



Archaetnos Culture & Cultural
Resource Consultants
BK 98 09854/23

**A REPORT ON TWO GRAVE SITES ON THE FARM DOORNKRAAL 680 LS,
POLOKWANE IN THE LIMPOPO PROVINCE**

For:

Mettle Property Solutions

REPORT: **AE833**

by:

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SUMMARY

Archaetnos cc was requested by Mettle Property Solutions to investigate the best way to deal with two grave sites. These were identified by Archaeology Africa cc during an earlier HIA on the farm Doornkraal 680 LS close to Polokwane in the Limpopo Province.

The sites were visited in order to obtain contextual information. This was coupled with information known about the graves, applicable legislation and the grave relocation process. A risk assessment and cost estimate was also made.

Different factors influencing these particular sites make recommendations difficult. However it is believed that the best possible solution is to not relocate these graves. Under certain conditions relocation may well be a better compromise.

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1. INTRODUCTION

The author of this report, an archaeologist from Archaetnos cc, was requested by Mettle Property Solutions to write an independent report on two grave sites on the farm Doornkraal 680 LS close to Polokwane in the Limpopo Province. The latter company is interested in acquiring the indicated land and it came to their attention that there are graves on the land.

The client provided the necessary background information which included the Heritage Impact Assessment done by Archaeology Africa cc. The grave sites were visited by the author of this report in order to obtain contextual information that may influence a decision in this regard.

2. TERMS OF REFERENCE

The Terms of Reference for the study were to enable Mettle Property Solutions to complete their due diligence on the suitability of the land for residential development in the affordable market by:

1. Reporting on how best to deal with the graves.
2. Indicating possible costs involved in relocating the graves.
3. Indicating if relocation is considered the best option.
4. Give an idea of the anticipated timing.
5. Mention possible risks involved in the relocation of the graves.

3. CONDITIONS & ASSUMPTIONS

The following conditions and assumptions have a direct bearing on the study:

1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity. These include all sites, structure and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development. **Graves and cemeteries are included in this.**
2. The significance of the sites, structures and artifacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. The various aspects are not mutually exclusive, and the evaluation of any site is done with reference to any number of these aspects. **Graves are always given a high cultural significance as it is an extremely emotional issue.**
3. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public. **This includes graves.**
4. All recommendations are made with full cognizance of the relevant legislation.

4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

4.1 The National Heritage Resources Act

According to the above-mentioned law the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years**
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

Archaeology, palaeontology and meteorites

Section 35(4) of this act states that no person may, without a permit issued by the responsible heritage resources authority:

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency. This includes graves older than 60 years as well as those of an unknown date.

Human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

4.2 The National Environmental Management Act

This act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

5. METHODOLOGY

5.1 Survey of literature

A survey of literature was undertaken in order to obtain background information regarding the process of dealing with graves.

5.2 Study of HIA

The HIA done by Archaeology Africa was studied in order to obtain the necessary background information.

5.3 Site visit

The grave sites were visited in order to obtain contextual information on the area and the implications that may have for the graves. The sites were marked by means of the Global Positioning System (GPS), while photographs were also taken where needed.

6. DESCRIPTION OF THE AREA

The farm Doornkraal 680 LS is situated to the northwest of Polokwane and to the east of Seshego in the Limpopo Province (Figure 1). A residential development is planned here.

The landscape consists of open grassland with very little trees. The farm shows old ploughed furrows and it is clear that it has been used for agricultural purposes in the past. Accordingly it has been disturbed to a large extent.

Both grave sites were found next to Sisal plants. It is not uncommon and definitely serves as indication of people residing close to these graves.

