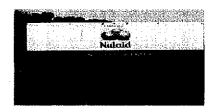
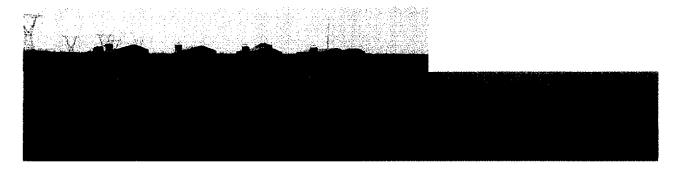
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PHASE 1 ARCHAEOLOGICAL AND HERITAGE IMPACT ASSESSMENT SPECIALIST STUDY REPORT FOR PROPOSED COSTRUCTION OF FOUR CHICKEN HOUSES FOR NULAID IN BRONKHORSTSPRUIT IN KUNGWINI LOCAL MUNICIPALITY OF GAUTENG PROVINCE





Prepare by Dr. M Murimbika

For Cape Lowlands Environmental Services

Final A/HIA Report

October 2011

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HERITAGE SOLUTIONS cc

2011 -11- 02

SLIITE # 345 POSTNET PRIVATE BAG X4307 POLOKWANE 0700 TEL: 015 291 3661 FAX: 015 291 3669

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Versions:	
Recipients:	
	Cape Lowlands Environmental Services PO Box 70 Darling 7345
	Tel: +27 (0) 87 151 1098 Cell: + 27 (0) 72 240 3092 Email: johmandie@cles.co.za
Prepared by:	
	Ngumbululo heritage solutions south attaca

Caveat

PHASE 1 ARCHAEOLOGICAL AND HERITAGE IMPACT ASSESSMENT SPECIALIST STUDY REPORT FOR PROPOSED COSTRUCTION OF FOUR CHICKEN HOUSES FOR NULAID IN BRONKHORSTSPRUIT IN KUNGWINI LOCAL MUNICIPALITY OF GAUTENG PROVINCE

Authorship: This Report has been prepared by Dr. M. Murimbika (Principal Investigator & Professional Archaeologist) assisted by Mr. T Mlilo at the request of Cape Lowlands Environmental Services. The report is for the review of the Heritage Resources Agency (PHRA).

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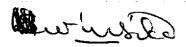
Geographic Co-ordinate Information: Geographic co-ordinates in this report were obtained using a hand-held Garmin Global Positioning System device. The manufacturer states that these devices are accurate to within +/- 5 m.

Maps: Maps included in this report use data extracted from the NTS Map and Google Earth Pro.

Disclaimer: The Author is not responsible for omissions and inconsistencies that may result from information not available at the time this report was prepared.

The Archaeological and Heritage Impact Assessment Study was carried out within the context of tangible and intangible cultural heritage resources as defined by the SAHRA Regulations and Guidelines. The report presents results of a study that seek authorisation for four proposed chicken faming facilities on site.

Signed by Principle Investigator:



McEdward Murimbika (Ph.D.)

October 2011

AUTHOR IDENTIFICATION

Dr. M. Murimbika (Principal Archaeologist & Heritage Consultant) prepared this Report. Mr Trust Mlilo assisted him during the research.

ACKNOWLEDGEMENTS

The authors acknowledges Cape Lowlands Environmental Services for their assistance with information, and the associated project site survey data as well as responding to technical queries related to the project.

ABSTRACT

This report presents results of an archaeological and heritage impact assessment study for the proposed construction of four chicken houses infrastructure development on Rem. of portion 6 of farm Nooitgedacht 525 JR in the Gauteng Province. The study did not identify any archaeological or physical cultural property barriers on the proposed development site. The report also gives detailed recommendations to guide the Provincial heritage authority in making appropriate recommendations and approval for the proposed development in line with the National Heritage Resources Act (1999).

EXECUTIVE SUMMARY

At the request of Cape Lowlands Environmental Services Nzumbululo Heritage Solutions (HeSSA) conducted an Archaeological and Heritage Impact Assessment for the proposed construction of four chicken houses at Rem. of portion 6 of farm Nooitgedacht 525 JR in Kungwini Local Municipality in Gauteng Province. Field studies were conducted in October 2011 under the direction of Principal Investigator, Dr. M. Murimbika. The study focuses on potential impacts on archaeological, and cultural heritage resources associated with the proposed construction's receiving environment. Although the study was initiated with the general background knowledge that different regions of the Gauteng have the potential to yield sites dating to all periods from paleontological era, archaeological past to historic and contemporary heritage, both the desktop and the field surveys did not identify any significant heritage site within the proposed development area.

The report makes the following observations:

- The project area is generally highly accessible through access roads within the farm.
- The affected area is currently developed and has a history of disturbance which compromised its potential to yield any significant or well preserved archaeological sites. As such the project area has limited potential to yield archaeological sites.
- Although the possibility of encountering significant archaeological or historical sites associated with the specific four chicken houses site is limited, a cautionary approach that include heritage monitoring in the context of development should be considered.

The Report makes the following recommendations:

- The proposed chicken houses development site is situated within a contemporary degraded landscape with low heritage potential. The proposed development will have minor additional disturbance within the earmarked site given the observation that similar infrastructure are already in situ.
- The study did not identify any archaeological or heritage resources barrier to the proposed developments. The proposed chicken houses development may be approved by the PHRA to proceed as planned subject to cautionary heritage monitoring measures being incorporated into the project construction EMP.
- Should construction work commence for this project:
 - The construction teams should be inducted on the significance of the previously unknown chance archaeological resources and grave sites that may be encountered during subsurface construction work before they work on the area in order to ensure appropriate treatment and course of action is afforded to any chance finds.
 - If archaeological materials or previously unmarked gravesites are uncovered, work should cease immediately and the PHRA be notified and activity should not resume until appropriate management provisions are in place.

In the absence of any significant archaeological or physical cultural property barriers, this report notes no objection to the proposed development. The project site may be approved for the proposed development, and we advise the heritage authority to action the same recommendations.

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ABBREVIATIONS

AIA Archaeological Impact Assessment

C Contractor

CECO Construction Environmental Conservation Officer

EAP Environmental Assessment Practitioner

ECO Environmental Conservation Officer

EIA Environmental Impact Assessment

EM Environmental Manager

EMP Environmental Management Plan

HIA Heritage Impact Assessment

LIA Late Iron Age

NHRA Nation Heritage Resources Act, Act 25 of 1999

PM Project Manager

SM Site Manager

SAHRA South African Heritage Resources Agency

DEFINITIONS

The following terms used in this HIA are defined in the NHRA, SAHRA Policies as well as the Australia ICOMOS Charter (Burra Charter):

Archaeological Material remains resulting from human activities, which are in a state of disuse and are in, or on, land and which are older than 100 years, including artefacts, human and hominid remains, and artificial features and structures.

Chance Finds Archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

Cultural Heritage Resources Same as Heritage Resources as defined and used in the National Heritage Resources Act (Act No. 25 of 1999). Refer to physical cultural properties such as archaeological and palaeolontological sites; historic and prehistoric places, buildings, structures and material remains; cultural sites such as places of ritual or religious importance and their associated materials; burial sites or *graves* and their associated materials; geological or natural features of cultural importance or scientific significance. Cultural Heritage Resources also include intangible resources such as religion practices, ritual ceremonies, oral histories, memories and indigenous knowledge.

Cultural Significance The complexities of what makes a place, materials or intangible resources of value to society or part of, customarily assessed in terms of aesthetic, historical, scientific/research and social values.

Grave A place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery.

Historic Material remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

In Situ material Material culture and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

Late Iron Age this period is associated with the development of complex societies and state systems in southern Africa.

