



REPORT

PHASE 1 HERITAGE AND ARCHAEOLOGICAL IMPACT ASSESSMENT

PROPOSED ESTABLISHMENT OF AN ACCESS ROAD BETWEEN SAPEKOE DRIVE AND KOEDOE STREET, ERF 3366 (EXTENSION 22) AND REMAINDER OF ERF 430 (EXTENSION 4)

PREPARED FOR

AGES ENVIRONMENTAL DIVISION

c/o Mr Bennie Pretorius

Email: bpretorius@ages-group.com

Tel: 015 291 1577

Fax: 015 291 1577

Cell: 083 644 9957

PO Box 2526

Polokwane

0700

28 July 2008

Contact Details

Tel: 012 420 5169

Cel: 072 288 5496

Fax: 086 618 3744

Email: johan.archaic@up.ac.za

www.archaic.za.net

Postal Address

Department of Anthropology & Archaeology

University of Pretoria

Lynnwood Road

Pretoria

0002

Members: Johan Nel & Gerard de Kamper

Company Registration No.: CK 1999-019984-23

Company Income Tax No.: 9451097647

VAT Registration Number: 4350228880

Project type	Phase 1 Heritage Impact Assessment		
Authors	Johan Nel - Archaic HPM		
Project code	ARC2008/04		
Project name	Proposed establishment of Access Road, Tzaneen		
Report type	Final Consolidated Report		
Project duration	25-28 July 2008		
Report date	28 July 2008		
Client	AGES Environmental Division c/o Mr Bennie Pretorius Tel: 015 291 1577 Fax: 015 291 1577 Cell: 083 644 9957 Email: bpretorius@ages-group.com PO Box 2526 Polokwane 0700		
Province:	Limpopo		
Magisterial district:	Tzaneen		
1: 50 000 Map number (or SAN chart):	2330 Tzaneen 3 rd edition (2002)		
Latitude and Longitude:	S23.83254 E30.16813		
Address and/or Erven:	Sapekoe Drive & Koedoe Street, Erf 3366 (Extension 22) & remainder of Erf 430 (Extension 4)		
Town/Nearest Town:	Tzaneen		
	Name	Date	Comments (attach separate sheet if necessary)
Reviewed:			

Copyright in terms of the copyright Act of 1978, as amended, is claimed in respect of the design, format and content of this report, and action will be taken in the event of any unauthorized use, duplication, imitation or adaptation hereof.

Proposals/Reports provided by Archaic Heritage Project Management, will remain the property of author, when work is not commissioned and shall not be revealed to any third party.

EXECUTIVE SUMMARY

Purpose

Africa Geo-Environment Services (AGES) have been appointed to undertake an Environmental Impact Assessment on locations that may be impacted on and affected by the proposed establishment of an access route. The proposed access route is situated between two erven within the Greater Tzaneen Local Municipal area Erf 3366 (Extension 22) & remainder of Erf 430 (Extension 4) Sapekoe Drive & Koedoe Street.

Archaic HPM has been approached by AGES to submit a proposal and quotation for a Phase 1 Heritage and Archaeological Impact Assessment on the affected locations.

Findings

The HIA identified did not identify any visible heritage resources. The survey area consisted of an urbanised, landscaped environment between two major roads. A minor tributary of the Greater Letaba River borders the survey area to the west, with the Letaba River to the north, across Koedoe Street.

Recommendations

Due to the nature of the proposed impact site, i.e. an urbanised, landscaped and generally disturbed site, it is recommended that AGES apply to the relevant authorities for a Letter of Recommendation for Exemption.

AGES should undertake to implement site monitoring or a watching brief during the initial stages of ground breaking and excavation in the event of unknown and/or subsurface heritage resources are found. These may include artefacts, features, objects and graves related to Early and Later Farmer settlement of the area, as well as Stone Age artefacts associated with the river courses.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
INTRODUCTION	1
TERMS OF REFERENCE, WORKING BRIEF & LEGAL REQUIREMENTS	3
AIM OF STUDY & SCOPE OF WORK	3
WAIVER OF LIABILITY & LIMITATIONS	4
SURVEY RESULTS	4
1. <i>Geographical description and location</i>	5
2. <i>Methodology - Pedestrian survey</i>	5
3. <i>Field ratings and site significance</i>	8
RECOMMENDATIONS & CONCLUSION	8
ADDENDUM A	9
	10

INTRODUCTION

WHO WE ARE

Archaic HPM is private company that manages the Archaeological Contracts Office for the Department of Anthropology and Archaeology, University of Pretoria. We specialise in the management of heritage projects in southern Africa and beyond. Our expertise includes the generation of desktop surveys, scoping surveys, Phase 1 Archaeological Impact Assessments and/or Specialist reports, Phase 2 Mitigation of archaeological and/or heritage sites, and Phase 3 Site Management Plans. We also conduct Social Impact Assessments.