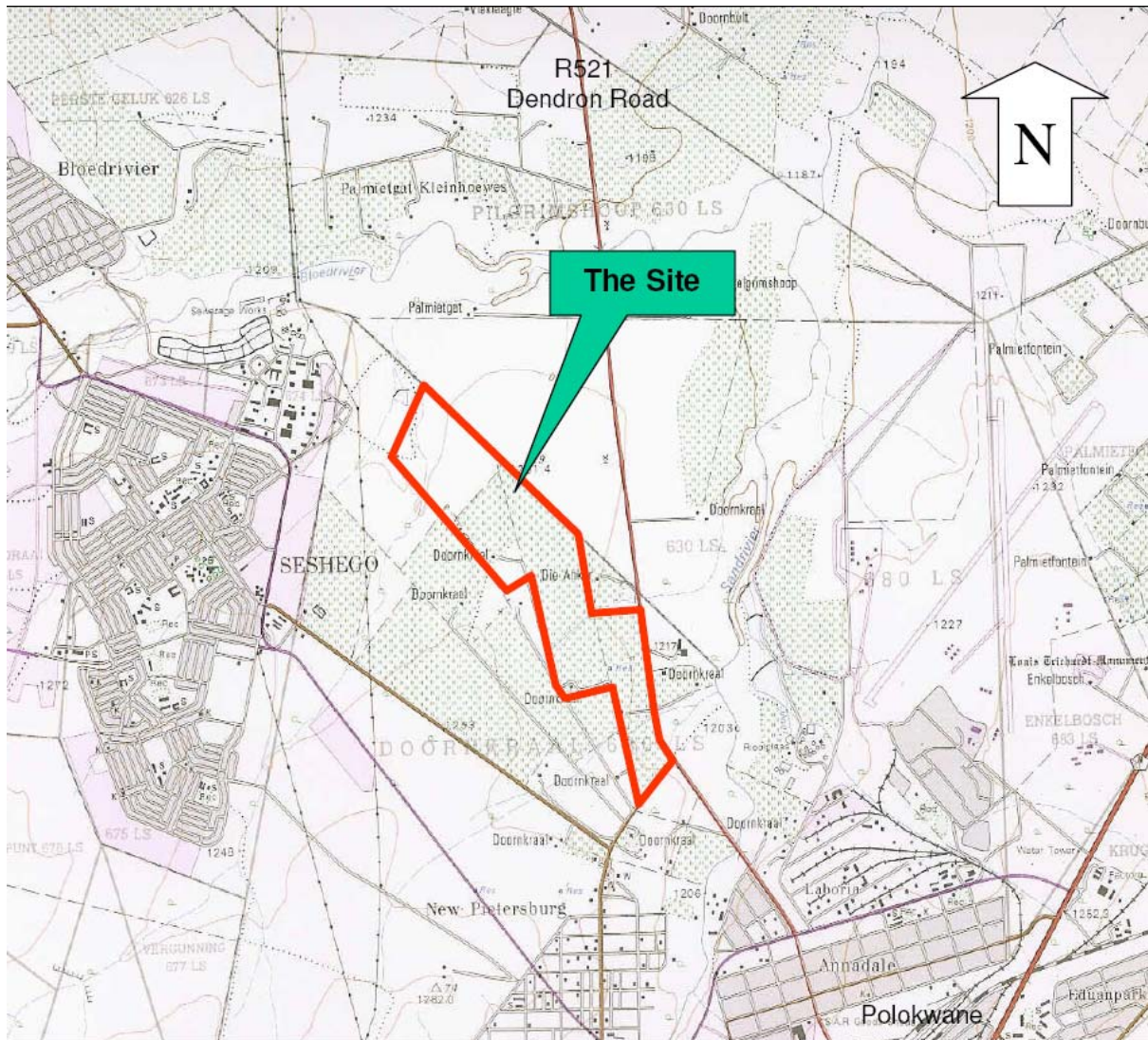


Figure 1 Location of the site.

7. DISCUSSION

The relevant questions regarding the matter of the graves are discussed under this section. From the discussion the recommendations will follow.

7.1 The HIA

During the HIA done in March 2006, three sites of cultural significance were identified (Birkholz 2006). This included an old building (DK2) and two grave sites (DK1 and DK3). DK 1 contained one grave and DK 3 contained three. This report will only deal with the two grave sites.