Material culture Buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

Site A distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity **Place** means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Fabric means all the physical material of the place including components, fixtures, contents and objects.

Conservation means all the processes of looking after a place so as to retain its cultural significance.

Use means the functions of a place, as well as the activities and practices that may occur at the place.

Compatible use means a use which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.

Setting means the area around a place, which may include the visual catchment.

Interpretation means all the ways of presenting the cultural significance of a place.

1. INTRODUCTION

This Archaeological and Heritage Impact Assessment (HIA) study was conducted to fulfil the requirements of the National Heritage Resources Act, Act 25 of 1999 Section 38. The study forms part of the Environmental Impact Assessment (EIA) for the four proposed chicken houses infrastructure at Rem. of portion 6 of farm Nooitgedacht 525 JR near Bronkhorstspruit in Kungwini Municipality in Gauteng Province (see Fig. 1). The impact assessment study focused on identifying and assessing potential impacts on archaeological resources and other physical cultural properties including historical heritage resources that may be associated with the proposed chicken houses development project. The study was designed to ensure that any significant archaeological or cultural physical property or sites are identified and recorded, and site significance is evaluated to assess the nature and extent of expected impacts from the proposed chicken farming infrastructure development. The assessment includes recommendations to manage the expected impact of development on the site.

In line with SAHRA guidelines, this report provides:

- 1) Management summary
- 2) Methodology
- 3) Information with reference to the desktop study
- 4) Map and relevant geodetic images and data
- 5) GPS co-ordinates
- 6) Directions to the site
- 7) Site description and interpretation of the cultural area where the project will take place
- 8) Management details, description of affected cultural environment, photographic records of the project area
- 9) Recommendations regarding the significance of the site and recommendations regarding further monitoring of the site
- 10) Conclusion.

2. OBJECTIVES AND SCOPE OF HERITAGE IMPACT ASSESSMENT

The objectives of an Archaeological and Heritage Impact Assessment (A/HIA) are to assist in assessing the effect that proposed development would have on the heritage value of a significant place in South Africa. Guidelines on Heritage Impact Assessments have been prepared by SAHRA and these have been the basis of the preparation of this report. This Heritage Impact Assessment is specifically as a response to the proposals to erect four chicken houses at Rem. of portion 6 of farm Nooitgedacht 525 JR near Bronkhorstspruit in Kungwini Municipality in Gauteng Province. The study also assesses the impact of the options provided in that proposal. The focus of this HIA is therefore the heritage value of the affected landscape and associated archaeological and

other heritage sites that may be on the affected area. If alternative or additional developments proposed in the future, the extent of this A/HIA will need to be reconsidered.

The study primarily seeks to address the applicable regulations in order to facilitate the approval process. This study seeks to:

- □ Fulfil the statutory requirements of the National Heritage Resources Act, Act 25 of 1999, section 38.
- To identify and describe, (in terms of their conservation and / or preservation importance) sites of cultural and archaeological importance that may be affected by the proposed four chicken houses development project. This study should include the identification of gravesites.
- Assess the significance of the resources where they are identified.
- Q Evaluate the impact thereon with respect to the socio-economic opportunities and benefits that would be derived from the proposed development.
- Make recommendations on mitigation measures with the view to reduce specific adverse impacts and enhance specific positive impacts on the heritage resources.
- Take responsibility for communicating with the SAHRA and other authorities in order to obtain the relevant permits and authorization with reference to heritage aspects where applicable.

3. STUDY TERMS OF REFERENCE

The author was asked to conduct an AIA/HIA study for the proposed four chicken houses associated with ongoing chicken farming activities on site. The study terms of reference requested the author to address the following issues:

- Archaeological and heritage potential of each of the alternative sites associated with the four chicken houses development proposal, including any known data on sites in the affected areas;
- Provide details on methods of study;
- Recommendations to guide the PHRA to make an informed with regards to authorization of the proposed development.

4. STATUTORY REQUIREMENTS

The legislations requires that when constructing a linear development exceeding 300m in length or developing an area exceeding 5000 m² in extent, the developer must notify the responsible heritage authority of the proposed development and they in turn must indicate within 14 days whether an impact assessment is required. The NHR Act notes that "any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent", the heritage authority here being Provincial Authority (PHRA).

The proposed four chicken houses development project area exceeds 5000m². This triggers a mandatory Phase 1 A/HIA study. Hence this study is a response in fulfilling the legal requirements. The statutory mandate of heritage impact assessment studies is to encourage and facilitate the protection and conservation of archaeological and cultural heritage sites, in accordance with the provisions of the National Heritage Resources Act, Act 25 of 1999 and the provincial auxiliary regulations. Therefore, in pre-development context, heritage impact assessment study is conducted to fulfil the requirements of Section 38 (1) of the National Heritage Resources Act (No 25 of 1999).

Both the national legislations and provincial provisions provide protection for the following categories of heritage resources:

- Landscapes, cultural or natural;
- Buildings or structures older than 60 years;
- Archaeological Sites, palaeontological material and meteorites;
- Burial grounds and graves;
- · Public monuments and memorials;
- Living heritage (defined as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships) (Also see Appendix 4).

In terms of Section 35 (4) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999)

...no person may, without a permit issued by the relevant heritage resources authority, destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or material or any meteorite; or 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.

5. METHODOLOGY

The methodology of this Heritage Impact Assessment has been determined by the requirements of the NHRA following the Guideline of the SAHRA Policy. The processes and standards for conservation of culturally significant resources such as the SAHRA Policies and the Burra Charter also inform the report. In order to meet the objectives of the AIA, the following tasks were conducted: 1) site file search, 2) limited literature review, 3) completion of a field survey and assessment and 4) analysis of the acquired data and report production.

The study activities included:

- Identify and describe sites of archaeological and other physical cultural properties including historical or cultural interest affected by the proposed four chicken houses development.
- Identify, where possible, the gravesites affected by the four chicken houses development.

- Liaise with the local communities (if applicable) with regards to the impact of the development on the heritage resources.
- Describe the importance or significance of these sites and whether these sites need to be conserved, protected or relocated.
- Describe the procedures for mitigation or relocation of sites and provide an indication of time required for these management measures to be implemented.
- Document findings and recommendations.

5.1 RECONNAISSANCE STUDY

The object of the study was to undertake a detailed site survey and gain an overall understanding of the heritage sensitivities of the Rem. of portion 6 of farm Nooitgedacht 525 JR within that would be affected by the proposed developed and indicate how, if any, heritage resources may be impacted or enhanced through development activities. The preliminary survey was limited to reconnaissance activities. The authors (Principal Archaeologist & Heritage Specialist) conducted and independent reconnaissance of the sites. The reconnaissance study gathered geographical and topographical background information on the proposed development site (Fig 1). A desktop literature review was conducted as part of the preliminary scoping HIA study for this project. We consulted the provincial sources, including historical, archaeological and geological sources.

5.2 A/HIA FIELD SURVEY

We subsequently conducted a detailed field survey of the affected landscape in October 2011. The survey was aimed at identifying archaeological sites and physical cultural resources signatures as well as other cultural heritage sites such as graves, burial and religious or sacred sites that may be affected by the proposed road upgrade project. The author in company of another Nzumbululo Heritage Solution archaeologist systematically transacted the project area on foot. Using the preliminary findings from the reconnaissance study we applied a judgment surveying strategy (stratified sampling). We divided the affected landscape and surrounding buffer zones into geographical zones (previously built up roadside sections, open low land, open grass lands, steep slope mountain section, road side gullies, and stream or river valley sections). Naturally, we placed more emphasis on areas we believed had potential of archaeological, historical or other physical cultural resources. Nonetheless, the field survey team conducted an impact assessment by transecting the affected landscape on foot looking for indicators of geological, palaeontological, archaeological and any other cultural materials in the affected areas. In part the field officer also inspected soil profiles for potential archaeological materials

that may still be trapped *in situ* in an area already disturbed by previous earthmoving activities such as road construction and maintenance activities.

