

Expert witness statement of Dr. Tim Stone
Expert of Gunns Limited

**In the matter of the Bell Bay Pulp Mill Project: A project of State Significance
Resource Planning and Development Commission inquiry**

Proponent: Gunns Limited

1. Name and address

Dr. Tim Stone
P.O. Box 1068
Carlton, Vic. 3053.

2. Area of expertise

My area of expertise is Australian Aboriginal archaeology

My qualifications and experience are detailed in Attachment 1.

I am sufficiently expert to make this statement because I have twenty years experience in undertaking archaeological investigations, including Aboriginal community consultation, for the purposes of environmental impact assessment. In Tasmania, I have completed a total of 34 archaeological investigations for development proposals. I also have a particularly good working relationship with the Tasmanian Aboriginal community and the Aboriginal Heritage Office of the Department of Tourism, Arts and the Environment (DTAE).

In addition, I have two higher degrees (Masters and PhD), both of which combine Aboriginal archaeology and earth science.

3. Scope

3.1 Instructions

I was engaged to work in conjunction with Aboriginal Heritage Officer, Steve Stanton to:

- (a) Document and assess the Aboriginal values of the study area.
- (b) Detail the condition of the sites, and undertake an analysis of inter and intra-site variability including, but not limited to, site location, site patterning, reduction sequences, raw materials type and sources, cultural landscape issues, and site conditions.
- (c) Assess the significance of the Aboriginal values identified.

- (d) As appropriate, identify areas of high cultural resource potential within the study area, and recommend any further research required.
- (e) Update existing Aboriginal Heritage Office site documentation, including completion of Tasmanian Aboriginal Site Index (TASI) site recording forms.
- (f) Construct an account of Aboriginal use patterns of the places and area based on archaeological, physical, ethno-historical, historical and oral evidence. The account was to present an interpretation of the story of the place and area.
- (g) Consult with Aboriginal people with interests in the study area in order to obtain their views regarding the cultural heritage of the area. Public consultation is separate from liaison with community agencies.
- (h) Provide conservation policy guidance and specific recommendations for managing the identified cultural values

The original scope of works applied to the proposed pulpmill site and port facility (Survey Areas 1 and 2), effluent and water supply pipeline routes and temporary accommodation camp. During the course of the investigation, Gunns requested that our survey also cover two corridors near the George Town golf course, proposed road corridors at the entrance to the Long Reach chip mill and near the intersection of the East Tamar Highway and Windermere Road and a proposed Chip Storage site within the existing chip mill. These additional area surveys were addressed in my report (Volume 1), which is exhibited at Appendix 14, Volume 8 of the Draft IIS (**Site Survey Report**).

I prepared a confidential Volume 2 of the report showing the exact locations of the recorded Aboriginal sites, with detailed descriptions of them. This volume is confidential at the request of the Tasmanian Aboriginal Land and Sea Council (TALSC) and as a consequence is not included in the Draft IIS.

I addressed all of the requirements of the brief to a degree that was appropriate. The scope did not change, other than by that described above.

3.2 Process and methodology

At all stages I worked with Aboriginal Heritage Officer Steve Stanton, the Aboriginal Heritage Office of the DTAE and various representatives of Gunns Limited who provided maps of the study area and kept us apprised of land access issues. The TALSC was informed at the start of the project and consulted about the survey results at the end of the project.

In this project, Steve Stanton and I confirmed the locations of:

- five Aboriginal sites in Survey Areas 1 and 2 of the proposed pulpmill site,
- three close to the proposed effluent pipe route, and
- two close to corridors proposed for the water supply pipeline.

Some of these sites had been recorded during earlier Aboriginal site investigations, while others were new recordings (Table 1). Of these ten confirmed sites, two (TASI 6589 and 9675) were found to be outside the proposed development area.

