

Peer Review Report

PEER REVIEW REPORT FOR THE HERITAGE IMPACT
ASSESSMENT FOR NUCLEAR 1 EIA
(ENVIRONMENTAL IMPACT ASSESSMENT)

PREPARED BY:



PREPARED FOR:



CREDIT SHEET

Project Director

STEPHAN GAIGHER (BA Hons, Archaeology, UP)

Principal Investigator for G&A Heritage

Member of ASAPA (Site Director Status)

Tel.: (015) 516 1561

Cell.: 073 752 6583

E-mail: stephan@gaheritage.co.za

Website: <http://www.gaheritage.co.za>

Report Author

STEPHAN GAIGHER

SIGNED OFF BY: STEPHAN GAIGHER



TABLE OF CONTENTS

Introduction	6
Peer Review Process	6
Client Provided TOR	7
2. Consider whether the report is entirely objective	7
Consider whether the report is technically, scientifically and professionally credible & Identify whether there are any information gaps, omissions or errors.....	7
Technical Credibility.....	8
Scientific Credibility	8
Professional Credibility	9
Consider whether the method and the study approach is defensible	9
Consider whether the recommendations presented are sensible and present the best options	9
Duynefontein	9
Bantamsklip.....	10
Thyspunt.....	10
Consider whether there are alternative viewpoints around issues presented in the report and if these are clearly stated	10
Consider whether the style of the report is written so as to make it accessible to non-specialists, technical jargon is explained and impacts are described using comparative analogies where necessary	10
Have normal standards of professional practice and competence been met	11
A. Title Page with:	11
B. Executive Summary including:	11
C. Table of Contents, for reports longer than 10 pages.....	11
D. Background Information on the Project with:.....	11
E. Background to the Archaeological History and other relevant heritage components of the area with,	11
F. Description of the Property or Affected Environment its setting and heritage resources, with:	11
G. Description of Sites identified and mapped with:.....	12
H. Description of the Artefacts, Faunal, Botanical or Other Finds and Features for each site.	13



2015/08/19

I. Clear Description of Burial Grounds and Graves with:	13
J. Field Rating (Recommended grading or field significance) of the site:	14
K. Statement of Significance (Heritage Value).....	14
L. Recommendations including:.....	15
M. Conclusions	16
N. Bibliography.....	16
O. Appendices if any.....	16
Conclusion	16



TABLE OF FIGURES

Figure 1. Synopsis of study approach used9





PEER REVIEW

PEER REVIEW

PEER REVIEW FOR THE HIA (HERITAGE IMPACT ASSESSMENT)
PRODUCED FOR NUCLEAR 1 EIA

INTRODUCTION

G&A Heritage was contracted by *Gibb Engineering and Architecture* to perform a peer review on the HIA report produced for the proposed Nuclear 1 project in the Western and Eastern Cape Provinces. The original report was produced by the *Archaeological Contracts Office (ACO)* of the *University of Cape Town* in 2012. The report was titled; *Environmental Impact Assessment for the Proposed Nuclear Power Station ('Nuclear – 1') and Associated Infrastructure – Heritage Impact Assessment – September 2012*. TJJG Hart signed off on the report.

A peer review is requested in cases where the validity or coverage of the original report is called into question by the controlling body, in this case the *South African Heritage Resources Agency (SAHRA)* and its provincial representative *Heritage Western Cape (HWC)*.

PEER REVIEW PROCESS

Although there are no fixed requirements laid down by SAHRA for the peer review process, there are industry standards that apply. These in conjunction with requirements from the commissioning company were used to evaluate the report. This peer review should be read in combination with the reviewed report in PDF.

The report was measured against the following points;

1. Assess the document/ report in terms of its fulfilment of its Terms of Reference set;
2. Consider whether the report is entirely objective;
3. Consider whether the report is technically, scientifically and professionally credible;
4. Consider whether the method and the study approach is defensible;
5. Identify whether there are any information gaps, omissions or errors;
6. Consider whether the recommendations presented are sensible and present the best options;
7. Consider whether there are alternative viewpoints around issues presented in the report and if these are clearly stated;
8. Consider whether the style of the report is written so as to make it accessible to non-specialists, technical jargon is explained and impacts are described using comparative analogies where necessary; and
9. Report on whether normal standards of professional practice and competence have been met.