Identification of archaeological sites during surveying also depends on visibility and accessibility. The proposed project area is generally accessible. The farm project area is occasionally cleared during the limited routine maintenance of the existing chicken farming facilities. Under these disturbed conditions, it was anticipated that the chances for finding archaeological material preserved *in situ* in most portions of the farmland were limited.

Geographic coordinates were obtained with a handheld Garmin GPS global positioning unit. Photographs were taken as part of the documentation process during field study.

5.3 ASSUMPTIONS AND LIMITATIONS

The field survey did not include any form of subsurface inspection beyond the inspection of burrows, road cut sections and the river banks exposed by natural erosion forces. Some assumptions were made as part of the study and therefore some limitations, uncertainties and gaps in information apply.

- The proposed chicken farming infrastructure development will be limited to the areas earmarked and covered in this survey without any major deviation
- Since the current affected farmland has similar developments in situ, it was anticipated that no significant archaeological materials were likely to be situated *in situ* within the farmland to present day given the extensive nature of the disturbance to the upper soil layers.
- The chances of encountering settlement sites (both Stone and Iron Ages) within the farmland portions directly affected by the proposed project were limited given the lack of rock shelters in the immediate vicinity (for SA sites) and steep slope topography (usually associated with Rock Art). Available data suggests that the Iron Age farming communities preferred areas suitable for settled homesteads with access to agricultural fields, water and grazing lands. This does not mean that the project area was not used for non-settlement activities by prehistoric communities.
- No excavations or sampling were undertaken, since a permit from heritage authorities prior to any such tests.

5.4 CONSULTATION

No community consultation was conducted during this phase of the A/HIA study. However, the EIA Public Participation Process (PPP) invited public comments on any matter related to the proposed development. No

heritage matter was raised or arose from the EIA PPP exercise, save for the possible grave relocation should the project be approved to proceed as planned.

6. BACKGROUND SUMMARY

The proposed chicken houses development is located on Remainder of portion 6 of Farm Nooitgedacht 525 JR in Bronkhorstspruit in the Kungwini Local Municipality of Gauteng Province (Refer to Figures 1 and 2). The study for proposed project covered one preferred site and one alternative site. (Refer to Figures 1 - 4).

7 CULTURE HISTORY CONTEXT

7.1 BIOPHYSICAL DESCRIPTION OF THE PROJECT AREA

The proposed project development is located in a commercial chicken and agricultural farming area marked with built up areas, roads and farm tracks, power and telecommunication lines, boundary fence lines, grazing land, cornfields and sand mining sites (Figures 1). From the records accessed, no systematic specific archaeological research and local archaeological surveys/recordings have been conducted on the affected project area in Bronkhorspruit. Generally, this area has a long history of intensive land use that left a distinctively altered landscape. Culture-historically, Gauteng area has yielded evidence of human settlement extending into hundreds of thousands of years of prehistory going back as far as the palaeontological human-evolutions through Stone Age, Iron Age, Historical period to contemporary communities.

Iron Age sites associated with the ancestors of the modern Sotho-Tswana and Ndebele speaking communities are wide spread in the region. In recent colonial history, the area played host to different competing local settler communities. The area was a scene of series of colonial wars. By the end of the 19th century, the region was placed under British rule and the local people displaced. Today most of the land is used for commercial, mining, agricultural activities and industrial activities. It is within this cultural landscape that the project area is located.

7.2 ARCHAEOLOGICAL BACKGROUND STONE AGE

The general Gauteng region, like most of South African coastal and inlands, has a culture history that goes back to Stone Age periods (also see Deacon and Deacon, 1997). The San hunter-gather people have lived in the coastal to inland southern and northern grasslands and hills of the modern day Gauteng Province for millenniums long before the Bantu-speaking farmers began arriving in southern Africa 1500 year ago. The San hunter-gatherer left behind a large amount of archaeological evidence including hunting camps marked with shell ash midden, stone tools, rock art (usually on rock shelter and cave walls and as well as cliff faces that today are some of the most unique prehistoric paintings on the continent) (Deacon and Deacon 1999).

In general, the oldest evidence of the early Stone Age inhabitants in the Gauteng comprise of large stone tools, called hand axes and cleavers found amongst river gravels and in old spring deposits in the region. These date to the Earlier Stone Age (ESA) and may date between 1,5 million and 250 000 years old (also see Deacon, 1970). In line with culture history chronology, smaller stone tools of the Middle Stone Age (MSA), which consists of flake and blade industries, replaced the large hand axes and cleavers. Evidence of MSA sites occur throughout the Gauteng region and date between 250 000 and 30 000 years old. These stone artefacts, like the Earlier Stone Age tools are also found in the gravels along the banks of the main rivers. Most archaeological sites found in the Gauteng area Later Stone Age (LSA) dating from the past 10 000 years. The LSA is characterised campsites of San hunter-gatherers and Khoi pastoralists. Despite their estimated ubiquitous, LSA sites pose a bigger challenge to identify *in situ* because they are spread on open agricultural lands most of which today are covered by the cultural landscape affected by the proposed project area. The preservation of these LSA sites is poor and it is not always possible to date them. At most LSA sites are only represented by a few stone tools and fragments of bone (Deacon & Deacon 1999).

The Kungwini region has no significant Stone Age sites on record.

IRON AGE

Some 1600 years ago, southern Africa region witnessed the arrival of Bantu farmers. The Iron Age of the Indian Ocean, the earliest arrivals, in South Africa dates back to the 5th Century AD. These Early Iron Age (EIA) proto-Bantu-speaking farming communities began arriving in this region which was then occupied by San hunter-gatherers and the Khoi pastoralists. These EIA communities are archaeologically referred to as the Mzonjani facies of the Urewe EIA Tradition (Huffman, 2007: 127-9). They occupied the foot-hills and valley lands along the general Indian Ocean coastland introducing settled life, domesticated livestock, crop production and the use of iron (also see Huffman 2007). These settled farming communities were concentrated to the eastern regions (Huffman, 2007).

From the Late Iron Age (LIA) perspective, the project area is associated with Late Iron Age Sotho Tswana communities and has yielded four ceramic sequences of the Urehwe tradition: Ntsuanatsatsi (1450-1650), Olifantspoort (AD 1500 - 1700) and Uitkomst (AD 1700-1850) and Buispoort (1700-1840) [Huffman 2007: 443). These Late Iron Age Nguni communities engaged in the Indian Ocean Trade exporting ivory and importing consumables such as cloth and glass beads. This brought the Nguni speaking community in touch with the IndoAsian and first Europeans (Portuguese). It was the arrival of the Dutch and the English traders that opened up Delagoa Bay to more trade (Huffman 2007). Furthermore, The arrival of the first European settlers on the coast in Cape Town in the mid-1600s added a new mix that will shape the history of the region to what became South Africa.

HISTORICAL BACKGROUND

From the late 1700s, trade in supply of meat to passing ships on the east coast had increased substantially to an extent that by 1800 meat trade is estimated to have surpassed ivory trade. At the same time population was booming following the increased food production that came with the introduction of maize that became the staple food. These changes promoted further westwards movement by the Nguni farming communities.