Table 1

Locations of Aboriginal sites				
N = Newly recorded				
P = Previously recorded				
U = Unconfirmed				
Survey Area 1 (see Figure 6, Appendix 14 IIS)	Survey Area 2 (see Figure 7, Appendix 14 IIS)	Effluent Pipeline	Water Supply Pipeline	Workers Accomm. Facility
9896 (P)	10001 (P)	9713 (P)	6589 (P)	
9900 (N)	7485 (U)	9675 (P)	8473 (P)	
9903 (P)	7486 (U)	9942 (N)	0220 (U)	
9905/10008 (P)	7487 (U)	8743 (U)	0224 (U)	
9897 (U)	10002 (U)		4008 (U)	
9898 (U)	10003 (U)			
9899 (U)	10009 (U)			
9901 (U)				
9902 (U)				
9904 (U)				
10004 (U)				
10005 (U)				
10006 (U)				
10007 (U)				

Twenty previously recorded sites could not be confirmed by the survey. Either the artefacts recorded were no longer visible or the mapped location of the site was either ambiguous or erroneous.

The types of Aboriginal sites encountered were stone artefact scatters, isolated stone artefacts and a shell midden.

In carrying out the Aboriginal site survey, Steve Stanton and I first examined the TASI for any sites known in the proposed impact areas. Permission to consult the TASI was obtained from the TALSC.

The team then surveyed the areas proposed for development by inspecting the ground surface for any Aboriginal archaeological traces. Our aim was to locate and record any Aboriginal sites in the proposed development areas, including those that had been previously recorded.

All Aboriginal sites located were recorded with a hand-held GPS. The site attributes were then described i.e. site type, environmental setting, aspect, size, contents, condition and the ground surface visibility available at the time of recording.

The resulting report was co-authored by myself and Steve Stanton. It details the environmental setting, background archaeology, field methodology and survey results. It also contains a formal assessment of scientific significance and statement of the Aboriginal significance of the sites that were found. A draft was reviewed by the Aboriginal Heritage Office (DTAE) and their feedback helped shape the final management recommendations. The draft report and recommendations were also discussed with Colin Hughes of the TALSC.

The Site Survey Report is exhibited at Appendix 14, Volume 8 of the Draft IIS and I adopt it as the basis for my expert witness statement and evidence. A summary of those findings is contained within this expert witness statement.

3.3 Reports reviewed

I was instructed to consider or take into account the following reports and materials:

- Graham, V. 2005. Aboriginal heritage survey of the Gunns East Tamar proposed pulp mill site and desktop survey of a proposed dam on Pipers River and associated proposed pipeline route, northern Tasmania. Draft report for Gunns Limited.

Graham recorded 14 stone artefact sites in Survey Area 1 and five in Survey Area 2 (see Table 1). However, three of the sites he recorded in Survey Area 1 are multiple listings of the one site (TASI 10004/10005/10006) and two are duplicate listings of the one site (TASI 9905/10008).

We were able to re-locate five of the sites he had recorded in Survey Area 1 (TASI 9896, 9900, 9903, 9905 and 10004/10005/10006) and one of those in Survey Area 2 (TASI 10001). The sites he had recorded in the powerline easement had been flagged with stakes. Some of the artefacts had been piled into small heaps.

We could not positively identify stone artefacts at the other six recorded sites. Either the stone pieces that were found did not display diagnostic properties of worked stone or there was no match between the GPS readings given and the site record.

The problem was discussed with Caleb Pedder of the Aboriginal Heritage Office who re-allocated some of the TASI numbers given to Graham's recordings to fit with the results of our investigation. Figure 9 of the Site Survey Report shows the state of the TASI prior to our investigation. Figures 18 and 19 show the results of our investigation, with most of Graham's recordings removed from consideration.

Subsequent to our investigation, representatives of the Aboriginal Heritage Office visited the field area to investigate the authenticity of those sites in Survey Area 1 that we could not confirm. I was later informed by the Aboriginal Heritage Office that they were able to locate artefacts at only two of the six sites investigated (TASI 9902 and TASI 9904).

The Aboriginal Heritage Office has since advised Gunns that the sites recorded by Graham would require permits prior to any impact, whether the existence of these sites can be proved or not.