The parameters within which Archaic HPM operates are provided by the National Heritage Resources Act 25 of 1999 (NHRA) and associated minimum standards provided by the South African Heritage Resources Agency (SAHRA). Further, we comply with the code of ethics and standards of the Association of Southern African Professional Archaeologists (ASAPA). Complementary national and provincial legislation such as the National Environmental Management Act No. 107 of 1998 (NEMA), the Environment Conservation Act No. 73 of 1989 (ECA), and Environmental Management Plans (EMPs) form key components of every project we undertake.

Archaic HPM's management of the University of Pretoria's Archaeological Contracts Office creates a unique environment within which heritage resources management may be undertaken. The Contracts Office has access to professional staff who may assist with projects. In addition, as part of our commitment to the training of young heritage practitioners, a percentage of all project turnover is allocated to a Research and Development Fund that enables the Department of Anthropology and Archaeology to assist students and staff in their studies, research and professional growth.

OUR HISTORY

Archaic's ancestry dates back to 2003 when Johan Nel started using that name during contracts and research projects undertaken as an Archaeology undergraduate student. *Archaic* means that which is old, ancient and belonging to or characteristic of a much earlier period, and the name has stayed with Johan and the company ever since. Archaic Heritage Project Management was officially founded in August 2005 by partners Johan Nel and Gerard de Kamper as a heritage resource management concern that caters to the wider needs of heritage professionals in South Africa. Since February 2007, Archaic HPM manages the Archaeological Contracts Office for the Department of Anthropology & Archaeology, University of Pretoria (UP).

OUR BUSINESS

The principle business interest of Archaic HPM is the assessment and management of projects that impact on or concern southern African heritage resources. Heritage, in all its various forms, constitutes a complex and vital part of the past, present and future. Thus the professional management, conservation and preservation thereof are of the utmost importance. Archaic HPM aims to promote South Africa's heritage (natural, cultural, and 'intangible') through undertaking heritage projects. These

projects include: legally required actions such as environmental and heritage impact assessments (EIA's and HIA's), curation, collections management, identifying, recording and documenting intangible, historical and archaeological heritage and related field activities.

Further aims are to involve local and affected communities as far as possible, teaching and training them in the importance of heritage, as well as learning from them. This is achieved partly through the dissemination of knowledge via the commercial and academic media. Archaic HPM endeavours to publish our projects and research findings and provide access to information at little or no cost for *bona fide* researchers, students, and schools. Student training forms a large part of the Archaic HPM's focus and students from UP and beyond are regularly used in projects to expose them to available work opportunities and experience within the heritage and cultural resource management field. Through the Research and Development Fund, these students have further opportunities to further their studies, qualifications and professional growth.

Archaic provides competitive and professional service of the highest standards and quality. We aim to achieve service excellence through the punctual submission of comprehensive and comprehensible reports and by operating within allocated budgets. As project managers, we utilise the best consultants and resources available to ensure that our detailed and well-researched projects meet the expectations of our clients and relevant authorities.

TERMS OF REFERENCE, WORKING BRIEF & LEGAL REQUIREMENTS

TERMS OF REFERENCE & WORKING BRIEF

Africa Geo-Environment Services (AGES) have been appointed to undertake an Environmental Impact Assessment on these locations that will be impacted on and affected by the proposed establishment of an access route between two erven within the Greater Tzaneen Local Municipal area.

Archaic HPM has been approached by AGES to submit a proposal and quotation for a Phase 1 Heritage and Archaeological Impact Assessment on the affected locations.

The Terms of Reference (TOR) for the proposed project was drawn from the *Background Document for the proposed establishment of an access road between Sapekoe Drive and Koedoe Street on Erf 3366 (Extension 22) and the Remainder of Erf 430 (Extension 4) in Tzaneen* supplied by Mr Bennie Pretorius (AGES Environmental Division) to Archaic HPM on 18 July 2008. Further TOR were supplied in email and telephonic communications between Mr Pretorius and Archaic HPM.