Naturally, there were signs that population groups had to compete for resources and at time move out of region, which may have been under stress. KwaZulu Natal, east of the Gauteng has a special place in the history of the region and country at large. This relates to the most referenced *mfecane* (wandering hordes) period of tremendous insecurity and military stress. Around the 1805, the region was witnessing the massive movements, which later came to be associated with the *mfecane*. The causes and consequences of the *mfecane* are well documented elsewhere (e.g. Hamilton 1995; Cobbing 1988).

In recent colonial history, the area played host to different competing local settler communities. The area was a scene of series of colonial wars. By the end of the 19th century, the region was placed under British rule and the local people displaced. This part of Gauteng was scene of the most recorded colonial war, the Battle of Majuba during the Anglo-Boer War 1899-1902. At the end of these wars, the colonial era of the Union of South Africa and the subsequent apartheid regimes on the Republic of South Africa, some areas were reserved for African settlements often referred to as Bantu homelands such as the KwaNdebele homeland in boarder region between Gauteng and Mpumalanga provinces.

8. RESULTS OF THE A/HIA STUDY

8.1. LOCATION DETAILS

Province: Gauteng

Local Municipalities: Kungwini Local Municipality.

Name Properties affected: Rem. of portion 6 of farm Nooitgedacht 525 JR Proposed development: Construction of four chicken houses infrastructure.

Current land use: Poultry Farming and associate chicken agribusiness infrastructure.

1:50 000 map name: 2528 DB

GPS Co-ordinates and description of proposed four chicken houses site:

Lat: 25 \(^2\) 52 ' 11" Long: 28\(^2\) 45 ' 37." (Point on the preferred chicken houses site)

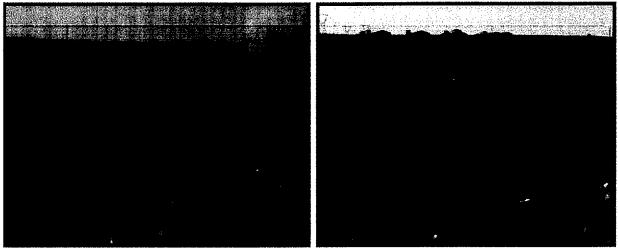
Lat: 25° 51' 49.6" Long: 28° 45' 04.8" (Central point on the preferred chicken houses site)

Lat: 25 º 51 ' 47." Long: 28 º 45 ' 06" (Point on option 2 site)

Lat: 25 ° 52 10.2" Long: 028 45 12.3" (Central point on option 2 site).

Lat: 25 º 52 10.8" Long: 028 45 13.5" (Point on option 2 site)

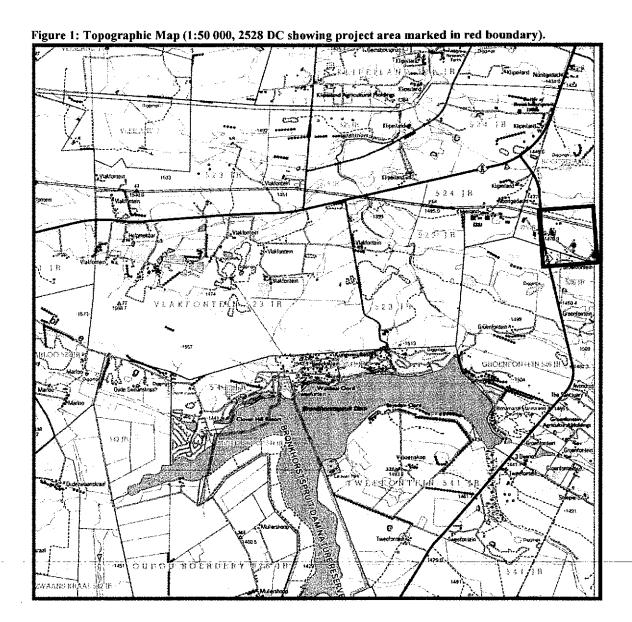
8.1. ARCHAEOLOGICAL AND CULTURAL SITES



Plates 1 and 2: View of Option 1 development site (Left) and (Right). This landscape was previously used for agricultural ploughing and it lay furrow today.

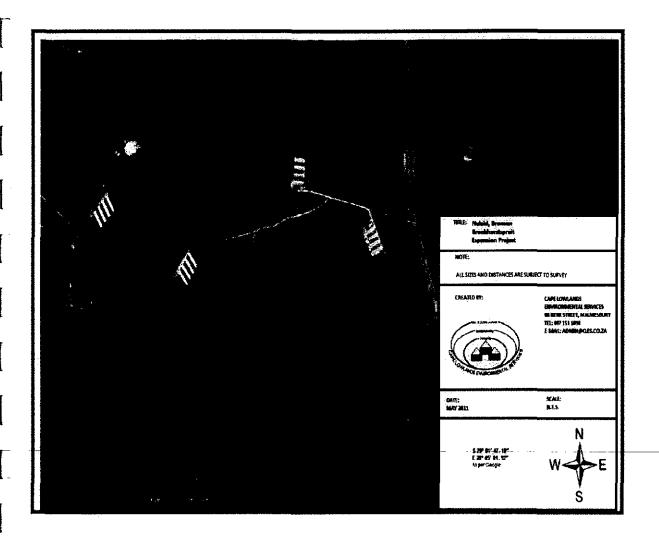
No section of the proposed chicken houses development site yielded any archaeological heritage or physical cultural property sites during the course of this study. The affected landscaped is heavily degraded from previous land use for any significant *in situ* sites to be preserved on location (see Figures 1 to 3 and Plates 1 to 4). Existing poultry infrastructures in the vicinity of the land portions earmarked for the chicken houses project area show how degraded the affected project area is. The proposed four chicken houses construction will be additional to *in situ* developments already on project area (Figure 1; also see Plates 1 to 4). As such the chances of recovering significant archaeological materials *in situ*, particularly open settlement sites, were seriously compromised and limited. If such sites existed on this particular project area, they may have been destroyed over the land use history of development and other destructive land use patterns such as deep ploughing, and the previous golf course that existed prior to this proposed development.

Based on the field study results and field observations, it is the considered opinion of the author that the affected landscape has low potential to yield previously unidentified archaeological sites during subsurface excavations and construction work associated with the chicken houses development.

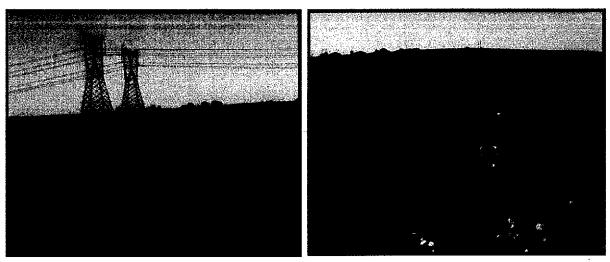


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Figure 2: View of lay out for the proposed four chicken houses development. Note the preferred and alternative sites within the context of existing faming infrastructure. (Source Adapted from Google by Cape Lowlands Environmental Services)

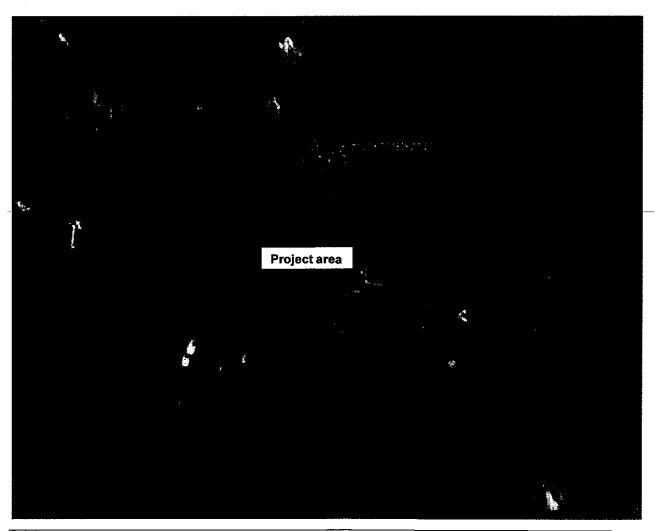


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Plates 3 and 4: View of high voltage powerline running past in the vicinity of Option 1 chicken houses development site (Left) and selected section of option 1 site (Right) (Also see Fig. 2.

