

Gerroa Sand Mine Extension

Aboriginal Cultural Heritage Management Plan

Report for Cleary Brothers

February 2009

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EXECUTIVE SUMMARY

This Aboriginal Cultural Heritage Management Plan (ACHMP) describes the process for the ongoing management of Aboriginal cultural heritage sites located within the Gerroa Sand Mine Extension and has been prepared to supplement the Environment Management Plan (EMP) for the project.

The Plan has been developed based on the findings of the previously prepared archaeological and cultural heritage survey assessments and sub-surface investigations at the Gerroa Sand Mine Extension.

Cleary Brothers (Bombo) Pty. Ltd have received approval from the Land and Environment Court for the extension of the Gerroa Sand Mine. This will involve the extraction of sand deposits to the north of the currently mined area (Figure 1).

The initial and subsequent archaeological investigations undertaken across the proposed sand mine extension area (Paton 1992; Barber 2002; Navin Officer 2005, 2006) identified a total of 5 Aboriginal archaeological sites within the proposed sand mine extension area.

The proposed mine extension area will impact upon these Aboriginal archaeological sites and part of an area of Aboriginal archaeological sensitivity known as Conservation Area B. It should be noted, however, that Aboriginal archaeological sensitivity Conservation Area A will be avoided entirely by the proposed works and retained as an area of conservation.

This Aboriginal Cultural Heritage Management Plan (ACHMP) describes the process for the ongoing management of recorded Aboriginal archaeological sites, and identified areas of conservation within the proposed sand mine extension area.

Through ongoing consultation, the ACHMP also details the inclusion of relevant Aboriginal stakeholders in the management of their cultural heritage, including archaeological sites and Aboriginal resources.

The ACHMP has been developed in consultation with the Jerrinja Local Aboriginal Land Council and the Department of Environment and Climate Change (DECC).

1.0 INTRODUCTION

1.1 Project Background

This Aboriginal Cultural Heritage Management Plan (ACHMP) was prepared to guide the process for the ongoing management of cultural heritage sites and places located within the proposed Gerroa Sand Mine Extension of an existing sand mining operation owned by Cleary Brothers (Bombo), south of Gerroa (Figure 1).

Since 1988, a number of archaeological assessments have been undertaken within the Cleary Brothers (Bombo) property. These investigations have identified a number of archaeological sites within the property (Colley 1988; Lance 1989, 1990; Paton 1992; Huys 1997; Barber 2001, 2002; Navin Officer 2004, 2005, 2006). Each of these investigations has been undertaken as part of ongoing environmental assessment and management processes following rulings in the Land and Environment Court.

The most recent and relevant of the archaeological and cultural heritage work has been undertaken within the current sand mine extension area (Navin Officer 2005, 2006). The current proposal will involve the extension of the current mine area to the north east of the property. The proposed area extends from Blue Angel Creek channel and the Gerroa-Nowra Road, covering an area of 800 metres in length and between 100-150 metres in width.

This report describes the rationale and methodology for the ongoing management and mitigation strategies for all Aboriginal archaeological sites and areas of Aboriginal archaeological sensitivity within the proposed Gerroa sand mine extension area.

2.0 RATIONALE FOR THE ACHMP

This Aboriginal Cultural Heritage Management Plan is intended to facilitate the implementation of the mitigation and conservation strategies by clearly setting out a process for the management of Aboriginal cultural heritage prior to, during and subsequent to the construction stages of this project. To this end, the ACHMP will be incorporated into the relevant Environmental Management Plan for the Gerroa Sand Mine Extension.

The archaeology and cultural heritage assessment undertaken initially by Paton (1992), and subsequent work completed by Navin Officer (2006), identified potential impacts to Aboriginal cultural heritage associated with the proposed sand excavation within the proposed sand mine extension area. In response to this, the cultural heritage assessments made recommendations to mitigate these impacts. These will be outlined as part of the Aboriginal Cultural Heritage Management Plan for the project.

This ACHMP seeks to implement best practice heritage management. In the first instance, this would involve the avoidance and conservation of Aboriginal archaeological sites. Where sites cannot be avoided, impact would be minimised by:

- development of management and mitigation of Aboriginal cultural heritage drawing on both information provided by the Aboriginal stakeholders and the results of the cultural and archaeological assessments. This might include excavation, salvage and relocation of cultural material.
- ensuring the direct involvement of the relevant Aboriginal stakeholder groups in the development and implementation of this ACHMP. This would be in compliance with the Interim Guidelines.
- promoting conservation of Aboriginal archaeological sites and cultural heritage at all times.

The ACHMP seeks to allow Cleary Brothers (Bombo) Pty Ltd to meet its obligations and requirements whilst working in partnership with the Jerrinja Local Aboriginal Land Council to manage and promote the Aboriginal cultural heritage values of the area.

3.0 LEGISLATIVE FRAMEWORK

3.1 The Minister's Part 3A Approval and the Statement of Commitments

Approval for the proposed Gerroa Sand Mine Extension Area was given by the Land and Environment Court on 2 September 2008 under Section 75J Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Condition 29 of the Courts Approval requires Aboriginal site conservation of Area A, and Condition 30 of the Courts Approval requires the preparation of an Aboriginal Heritage Management Plan.