In conjunction with the above the report will also be measure against the minimum standards for reporting as outlined by SAHRA and HWC. These standards are outlined in detail in the document *Minimum Standards for Archaeological & Palaeontological Components of Impact Assessment Reports*.





REVIEW FINDINGS

REVIEW FINDINGS

MEASURING THE CONTENTS OF THE REPORT AGAINST THE SET PARAMETERS

CLIENT PROVIDED TOR

2. CONSIDER WHETHER THE REPORT IS ENTIRELY OBJECTIVE

It has been consistently proven that true objectivity in science is not possible. Objectivity in science and observation is corrupted by certain biases. The most relevant for the contracted consultant are;

- **Experimental bias**
Although this aspect has a whole plethora of philosophical implications based on cognitive biases, we will look mainly at the empirical validity of the report. This means how closely the gathered data reflects the reality of the situation. Since we do not have a definitive model against which to measure the results of the study as a result of the little work that has been done in the areas, it is difficult to measure this aspect. We can however use the available scientific studies and measured against this; the impact assessment is seen as sufficiently comprehensive. It would have been advantageous, although not within the scope of the study, to measure the information resolution of the test pits against a mathematical model such as the Whitaker model (adapted from botany) to give the results a qualitative measurable quality. On the whole the study can however be seen as satisfactory.
- **Publication bias**
This aspect has to do with the academic need to “publish or perish”. In some cases the impact study subject’s scientific significance is inflated by the consultant to enable them to prepare scientific publications at the expense of the developer. Since no scientific publications have yet emerged and all the fieldwork seems to have been well motivated, this does not seem to be the case here.
- **Political bias**
Often and especially with heritage, the results of a study are skewed to accommodate the needs or agenda of a specific political pressure group. From the available correspondence it does seem in this case that significant political pressure was placed on the consultants from indigenous ethnic groups. The consultants responded professionally in my view by accommodating any relevant requests. The report cannot be seen as politically biased.
- **Fraud**
Without first-hand experience of the finds and results and deprived of being able to test the findings, it would not be possible to determine whether there was fraud in the report or in regards to the results. The ACO however has an excellent reputation as a consulting group and their reputation as well as the reputation of the *University of Cape Town* will most likely not be jeopardised by delivering a fraudulent product.

Although the measuring of objectivity is in itself a relative activity, using the available parameters common to science, the report can be seen as sufficiently objective.

CONSIDER WHETHER THE REPORT IS TECHNICALLY, SCIENTIFICALLY AND PROFESSIONALLY CREDIBLE & IDENTIFY WHETHER THERE ARE ANY INFORMATION GAPS, OMISSIONS OR ERRORS



TECHNICAL CREDIBILITY

The peer reviewer of a report should be very careful not to digress into an analysis of technical editing of a report. This is best left to proof readers with a background in writing. There is however a need to determine whether or not a report adheres to at least the basics of technical construction. The reason for this is that the transfer of scientific information in the report should not be subject to corruption due to poor use of the written language. The reporter might have the correct information, however the inability to transfer this information correctly via a written format will result in the loss of this information or the misinterpretation of it. This is especially evident in individuals for whom English is not a first language. A second important reason for good technical editing is to ensure that the information is relayed practically and that this information is measurable against other reports. Part of the technical credibility of the report will be measured in the section on the Minimum Standards for Reporting as supplied by SAHRA. The following technical oversights were noted in the report (these are highlighted in the PDF version of the report supplied);

- Some instances of misspelling or poor grammar (although these were very limited)
- The declaration of independence gives the wrong explanation for the abbreviation ASAPA (Association of Southern African Professional Archaeologists)
- Several update errors are found in the Table of Contents (although this might be a result of automatic editing on the side of the word processor used)
- Not all abbreviations used in the text are listed in the List of Abbreviations
- The Glossary is similarly lacking in comprehensiveness
- The aerial photographs used could be more clear
- Not all scientific statements were referenced
- Not all references in the text were included in the References section (six instances)
- Location maps should be included in the sections where the study areas are discussed, this simply makes interpretation easier.
- Spacing of paragraphs are not consistent

Although there are several technical issues with the report, we need to take into account that it is a rather large volume and that several different people probably worked on it. As such the technical issues with the report does not affect the delivery of the scientific information in any significant way and is therefore of little consequence. The report can be seen as technically credible.