DK1

At DK1 only one grave was identified, but it was indicated that more graves may exist. The cemetery is of unknown age and no formal headstones or any grave inscription was observed.

It is agreed with the HIA that the site is of high cultural significance. The consultant who did the HIA gave two options for the site, namely that it either be fenced or under supervision of a qualified heritage specialist or to relocate the grave (s). No recommendation for either of these options are made.

DK3

The consultant who did the HIA indicated that no evidence for the site could be observed, but that it was shown to him by local residents. They indicated that there were three graves at DK3.

If the site does contain graves (and it is assumed that it does) it is again agreed that it is of high cultural significance. The same two options as for site DK1 is given and again no specific recommendation favoring any of these was made.

7.2 Site visit

Archaeos cc visited the sites on 30 July 2008. The following was determined:

DK1

Only one grave was found (Figure 2-3). It is clear that the grave stone was erected fairly recently. It is indicated that it is the grave of Seemole Mamoloko Phela, 21 May 1874 – 10 July 1946.

GPS: S 23.84453; E 29.418135

No indication of any other graves could be identified.



Figure 2 Grave at site DK1.



Figure 3 Headstone of grave at DK1.

DK3

Although no clear evidence was visible it does seem as if three graves may be present at this site. Vague indications of packed stones indicate the possible presence of these graves (Figure 4-6).

GPS: S23.854479; E 29.426854

No other evidence of any graves was identified.



Figure 4 First possible grave at site DK3.



Figure 5 Second possible grave at site DK3.



Figure 6 Third possible grave at site DK3.

7.3 Comments from Professional Grave Solutions

The Managing Director of PGS gave the following additional comments in an update on the graves:

- Legal notices declaring the intention to relocate the graves were erected at both these sites on 8 December 2007. No response to these notices was received.
- Legal notices were published in the *Northern Review* (14 February 2008) and the *Daily Sun* (14 February 2008). Again no response was received.
- During the site visit to put up the notices it was noticed that a tombstone were newly erected at Site 1. The headstone indicated that the grave was that of one *Seemole Mamloko Phela (1874-1946)*. According to the next of kin there are a second grave at this site. The exact position of this grave is currently unknown.
- By contacting the manufacturer of the headstone it was possible to trace the next of kin of the deceased. They are:
 - Johanna Phela (073 171 6865)
 - Mokgabi Phela (083 312 8118)
- Despite several attempts it was not possible to procure their permission for the graves to be relocated. They gave no reason for their refusal to cooperate and to this date have not supplied PGS with anything on paper as requested.
- At this stage the graves / possible graves at Site 2 are unknown. The Phela family indicated that they have no knowledge of the graves situated at this site.

PGS gave the following recommendations on the way forward:

- Site 1. It is going to be very difficult to get the necessary permits without the consent of the next of kin. All the departments and compliance agencies requires permission from them (if they are known) before they will issue a permit. Trying to convince them otherwise would be a waste of time. The issue can be dealt with in the following ways:
 - Carry on developing around the graves and leave them *in situ* with a 20m buffer around them. There is a possibility that the next of kin will be more willing to negotiate if they see that the graves will be situated in the middle of a suburb/township/built up area.
 - Try to convince the next of kin to cooperate. This will be difficult and time consuming as they are uncooperative and have not made clear what they want (if anything) in return for their consent. Please note that compensation is not paid in return for consent but that a small wake fee in order for the next of kin to have a cultural ceremony is offered. This usually amounts to about R1,500.00 per grave.
- Site 2. As the graves are unknown at this stage, it is suggested that the site be fenced of and that the graves / possible graves are left *in situ*. A 20m buffer should be created around the graves to ensure that they are not damaged.

From this it is clear that a decision was made to relocate the graves. Apparently the permitting process in this regard has already started (Personal communication: H Steyn). It however is important to note the concerns mentioned in the above mentioned comments, namely that it seems as if the family may not give permission the exhume the graves.

Accordingly the recommendation was that the graves should not be exhumed and relocated, but rather fenced off.