Condition 29 of the Courts Approval requires that:

29. The proponent shall protect and conserve Area A, as described in the EA (and shown on the plan in Appendix 8), to the satisfaction of the Director-General.

Condition 30 of the Courts Approval requires that:

30. The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must:

- be submitted to the Director-General within 3 months of the date of this approval and prior to disturbance of any identified Aboriginal object;
- be prepared in consultation with the DECC and relevant Aboriginal communities; and

include a:

- description of the measures that would be implemented to protect Area A and that part of Area B proposed to be conserved, as described in the EA (and shown on the plan in Appendix 8);
- description of the measures that would be implemented for the mapping and salvage or relocation of the archaeological relics in the site including the shell midden deposit situated at the South Western corner of the extraction area (and shown on the plan in Appendix 8).
- description of the measures that would be implemented if any new Aboriginal objects or relics are discovered during the project; and
- protocol for the ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.

This ACHMP has been prepared in satisfaction of Condition 29 and 30 of the Courts Approval and Statement of Commitments No. 10 and 11.

These commitments are stated as follows:

10. Protect from disturbance Area A (shown on the figure in Appendix 8), of significance for potential Aboriginal relics;
11. Arrange for targeted salvage excavations for Aboriginal artefacts to take place as recommended by Navin Officer and to include the shell midden deposit situated at the South Western corner of the extraction area prior to mining occurring in the nominated locations (shown on the figure in Appendix 8);

4.0 CONSULTATION

4.1 Overview of Aboriginal Community Consultation

Consultation for this project has been undertaken with the identified stakeholders including representative members of the Jerrinja Local Aboriginal Land Council. Aboriginal representatives have been involved in the archaeological and cultural heritage work for the Cleary Brothers (Bombo) sand mine for the past 16 years.

No additional Aboriginal community groups beyond the Jerrinja Local Aboriginal Land Council have been involved in the consultation / assessment process of the subject land, as the land council represents all known traditional owners or interested parties in this region.

Consultation for this ACHMP document has been undertaken with the relevant representatives from the Jerrinja Local Aboriginal Land Council.

Discussions regarding the proposed salvage and relocation methodology (see Section 7.0 below), and a Care and Control Agreement have taken place with the Administrator and Elders from the Jerrinja Local Aboriginal Land Council regarding any cultural material recovered during the sub-surface investigation program. A copy of correspondence received from the Jerrinja Local Aboriginal Land Council is attached in Appendix 1 of this report.

4.2 ACHMP Consultation Framework

As part of the Aboriginal Cultural Heritage Management Plan, consultation with identified Aboriginal stakeholders with regard to managing archaeological sites and cultural heritage values within the proposed Gerroa sand mine extension will be ongoing. It will continue to do so in respect to the following:

- Identified Aboriginal community stakeholder groups to be consulted include the Jerrinja Local Aboriginal Land Council.
- Representatives of the Aboriginal community will be invited to participate in any active management of archaeological sites and objects, including consultation, salvage excavation and relocation.
- Representatives of the Aboriginal community groups will be invited to participate in any active management of other materials of traditional significance.
- Aboriginal community groups will be consulted regarding maintaining cultural values within the Gerroa sand mine extension landscape.
- Systematic review of this Aboriginal Cultural Heritage Management Plan will be performed with the local Aboriginal stakeholder groups.

5.0 ABORIGINAL ARCHAEOLOGICAL CONTEXT

5.1 Previous Archaeological Investigations

The following Table summarises the archaeological studies that have been undertaken within the sand mine property (Table 1). These assessments have involved archaeological survey of proposed sand mining across the property, including surface survey and archaeological sub-surface investigations. This work has resulted in the identification of 8 Aboriginal archaeological sites and the re-assessment of a number of previously recorded sites.

Table 1: Previously completed archaeological assessments for the Gerroa Sand Mine Property.

Author	Year	Findings
Colley, S.	1988	No Aboriginal sites, recommendations made for further archaeological investigation
Lance, A.	1989	Undertook archaeological survey of the sand mine area and completed subsequent sub-surface investigation using an auger. Shell midden deposits were dominant, comprising pipi shell at a depth of 20cm. Archaeological sites identified during the study, however, were deemed to be of low significance.
Paton, R.	1992	Due to objections to Lance (1989) assessment of site significance, further archaeological assessment and sub-surface investigation across the sand mine property. A total of 31 midden sites were identified within the sand mining area. Paton (1992) identified 2 areas of conservation to be excluded from the proposed sand extraction.
Lee	1996	Completed detailed analysis of material recovered from Paton (1992) excavations. The results concluded that the Aboriginal archaeological sites within the sand mine area were used/visited periodically.
Huys, S	1997	Reassessed the sand mining area for ongoing management purposes. Although some sections within the mine area no longer contained archaeological material, a number of other areas remained intact.
Barber, M	2000	Focussed reassessment of some sections of the sand mine area and the two identified areas of conservation. In addition, a new area proposed for mining was surveyed, resulting in the identification of one new Aboriginal archaeological site. Sub-surface investigations of the new area were recommended.
Barber, M	2002	Subsequently, archaeological sub-surface investigations were undertaken. Only 20 of the 220 auger holes excavated contained archaeological or cultural material.
Navin Officer	2004	A monitoring program of the new mining area was then undertaken. This involved monitoring and inspection of topsoil stripping across the area. Only a small number of stone artefacts were recovered.
Navin Officer	2004	Undertook an archaeological assessment of a proposed golf course that encompassed part of the sand mine property and part of the drained Foys Swamp area. The assessment identified one new Aboriginal archaeological site near Blue Angle Creek.
Navin Officer	2005	Conducted an archaeological assessment of the proposed Gerroa Sand Mine Extension area. The surface survey of the area identified one new Aboriginal archaeological site (52-2-0452) and a number of surface expressions of shell midden material. Those areas that remain undisturbed were considered to be of moderate to high archaeological significance, including precisely identified conservations areas A and B. Further archaeological investigations were recommended.
Navin Officer	2006	Completed an Aboriginal archaeological subsurface testing program of areas of identified Aboriginal archaeological potential, to determine the presence and extent of cultural material. The excavations resulted in the identification of 5 areas that contained cultural material, comprising pieces of shell and stone tools. It was recommended that these areas are salvaged excavated prior to the commencement of sand extraction.