Figure 3: Aerial View of Project area (Adapted from Google by Cape Lowlands Environmental Services)



8.2. HISTORICAL AND RECENT SITES

The affected project area may currently be disturbed, however, the cultural landscape does have a long history of human settlements. Generically speaking, historic sites are associated with white settlers, colonial wars, industrialization; recent and contemporary African population settlements, contemporary ritual sites dating to the last hundred years. However, recent historic period sites and features associated with the, African communities, settler and commercial farming communities are on record in the general Gauteng environs. Although the affected general landscape is associated with historical events such as white settler migration, colonial wars and the recent African peopling of the region, no listed specific historical sites are on the proposed development sites.

The more common functions of places of cultural historical significance may include:

- Domestic
- Recreation & culture
- Commerce & trade
- Agriculture & subsistence
- Social
- Health care

- Religion
- Designed landscape
- Funeral (cemeteries, graves and burial grounds)
- · Civil and Structural Engineering
- Education
- Defence /Military

There is no listed monument on the project's receiving environment or its vicinity.

8.3. BURIAL GROUNDS AND GRAVES

No burial sites were identified during the course of field investigations. Whether they are known or not on record, from a heritage perspective, burial grounds and gravesites are accorded the highest social significance threshold (see Appendix 3). They have both historical and social significance and are considered sacred. Wherever they exist they may not be tempered with or interfered with during any proposed development.

In any development context, it is critical to note that there is always a possibility of encountering human remains anywhere on the landscape – finds are made on construction sites from time to time across the country particularly historical cultural landscape such the development project area. Although the possibility of encountering previously unidentified burial sites is limited on the project sites, should such sites be identified during subsurface construction work, they are still protected by applicable legislations and they should be protected (also see Appendixes 3 for more details).

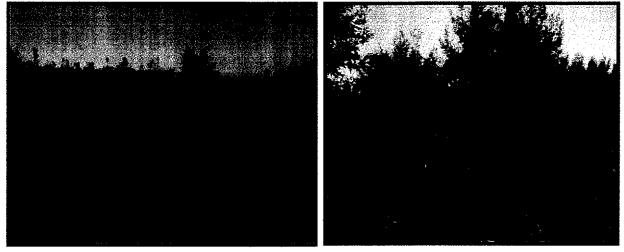
9. OPTION 2 DEVELOPMENT SITE

9.1. ARCHAEOLOGICAL AND CULTURAL SITES

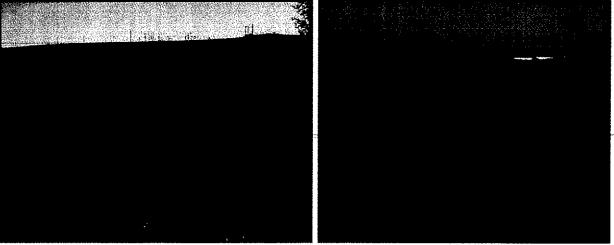
In line with the National Environmental Management Act (NEMA, 2002) EIA regulations, Cape Lowlands Environmental Services identified an alternative chicken houses development site. The alternative site was also

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assessed alongside the preferred site. The presented alternative site is located adjacent to Option 1 site on generally similar landscape to that of the preferred site discussed above (also see Plates 5 & 6). The survey did not identify any archaeological sites or physical cultural resources such as graves, burial grounds and religious or sacred sites that may be affected by the proposed development of this alternative four chicken houses site.



Plates 5 and 6: View of option 2 chicken houses site (Left) and remains of previous chicken house slab within the proposed development site (Right).



Plates 7 and 8: Selected Sections of option 2 chicken houses site (Left) and. (Right). Note that the site has been previously used for chicken production infrastructure.

There is no listed monument on the project's receiving environment or its vicinity. No burial sites were identified during the course of field investigations for the option 2 chicken houses Site. Although the possibility of encountering previously unidentified burial sites is limited on the project sites, should such sites be identified during subsurface construction work, they are still protected by applicable legislations and they should be protected (also see Appendixes 3 for more details).

10. DISCUSSION

No archaeological sites were recorded on direct path for both the preferred and the alternative sites. Both sites a situated on land previously ploughed and uses for other agricultural activities. This has severely degraded the potential of the project area to yield in situ archaeological or significant physical cultural properties. The lack of clearly distinguishable archaeological sites recorded during the current survey is thought to be a result of the level of disturbance and existing developments around the proposed sites. The following observations are key to this result:

- 1. The proposed chicken houses development sites are situated within a heavily degraded area within a previously built up area. The area have reduced sensitivity for the presence of high significance physical cultural site remains, be they archaeological, historical or burial sites, due to previous earth moving disturbances resulting from developments and other land uses in the project area.
- 2. Limited ground surface visibility of the sections of the chicken houses sites that were under tall grass at the time of the study may have impended the detection of other physical cultural heritage site remains immediately associated with the four proposed chicken houses development site. Should such sites exist on direct path of chicken houses development, they will most likely be subsurface and unlikely to be of high significance in relation to the project potential impact.

However, these factors may be worth noting but the proposed project will not introduce any new significant impact into the project area. The development is incremental in the sense that there are already existing other developments in the area (see Plates 1 to 8).

The absence of confirmable archaeological cultural heritage site is not evidence in itself that such sites did not exist in the project area. It may be that, given the dense development in most sections of the four chicken houses site, if such sites existed before, changing earth-moving activities may have destroyed their surficial evidence. Furthermore, some sections were not accessible due to thick vegetation cover. Significance of the Sites of Interest (proposed four chicken houses site) is not limited to presence or absence of physical archaeological sites.

11. STATEMENT OF OVERALL IMPACTS ON PLANNED DEVELOPMENT SITES

The appropriate management of cultural heritage resources is usually determined on the basis of their assessed significance as well as the likely impacts of any proposed developments. Cultural significance is defined in the Burra Charter as meaning *aesthetic*, *historic*, *scientific or social value for past*, *present or future generations* (Article 1.2). Social, religious, cultural and public significance are currently identified as baseline elements of this assessment, and it is through the combination of these elements that the overall cultural heritage values of the Site of Interest, associated place or area are resolved.

The general project area has low potential to yield archaeological sites. The survey did not identify any archaeological or physical cultural properties on the path of the proposed chicken houses sites. Furthermore, the proposed development will be an *in situ* development situated on previously and currently disturbed or developed areas. Inspite of this observation, it is important to note that in any given situation, archaeological resources are fixed in space and absence of archaeological evidence on the surface does not conclusively mean such sites are completely absent.

Archaeological sites may exist subsurface without any visible signature on the surface unless exposed by land disturbances such as erosion and construction work. Therefore, any activity that threatens to alter the status quo of a given landscape is an immediate and direct threat to any potential archaeological resources in its direct path. Should archaeological materials be encountered particularly during the proposed chicken houses construction work, the impact will be permanent in nature, extent and duration (Bickford and Sullivan, 1977). In the context of this study, the affected project area is heavily degraded by existing and previous land use activities. The potential of creating negative impacts to archaeological or physical cultural properties during the chicken houses development and the construction of associated auxiliary infrastructure is remote but nonetheless, there is always a possibility that chance archaeological artefacts may be unearthed during excavations associated with any subsurface development work.