I have also considered or reviewed the following additional reports and materials:

- 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.
- Brown, S. 1991. *Aboriginal archaeological sites in eastern Tasmania: a cultural resource management statement*. Department of Parks, Wildlife and Heritage, Occasional Paper No. 31, Hobart, Tasmania.
- 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.
- Moore, M. 1997. *Aboriginal archaeology of dry sclerophyll forest conservation reserves in eastern Tasmania: a study of Tasmanian lithic technology*. A report to Forestry Tasmania, 2 vols.
- Ross, B., Summers, R. and Burgess, R. 1992. *East Tamar Highway Archaeological Survey, Aboriginal and historic sites*. Report prepared for Smith, Sale and Burbury Engineers, Hobart.
- Stanton, S. 1999. *An assessment of Aboriginal cultural heritage values in relation to Stage 1 of the proposed Basslink Project: Section 6 – George Town coast to Bell Bay Sub Station*. A report prepared for Austral Archaeology Pty. Ltd. And the Tasmanian Aboriginal Land Council.
- Stanton, S. 2000. *An Aboriginal cultural heritage assessment of the proposed Basslink eastern corridor, near George Town in northern Tasmania*. A report

prepared for Austral Archaeology Pty. Ltd. And the Tasmanian Aboriginal Land Council.

- Stanton, S. 2001. *An Aboriginal cultural heritage assessment of the preferred Basslink eastern alignment – (Route Option 1), from the coastline near Four Mile Bluff to George Town substation at Bell Bay, in northern Tasmania*. A report prepared for Austral Archaeology Pty. Ltd. And the Tasmanian Aboriginal Land Council.
- Stanton, S. and Painter, R. 2001. *Tasmania Natural Gas Project Report on the Aboriginal Heritage Study*. A report to Duke Energy International and Hydro Tasmania.
- 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.

These are the most relevant regional and local archaeological studies, which establish a context for interpretation of the Aboriginal sites located in the study area. The reference list at the back of the Site Survey Report contains numerous other sources.

3.4 Assumptions

All archaeological survey results come with one important caveat. That is, Aboriginal sites will only be located where there is sufficient ground surface visibility. In this study, visibility ranged from 10-80 %, which was assumed to be enough to locate most Aboriginal sites. Only two areas with Aboriginal site potential were identified where ground surface visibility was insufficient. Both are located along the proposed water supply pipeline route, with one between Coulsons Creek and Dilston and the other at the crossing of Station Creek south of Dilston. The Site Survey Report recommends that these areas be investigated further by archaeological shovel-testing and monitoring prior to pipe installation (see Section 4 below).

3.5 Limitations and exclusions

Access was denied to two properties along the proposed effluent pipe route and seven properties along the proposed water supply pipeline route. Surveying should take place prior to construction commencing.

4. Management recommendations

Avoiding Aboriginal sites is the preferred management strategy because Aboriginal sites in Tasmania are protected by the State *Aboriginal Relics Act 1975* and the Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

If impact to an Aboriginal site cannot be avoided, the developer must apply to the Aboriginal Heritage Office for a permit prior to any works commencing.

Table 2 below summarizes the management recommendations contained in the Site Survey Report.

Table 2

(1) Pulpmill Site (Survey Area 1 & 2)

Site	Significance	Potential Impact	Mitigation measures
9896	Not yet formally assessed because covered by thick vegetation. Should be investigated further prior to construction.	Pulpmill and car park construction.	Part of site in proposed car park to be protected. Remainder of site to be investigated further under permit.
9900	Low Significance	No impact	Avoid disturbance
9903	Low to Moderate Significance	Pulpmill construction	Avoid disturbance
9905/10008	Low Significance	Pulpmill construction	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
10001	Low Significance	No impact	Avoid disturbance
7485	Not assessed because site could not be found	Solid waste disposal site construction	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.

7486	Not assessed because site could not be found	Solid waste disposal site construction	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
7487	Not assessed because site could not be found	Solid waste disposal site construction	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
9897	Not assessed because site could not be found by either Stone and Stanton or representatives of Aboriginal Heritage Office	Pulpmill construction	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
9898	Not assessed because site could not be found by either Stone and Stanton or representatives of Aboriginal Heritage Office	Pulpmill construction	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
9899	Not assessed because site could not be found by either Stone and Stanton or representatives of Aboriginal Heritage Office	Pulpmill construction	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
9901	Not assessed because site could not be found by either Stone and Stanton or representatives of Aboriginal Heritage Office	Pulpmill construction	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
9902	Not assessed because site could not be found	Pulpmill construction	Avoid disturbance If not feasible, re-location of artefacts