5.2 Aboriginal Archaeological Sites

A number of Aboriginal archaeological sites have been previously recorded within the Gerroa Sand Mine as a result of surface survey and sub-surface investigations (Figure 2 and 3). Four of these identified sites have been registered on the DECC AHIMS (Table 2). Within the extension area, 5 separate areas have revealed stone artefact material as a result of sub-surface investigations (Figure 4). These five areas will be the focus of the salvage excavations under this Aboriginal Cultural Heritage Management Plan.

Site Number	Name	Content	Location
52-5-0259	Brickies Pit Site	The site consists of at least 15 discrete midden heaps and small clusters of shell material.	The site is located on the margin of a small swamp near Blue Angle Creek. The area has since been extracted and a s90 to Destroy was issued by DECC
52-5-0261	Gerroa	This site comprises a small scatter of stone artefacts and shell	The site occurs across the southern end of a beach sand ridge covering an area approximately 60 x 40 m. The area has since been extracted and a s90 to Destroy was issued by DECC
52-5-0415	CB 2	This site comprises one grey silcrete flake and a number of shell fragments spread across a 40 x 40 m area	Situated below the crest of a sand dune at the southern end of the Gerroa Sand Mine site. The area has since been extracted and a s90 to Destroy was issued by DECC
52-5-0452	Cleary Bros 3	The site comprises scattered shell midden and a small number of stone artefacts	The site is located on the crest of a small dune adjacent to Blue Angle Creek, covering a large area of 700 x 100 m. The area has since been extracted and a s90 to Destroy was issued by DECC
Unregistered	CB Sand Extension 1	Consists of a small number of stone artefacts and associated shell material	The site is situated on the crest of a sand dune
Unregistered	CB Sand Extension 2	Consists of a small number of stone artefacts and associated shell material	The site is situated on the crest of a sand dune
Unregistered	CB Sand Extension 3	Consists of a small number of stone artefacts and associated shell material	The site is situated on the crest of a sand dune
Unregistered	CB Sand Extension 4	Consists of a small number of stone artefacts and associated shell material	The site is situated on the crest of a sand dune
Unregistered	CB Sand Extension 5	Consists of a small number of stone artefacts and associated shell material	The site is situated on the crest of a sand dune
Unregistered	Shell Midden Deposit	Small concentration of shell material	The site is situated on the edge of Conservation Area A in bushland

Table 2: Identified Aboriginal archaeological sites situated within the Gerroa Sand Mine.

6.0 CONSERVATION AND MANAGEMENT

6.1 Heritage Management Principles

Cultural heritage and archaeological sites management often involves mitigation through the salvage of features or artefacts and retrieval of information through excavation or collection, and interpretation. Within the proposed Gerroa sand mine extension area two basic levels of management options are available for the Aboriginal archaeological sites that will be impacted. In order of preference these are:

- Conservation through avoidance, and preservation through ongoing management;
- Destruction mitigated by salvage excavation and interpretation

All management strategies have been formulated in consultation with the Jerrinja Local Aboriginal Land Council.

Cleary Brothers (Bombo) have attempted, where practicable, to avoid impacts to Aboriginal archaeological sites and the two identified areas of Conservation (A and B), through changes to the boundaries of the proposed sand mine extension area.

However, in some instances, avoiding or minimising impacts to archaeological sites may not be possible, due to nature of the sand mining process. Implementation of appropriate mitigation measures if required, including procedures for detailed site recording, collection of cultural material, excavation of cultural deposits, monitoring of initial ground disturbance works and relocation of cultural material. As part of this process, detailed documentation of sites prior to the commencement of any proposed impacts will be undertaken. This work would be undertaken in conjunction with an archaeologist and the relevant Aboriginal stakeholder groups.

7.0 SALVAGE EXCAVATION, RELOCATION METHODS AND PROTOCOLS FOR ACHMP

The archaeological methodology proposed below has been devised in light of the landform attributes, the results of the archaeological survey, and archaeological excavations that have been undertaken within the Gerroa Sand Mine property. This has been undertaken in consultation with the relevant Aboriginal stakeholders.

