest that it is a likely location for Aboriginal sites. A review of a geological map of the area revealed that Barnes Hill contains residual Tertiary conglomerate mainly of rounded vein quartz and quartzite. The presence of these stone types suggests that there may be potential source materials for Aboriginal quarries.

While it appears that Barnes Hill is surrounded by igneous rocks (Cambrian pyroxenite), along with ironstone pellets on the eastern flank, there are sandstone outcrops on the western side of Andersons Creek (near the margin of the proposed lease) and also approx. 1 km to the south and east of the hilltop. A review of the Beaconsfield 4843 1:25,000 topographic map shows relatively steep hillsides which enhances the potential for sandstone shelter formation. Previous Aboriginal occupation of any potential shelters would increase the likelihood of sites being present in the vicinity of the proposed mining lease.

Finally, the terrain of the proposed lease increases the potential for Aboriginal sites to be present. Level ridgetops in the elevated sections of the proposed lease are potential site locations, particularly when considered in association with possible stone sources on Barnes Hill. Level benches adjacent to both Andersons Creek and Middle Arm Creek also increase substantially the potential for sites to be present.

These factors highlight the Aboriginal site potential of the proposed lease and re-inforce the need for likely site locations to be subjected to a thorough process of survey and on ground assessment. The identification of sites may be influenced by landscape factors such as the level of prior disturbance, landscape modification and the degree of ground surface visibility. While prior disturbances e.g. the establishment of access tracks or earthworks may result in improved ground surface visibility they also have the potential to conceal, disturb or destroy Aboriginal sites. Likewise, sections of the proposed lease area with high site potential e.g. potential campsite locations adjacent to watercourses, may have dense vegetation cover which reduces ground surface visibility and restricts the identification of sites.

A thorough assessment process should take into account the above factors in order to ensure that any potential Aboriginal sites and associated landscape values are identified and managed in a manner consistent with the views of the Aboriginal community and in accordance with legislative requirements.

5. LEGISLATIVE FRAMEWORK

Aboriginal sites are afforded legal protection under various State and Federal statutes - the key elements of pertinent legislation are summarised below. The summary is intended as a guide only and should be confirmed with the administering agency (DEPHA) and, where necessary, specialist legal opinion.

The main legislation relating to Aboriginal cultural heritage values in Tasmania is the *Aboriginal Relics Act 1975* which is currently under review. This Act is the primary legislation which governs the treatment of Aboriginal cultural heritage (any place, site or object made or created by, or bearing the signs of the activities of, the original inhabitants of Australia or descendants of such inhabitants in or before 1876) in Tasmania. It is administered by DEPHA and its main provisions are:

- all relics are protected under the Act and it is illegal to 'destroy, damage, deface, conceal, or otherwise interfere with a relic' without a permit,
- it is illegal to 'cause an excavation to be made or any other work to be carried out on Crown land for the purpose of searching for a relic' without a permit,
- it is illegal to 'sell or offer for sale a relic', or 'to cause or permit a relic to be taken out of Tasmania without a permit',
- persons who own or who have knowledge of a relic shall inform the Parks and Wildlife Service of this, and provide information about the location of the relic(s),
- the ability to declare sites and objects as 'protected' sites or objects which are required to be managed by the Parks and Wildlife Service.

Although the *Aboriginal Relics Act 1975* is managed by DEPHA, for matters relating to Aboriginal cultural heritage, the protocol is to liaise primarily with the Tasmanian Aboriginal community through TALSC. Through DEPHA policy, TALSC acts as the primary adviser in relation to the *Aboriginal Relics Act 1975*, endorses Aboriginal cultural heritage research and reports, and approves access to the TASI database managed by DEPHA. TALSC also advise on other policies and protocols relating to the management of Aboriginal cultural heritage resources in Tasmania.

The development of culturally appropriate management structures for Aboriginal cultural heritage resources is dependant upon cultural heritage surveys/studies being undertaken, in order to ensure that Aboriginal values are identified prior to any disturbance occurring. This process assists project proponents to comply with legislative obligations and avoids potential delays that may arise if Aboriginal values are not considered during the planning and design phases of a project.

6. ABORIGINAL CONCERNS

All land has extremely high cultural significance for individual Aboriginal people and for the Aboriginal community collectively. Aboriginal sites are important to the Tasmanian Aboriginal community and help to strengthen the links between Aboriginal people and the land. Accordingly, the proposed mining lease should be the subject of a field survey in order to identify potential Aboriginal sites with the objective of mitigating or preventing disturbance of such sites.