SCIENTIFIC CREDIBILITY

As stated earlier in the report, it is very difficult to measure the scientific credibility of the findings without testing the results itself. This section will therefore focus on whether the report fulfils its obligation for being scientifically credible. After evaluation it was found that the report contained the following scientific discrepancies;

- Some of the scientific statements in the report are not qualified with references (see text).
- There is reference made to several recordings of sites within the different study areas, however these are not discussed in enough detail to enable the reader to know which ones are under discussion.
- There are some abbreviated references to Khoisan groups. Taken the potential political sensitivity of this study, it would be prudent to make sure that the correct, complete naming is used in the report.
- Reference is made to discussions with researchers that have worked in these areas, however the results obtained by them is not discussed.
- In the site documentation section a datum point for the use of the GPS is not given.
- Photographs of artefact should have a photo scale included, rather than a GPS device.
- Some of the research discussed, such as the fish traps, has newer publications and information available than those supplied in the report.
- The results of the test excavations could have provided more relevant information if supplied in the report.

The report would have been more consistent with the above amendments, however it is not detrimental to the relaying of the necessary information. For this reason the report is found to be sufficiently scientifically credible.



PROFESSIONAL CREDIBILITY

The professional credibility of the report will be discussed under the Minimum Standards section of this report.

CONSIDER WHETHER THE METHOD AND THE STUDY APPROACH IS DEFENSIBLE

As will be seen under the section of the minimum standards for reporting, the report adheres in some aspects to the industry defined standards in terms of methodology.

The study approach is similar to the standard approach to heritage reporting as outlined by the controlling body SAHRA and HWC. The study was performed in a structured manner in such a way as to maximise the retrieval of information and the evaluation thereof unfortunately this information was not always relayed in the report.