7.1.1 Conservation of known areas of sensitivity containing cultural material

All of identified Conservation Area A and part of identified Conservation Area B will remain undisturbed and be avoided by the proposed sand mining operations.

These areas will be fenced prior to the commencement of any ground disturbance works to remain undisturbed for the life of the Gerroa Sand Mine. These areas may be considered suitable location or 'keeping place' to which excavation cultural material can be relocated.

7.1.2 Salvage Excavation of Cultural Material and Potential Archaeological Deposits

Conservation principals supporting the excavation of archaeological and cultural material seek to undertake the archaeological salvage excavation within the boundary of the sand mine property only. The excavation of the archaeological cultural material will involve using controlled salvage excavation of pits. This method is outlined below:

Salvage Pits

The controlled excavation of salvage pits will be undertaken at recorded Aboriginal sites and areas of identified cultural material, including midden deposits that have been identified for possible relocation. The salvage pits will be completed to determine the entirety of the remaining cultural material associated with each site or areas of sensitivity. This will involve the excavation of 1 m x 1 m pits at the identified areas of interest.

The following excavation methods will be used for salvage pits:

- Each salvage pit will be excavated using spades and trowels following the identified stratigraphy.
- The soil from each stratigraphic layer will be dry sieved in nested 10 mm and 5 mm sieves and all artefacts collected, bagged and clearly labelled.
- For each salvage pit that is excavated, the following documentation will be made:
 - Unique pit identification number;
 - Soil colour and texture;
 - Amount and location of artefacts within deposit;
 - Nature of disturbance if present;

- Stratigraphy;
- Archaeological features (if present);
- Photographic records; and
- Spit records.

For safety reasons all excavated pits will be backfilled with sieved spoil at the end of the excavation to ensure a level surface within the study area.

All excavated salvage pits will be mapped, along with the extent of any additional cultural material identified as a result of this archaeological work.

If artefact density exceeds 10 artefacts in a single pit, or if distinct archaeological features are present, adjacent pits will be placed to complete the salvage of this site.

7.1.3 Collection and Relocation of Identified Aboriginal Objects

The Aboriginal Objects shall be collected using the following methodology:

- each site will be photographed, its location recorded using GPS and additional information recorded as appropriate;
- the Archaeologist and relevant Aboriginal stakeholders will collect the surface Aboriginal Objects from each site to be impacted;
- the collected Aboriginal Objects will be bagged and temporarily stored in a locked cabinet located at Biosis Research offices in Wollongong;
- upon completion of archaeological works under this ACHMP, the Archaeologist will analyse (see methodology outlined below) the Aboriginal Objects as part of the requirements for this ACHMP;
- following completion of the reporting requirements, collected Aboriginal Objects will be relocated to an appropriate location on-site – generally within close proximity to the original location. New co-ordinates for the relocated material will be taken using a hand-held GPS and the information gathered will be used to update the existing AHIMS Site Cards and resubmitted to DECC.

7.1.4 Topsoil Stripping - Procedure for previously undiscovered Aboriginal Objects

If in the course of construction of topsoil and surface sand stripping an Aboriginal Object is discovered, the following will occur:

- all works within the immediate vicinity should cease until the Aboriginal Object(s) can be assessed and collected for further analysis;

- the extent and significance of the Aboriginal Object(s) will be assessed and recorded. Immediately after collection, stripping may then continue;
- the Aboriginal Object(s) will be relocated, following analysis by a qualified archaeologist, to an appropriate location at the completion of works.

Aboriginal Objects considered to be culturally significant should be assessed by an archaeologist and the cultural values determined by the Aboriginal stakeholder groups.

Should any of these Aboriginal Object(s) be deemed culturally significant, then further investigation with a qualified archaeologist should be undertaken to determine the need for further archaeological investigation. If the Aboriginal Object(s) are not regarded to be significant, these will be collected for analysis, and relocated accordingly.

7.1.5 Discovery of Human Remains

If during the course of construction works Human Remains are uncovered, the following procedure should be followed:

- inform Cleary Brother (Bombo) of the find and cease all works within the vicinity of the remains. Do not further disturb or remove any of the remains.
- inform the Local Police and DECC.
- if the remains are determined to be Aboriginal, then following DECC advice the traditional owners should be informed of their discovery. Detailed excavation of the skeletal remains and any associated Aboriginal Objects should be undertaken by a suitably qualified archaeological or physical anthropologist with the required experience and expertise for Aboriginal remains.
- The repatriation of the remains should then be left up to the Aboriginal stakeholders who will determine a suitable location nearby. It would be preferable if such remains could be repatriated to within the identified areas of Conservation.

7.1.6 Analysis of Aboriginal Objects

Any artefacts recovered from the procedures described above will be collected and analysed. The analysis will be designed to describe stone tool technology and typology. A comparison of findings with other archaeological findings that have been recovered within the mine area will also be carried out. Dependent on assemblage size the analysis will also attempt to expand and refine regional descriptions and predictive modelling. This will also naturally allow the analysis to provide information on the types of activities undertaken in the past within the study area. The analysis will include details of stone type, manufacturing techniques and varieties of tool types. As there has previously been only limited archaeological work in the region, this will enable a baseline reference for comparison against future excavations in the region.