Those sections of the proposed mining lease which are currently classified as Crown land have potential to be returned to Aboriginal ownership and/or management. It is, therefore, a major concern of the Tasmanian Aboriginal community that government support for the development or modification of such land will result in its further alienation. This process may reduce or remove completely the potential for its future return to the Aboriginal community. In addition, the presence of significant Aboriginal sites or landscape values on the land may increase support for its return to Aboriginal ownership. The Tasmanian Aboriginal community are unlikely, therefore, to support the current project proposal.

Mining projects contribute to the ongoing modification and disturbance of the Tasmanian landscape. This is also a matter of concern to the Aboriginal community when considered in the context of changes to the Tasmanian land mass as a whole. These changes have the potential to destroy Aboriginal values and conflict strongly with Aboriginal associations with land.

Accordingly, it should be noted that any development upon, or other disturbance of land within the proposed mining lease, is contrary to principal Aboriginal beliefs regarding the land, its values, and its inherent cultural significance. This applies to all land irrespective of its tenure, the degree of landscape modification or the levels of existing disturbance.

7. RECOMMENDATIONS

1. The nature of the terrain and the site distribution pattern for the region suggests that the proposed mining lease has the potential to contain open campsites represented by scatters of stone artefacts; occupied rockshelters; and possible stone quarries or sources. Aboriginal sites are protected by the *Aboriginal Relics Act 1975*, which makes it an offence to “destroy, damage, deface, conceal or otherwise interfere with a relic” without a permit from the Minister.

It is recommended, therefore, that those sections of the proposed mining lease with Aboriginal site potential be subjected to a thorough Aboriginal site survey and assessment prior to finalisation of the mining lease application and the development footprint. This survey should be undertaken by a suitably experienced Aboriginal Heritage Officer. It should take place prior to any proposed disturbance within the lease area which will allow for Aboriginal sites to be identified and avoided during the planning and design phase of the project.

2. Due to principle issues regarding Aboriginal values and the overall significance of land to the Aboriginal community (see Section 7), it is recommended that the proponents consult with the TALSC. This would provide an opportunity to further explore and discuss community concerns such as the ongoing alienation and disturbance of Crown land which would occur within the proposed lease area, should the project proceed.

8. REFERENCES

- Bourke, C. 1998. Aboriginal archaeological site management on the north east coast of Tasmania. Report to the Australian Heritage Commission and the Parks and Wildlife Service.
- Cosgrove, R. 1982. The management of archaeological resources in forested areas: Preliminary report of Phase 2 fieldwork, Forth River valley. Department of Archaeology, LaTrobe University.
- Cosgrove, R. 1995. Late Pleistocene behavioural variation and time trends: The case from Tasmania. *Archaeology in Oceania*, 30:83-104.
- Cosgrove, R. 1995a. The illusion of riches. Scale, resolution and explanation in Tasmanian Pleistocene human behaviour. BAR International Series No. 608. Oxford.
- David, T. W. E. 1923. R. M. Johnson Memorial Lecture: Geological evidence of the antiquity of man in the Commonwealth with special reference to the Tasmanian Aborigines. *Papers and Proceedings of the Royal Society of Tasmania*: 109-150.
- Kee, S. 1990. Midlands Aboriginal archaeological site survey. Occasional Paper No. 26, Department of Parks, Wildlife and Heritage, Hobart, Tasmania.
- Kee, S. 1991. Aboriginal archaeological sites in North East Tasmania. Occasional Paper No. 28, Department of Parks, Wildlife and Heritage, Hobart, Tasmania.
- Kiernan, K., Jones, R., and Ranson, D., 1983. New evidence from Fraser Cave for glacial age man in south-west Tasmania. *Nature*, 301(6):28-32.
- Gill, E. D. 1968. Aboriginal bone implement from fossil bone bed, Tasmania. *Records of the Queen Victoria Museum*, 31:1-5.
- Lourandos, H. 1983. 10,000 years in the Tasmanian Highlands. *Australian Archaeology*, 16:39-47.
- Murray, P., Goede, A. and Bada, J. 1980. Pleistocene human occupation at Beginners Luck Cave, Florentine Valley, Tasmania. *Archaeology and Physical Anthropology in Oceania*, 15:142-152.
- Ryan, L. 1996. *The Aboriginal Tasmanians*. (Second edition) Published by Allen & Unwin.

Stanton, S. 1999. Aboriginal cultural heritage assessment: proposed extension of landfill site at Bowens Jetty Road, Beaconsfield. Report to SEMF.

Stanton, S. 2006 Aboriginal cultural heritage assessment: proposed shoulder sealing along three sections and at three junctions on West Tamar Highway. Report to GHD.

Sutherland, F. 1972 The classification, distribution, analysis and sources of materials in flaked stone implements of Tasmanian Aborigines. Records of the Queen Victoria Museum, 42:1-46.