The Terms of Reference included:

- A comprehensive and detailed site survey of the proposed access road, estimated at 8-12 meters in width and 280 meters in length;
- A further site survey of the two erven adjoining the proposed road (Erf 3366 and Remainder of Erf 430);
- Impact on the construction of the access road on possible heritage resources;
- Impact of storm water during construction and operation on possible heritage resources;
- Impact of borrow pit that will be used to obtain gravel for the construction of the road;
- Management and mitigation measures of possible heritage resources

LEGAL REQUIREMENTS

Additional TOR that Archaic HPM binds itself to include all relevant legislation and Minimum Standards for archaeological components of Impact Assessment reports as set by the South African Heritage Resources Agency (SAHRA). Specific references are made to the following:

- National Heritage Resources Act No. 25 of 1999 (NHRA), with specific reference to Section 32;
- National Heritage Resources Act No. 25 of 1999 (NHRA), with specific reference to Section 35;
- National Heritage Resources Act No. 25 of 1999 (NHRA), with specific reference to Section 36;
- National Heritage Resources Act No. 25 of 1999 (NHRA), with specific reference to Section 38;
- Environmental Conservation Act No. 73 of 1989 (ECA);
- National Environment Management Act No. 107 of 1998 (NEMA);
- List of Activities and Regulation for Environmental Impact Assessments (EIA), Government Notice Nos. R385, R386 and 387;

AIM OF STUDY & SCOPE OF WORK

- Recording, documentation and rating of known heritage and archaeological sites according to SAHRA minimum standards;
- Survey of affected areas to identify any other heritage resources;
- Recording of any heritage resources identified.

The TOR and Working Brief were interpreted and inferred at the hand of the communication between Mr Pretorius and Archaic HPM, as well as the additional requirements as outlined above. These interpretations were used to prepare a Scope of Work and timeframes that included the following:

- A baseline study of previous heritage and/or archaeological research and contract work undertaken in the area;
- A pedestrian survey of the affected areas that identified possible heritage resources and assessed the impact that the proposed development may have on such resources;
- Compilation of a consolidated report, which include:
 - Identification of specialist studies where necessary
 - Recommendations

WAVER OF LIABILITY & LIMITATIONS

The proposed impact area was easily surveyed, as the terrain was altered by urban development and landscaping. However, due to the aforementioned fact, no surface evidence of any heritage resources was visible. The obvious fact that many (indeed most) heritage resources lie buried below ground, must be taken into account. Archaic does not accept any responsibility for the discovery of any heritage resources (including graves or burials) that may be inadvertently made during excavations or other activities by the client or other persons.

All work is undertaken under mandate of the National Heritage Resources Act 25 of 1999, SAHRA minimum standards and the constitution and code of ethics of the Association of Southern African Professional Archaeologists (ASAPA).

Archaic HPM and persons contracted by Archaic HPM cannot be held responsible for exposure of any subsurface heritage resources, including graves and burials, exposed during intrusive construction and development activities.

Notwithstanding Archaic HPM's attempts at a detailed and comprehensive assessment of the affected areas, the heritage resources identified during the study do not necessarily represent the total resources in the area. Several reasons exists which may lead to heritage resources remaining unidentified: subsurface resources, dense vegetation, dangerous ascents/descents.

Absence of evidence is not evidence of absence.