Consultation with Jerrinja Local Aboriginal Land Council is currently being undertaken to determine an appropriate Care Agreement for relocation or storage of any artefacts recovered after the completion of the works.

Based on recent discussions with the Jerrinja Local Aboriginal Land Council, protected Conservation Area A may be used as an area for the relocation of cultural material.

7.2 Contingency Triggers and Management Responses

All contingent management strategies will be developed in consultation with the identified Aboriginal communities, Cleary Brothers and DECC.

Management strategies will be implemented in accordance with current conservation practice and the conservation principles contained within the Australia International Council on Monuments and Sites (ICOMOS) *Burra Charter*, and the NSW DECC *Guidelines for Aboriginal Heritage Impact Assessment* (Draft) and the *Aboriginal Cultural Heritage Standards and Guidelines Kit*. The advice of the identified Aboriginal communities regarding appropriate management methodologies will form an integral part of the development of the management strategies.

7.3 Reporting

Reports will be prepared subsequent to the completion of salvaged excavations and ongoing monitoring. The following reports will be produced in consultation with the identified Aboriginal communities and submitted to DECC:

- Report of findings of the comprehensive salvage excavation works;
- Report documenting salvage excavation findings and cultural material analysis;

The reports will include site and impact specific recommendations for management.

8.0 PROCESS REVIEW AND DOCUMENTATION

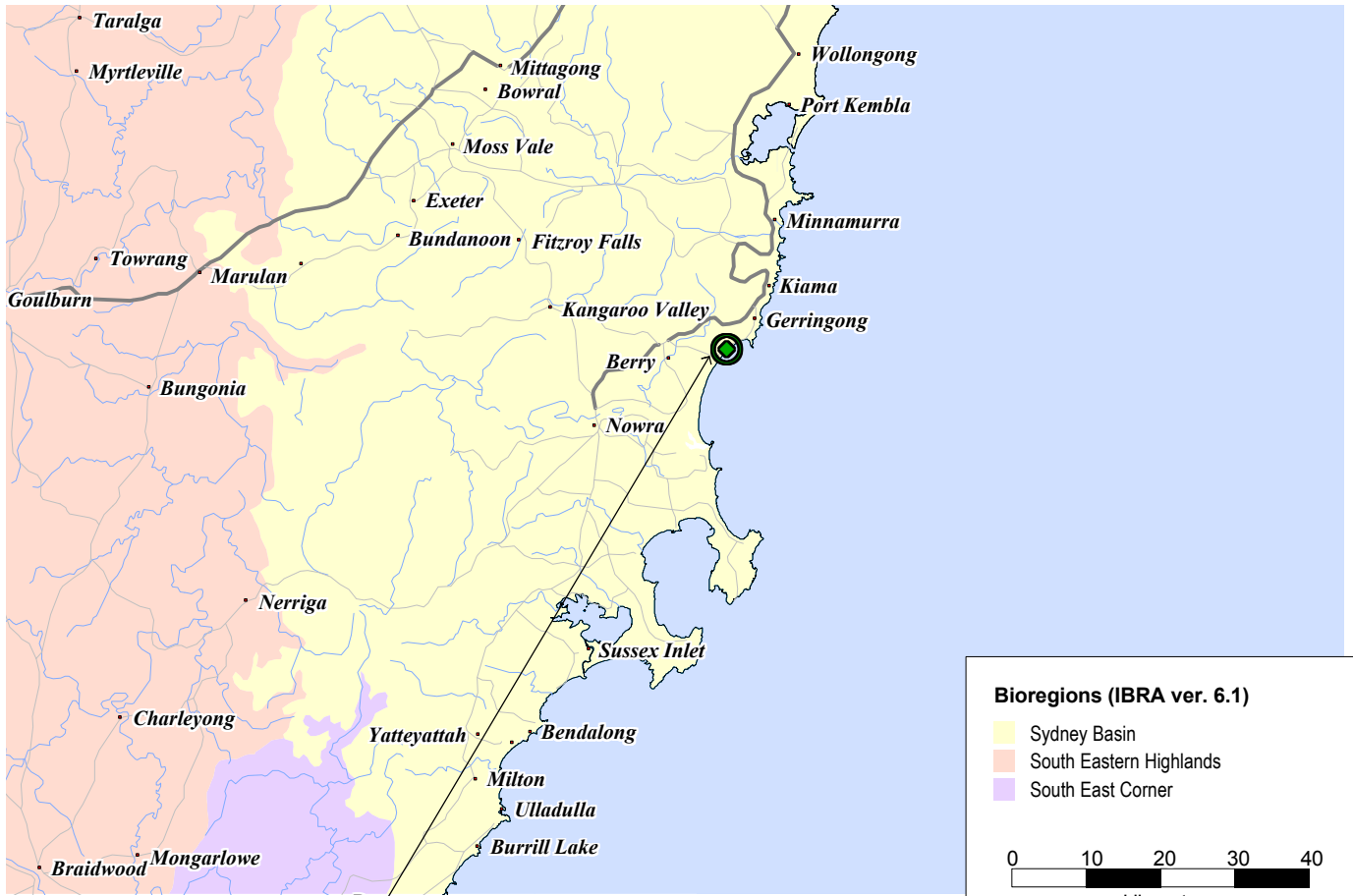
This ACHMP will be reviewed:

- In conjunction with the Environmental Management Plan;
- At anytime with the mutual agreement of the Jerrinja Local Aboriginal Land Council and Cleary Brothers (Bombo).