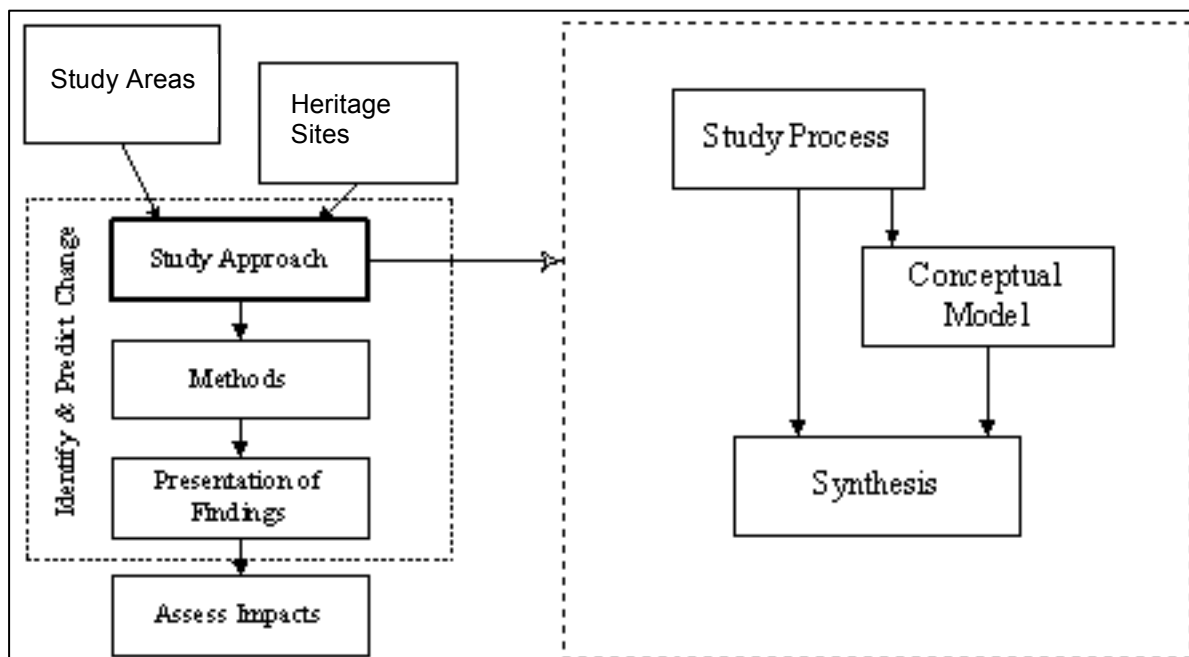


Figure 1. Synopsis of study approach used

If the purpose of the study was to choose between the different study areas the approach was defensible, however it is not if the purpose was the comprehensive documentation and evaluation of sites.

CONSIDER WHETHER THE RECOMMENDATIONS PRESENTED ARE SENSIBLE AND PRESENT THE BEST OPTIONS

For the evaluation of this, each separate site will be evaluated;

DUYNEFONTEIN

The proposed mitigation recommendations are given in a clear and concise manner. The mitigation measures covers both the archaeological and palaeontological impacts on the site. The recommended trial excavations for palaeontology could be better quantified and specific areas should be indicated. At this stage the recommendations in this regard is not clearly defined.

It should be indicated whether the need for a museum is a legal requirement or a negotiable point.

The statement: "... If there is good reason to believe that certain activity areas are not sensitive, the frequency of monitoring can be decreased..." should be quantified. The measurement of "good reason" is not scientific and is therefore not measurable.

The palaeontological recommendations are sufficient.

BANTAMSKLIP

The recommendations given state that significant archaeological deposits are found up to 400m from the sea, however the recommendation for mitigation suggests only a 200m buffer from the sea. The reason for this should be more fully explained.

An enhanced explanation should be provided for the selection criteria for the 20 LSA sites identified for further detailed study. A motivation should also be given as to what this research will achieve in terms of site preservation as well as how the number of 20 was decided on.

Recommendations should be made for the possible occurrence of more recent graves.

THYSPUNT

The recommendations seem to be arbitrary concerning the archaeological importance of the study area. In one section it is indicated that the area is very sensitive and in the recommendations it is stated that impacts on the coastal strip will be minimal while the vegetated areas are described as an "...archaeological dead zone...". This needs to be cleared up.

The rest of the recommendations are copied from the recommendations on the other sites.

In conclusion it is evident that the recommendations for the study areas are in some cases unclear and arbitrary. This does not mean that they are erroneous, only that in some cases they need to be better qualified or outlined. The actions given are consistent with effective and extensive mitigation provided they are better described.

CONSIDER WHETHER THERE ARE ALTERNATIVE VIEWPOINTS AROUND ISSUES PRESENTED IN THE REPORT AND IF THESE ARE CLEARLY STATED

Due to the lack of research at Bantamsklip and the specific nature of the research at Duynfontein, there was very little stand-alone information to measure the findings of the report against. At Thyspunt, however there has been significant work done by Johan Binneman, which in essence seem to contradict the findings of this report. The author does indicate that Binneman was consulted at one stage, however the results of this consultation are not given.

Unfortunately the issue at Thyspunt has become political and this clouds the scientific facts. There seems to be a strong opposition against the development, by the Khoisan groups in the area and the heritage study has been used as motivation for their grievances. Clarity regarding the issues brought up by the Khoisan representatives should receive attention and a possible discussion on the findings by Binneman could prove valuable in the overall management of the area.

CONSIDER WHETHER THE STYLE OF THE REPORT IS WRITTEN SO AS TO MAKE IT ACCESSIBLE TO NON-SPECIALISTS, TECHNICAL JARGON IS EXPLAINED AND IMPACTS ARE DESCRIBED USING COMPARATIVE ANALOGIES WHERE NECESSARY

Specialist reports by their very nature are written in a technical language that lends itself to describing the subject matter within its scientific realm. As a result there is often much that is not readily accessible to laymen reading the reports. Due to the fact that these reports form part of the public participation process it is a narrow line that consultants tread between making their reports accessible and at the same time accurate within a scientific context.