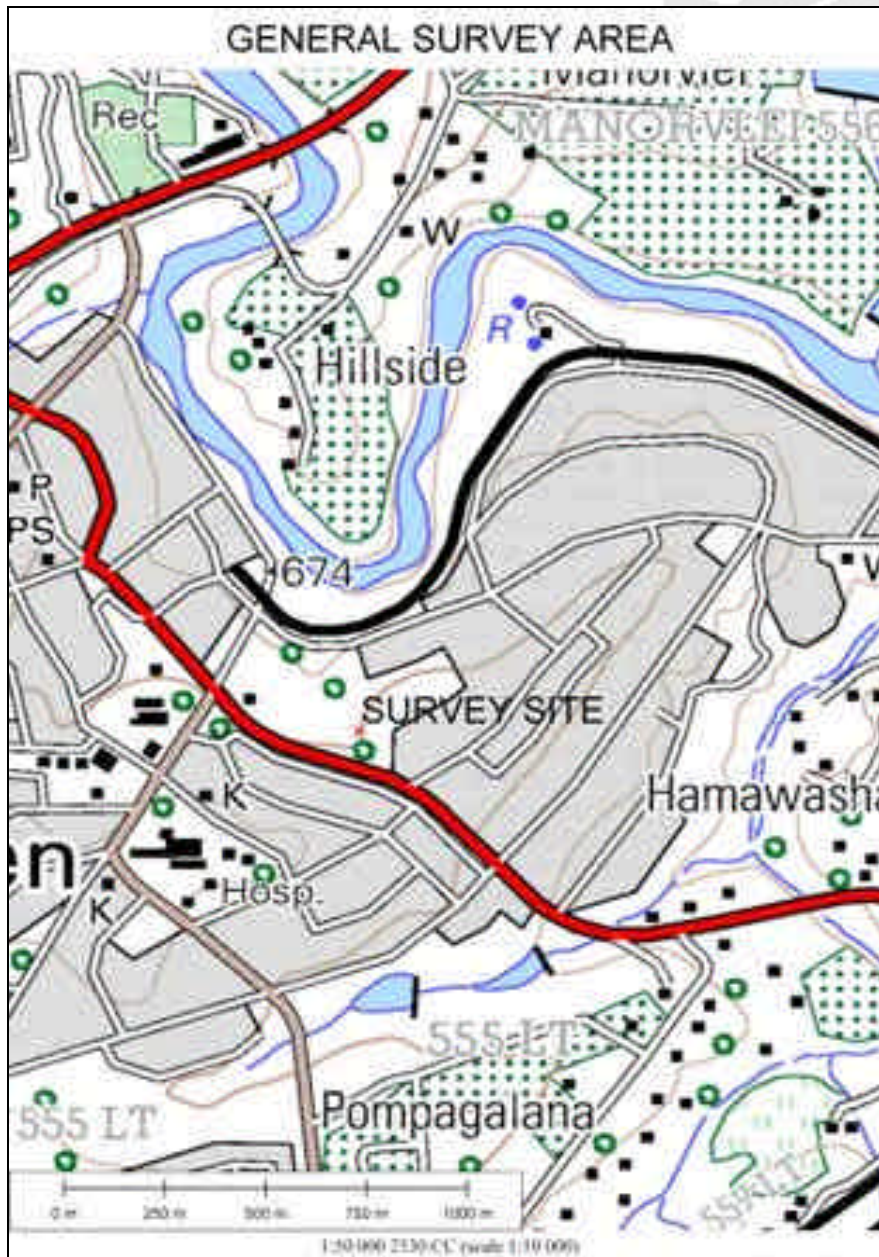
SURVEY RESULTS

1. Geographical description and location

Province:	Limpopo
Magisterial district:	Tzaneen
1: 50 000 Map number (or SAN chart):	2330 Tzaneen 3 rd edition (2002)
Latitude and Longitude:	S23.83254 E30.16813
Address and/or Erven:	Sapekoe Drive & Koedoe Street, Erf 3366 (Extension 22) & remainder of Erf 430 (Extension 4)
Town/Nearest Town:	Tzaneen



Detail of surveyed area



General location of surveyed area

The proposed impact site is located in an urbanised area south of Koedoe Street and the Greater Letaba River. The site is characterised by a fairly well-kept and extensive garden and lawn that slopes westwards to a channelled stream or tributary and northwards to Koedoe Street and the Greater Letaba River. Several buildings are located on the site that includes Sapekoe's offices and another complex of buildings west of the channelled waterway.

The following photographs illustrates the general environment and terrain type at the site.





2. Methodology - Pedestrian survey

The survey was undertaken on 25 July 2008 by Mr Johan Nel (manager Archaic HPM and ASAPA-CRM section accredited) and Mr Marc Groenewald (third-year archaeology student from Department of Anthropology and Archaeology, UP).

3. Field ratings and site significance

The following is a brief description of field ratings and site significance as interpreted by SAHRA minimum standards:

- National (Field Rating/Grade I);
- Provincial (Field Rating/Grade II);
- Local (Field Rating/Grade IIIA);
- Local (Field Rating/Grade IIIB);
- Generally Protected A (Field Rating IV A) (generally High/Medium significance);
- Generally Protected B (Field Rating IV B) (generally Medium significance);
- Generally Protected C (Field Rating IV C) (generally Low significance).

No field rating is given for the surveyed area as no visible archaeological or other heritage resources were found during the impact assessment. The survey is rated as being of low significance based on the same principles.