7.4 Fencing of the site

Should graves not be directly impacted upon by development, archaeologists will usually pick this option. It is less time consuming than that of grave relocation and it also may be less expensive.

Costs will include the erecting of a fence and a management plan. The latter should cost no more than R 10 000.00.

7.5 The grave relocation process

Reporting the discovery

The discovery of all graves not located in a formal cemetery administered by a recognized local authority should be reported to the regional representative of the South African Heritage Resources Agency and the South African Police Service. SAHRA and the SAPS should visit the site and are required to advise regarding heritage related and possible criminal and judicial, and legal issues.

As a result of the HIA, this has already been done in this case.

Identifying the graves

Four categories of graves can be identified. These are:

- Graves younger than 60 years;
- Graves older than 60 years, but younger than 100 years ;
- Graves older than 100 years;
- Graves of victims of conflict or of individuals of royal descent.

The graves to be relocated should be classified as accurately as possible into these categories. A concerted effort should also be made to identify the specific buried individual. These tasks must be accomplished by the survey and social consultation process already in place.

Looking at the HIA and the comments from PGS this seems to have been handled although the graves in Site 2 may be unknown.

Social Consultation

Section 36 (3)(a) of the National Heritage Resources Act 25 of 1999 reads:

“No person may, without a permit issued by SAHRA or a provincial heritage resources authority-

- (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

(b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

(c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.”

Furthermore, Section 36 (5) of the Act reads:

“SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection (3)(b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority-

(a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and

(b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.”

In terms of social consultation and permits issued by SAHRA, these sections from the Act means that a permit will only be supplied if a “concerted effort” has been made to “contact and consult” the relatives or persons associated with those specific graves. Normally, such a social consultation process would (as a minimum) consist of the following:

- Full documentation of the entire social consultation process, including signed permission forms from the closest relatives providing permission for the grave to be relocated.
- Site notices (in the format and for the duration required by the Act), and proof thereof
- Newspaper notices, and proof thereof
- Documentary proof of social consultation process, i.e. minutes of meetings held with family members/affected parties

The information obtained from PGS indicates that these matters have also been adhered to.

Authorization

This component incorporates obtaining permissions, permits and authorizations from the relevant compliance agencies. In order to obtain permits, the following is needed:

- Full documentation of the entire social consultation process, including signed permission forms from the closest relatives providing permission for the grave to be relocated.

- Site notices (in the format and for the duration required by the Act), and proof thereof
- Newspaper notices, and proof thereof
- Documentary proof of social consultation process, i.e. minutes of meetings held with family members/affected parties

Different legislation applies to the different categories of graves set out above:

- Graves younger than 60 years fall under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925) as well as the Human Tissues Act 65 of 1983. These graves fall under the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the Office of the relevant Provincial Premier. This function is usually delegated to the Provincial MEC for Local Government and Planning, or in some cases the MEC for Housing and Welfare. Authorization for exhumation and re-interment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. The institution undertaking the relocation must be authorized under Section 24 of the Human Tissues Act 65 of 1983 to handle and transport human remains.
- Graves older than 60 years, but younger than 100 years, fall under the jurisdiction of two acts, namely the National Heritage Resources Act 25 of 1999 (Section 36) as well as the Human Tissues Act 65 of 1983. Should graves older than 60 years, or if the age of the grave cannot be ascertained either by a grave marking or through a social consultation process, be located outside a formal cemetery, the Procedure for Consulting Regarding Burial Grounds and Graves (Section 36(5) of the Heritage Resources Act 25 of 1999) is applicable. However, graves older than 60 years but younger than 100 years, which are located within a formal cemetery administered by a local authority will also require the same authorization as set out for graves younger than 60 years over and above SAHRA authorization. If the grave is not located within a formal cemetery, but is to be relocated to one, permission must also be acquired from the local authority and all regulations, laws and by-laws set by the cemetery authority must be adhered to. The institution undertaking the relocation must be authorized under Section 24 of the Human Tissues Act 65 of 1983 to handle and transport human remains. A qualified archaeologist accredited by SAHRA must personally supervise any alteration to, or relocation of, graves in this category.
- Graves older than 100 years are classified as archaeological, and are protected in terms of Section 35 of the National Heritage Resources Act 25 of 1999. Authorization from SAHRA is required for these graves. A qualified archaeologist accredited by SAHRA must also supervise any alteration or relocation of graves in this category. On the discretion of SAHRA, the Procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999) might also be required. If the grave is situated in cemetery administered by a local authority the authorizations as set out for graves younger than 60 years are also applicable over and above SAHRA