			by Aboriginal Heritage Officer under permit.
9904	Not assessed because site could not be found	No impact	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
10002	Not assessed because site could not be found by either Stone and Stanton or representatives of Aboriginal Heritage Office	No impact	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
10003	Not assessed because site could not be found by either Stone and Stanton or representatives of Aboriginal Heritage Office	No impact	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
10004 10005 10006	refer to 9900		
10007	Not assessed because site could not be found by either Stone and Stanton or representatives of Aboriginal Heritage Office	No impact	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.
10009	Not assessed because site could not be found by either Stone and Stanton or representatives of Aboriginal Heritage Office	Local water reservoir	Avoid disturbance If not feasible, re-location of artefacts by Aboriginal Heritage Officer under permit.

(2) Effluent Pipe

Site	Significance	Potential Impact	Mitigation measures
8743	Not assessed because site could not be found	No impact	Avoid disturbance
9675	Not assessed because outside area of impact	No impact	Avoid disturbance
9942	Low Significance	No impact	Avoid disturbance
9713	Low Significance	No impact	Avoid disturbance

(3) Water supply pipe

Site	Significance	Potential Impact	Mitigation measures
6589	Not assessed because outside area of impact	No impact	Avoid disturbance
8473	Low significance	No impact	Avoid disturbance
0220	Not assessed because site could not be found	No impact. Registered site location incorrect	Avoid the recorded site locality
4008	Not assessed because although the site could be found no artefacts were visible on surface	Pipe installation	Avoid the recorded site locality
0224	Not assessed because site could not be found	No impact. Registered site location incorrect	Avoid the recorded site locality

- Construction of the proposed pulpmill will impact on most of TASI 9896. This site is inferred to extend over the northern half of a prominent ridgetop, on which the pulpmill will be built. The part of TASI 9896 that extends into the existing powerline easement (represented by one stone artefact) will not be impacted but instead incorporated into a buffer zone to protect it from construction of the mill site car park.

TASI 9896 requires further investigation prior to pulpmill construction as most of it is currently covered by thick vegetation. It is standard practice to further investigate a site where a development cannot be modified to protect it and a permit is necessary for the development to continue. TASI 9896 requires further investigation (by archaeological test-excavation) to determine more about its contents, stratigraphy, extent and significance.

- TASI 9900 and 9903 are in the existing powerline easement and can be incorporated into restricted areas to ensure that no damage is done to them beyond that already caused by construction of the powerline easement. TASI 9905 is located at the edge of the powerline easement and will be impacted by the proposed development. The three artefacts that comprise this site should be re-located to the reserve proposed for TASI 9903 (or other culturally appropriate site) by an Aboriginal Heritage Officer under permit prior to works at the site.
- TASI 10001 is not in the mill footprint, with vehicle traffic being the only foreseeable impact. Access to this site can be restricted to protect it from any potential damage.
- TASI 7485, 7486 and 7487 will be impacted if their locations are used for a solid waste disposal site and quarry. However, based on the recorded descriptions of these sites, I do not consider them to be archaeologically significant. The artefacts that comprise these sites, if found, could be removed to an alternative site by an Aboriginal Heritage Officer under permit prior to the proposed impacts.
- TASI 8743, 9675 and 9942 (Four Mile Bluff) are unlikely to be impacted by construction of the proposed effluent pipe along the preferred pipe route. Access to these sites should be restricted during works associated with pipeline installation to ensure that the sites are not inadvertently disturbed.
- TASI 9713 (Lauriston Reservoir) is unlikely to be impacted by construction of the proposed effluent pipe along the preferred pipe route. Access to this site should be restricted during works associated with pipeline installation to ensure that it is not inadvertently disturbed.
- TASI 6589 at the head of East Arm is unlikely to be impacted by construction of the proposed water supply pipeline along the preferred pipe route. Access to this site should be restricted during works associated with pipeline installation to ensure that it is not inadvertently disturbed.
- TASI 8473 near Mount Direction is unlikely to be impacted by construction of the proposed water supply pipeline along the preferred pipe route. Access to this site should be restricted during works associated with pipeline installation to ensure that it is not inadvertently disturbed.
- TASI 4008 on the outskirts of Launceston is unlikely to be impacted by construction of the proposed water supply pipeline along the preferred pipe route. Access to this site should be restricted during works associated with pipeline installation to ensure that it is not inadvertently disturbed.