RECOMMENDATIONS & CONCLUSION

The following recommendations and conclusions are made based on the SAHRA Minimum Standards for Impact (Addendum A):

- Due to the nature of the proposed impact site, i.e. an urbanised, landscaped and generally disturbed site, it is recommended that AGES apply to the relevant authorities for a Letter of Recommendation for Exemption.
- However, it is recommended that AGES undertake to implement site monitoring or a watching brief during the initial stages of ground breaking and excavation in the event of unknown and/or subsurface heritage resources are found. These may include artefacts, features, objects and graves related to Early and Later Farmer settlement of the area, as well as Stone Age artefacts associated with the river courses.
- Should any heritage resources be found during the initial ground breaking and excavation, or at any time during development of the proposed impact area, AGES and their subcontractors must notify the relevant authorities immediately. All work should cease until a qualified and accredited specialist has commented on such resources and provided recommendations, which in turn must be supported by the relevant heritage resource authorities.

ADDENDUM A

SUMMARY OF SAHRA MINIMUM STANDARDS: PHASE 1 HIAs

The following has been summarised and adapted from “Minimum standards: archaeological and palaeontological components of impact assessment reports” (www.sahra.org.za)

South Africa’s unique and non-renewable archaeological and palaeontological heritage sites are ‘Generally’ protected in terms of the National Heritage Resources Act (Act No 25 of 1999, section 35) and may not be disturbed at all without a permit from the relevant heritage resources authority. As many such heritage sites are threatened daily by development, both the environmental and heritage legislation require impact assessment (IA) reports by qualified professionals that identify all heritage resources including archaeological sites in the area to be developed, and that make recommendations for protection or mitigation of the impact of the sites. Where possible archaeological sites should be saved, but where this is not possible, the loss of information about our heritage resources can be mitigated against or minimised through a process of excavation (or sampling) & dating of a representative sample of the evidence from the site. This allows us to record at least part of the history of the place. Experience has shown that early mitigation minimises the negative effects of development and often saves the developer considerable delays & related costs.

Archaeological Impact Assessments (AIAs) are most often specialist reports that form part of the wider heritage component of the:

- Environmental Impact Assessments (EIAs) required in terms of the National Environmental Management Act; or
- Environment Conservation Act by the provincial Department of Environment Affairs; or
- Environmental Management Plans (EMPs) required by the Department of Minerals and Energy.

These specialist reports may also form part of Heritage Impact Assessments (HIAs) called for in terms of Section 38 of the National Heritage Resources Act, Act No. 25, 1999 by a heritage resources authority.

The legislation¹ requires that all heritage resources, that is, all places or objects of aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures over 60 years, living heritage and the collection of oral histories, historical settlements, landscapes, geological sites, palaeontological sites and objects.

The archaeological components discussed here therefore form only part of the heritage resources that the law requires heritage authorities to assess. Specialists must acknowledge this and ensure that if

¹ National Heritage Resources Act (Act No. 25 of 1999, section 35) and KwaZulu-Natal Heritage Act (No. 10 of 1997, section 27)

they do not have the capacity to assess other heritage components they team up with heritage practitioners who do, or, at least, refer heritage components for which they do not have expertise to appropriate specialists or draw the attention of consultants and developers to the need for assessment of other heritage components.

In this sense, Archaeological Impact Assessments that are part of Heritage Impact Assessments are similar to specialist reports that form part of the EIA process.

The minimum standards discussed below for archaeological and, where applicable, for palaeontological specialist assessments should be adhered to during the compilation of any Heritage Resources Impact Assessment Report.

The process of assessment, for the archaeological (AIA) specialist components of heritage impact assessments, usually involves:

- An initial pre-assessment (scoping) phase, where the specialist establishes the scope of the project and terms of reference for the developer.
- A Phase 1 Impact Assessment/ Specialist Report, which identifies the sites and their significance and makes recommendations for their management OR:
- A Letter of Recommendation for Exemption (if there is a likelihood no sites will be impacted).
- Phase 2 Mitigation: usually this involves planning of the protection of significant sites or excavation or collection (in terms of a permit) at sites that may be lost.
- A 'Phase 3' Heritage Site Management Plan (for heritage conservation), may be required in rare cases where the site is so important that development will not be allowed. Developers may also choose to, or be encouraged to, enhance the value of the sites retained on their properties with appropriate interpretive material or displays.

STAGES OF ASSESSMENT

Phase 1 Impact Assessments

Phase 1 Archaeological Assessments generally involve the identification of sites during a field survey, an assessment of their significance and the impact of development, and recommendations. The report will include:

- Location of the sites that are found;
- Short description of the characteristics of each site;
- Short assessment of how important each site is, indicating which should be conserved and which mitigated;
- Assessment of the potential impact of the development on the site/s;
- In some cases, a shovel test, to establish the extent of a site, or collection of material might be required to identify the associations of the site. (A pre-arranged permit is required); and
- Recommendations for conservation or mitigation.