authorization. The institution undertaking the relocation must be authorized under Section 24 of the Human Tissues Act 65 of 1983 to handle and transport human remains.

- All graves of victims of conflict regardless of old they are or where they are situated are protected by Act 25 of 1999 (National Heritage Resources Act). SAHRA authorization is required for all graves in this category. Any alteration to a grave in this category or the relocation thereof must be personally supervised by a qualified archaeologist accredited by SAHRA. If the grave is situated in a cemetery administered by a local authority the authorizations as set out for graves younger than 60 years are also applicable over and above SAHRA authorization. On the discretion of SAHRA the Procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999 (National Heritage Resources Act)) might also be required. In order to handle and transport human remains the institution conducting the relocation should be authorized under Section 24 of Act 65 of 1983 (Human Tissues Act).

In this case the second bullet is applicable. This part of the process has already been done and PGS is awaiting the permit from SAHRA.

Exhuming the remains

The methods employed during exhumation will aim to recover all the remains, to minimize damage to the remains, to record the three-dimensional context of the remains and should preserve and respect the dignity of the buried individual. All evidence that might allude to the events leading to the death of the individual and circumstances regarding the event will be recorded and interpreted. The information gathered will be presented in a technical report as required by the relevant compliance agency.

The aim of the excavation should be the in situ exposure of the burial and associated artefacts (Nienaber and Steyn 1999). The focus should be on accurate and complete documentation (Nienaber 1997). Various methods for the excavation of graves have been proposed by different authors (Hester 1975; Joukowsky 1980; Krogman and Iscan 1986; Morse 1978) but all stress the need for adequate workspace around the exposed remains and a systematic approach to the removal of individual bones.

The archaeological method, including extensive test trenching to prevent damage to the remains, should be employed. This approach should be largely similar to that of forensic archaeology where buried body cases are concerned. This approach should be adapted for the situation since graves vary in shape, size, depth and content (Nienaber 1999). The methods of forensic archaeology are discussed by Steyn, et al. (2000).

This part of the process can only be followed after a permit has been issued by SAHRA.

Confirming the identity of the buried individual (Analysis)

Where any doubts exist regarding the identity of exhumed remains, a physical anthropological analysis aiming to help confirm or ascertain the identity could be conducted. This can be accomplished by comparing the results of the reconstruction of certain

characteristics of the remains with known facts regarding the individual. Data on the remains should be recorded in a suitable format (such as that proposed Buikstra and Ubelaker (1994)) for future reference and comparison.

Physical anthropological analysis of remains of archaeological origin should be undertaken as a matter of course, and could be required on the discretion of SAHRA. The techniques that are applied should aim to achieve the reconstruction of individuals rather than the study of populations. The only parallel methodology that exist are the techniques of forensic anthropology that also aims to ascertain the identity of individuals (Krogman and Iscan 1986). Where possible deductions regarding pathology, health and other indicators of stress should be considered during a reconstruction of events and the interpretation of evidence.

In this case it probably will not be necessary to go through this step.

Reinterment of the remains

If the outcome of the social consultation allows for the curation of the remains, i.e. reinterment is not required by the identified families, persons or communities, the remains should be handed over for curation to a collaborating institution under Act 25 of 1999 (National Heritage Resources Act) authorized under section 24 of Act 65 of 1983 (Human Tissues Act).