In addition to these site-specific recommendations the following, more general, management prescriptions should apply:

- monitoring for subsurface Aboriginal cultural material should be undertaken by an Aboriginal Heritage Officer and archaeologist between Coulsons Creek and Dilston and at the crossing of Station Creek south of Dilston. The monitoring should be undertaken during the initial vegetation removal and trench excavation phase of pipeline installation. If results are inconclusive after removal of vegetation, shovel-testing is recommended prior to trench excavation. Any other ground disturbance works in these areas should also be monitored. Monitoring of trench excavations should continue until the Aboriginal Heritage Officer and archaeologist are satisfied that culturally sterile horizons have been reached. In the event that Aboriginal cultural material is identified at depth in the excavated trench, further management strategies may need to be developed in consultation with the Aboriginal Heritage Office and the TALSC.
- Those areas along the proposed effluent and water supply pipe routes that could not be accessed because of land owner issues should be surveyed for Aboriginal sites once permission to enter this land has been obtained.
- Gunns Limited should establish dialogue and consult with the Tasmanian Aboriginal Land and Sea Council on all matters pertaining to Aboriginal site management throughout the course of the proposed pulpmill development. Gunns Limited should invite TALSC representatives to any relevant meetings/discussions regarding the proposed pulpmill. Gunns Limited should also keep the TALSC apprised of developments with the project and ensure that any other areas it might impact are similarly surveyed for Aboriginal sites and associated landscape values.

4.1 Draft IIS recommendations for Aboriginal heritage

Volume 4 of the draft IIS presents strategies for the management of Aboriginal heritage “based on the recommendations of the consultants, and have been further developed in consultation with the Aboriginal Heritage Office (DTAE)”. Below I comment on the management conclusions drawn in Volume 4.

Section 3.3.9 (the pulpmill site): The management strategies for Aboriginal sites at the proposed pulpmill site are sound and accord with standard cultural heritage management practices in Tasmania. TASI 9896 is to be investigated further, with full salvage under permit, if warranted. Temporary fencing will be used during car park construction to protect one of the artefacts from this site. This artefact will then be left in a small reserve. TASI 9903 is to be placed in a much larger, 2 ha reserve, where artefacts from TASI 9897, 9898, 9899, 9901, 9902, 9905, 10008 can be re-located under permit, if any are found. TASI 9900, 9904, 10001, 10002, 10004, 10005, 10006 and 10007 are unlikely to be impacted by the proposed development, with their locations maintained as restricted

areas. These are appropriate management strategies for both the previously recorded TASI sites and the sites confirmed in the Site Survey Report.

Section 3.4.10 (the wharf facility): No Aboriginal sites were located in this area.

Section 3.5.9 (landfill site): This section of the draft IIS mentions previously recorded Aboriginal sites in the landfill area but does not relay the management recommendations for them contained in the Site Survey Report. These apply to TASI 7485, 7486 and 7487. It is recommended that if disturbance to these sites cannot be avoided, the artefacts contained in these sites can be re-located by an Aboriginal Heritage Officer under permit to a culturally appropriate, alternative site.

Section 3.6.9 (water supply pipeline): The draft IIS recommends selecting a route for the proposed water supply pipeline that avoids Aboriginal sites. Three Aboriginal sites are known along the proposed pipeline route (TASI 4008, 6589 and 8473). All are to be avoided in the final route selection.

Section 3.6.9 also specifies that “Monitoring by an Aboriginal Heritage Officer will be undertaken whilst undertaking works on the section of pipeline between Coulsons and Station Creeks at Dilston”. This recommendation in the draft IIS should be amended to “Monitoring by an Aboriginal Heritage Officer and an archaeologist”. Further, “If monitoring of the initial vegetation removal is inconclusive, shovel-testing should be undertaken prior to trench excavation”. This approach requires both archaeological expertise and Aboriginal participation to prevent any undue delay in resolving any unforeseen site management issues.