The result of misinterpreting the context of statements made within the report is very evident from the comments received from opposition groups such as those representing the Khoisan peoples. It is very easy to "misinterpret" a statement for own gain when it is not very well defined and qualified. In this regard the report does leave itself open to being manipulated due to some of its statements not being defined or qualified.

There are also obvious omissions in the Glossary and list of abbreviations, which needs to be more complete. On the whole, the report is however accessible enough to anyone with a moderate degree of



education.

HAVE NORMAL STANDARDS OF PROFESSIONAL PRACTICE AND COMPETENCE BEEN MET

To address this issue we will measure the report against the *SAHRA* and *HWC* Minimum Standards for reporting published in 2007 and as amended. Inputs and evaluations will be provided as follows;

Comments in blue means that the report complies

Comments in red means that the report does not comply

Comments in orange means that the report complies; however improvements can be made

Every Archaeological Impact Assessment Report must include:

A. TITLE PAGE WITH:

The report complies.

B. EXECUTIVE SUMMARY INCLUDING:

The report complies.

C. TABLE OF CONTENTS, FOR REPORTS LONGER THAN 10 PAGES.

The report complies.

D. BACKGROUND INFORMATION ON THE PROJECT WITH:

The Report complies.

E. BACKGROUND TO THE ARCHAEOLOGICAL HISTORY AND OTHER RELEVANT HERITAGE COMPONENTS OF THE AREA WITH,

a. Literature review or archival research sufficient to place the sites located in context;

The literature review could be expanded.

b. Reference to museum or university databases and collections;

The report complies.

c. Previous relevant impact assessment reports for the area.

Although it is mentioned that little research has been done in the study area, there is no dedicated section on impact assessments within the larger area. These are easily accessible through the SAHRIS database.

This background is required in part to anticipate or predict the kinds of heritage resources that might occur, and in part to gauge the regional significance of findings made during the current assessment.

F. DESCRIPTION OF THE PROPERTY OR AFFECTED ENVIRONMENT ITS SETTING AND HERITAGE RESOURCES, WITH:

a. Details of the area surveyed including;

i. Full Location Data for Province, Magisterial District/Local Authority and property (e.g. farm/erf) name and number, etc.;

The report complies.

ii. Location Map(s)/ orthophotos of the general area. These must include the map name and number (e.g. 3318DC Bellville). Maps must include at least a 1:50 000 and (if available) also a 1:10 000 (i.e. most detailed possible). Large-scale colour satellite photos make a useful addition. Maps should be preferably at least A4 in size.

The satellite photos of the site are greyed out and could be of a better definition. It would improve readability if locations maps were to be inserted at the site location section.

iii. Either the Location Map or the Site Map must have the polygon of the area surveyed



marked on it and full geographical co-ordinates for all relevant points and, where applicable, indication of the area to be developed (footprint). The report or map must indicate exactly what area was searched, and if any area was not searched why this was so; and what the probability is of sites being found there.

The Duynfontein map does not include a polygon and this should be added.
The rest of the report complies.

b. Description of the methodology used including:

i. How the area was searched (e.g. a three-person team for two days, and whether on foot or not) and what, if any, sampling techniques were used;

The report complies.

ii. What the restrictions to the study were, for example:

- Visibility affected by high grass or bush or vegetation cover, walls or concrete surfaces;

The report complies.

- Physical or other impediments (e.g. vlei, swamp, steep kloof, mobile dune) to the assessment of the area;

The report complies.

iii. How the data was acquired, and details of research equipment (e.g. GPS).

The report complies, however the GPS datum point used should be included in the text.

G. DESCRIPTION OF SITES IDENTIFIED AND MAPPED WITH:

a. Details of the location of all the sites including:

i. Site Map or aerial photograph of the specific area with the location of all sites marked on it (at least A4 size). Make it clear how this relates to the Location Map described above (7.1Fii).

The report complies.

ii. GPS readings with the model and datum used (WGS 84 is considered the most useful). Please comment on the accuracy. If co-ordinates are read off the 1:50 000 map, please indicate this. Wherever possible the GIS track actually surveyed should be mapped.