Should the remains be reburied, it will be done by a registered funeral undertaker acting in compliance with the relevant local regulations, laws and by-laws stipulated by the cemetery authority. The ceremony will be organized with the full participation of stakeholders and according to the wishes of the concerned families where these were identified.

The last mentioned paragraph will be applicable in this case.

Reporting

Reports compliant to the stipulations of the relevant legislation will be submitted as required by the relevant compliance agencies. Copies of all reports will be made available to the families and other stakeholders on request. All stakeholders are to have access to information generated by the project at all stages.

This will be the final step and will have to be done after completion of the exhumation and reinternment of the human remains.

7.6 Possible relocation costs

As indicated above there are two parties involved in the physical work to relocate graves. The graves in this case are all unknown or older than 60 years. Therefore an archaeologist should be part of the process. A registered undertaker will also be part of the process.

The option of relocating graves is an expensive option with many possible problems that may be encountered. Different archaeologists and undertakers will undoubtedly have different prices. Based on work done by Archaetnos in the past and working with African Grave Relocation Specialists, the cost in this particular case, could be as follows:

Archaeologist:

- | | |
|---|------------|
| • Exhumation of graves @ R 1150.00/ grave – | R 4 600.00 |
| • Travel cost 650 km @R 4.80/km - | R 3 120.00 |
| • Accommodation and subsistence @ R 600/ person – | R 1 200.00 |
| • Administrative fee – | R 550.00 |
| • Writing of report 8 hours @ R 350.00/ hour – | R 2 800.00 |

ARCHAEOLOGIST TOTAL:

R11 720.00

Undertaker:

- | | |
|-----------|-------------|
| • Phase 1 | R 65 000,00 |
|-----------|-------------|

This includes the full Social Consultation consisting of adverts to be placed in one newspaper in 2 languages, to cover a period of 60 days as well as notices to be placed in the area of the graves, fliers to be distributed at various strategic places. It also include site meetings once a week with family or friends who can identify the graves, a grave map to be drawn and graves to be numbered and registered.

After these steps the following should happen:

- Application to the District Director of Health
- Application to the Provincial Government
- S A P notification
- Pietersburg Municipality
- Forward all documentation to archaeologists for the application of the SAHRA permit.

It seems as if this has already been done by PGS.

- | | |
|-----------|-------------|
| • Phase 2 | R 38 760.00 |
|-----------|-------------|

This includes the following:

- | | |
|---|------------|
| Exhuming and Re-internment – 4 GRAVES @ R 8500.00 | R 34000.00 |
| 14 % VAT | R 4760.00 |

UNDERTAKERS TOTAL:

R103760.00

TOTAL COST: R 115 480.00 (or minus Social Consultation fees - R 50 480.00)

7.7 Anticipated timing

The aspects that take most of the time during the process of grave relocation is the social consultation and advertisements. Advertisement has to be places on site for at least 60 days. The archaeologist needs the copies of the advertisements and results of the social consultation before it is possible to apply for a permit.

However, in this case this work has already been completed. Unfortunately SAHRA also takes a long time to issue permits. In theory it should only take about three weeks, but the process usually takes much longer. SAHRA has a Burials Reaction Unit dealing with these issues. Permits are however issued by the Archaeological committee. This means that the archaeologist does the application at the latter (in Cape Town). It is then checked and send to the Burials Reaction Unit in Johannesburg. This unit has a committee to whom the application is send via e-mail for comments. The flaw in the system is that these members may not respond or take a long time to respond resulting in a slowing down of the process.

Archaeologists have indicated that they have waited between two and four months for a permit.

Once the permit has been issued the work needs to be done and it can start immediately. I foresee that two days would be necessary in this particular case. The report will follow a few days later.

7.8 Possible risks

The management of risks is a difficult issue as one is never sure what kind of problems may occur under different circumstances. It is therefore necessary to indicate possible risks for both options.