Section 3.7.11 (effluent pipeline): Care is to be taken to avoid disturbance to three Aboriginal sites in the vicinity of the proposed outfall (TASI 8743, 9675 and 9942) and one at Lauriston Park (TASI 9713). To ensure that these sites are protected, access to them is to be restricted during the course of the development. Archaeological survey is still required for those parts of the proposed pipeline route that could not be accessed because of land-owner issues. The Aboriginal Heritage Office also recommends subsurface testing of the pipeline route between Four and Five Mile Bluff, a distance of ~650 m, which is also an appropriate precaution.

Section 3.8.9 (accommodation facility): No Aboriginal sites were located in this area.

5. Response to community concerns and key submissions

The results of the Site Survey Report were discussed with Colin Hughes, Manager of the TALSC, and the management recommendations in the report were developed in close consultation with him. Concerns about the report were subsequently raised by Rocky Sainty, Chairperson of the TALSC, that the survey coverage was inadequate and that other Aboriginal heritage values went unrecognized. The Site Survey Report explains that the amount of survey coverage possible is a function of the amount of ground surface

visibility available. All available exposures were examined, with a particular focus on those areas with potential to contain Aboriginal cultural material. This survey methodology accords with standard archaeological practice and resulted in the best possible coverage for the study area. Moreover, the Site Survey Report does recognize the possibility of “special places”, “areas of cultural importance” and “other landscape values”. It also stresses the significance of Aboriginal sites and the surrounding landscapes to the Aboriginal community.

Rocky Sainty further submits that the TALSC was not consulted prior to commencement of the survey and that, if we had, the survey would have been more comprehensive than that undertaken. In fact, the TALSC were consulted prior to the survey, at which time it authorized our access to the Tasmanian Aboriginal Site Index (see Section 13 of the Site Survey Report). We could not have done the survey without first consulting the TALSC and searching the TASI for sites already known in the study area. Once in the field, our survey methodology ensured a comprehensive assessment.

The Tasmanian Aboriginal Centre (TAC) submit that it should have been consulted about initial pulpmill site selection and that Aboriginal community consultation should have been wider than that described in the Site Survey Report. However, established protocols dictate that the TALSC is the Aboriginal community organization to contact with regard to cultural heritage matters and so advice was sought from them.

The TAC also claims that the survey missed thousands of sites because of a calculation I made of 1.5% for effective coverage. This figure is a measure of bare ground actually available for inspection across the total survey area. It does not mean that we only examined 1.5 % of the total survey area. Nor does it mean that only 1.5 % of the sites to be found were found. Aboriginal sites are non-random in the landscape, occurring mostly along waterways and the seafront. Usually, there is enough erosion in these areas to determine whether or not Aboriginal sites are present. When eroded (or otherwise disturbed) areas were encountered, they were given the utmost scrutiny.

The pulpmill site (Survey areas 1 and 2) had been surveyed previously for Aboriginal sites by Aboriginal Heritage Officer Vernon Graham. His survey of this area adds significantly to the amount of overall survey coverage.

Finally, the TAC’s submission that some ethnohistorical information was overlooked is acknowledged but this could hardly have changed the results of the survey. The archaeological record left by Aboriginal people, and that we recorded, did not result from the brief historical encounter described by the TAC.

6. Provisional opinion

Subject to any limitations and exclusions identified in this statement, my opinions are complete and accurate in every respect.

I am satisfied through my inquiries that the opinions I have expressed are reasonable in regard to Aboriginal sites in the study area.

7. Declaration

I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have, to my knowledge, been withheld from the Commission.

Tim Stone

Project Archaeologist

19th December, 2006

CURRICULUM VITAE

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Qualifications

1981-85 Bachelor of Arts (combined Honours) Department of Geography and Department of Prehistory and Anthropology, the Australian National University, Canberra.

Thesis: Earth Movements and Archaeology near Braidwood, N.S.W.

1991-92 Master of Science, Department of Geography, the Australian National University, Canberra.

Thesis: Origins of the Weipa Shell Mounds.

2006 Doctor of Philosophy, School of Earth Sciences, the University of Melbourne.

Thesis: Late Quaternary Rivers and Lakes of the Cadell Tilt Block region, Murray Basin, southeastern Australia.

Previous professional experience

1986-88 Consultant Archaeologist with ANUTECH Pty. Ltd., Canberra.
Consultant to Aboriginal Sacred Sites Protection Authority, Darwin.