The report is intended to inform the client about the legislative protection of heritage resources and their significance and make appropriate recommendations. It is essential that it provides the heritage authority with sufficient information about the sites to enable it to assess:

- Whether or not it has objections to a development;
- What the conditions are upon which such development might proceed;
- Which sites require permits for mitigation or destruction;
- Which sites require mitigation and what this should comprise;
- Whether sites must be conserved and what alternatives can be proposed that may re-locate the development in such a way as to conserve other sites, for example, by incorporating them in a wilderness area, or under a parking space; and
- What measures should/can be put in place to protect the sites that should be conserved.

Phase 1 Specialist Reports (AIAs) will be assessed by the relevant heritage resources authority. If the decision is that sites are of low significance, they may, after recording, be destroyed to make way for development. The final decision about this should be taken by the heritage resources authority, which should give formal permission for the destruction. In the case of AIAs that are part of EIAs or EMPs, the heritage resources authority will issue a record of decision (ROD) that may be forwarded to the consultant or developer, relevant government department or heritage practitioner and where feasible to all three. When a property is either very disturbed (e.g. has been quarried or mined) or is very small and the archaeologist can see that it is highly unlikely that any archaeological remains will be found, a letter of "Recommendation for Exemption" from a full Phase 1 report may be supplied. This must be accompanied by a map and photograph indicating landscape features. (Remember: *Absence of evidence is not necessarily evidence of absence* and use this option with caution).

AIAS AND PIAS AND THE NATIONAL INVENTORY

Phase 1 and Phase 2 AIAs are very often the last opportunity we will ever have to record the remaining of the evidence of people who lived in this country before us or the fossil record at that site. These records are immensely important to our understanding of the past and as such they form an important part of our National Estate. SAHRA is building up a national archive of these reports, in hard copy and where possible electronically. Developers or specialists are required to submit a copy of the report that goes to the relevant Provincial Heritage Resources Authority (PHRA) to the SAHRA provincial office. SAHRA will require a copy of these documents either from the specialist or the PHRA for record as part of the national inventory. It is important that the quality of these reports is high, that they characterize and date the sites meaningfully and reflect best practice in terms of the identification, assessment, interpretation and management of our archaeological and palaeontological heritage.

Statement of Significance (Heritage Value) describing the significant archaeological heritage value of each site in terms of the legislation (NHRA, section 3 (3)) and give reasons.

Field Rating (Recommended grading or field significance) of the site:

While grading is actually the responsibility of the heritage resources authorities, all reports should include Field Ratings for the site(s) discussed (proposals for grading), to comply with section 38 of the national legislation, for example:

- National: This site is considered to be of Field Rating/Grade I significance and should be nominated as such (mention should be made of any relevant international ranking);
- Provincial: This site is considered to be of Field Rating/Grade II significance and should be nominated as such;
- Local: this site is of Field Rating/Grade IIIA significance. The site should be retained as a heritage register site (High significance) and so mitigation as part of the development process is not advised;
- Local: this site is of Field Rating/Grade IIIB significance. It could be mitigated and (part) retained as a heritage register site (High significance);
- Generally Protected A (Field Rating IV A): this site should be mitigated before destruction (generally High/Medium significance);
- Generally Protected B (Field Rating IV B): this site should be recorded before destruction (generally Medium significance);
- Generally Protected C (Field Rating IV C): this site has been sufficiently recorded (in the Phase 1). It requires no further recording before destruction (generally Low significance).

Phase 1 Archaeological Reports: General Comments

Take into account:

- That ephemeral sites may not be unimportant as they may represent the only trace on the landscape of a particular people or period and must be adequately sampled and described so as to supply important information about human settlement patterns.
- That bush clearing and construction work may have a strong negative impact on sites.
- That assessment should include access roads, etc.
- That specialists are expected to assess the whole property or to indicate why only part of the property is to be affected by short term and long term effects of the development.
- Indicate the location of any significant extra documentation or photographic material not included in the report itself.
- Provide information and recommendations to the client including the scope of the heritage legislation that applies; the need to apply for permits in good time before disturbing sites in any way; and the need for approval of the heritage authority before the destruction of sites that have been recorded.

- Give the Heritage Resources Authority enough information to assess with confidence whether those recommendations should be approved or modified and whether to issue permission for destruction of sites.
- Make it clear to the developer that the final decisions rest with the heritage authority and that permission is required for destruction.