Risk factor	Fencing of site	Relocation of graves
People will not buy property	Not known, but many people do live next to cemeteries	Has never happened before
Access	Descendents will need undisturbed access to graves	Descendants will have access to new grave yard
Compensation	Probably not needed	Descendants may want compensation
Approval from descendants	Not needed	Needed and without it no relocation will be allowed
Security risk	Yes, as descendants must get access	No, as access would be at new cemetery
Management of sites	Yes, a sustainable management plan will be needed	No, as this will form part of an existing cemetery
Upgrade and cleaning	Yes, site should be left by developer in a better state than before and it should be kept neat	No, as this would be dealt with as part of the existing cemetery
Land claims	Yes, but only in case of a forced removal	Yes, but only in case of a forced removal
Finances	Less expensive	More expensive

8. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is clear that on the short term the fencing of the sites will be the best option. However, it may become an administrative drawback in the future. If possible the development plans should be adapted as such that it falls within green zones and that it be

managed by the municipality. This will remove this burden from the developer. It does indeed seem from information obtained from Plan2survey Africa that this might be possible.

The option of exhumation and relocation is usually a good option as it takes the issue away from the development with no resulting future influences. It is however more expensive. Unfortunately, without the consent of the families this would however not be possible.

In this particular case it is not known yet how the layout plans of the development will look. It will therefore be possible to write in a management plan as part of the development process. For instance, should the graves remain on site, it could be part of the responsibilities of the home owners association (if applicable) to also keep the graves tidy. Security risks and issues like access for the families can be minimized by the way access to the whole development is planned. For instance, an entrance gate could be placed close to one of the grave sites, or the graves could have its own entrance gate from where it is impossible to reach any other part of the development.

The final recommendations therefore are as follows:

- 1 Both grave sites should remain on the premises if it is possible to adapt the layout plans to such an extent as to minimize risks. This should be dealt with in accordance with a management plan, drawn up by a heritage practitioner. This could include carrying over the responsibility to the municipality.
- 2 Should that not be possible DK1 may exhumed as the social consultation failed to provide any information.
- 3 Should the permission from the families applicable to DK2 be obtained, this site may also be relocated. However, without their permission SAHRA will not issue a permit.

9. REFERENCES

- Birkholz, P.D. 2006. **Phase 1 Heritage Impact Assessment for the proposed development of portions 13, 23, 52 & 75 of the farm Doornkraal 680-LS, Polokwane, Limpopo Province.** (Unpublished report, Archaeology Africa cc, Hatfield).
- Buikstra, J.E. & Ubelaker, D.H. (eds.) 1994. Standards for data collection from human skeletal remains. **Arkansas Archaeological Survey Research Series 44.**
- Hester, T.R. et.al. 1975. **A guide to field methods in archaeology.** Palo Alto.
- Joukowsky, M. 1980. **A complete manual of field archaeology.** Engelwood Cliffs.
- Krogman, W.M. & Iscan, M.Y. 1986. **The human skeleton in forensic medicine.** 2nd edition. Springfield: CC Thomas.
- Maps supplied by the client.
- Morse, D. (ed.) 1978. **Handbook of forensic archaeology and anthropology.** Tallahassee.
- Nienaber, W.C. 1997. Exhumation and reinterment of Burger CG Naude. **South African Journal of Cultural History** 11(1).
- Nienaber, W.C. 1999. **A multidisciplinary approach to burials and burial practices during the South African War (1899-1902).** Paper presented at the 4th World Archaeological Conference, Cape Town: University of Cape Town.
- Nienaber, W.C. 2000. **Forensic archaeology: a South African perspective.** Paper presented at the South African Association of Archaeologists Biennial Conference, Johannesburg: University of the Witwatersrand.

- Nienaber, W.C. & Steyn, M. 1999. Exhumation and analysis of the remains of a black native participant in the Anglo Boer War (1899-1902), KwaZulu-Natal. *South African Journal of Culture History* 13(2).
- Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.
- Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.
- Steyn, M. et.al. 2000. Excavation and retrieval of forensic remains. In Siegel, J.A., Saukko, P.J. & Knupfer, G.C. (eds.) *Encyclopedia of forensic sciences*. Sidcup: Academic press.
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