Based on the findings of this study, with high degree of confidence, supplemented by the observation that no archaeological or physical cultural property was recorded on the earmarked development chicken houses sites and, it is logical to conclude that the proposed development project will have no impact upon any known cultural heritage resources be they graves, historical or archaeological sites. It is highly unlikely that the chicken houses construction work will encounter chance archaeological sites. Although the development may alter the existing cultural landscape, the impact will be insignificant from a heritage perspective particularly given the observation that the project area is already altered and similar and more developments exist in the area.

12. RECOMMENDATIONS AND CONCLUDING REMARKS

No physical cultural archaeological or historical sites of significance, were recorded on the project area. The proposed chicken houses development sites have limited potential to affect any physical cultural properties or archaeological resources. No conflicts between archaeological and physical cultural heritage properties including burial grounds and the proposed development are anticipated when construction begins on the four chicken houses sites (see Appendixes 2 and 3 for detailed management inputs and mitigation measures). It is the recommendation of this study that there are no archaeological or significant physical cultural property barriers that were recorded with regards to the project area of the proposed development. Therefore, the preferred site may be approved by the heritage authorities subject to the further recommendations made below.

- Based on the results of this AIA/HIA study, we recommend that the preferred site be approved by heritage authorities.
- The foot print impact of the proposed four chicken houses development and associated infrastructure should be kept to minimal to limit the possibility of encountering chance finds.
- All construction activities including construction campsites should be located within the surveyed project area on previously disturbed ground.
- In situations where unpredicted impacts occur (such as accidentally disturbing a previously unknown grave), construction activities should be stopped and the heritage authority notified immediately. In the unlikely event of chance archaeological material or previously unknown human remains being disturbed during subsurface construction, the finds should be left *in situ* subject to further instruction from the project archaeologist or heritage authorities (refer to Appendixes 1 3 for more details). The overriding objective, where remedial action is warranted, is to minimize disruption in construction scheduling while recovering archaeological and any affected cultural heritage data as stipulated by the NHRA.
- It may be necessary to implement emergency measures to mitigate unanticipated impacts on archaeological sites where project actions inadvertently uncovered significant chance archaeological sites (see Appendixes 1, 2 & 3).
- Furthermore, should the project receive all the necessary approvals and cleared to proceed, the four chicken
 houses construction team should be briefed about the value of the cultural heritage resources in order to
 ensure that they do not destroy the chance archaeological sites they may encounter during subsurface
 construction working on sites.
- These recommendations should be included in the project EMP to ensure compliance during the proposed development.

Subject to the recommendations herein made, there are no cultural heritage resources barriers to both the preferred site and the alternative site. The study did not find any barrier to the preferred four chicken houses site and the alternative. As such, it is recommended to the PHRA authority that the development be cleared to proceed subject to specified recommendations made in the following sections. The following recommendations are based on the results of the A/HIA research, cultural heritage background review, site inspection and assessment of significance.

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APPENDIX 14: HUMAN REMAINS AND BURIALS IN DEVELOPMENT CONTEXT

BY Dr Murimbika M. [2011] Dr. M. Murimbika Hessa5@telkomsa.net

Developers, land use planners and professional specialist service providers often encounter difficult situations with regards to burial grounds, cemeteries and graves that may be encountered in development contexts. This may be before or during a development project. There are different procedures that need to be followed when a development is considered on an area that will impact upon or destroy existing burial grounds, cemeteries or individual graves. In contexts where human remains are accidentally found during development work such as road construction or building construction, there are different sets of intervention regulations that should be instigated. This brief is an attempt to highlight the relevant regulations with emphasis on procedures to be followed when burial grounds, cemeteries and graves are found in development planning and development work contexts. The applicable regulations operate within the national heritage and local government legislations and ordinances passed in this regard. These guidelines assist you to follow the legal pathway.

1. First, establish the context of the burial:

A. Are the remains less than 60 years old? If so, they may be subject to provisions of the Human Tissue Act, Cemeteries Ordinance(s) and to local, regional, or municipal regulations, which vary from place to place. The finding of such remains must be reported to the police but are not automatically protected by the National Heritage Resources Act (Act 25 of 1999).

B. Is this the grave of a victim of conflict? If so, it is protected by the National Heritage Resources Act (Section 36(3a)). (Relevant extracts from the Act and Regulations are included below).

C. Is it a grave or burial ground older than 60 years which is situated outside a formal cemetery administered

by a local authority? If so, it is protected by the National Heritage Resources Act (Section 36(3b)).

D. Are the human or hominid remains older than 100 years? If so, they are protected by the National Heritage Resources Act (Section 35(4), see also definition of "archaeological" in Section 2).

2. Second, refer to the terms of the National Heritage Resources Act most appropriate to the situation, or to other Acts and Ordinances:

A. Human remains that are NOT protected in terms of the National Heritage Resources Act (i.e. less than 60 years old and not a grave of a victim of conflict or of cultural significance) are subject to provisions of the Human Tissue Act and to local and regional regulations, for example Cemeteries Ordinances applicable in different Provincial and local Authorities.

- B). All finds of human remains must be reported to the nearest police station to ascertain whether or not a crime has been committed.
- C). If there is no evidence for a crime having been committed, and if the person cannot be identified so that their relatives can be contacted, the remains may be kept in an institution where certain conditions are fulfilled. These conditions are laid down in the Human Tissue Act (Act No. 65 of 1983). In contexts where the local traditional authorities given their consent to the unknown remains to be re-buried in their area, such re-interment may be conducted under the same regulations as would apply for known human remains.
- 3. In the event that a graveyard is to be moved or developed for another purpose, it is incumbent on the local authority to publish a list of the names of all the persons buried in the graveyard if there are gravestones or simply a notification that graves in the relevant graveyard are to be disturbed. Such a list would have to be compiled from the names on the gravestones or from parish or other records. The published list would call on the relatives of the deceased to react within a certain period to claim the remains for re-interment. If the relatives do not react to the advertisement, the remains may be re-interred at the discretion of the local authority.

- **PROVINCE**
- A. However, it is the responsibility of the developer to ensure that none of the affected graves within the cemetery are burials of victims of conflict. The applicant is also required in line with the heritage legislation to verify that the graves have no social significance to the local communities.
- B. It is illegal in terms of the Human Tissue Act for individuals to keep human remains, even if they have a permit, and even if the material was found on their own land
- 4. The Exhumations Ordinance (Ordinance No. 12 of 1980 and as amended) is also relevant. Its purpose is "To prohibit the desecration, destruction and damaging of graves in cemeteries and receptacles containing bodies; to regulate the exhumation, disturbance, removal and re-interment of bodies, and to provide for matters incidental thereto". This ordinance is supplemented and support by local authorities regulations, municipality by-laws and ordinances.

DEFINITIONS AND APPLICABLE REGULATIONS

- 1). A "Cemetery" is defined as any land, whether public or private, containing one or more graves.
- 2). A "grave" includes "(a) any place, whether wholly or partly above or below the level of ground and whether public or private, in which a body is permanently interred or intended to be permanently interred, whether in a coffin or other receptacle or not, and (b) any monument, tombstone, cross, inscription, rail, fence, chain, erection or other structure of whatsoever nature forming part of or appurtenant to a grave.
- 3). No person shall desecrate, destroy or damage any grave in a cemetery, or any coffin or urn without written approval of the Administrator.