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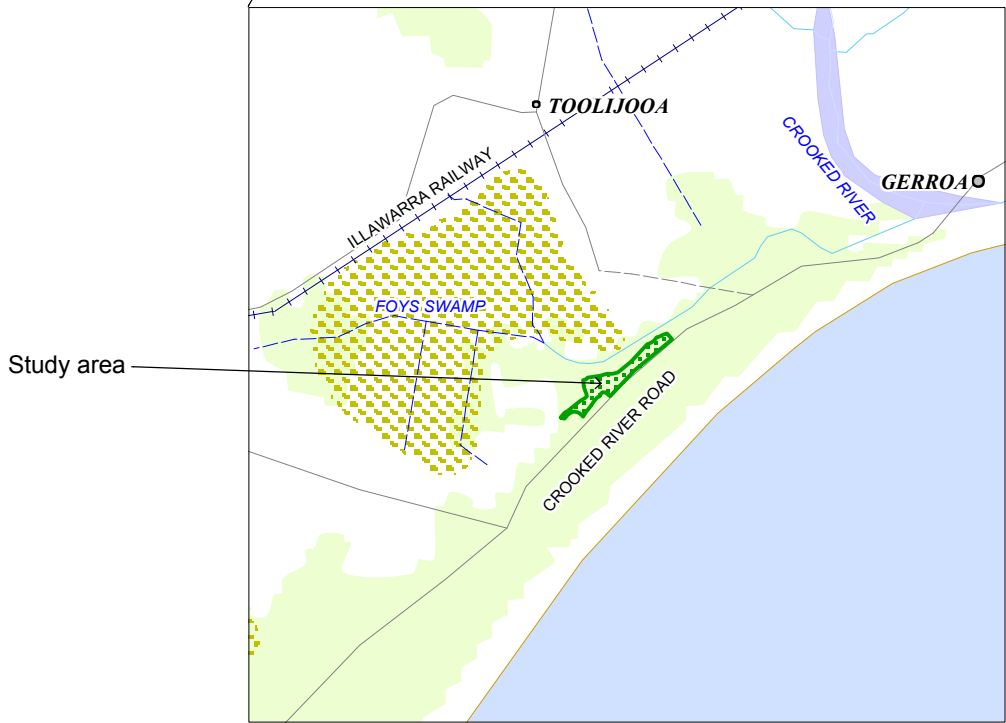
FIGURES



Bioregions (IBRA ver. 6.1)

- Sydney Basin
- South Eastern Highlands
- South East Corner

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kilometres



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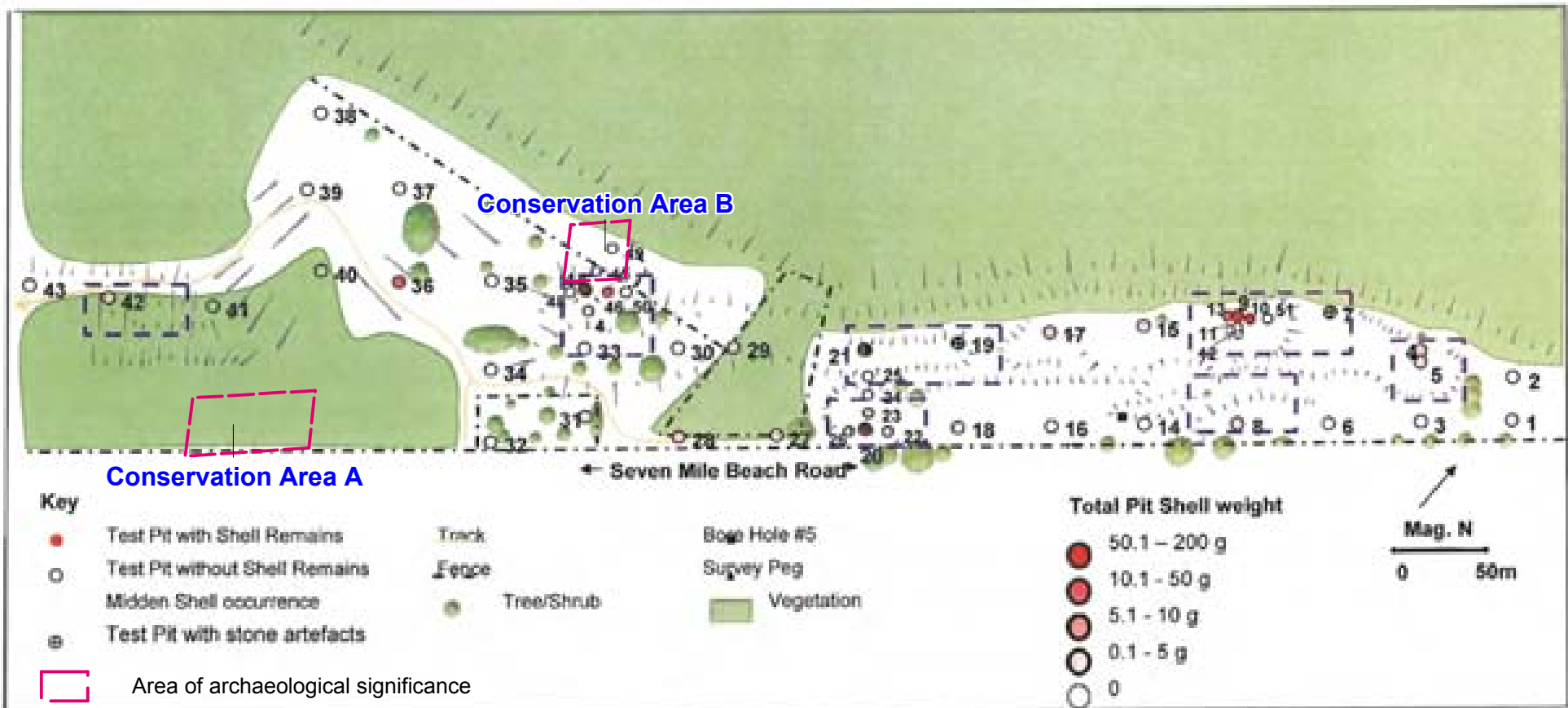
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WOLLONGONG
NEW SOUTH WALES 2500