1989 Consultant Archaeologist with National Heritage Studies Pty. Ltd., Canberra.

1993-94 Consultant Archaeologist/Geomorphologist to various agencies.

1995 Consultant to the Australian Heritage Commission, Canberra.

1995-06 Consultant Archaeologist/Geomorphologist to various agencies.

International experience

2004 Physical Cultural Resources Adviser to proposed Nam Theun 2 Dam Project, Peoples Democratic Republic of Laos.

Publications

Stone, T. (1989) Origins and environmental significance of shell and earth mounds in northern Australia. Archaeology in Oceania, 24:59-64.

Stone, T. (1991) Two birds with one Stone: a reply. Archaeology in Oceania, 26:26-28.

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Stone, T. (2004) Robust and gracile. Australasian Science, 25 (2):18-20.

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Stone, T. (1992) Unmaking the myth of the shell mound builders. Presented at the 27th International Geographical Congress, Washington D.C. (see Technical Program Abstracts).

- Stone, T. (1993) The natural origins of the Weipa shell mounds. Presented at the 1993 Australian Archaeological Association conference, Darwin.
- Stone, T. (1994) Grainsize data from sands at Halls Lane and Jembaicumbene Creek, Braidwood area. Presented at the Australasian Quaternary Association conference, Nerriga, N.S.W.
- Stone, T. (1997) Bioturbation of beach ridge sediments by the Orange-footed Megapode *Megapodius reinwardt*. Presented at the Third International Megapode Symposium, Nhill, Victoria.

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Tasmania

- Stone, T. (1997) An archaeological survey of a proposed television translator site and access track on Browns Hill near Lilydale, Tasmania. A report to the National Transmission Agency.
- Stone, T. and Stanton, S. (1998) An Aboriginal site survey of the Stony Head Training Area, northern Tasmania. A report to the Department of Defence.
- Stone, T. (2000) An archaeological survey of proposed Optus sites on Canopus Hill and Mount Herringback near Hobart, Tasmania. A report to Connell Wagner.
- Stone, T. (2000) An archaeological survey of a proposed Optus lease at the Flagstaff Lookout near St. Helens, North East Tasmania. A report to Connell Wagner.
- Stone, T. (2000) An archaeological survey of two proposed Optus leases at Richmond and Sorrell, South East Tasmania. A report to Connell Wagner.
- Stone, T. (2001) An archaeological survey of a proposed Optus lease area on Golden Hill near Cambridge, South East Tasmania. A report to Connell Wagner.
- Stone, T. (2001) Historical archaeological survey of proposed road-widening corridors at Oatlands and Woodbury, Tasmania. A report to Hydro Tasmania.
- Stone, T. (2001) Geomorphology of Lake Augusta, Central Plateau, Tasmania. A report to Hydro Tasmania.

- Stone, T. (2001) An archaeological investigation of the proposed Meander Dam inundation zone near Deloraine, northern Tasmania. A report to the Department of Primary Industries, Water and Environment, Hobart.
- Stone, T. (2001) Further archaeological investigation of the Ansons Bay Shack Settlement, Northeast Tasmania. A report to the Department of Primary Industries, Water and Environment, Hobart.
- Stone, T. (2002) Historical archaeological survey of the proposed Tamar River Diversion Fibre Optic Cable route, northern Tasmania. A report to Downer Engineering.
- Stone, T. (2002) An Aboriginal and historic site survey of the Akaroa Heights residential subdivision near St. Helens, North East Tasmania. A report to G. J. Walkem & Co. Pty. Ltd.
- Stone, T. (2002) Further archaeological investigation of TASI 8186 at Akaroa near St. Helens, North East Tasmania. A report to G. J. Walkem & Co. Pty. Ltd.
- Stone, T. (2003) Review of Aboriginal heritage procedures utilized in the dam assessment process. Stage 1 Scoping Report. A report to the Department of Primary Industries, Water and the Environment, Tasmania.
- Stone, T. and Stanton, S. (2003) An archaeological survey of Derwent Barracks near Hobart, Tasmania. A report to GHD Pty. Ltd.
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New South Wales

A total of 61 reports have been completed for projects in NSW.

Victoria

A total of 71 reports have been completed for projects in Victoria.

Northern Territory

A total of 3 reports have been completed for projects in the NT.