- 4). No person shall exhume, disturb, remove or re-inter anybody in a cemetery, or any coffin or urn without written approval of the Administrator.
- 5). Application must be made for such approval in writing, together with:
- a). A statement of where the body is to be re-interred.
- b). Why it is to be exhumed.
- c). The methods proposed for exhumation.
- d). Written permission from local authorities, nearest available relatives and their religious body owning or managing the cemetery, and where all such permission cannot be obtained, the application must give reasons why not.
- 6). The Administrator has the power to vary any conditions and to impose additional conditions.
- Anyone found guilty and convicted is liable for a maximum fine of R200 and maximum prison sentence of six months.
- 5. Human remains from the graves of victims of conflict, or any burial ground or part thereof which contains such graves and any other graves that are deemed to be of cultural significance may not be destroyed, damaged, altered, exhumed or removed from their original positions without a permit from the National Heritage Resources Agency. They are administered by the Graves of Conflict Division at the SAHRA offices in Johannesburg.
- "Victims of Conflict" are:
- a). Those who died in this country as a result of any war or conflict but excluding those covered by the Commonwealth War Graves Act, 1992 (Act No. 8 of 1992).
- b). Members of the forces of Great Britain and the former British Empire who died in active service before 4 October 1914.
- c). Those who, during the Anglo Boer War (1899-1902) were removed from South Africa as prisoners and died outside South Africa, and,

- d). Those people, as defined in the regulations, who died in the "liberation struggle" both within and outside South Africa.
- 6. Any burial that is older than 60 years, which is outside a formal cemetery administered by a local authority, is protected in terms of Section 36(3b) of the National Heritage Resources Act. No person shall destroy damage, alter, exhume or remove from its original position, remove from its original site or export from the Republic any such grave without a permit from the SAHRA.

There are some important new considerations applicable to B & C (above).

SAHRA may, for various reasons, issue a permit to disturb a burial that is known to be a grave of conflict or older than 65 years, or to use, at a burial ground, equipment for excavation or the detection or the recovery of metals.

(Permit applications must be made on the official form Application for Permit: Burial Grounds and Graves available from SAHRA or provincial heritage resources authorities.) Before doing so, however, SAHRA must be satisfied that the applicant:

- a). Has made satisfactory arrangements for the exhumation and re-interment of the contents of such a grave at the cost of the applicant.
- b). Has made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such a grave and,
- c). Has reached an agreement with these communities and individuals regarding the future of such a grave or burial ground.

PROCEDURE FOR CONSULTATION

The regulations in the schedule describe the procedure of consultation regarding the burial grounds and graves. These apply to anyone who intends to apply for a permit to destroy damage, alter, remove from its original

position or otherwise disturb any grave or burial ground older than 60 years that is situated outside a formal cemetery administered by a local authority. The applicant must make a concerted effort to identify the descendants and family members of the persons buried in and/or any other person or community by tradition concerned with such grave or burial ground by:

- 1). Archival and documentary research regarding the origin of the grave or burial ground;
- 2). Direct consultation with local community organizations and/or members;
- 3). The erection for at least 60 days of a notice at the grave or burial ground, displaying in all the official languages of the province concerned, information about the proposals affecting the site, the telephone number and address at which the applicant can be contacted by any interested person and the date by which contact must be made, which must be at least 7 days after the end of the period of erection of the notice; and
- 4). Advertising in the local press.

The applicant must keep records of the actions undertaken, including the names and contact details of all persons and organizations contacted and their response, and a copy of such records must be submitted to the provincial heritage resources authority with the application.

Unless otherwise agreed by the interested parties, the applicant is responsible for the cost of any remedial action required.

If the consultation fails to research in agreement, the applicant must submit records of the consultation and the comments of all interested parties as part of the application to the provincial heritage resources authority. In the case of a burial discovered by accident, the regulations state that when a grave is discovered accidentally in the course of development or other activity:

a). SAHRA or the provincial heritage resources authority (or delegated representative) must, in co-operation with the Police, inspect the grave and decide whether it is likely to be older than 60 years or otherwise protected in terms of the Act; and whether any further graves exist in the vicinity.

- b). If the grave is likely to be so protected, no activity may be resumed in the immediate vicinity of the grave, without due investigation approved by SAHRA or the provincial heritage resources authority; and
- c). SAHRA or the provincial heritage resources authority may at its discretion modify these provisions in order to expedite the satisfactory resolution of the matter.
- d. Archaeological material, which includes human and hominid remains that are older than 100 years (see definition in section 2 of the Act), is protected by the National Heritage Resources Act (Section 35(4)), which states that no person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter or remove from its original site any archaeological or palaeontological material.

The implications are that anyone who has removed human remains of this description from the original site must have a permit to do so. If they do not have a permit, and if they are convicted of an offence in terms of the National Heritage Resources Act as a result, they must be liable to a maximum fine of R100 000 or five years imprisonment, or both.

TREAT HUMAN REMAINS WITH RESPECT

- a). Every attempt should be made to conserve graves in situ. Graves should not be moved unless this is the only means of ensuring their conservation.
- b). The removal of any grave or graveyard or the exhumation of any remains should be preceded by an historical and archaeological report and a complete recording of original location, layout, appearance and inscriptions by means of measured drawings and photographs. The report and recording should be placed in a permanent archive.

- c). Where the site is to be re-used, it is essential that all human and other remains be properly exhumed and the site left completely clear.
- d). Exhumations should be done under the supervision of an archaeologist, who would assist with the identification, classification, recording and preservation of the remains.
- e). No buried artifacts should be removed from any protected grave or graveyard without the prior approval of SAHRA. All artifacts should be re-buried with the remains with which they are associated. If this is not possible, proper arrangements should be made for the storage of such relics with the approval of SAHRA.
- f). The remains from each grave should be placed in individual caskets or other suitable containers, permanently marked for identification.
- g). The site, layout and design of the area for reinterment should take into account the history and culture associated with, and the design of, the original grave or graveyard.
- h). Re-burials in mass graves and the use of common vaults are not recommended.
- i). Remains from each grave should be re-buried individually and marked with the original grave markers and surrounds.
- j). Grouping of graves, e.g. in families, should be retained in the new layout.
- k). Material from the original grave or graveyard such as chains, kerbstones, railing and should be re-used at the new site wherever possible.
- 1). A plaque recording the origin of the graves should be erected at the site of re-burial.
- m). Individuals or groups related to the deceased who claim the return of human remains in museums and other institutions should be assisted to obtain documentary proof of their ancestral linkages.

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APPENDIX 2: HERITAGE MANAGEMENT PLAN INPUT INTO THE FOUR CHICKEN HOUSES PROJECT EMP

- Protection of archaeological sites and land considered to be of cultural value;
- Protection of known physical cultural property sites against vandalism, destruction and theft; and
 The preservation and appropriate management of new archaeological finds should these be discovered during construction.