Figure 1: Location of the Study Area in a regional context.

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Scale:
0 0.5 1.0 1.5 2.0
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Acknowledgement:
 Navin Officer Heritage Consultants
 October 2006



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 NEW SOUTH WALES 2500

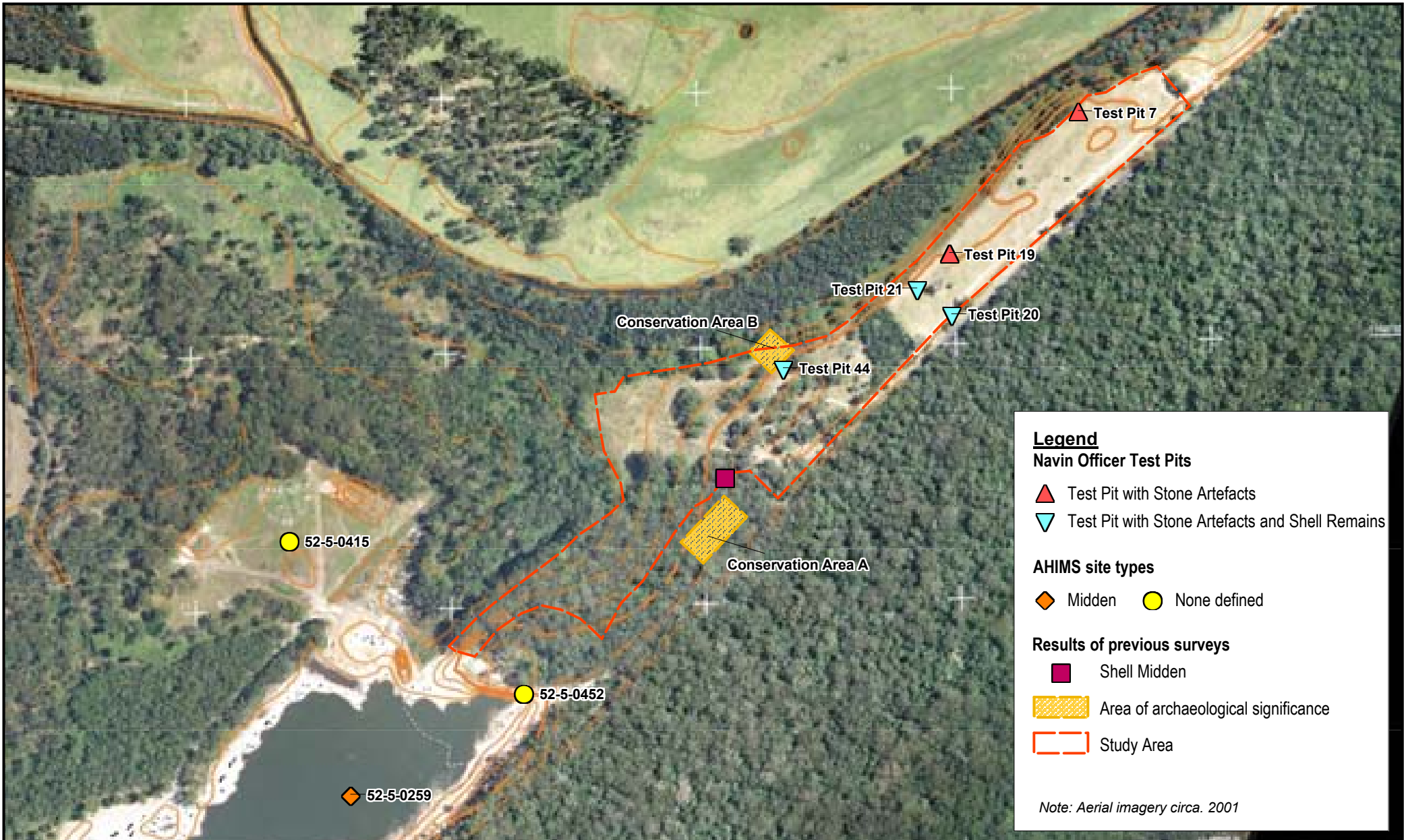

Figure 2: Test pits conducted by Navin Officer

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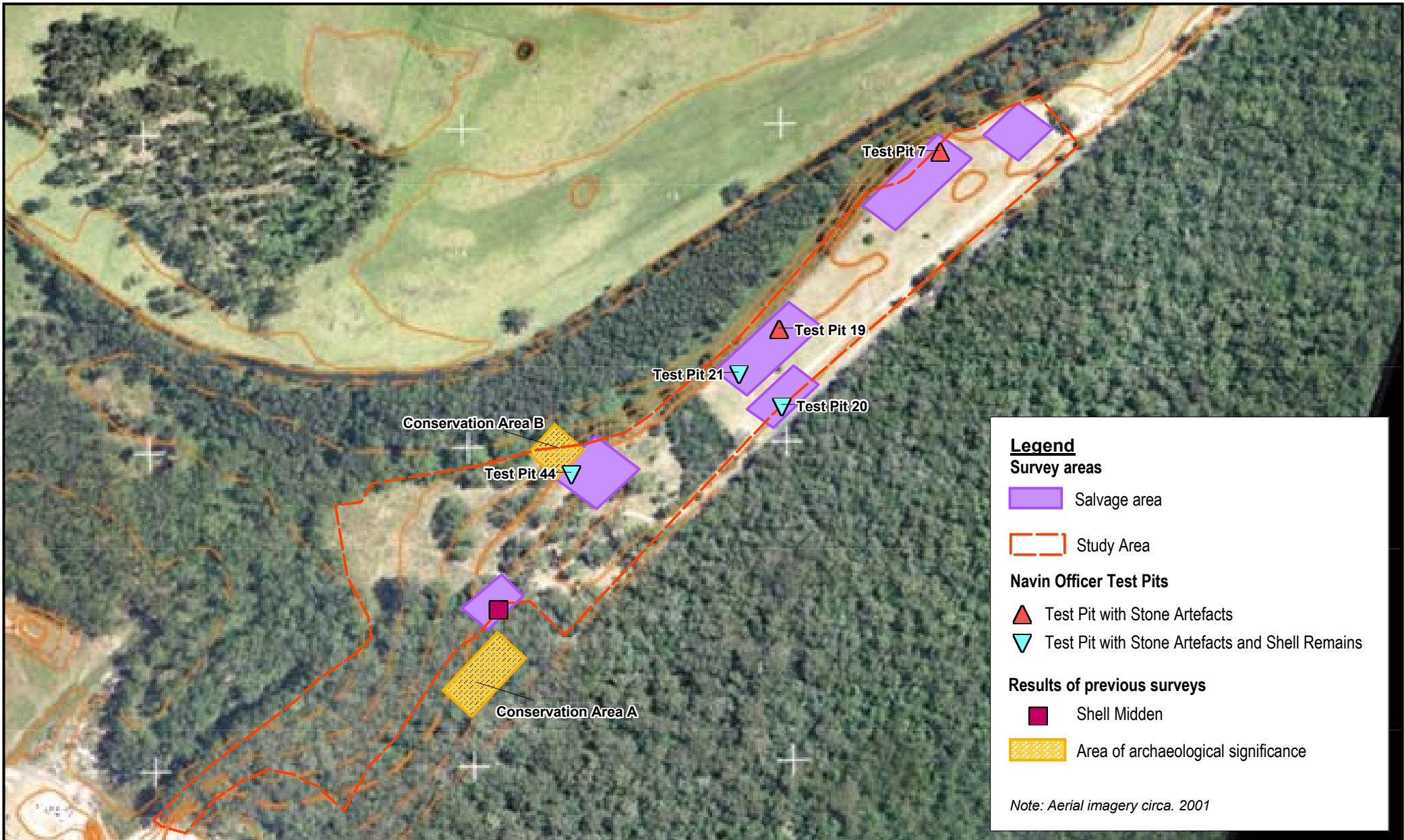
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 NEW SOUTH WALES 2500

Figure 3: Previously recorded Aboriginal archaeological sites and test pits that contained Aboriginal cultural material

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Scale: 0 50 100 150 200 250 metres





APPENDICIES

APPENDIX 1

ABORIGINAL COMMUNITY COMMENTS



Jerrinja Local Aboriginal Land Council
PO Box 167
Culburra Beach NSW 2540
January 29, 2009

Melanie Thomson
Biosis Research Pty Limited
8 Tate St
Wollongong BSW 2500

Dear Mel

RE: Gerroa Sand Mine ACHMP

Thank you for the opportunity to review the Gerroa Sand Mine ACHMP.

We have no specific comments to make on the document at this time..

We would however ask that our site officers continue to be involved as early as possible in any site works to ensure that heritage and culturally significant material is recognised, identified and preserved in the best possible manner.

Yours truly,

Louise Tucker

CEO

Jerrinja Local Aboriginal Land Council