The information is supplied, however the datum point should be provided.

b. An adequate description of each site including:

i. Type of site (e.g. open scatter; shell midden, cave/shelter);

The report complies.

ii. Site categories (e.g. Earlier Stone Age, Late Iron Age);

A description of the sites are given, however specific reference is not made to the industry of each site, although some are listed.

iii. Context (detailed description of depositional history and environment);

The report complies, however more detail could be given.

iv. Cultural affinities, approximate age and significant features of the site;

The report complies, however more detail could be given.

v. Estimation or measurement of the extent (maximum dimensions) and orientation of the site(s);

The report does not comply.

vi. Depth and stratification of the site (where shovel test permits have been given or natural exposures available), both in the text and through photographs of sections;

The report does not comply.

vii. Possible sources of information about past environments, such as stalagmites/ stalagmites, flowstone, dassie middens, peat or organic rich deposits and natural bone accumulations; and

The report complies.

viii. Photographs and diagrams, of good quality, with a centimetre scale (e.g. for artefacts) or metre scale (e.g. for large scale village plan) and a caption. Include a 'wide angle' photo of the sites.

The report does not comply, however it should be taken into account that numerous observations were made at all the sites and it would be difficult to document all the sites in detail.

c. Threats or sources of risk and their impact on the heritage resources (e.g. earth moving, traffic of vehicles or humans, erosion).

The report complies, however it does not discuss each listed site individually.

d. If the sites are in KwaZulu-Natal or the Northern Cape please apply to the old Archaeological Data Recording Centres at the Provincial Museums for National Site Numbers (for sites that will be conserved, excavated or collected).

N/A

H. DESCRIPTION OF THE ARTEFACTS, FAUNAL, BOTANICAL OR OTHER FINDS AND FEATURES FOR EACH SITE.

Record meaningful information and consider supplying:

a. Raw material, type, maximum dimensions and relative frequency of and significant attributes of stone tools observed on the surface;

The report complies.

b. Basic description of ceramics, other artefacts and occurrences such as rock art;

The report complies.

c. Description of features (e.g. hearths, bedding, walling);

The report complies.

d. Basic description of faunal or botanical taxa and estimated frequencies;

The report complies.

e. Adequate photographic and graphic representations (with scale in centimetres); and cross-reference photographs with a map showing where the objects in the photographs were found;

The report has a distinct lack of visual media such as photographs of stone tools etc. Considering the importance and extent of sites identified, more information is expected.

f. Locations of repositories at which artefacts, photographs, rock art tracings and field records (from other sites in the area) are kept.

It is expected that this will be kept at the University of Cape Town, however this is not indicated in the report.

I. CLEAR DESCRIPTION OF BURIAL GROUNDS AND GRAVES WITH:

a. Clear written and photographic description of any graves;



N/A

b. Exact or estimated age and affinities of the burials;

N/A

c. Clear discussion for the client of the legal implications (include reference to both the Act and the regulations for s.36 and particularly the public participation process, and whether this should be done by the archaeologist or may be better done by a social consultant).

N/A

J. 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:

- a. 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);
- b. Provincial: This site is considered to be of Field Rating/Grade II significance and should be nominated as such;
- c. 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;
- d. Local: this site is of Field Rating/Grade IIIB significance. It could be mitigated and (part) retained as a heritage register site (High significance);
- e. 'General' Protection A (Field Rating IV A): this site should be mitigated before destruction (usually High/Medium significance);
- f. 'General' Protection B (Field Rating IV B): this site should be recorded before destruction (usually Medium significance);
- g. 'General' Protection C (Field Rating IV C): this site has been sufficiently recorded (in the Phase 1). It requires no further recording before destruction (usually Low significance).

The report does not classify the sites.

K. STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

Giving the significant archaeological heritage value of relevant sites in terms of the legislation (NHRA [National Heritage Resources Act], section 3 (3) listed below) or any other relevant criteria, and give reasons.