The preservation and appropriate management of new archaeological finds should these be discovered during construction.									
La sur	وبالإدلة بمجادداته		rang uni terresi ikas 25 agas i	Tyr 1-1- a sinalatikanikanikaji y ilikulo <u>di y</u>	(Islanda bir Lader Land Breed	∮arana asagaraka		Tadamata Seri	
1	Planning	Ensure all known sites of cultural, archaeological, and historical significance are demarcated on the site layout plan, and marked as no-go areas.	Throughout Project	Weekly Inspection	Contractor [C] CECO	SM	ECO	EA EM PM	
***	Emergency Response	Should any archaeological or physical cultural property heritage resources be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped until heritage authority has cleared the development to continue.	N/A	Throughout	C CECO	SM	ECO	EA EM PM	
		Should any archaeological, cultural property heritage resources be exposed during excavation or be found on development site, a registered heritage specialist or PHRA official must be called to site for inspection.		Throughout	C CECO	SM	ECO	EA EM PM	
		Under no circumstances may any archaeological, historical or any physical cultural property heritage material be destroyed or removed form site;		Throughout	C CECO	SM	ECO	EA EM PM	
		Should remains and/or artefacts be discovered on the development site during earthworks, all work will cease in the area affected and the Contractor will immediately inform the Construction Manager who in turn will inform PHRA.		When necessary	C CECO	SM	ECO	EA EM PM	
		Should any remains be found on site that is potentially human remains, the PHRA and South African Police Service should be contacted.		When necessary	C CECO	SM	ECO	EA EM PM	
	Part of the second seco	Same as construction phase.					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ed en all little de ed en all little de el serverjoer (12 light	
	and the Constant	Same as construction phase.	त्र का कार्यात्र क्षेत्रकार क्षेत्रकार क्षेत्रकार क्षेत्रकार क्षेत्रकार क्षेत्रकार क्षेत्रकार क्षेत्रकार क्षेत्र व	tieti sääntyi sii metkimen einkitivai almeen sii min tuk	tti (filozofi sila del	Local Communication		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

APPENDIX 3: HERITAGE MITIGATION MEASURE TABLE

SITE REF	HERITAGE ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	RESPONSIBLE PARTY	PENALTY	METHOD STATEMENT REQUIRED
Сһапсе	General area where the proposed project	Possible damage to previously	In situations where unpredicted impacts occur	Contractor /	Fine and or	
Archaeological	is situated is a historic landscape, which	unidentified archaeological and	construction activities must be stopped and the	Project Manager	imprisonment	Monitoring measures should be
and Burial Sites	may yield archaeological, cultural	burial sites during construction	heritage authority should be notified	 Archaeologist 	under the PHRA	issued as instruction within the
	property, remains. There are	phase.	immediately.	Project EO	Act & NHRA	project EMP.
	possibilities of encountering unknown	Unanticipated impacts on	Where remedial action is warranted, minimize			
	archaeological sites during subsurface	archaeological sites where	disruption in construction scheduling while			PM/EO/Archaeologists Monitor
	construction work which may disturb	project actions	recovering archaeological data. Where			construction work on sites where
	previously unidentified chance finds.	inadvertently uncovered	necessary, implement emergency measures to			such development projects
		significant archaeological	mitigate,			commences within the farm.
		sites.	Where burial sites are accidentally			
		Loss of historic cultural	disturbed during construction, the			
		landscape;	affected area should be demarcated as no-			
		Destruction of burial sites	go zone by use of fencing during			
}	<u>'</u>	and associated graves	construction, and access thereto by the			
		Loss of aesthetic value	construction team must be denied.			
		due to construction work	Accidentally discovered burials in			
[Loss of sense of place	development context should be salvaged			
		Loss of intangible heritage	and rescued to safe sites as may be			
	1	value due to change in land use	directed by relevant heritage authority.			
			The heritage officer responsible should			
1	·	;]	secure relevant heritage and health			
		1	authorities permits for possible relocation			
		:	of affected graves accidentally			
			encountered during construction work.			

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APPENDIX 4: LEGAL BACK GROUND AND PRINCIPLES OF HERITAGE RESOURCES MANAGEMENT IN SOUTH AFRICA

Extracts relevant to this report from the National Heritage Resources Act No. 25 of 1999, (Sections 5, 36 and 47):

General principles for heritage resources management

- 5. (1) All authorities, bodies and persons performing functions and exercising powers in terms of this Act for the management of heritage resources must recognise the following principles:
- (a) Heritage resources have lasting value in their own right and provide evidence of the origins of South African society and as they are valuable, finite, non-renewable and irreplaceable they must be carefully managed to ensure their survival;
- (b) every generation has a moral responsibility to act as trustee of the national heritage for succeeding generations and the State has an obligation to manage heritage resources in the interests of all South Africans;
- (c) heritage resources have the capacity to promote reconciliation, understanding and respect, and contribute to the development of a unifying South African identity; and
- (d) heritage resources management must guard against the use of heritage for sectarian purposes or political gain.
- (2) To ensure that heritage resources are effectively managed—
- (a) the skills and capacities of persons and communities involved in heritage resources management must be developed; and
- (b) provision must be made for the ongoing education and training of existing and new heritage resources management workers.
- (3) Laws, procedures and administrative practices must-
- (a) be clear and generally available to those affected thereby;
- (b) in addition to serving as regulatory measures, also provide guidance and information to those affected thereby; and
- (c) give further content to the fundamental rights set out in the Constitution.
- (4) Heritage resources form an important part of the history and beliefs of communities and must be managed in a way that acknowledges the right of affected communities to be consulted and to participate in their management.
- (5) Heritage resources contribute significantly to research, education and tourism and they must be developed and presented for these purposes in a way that ensures dignity and respect for cultural values.
- (6) Policy, administrative practice and legislation must promote the integration of heritage resources conservation in urban and rural planning and social and economic development.
- (7) The identification, assessment and management of the heritage resources of South Africa must—
- (a) take account of all relevant cultural values and indigenous knowledge systems;
- (b) take account of material or cultural heritage value and involve the least possible alteration or loss of it;
- (c) promote the use and enjoyment of and access to heritage resources, in a way consistent with their cultural

significance and conservation needs;

- (d) contribute to social and economic development;
- (e) safeguard the options of present and future generations; and
- (f) be fully researched, documented and recorded.

Burial grounds and graves

- 36. (1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.
- (2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.
- (3) (a) 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.
- (4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.
- (5) 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.
- (6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority—
- (a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and

- (b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.
- (7) (a) SAHRA must, over a period of five years from the commencement of this Act, submit to the Minister for his or her approval lists of graves and burial grounds of persons connected with the liberation struggle and who died in exile or as a result of the action of State security forces or agents provocateur and which, after a process of public consultation, it believes should be included among those protected under this section.
- (b) The Minister must publish such lists as he or she approves in the Gazette.
- (8) Subject to section 56(2), SAHRA has the power, with respect to the graves of victims of conflict outside the Republic, to perform any function of a provincial heritage resources authority in terms of this section.
- (9) SAHRA must assist other State Departments in identifying graves in a foreign country of victims of conflict connected with the liberation struggle and, following negotiations with the next of kin, or relevant authorities, it may re-inter the remains of that person in a prominent place in the capital of the Republic.

General policy

- 47. (1) SAHRA and a provincial heritage resources authority—
- (a) must, within three years after the commencement of this Act, adopt statements of general policy for the management of all heritage resources owned or controlled by it or vested in it; and
- (b) may from time to time amend such statements so that they are adapted to changing circumstances or in accordance with increased knowledge; and
- (c) must review any such statement within 10 years after its adoption.
- (2) Each heritage resources authority must adopt for any place which is protected in terms of this Act and is owned or controlled by it or vested in it, a plan for the management of such place in accordance with the best environmental, heritage conservation, scientific and educational principles that can reasonably be applied taking into account the location, size and nature of the place and the resources of the authority concerned, and may from time to time review any such plan.
- (3) A conservation management plan may at the discretion of the heritage resources authority concerned and for a period not exceeding 10 years, be operated either solely by the heritage resources authority or in conjunction with an environmental or tourism authority or under contractual arrangements, on such terms and conditions as the heritage resources authority may determine.
- (4) Regulations by the heritage resources authority concerned must provide for a process whereby, prior to the adoption or amendment of any statement of general policy or any conservation management plan, the public and interested organisations are notified of the availability of a draft statement or plan for inspection, and comment is invited and considered by the heritage resources authority concerned.
- (5) A heritage resources authority may not act in any manner inconsistent with any statement of general policy or conservation management plan.
- (6) All current statements of general policy and conservation management plans adopted by a heritage resources authority must be available for public inspection on request.