- a. Its importance in the community, or pattern of South Africa's history; 3 National Heritage Resources Act (Act No. 25 of 1999) and the permit regulations (Government Gazette Vol. 240, No. 21239).
- b. Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- c. Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- d. Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- e. Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- f. Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- g. Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- h. Its strong or special association with the life or work of a person, group or organisation of



importance in the history of South Africa; and

i. Sites of significance relating to the history of slavery in South Africa.

Although a general evaluation of the significance of the study areas are given, the individually identified sites are not evaluated.

L. RECOMMENDATIONS INCLUDING:

a. An assessment of the potential impact of the development on these sites, relative to sustainable social and economic benefits;

The report complies.

b. Proposals for protection or mitigation relating to:

i. Possible alternatives in the development that might allow the protection and conservation of the sites; or

The report complies.

ii. The need for mitigation of adverse impacts; or

The report complies.

iii. The need to conserve certain sites because of their high heritage value.

The report does not distinguish between individual sites, but gives general recommendations.

c. Detailed recommendations with regard to burial grounds and graves. This must inform the client about the full process and enable the heritage authority to make decisions about permits.

This must include:

i. Recommendations for protection of the grave(s) during the development and in the long term, e.g. fencing and plans for maintenance (mini-management plan);

The report complies

OR

ii. Recommendations for relocation of the grave(s), public participation and possibly further archival research, or both (i & ii).

The report complies.

d. An indication of what must be done at each site:

i. If the site is of Low Significance the recommendation maybe that the site must be mapped, documented and then destroyed (with a permit / letter of permission / Record of Decision from the heritage authority);

Once again the report does not discuss individual sites but the study area as a whole.

ii. If the site is of Medium Significance the recommendation may be for a measure of mitigation after which the site may be destroyed. Mitigation usually involves a requirement to collect or excavate a sample of the cultural and other remains that will adequately allow characterization and dating of the site. (The archaeologist will require a permit for the excavation and collection. If, after this mitigation significant archaeological residues or parts of sites remain, the archaeologist should request the developer to apply for a permit for destruction or fill in the application for them to sign! In this way the heritage resources authority can help the archaeologist ensure that the recommended mitigation takes place;

The report does not discuss individual sites but the study area as a whole.

ii. If the site is of High Significance the recommendation may be that it be formally graded and conserved (with. provision of boardwalks, fencing, signage, guides) and protected as a heritage resource (either being listed on the Heritage Register or being declared as a Provincial or National Heritage Site).



If sites are to be protected a Site Management Plan should be required. For mini-plans, where small sites are incorporated into developments, this must include an indication of who is responsible for maintenance and how this process will be monitored.

The report can be clearer on these issues.

M. CONCLUSIONS

The report complies.

N. BIBLIOGRAPHY

The report complies.

O. APPENDICES IF ANY

The report complies.

CONCLUSION

Due to the unique nature of this study it is difficult to measure its effectiveness against a set directive. Although the report fulfils most of the requirements outlined by the client it does fall short in some aspects. Furthermore the report does not uphold the minimum standards for reporting as supplied by the heritage agencies.

The main issue is that the report handles the three sites as individual heritage sites. The fact is however that each of these sites contains numerous and varied heritage components or sites within that should have been discussed individually. Each *heritage* site should have been attributed a significance score and it should have been described in detail on its own.

As the report now stands it fulfils the requirements for a scoping report, in that its main objective is to choose between the three options based on their heritage significance. If this was the original brief, then the report fulfils that requirement. If the reports is however measured against the minimum standards for reporting it does come short.

An HIA is supposed to describe and record individual sites within the study area and measure their significance, provide management guidelines and where necessary mitigation measures. The report as it stands only evaluates the overall heritage significance of each proposed alternative.

At this stage it is thought that the report fulfils the requirement for site selection, the logical next step in this process. The report cannot however be described as a Heritage Impact Assessment but rather a scoping report for site selection. This is not seen as an error on the side of the consultant but rather the process that is skewed. At this stage the study area should not have needed a full HIA performed on them, this would only be necessary once the best alternative was chosen and the current study should only provide enough information to make this choice. In this respect the report does fulfil the requirements.

It is therefore our finding that the report does not fulfil the minimum requirements as provided by SAHRA and HWC for HIA reports however it does fulfil the requirements for site selection.