

**HERITAGE INSPECTION REPORT FOR ABANDONED BURIAL
SITE DISCOVERED DURING CONSTRUCTION WORK ON
PORTION 32 OF THE FARM MODDERFONTEIN 76-IR
ALLIANCE EXTENSIONS 6 TO 8 AND 12 TO 17 IN EKURHULENI
METROPOLITAN MUNICIPALITY, GAUTENG PROVINCE**

Final Heritage Inspection Report

April 2018

1 DOCUMENT INFORMATION

Item	Description
Proposed development and location	Heritage Inspection report for a burial site discovered during construction work on Portion 32 of the farm Modderfontein 76 IR in Ekurhuleni Metropolitan Municipality in Gauteng Province.
Purpose of the study	To verify the extent of the burial site in respect of the ongoing construction work and to provide viable mitigation measures
1:50 000 Topographic Map	2628 AB
Coordinates for burial site	S26° 11' 23" E028° 25' 50."
Municipalities	Ekurhuleni Metropolitan Municipality.
Predominant land use of surrounding area	Residential, mining, industrial, powerlines, road, and transport.
Developer/Applicant	Ekurhuleni Metropolitan Municipality
Project Managers	2MC Consulting Engineers (Pty) Ltd
Reference no.	170302.01b/AI Ext1 ISS
Heritage Consultant	Integrated Specialist Services (Pty) Ltd 135 Pitzer Road, Glen Austin 1685 Phone: 011 037 1565 Cell: 071 685 9247 Email: trust@issolutions.co.za
Date of Report	Final Report 19 April 2018

NATIONAL LEGISLATION AND REGULATIONS GOVERNING THIS REPORT

This is a specialist report' and is compiled in terms of the National Heritage Resources Act 25 of 1999 and National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2014.

DECLARATION OF INDEPENDENCE

In terms of Chapter 5 of the National Environmental Management Act of 1998 specialists involved in Impact Assessment processes must declare their independence.

I, Trust Mlilo, do hereby declare that I am financially and otherwise independent of the client and their consultants, and that all opinions expressed in this document are substantially my own, notwithstanding the fact that I have received fair remuneration from the client for preparation of this report.

Expertise:

Trust Mlilo, MA. (Archaeology), BA Hons, PDGE and BA General & (Univ. of Pretoria) ASAPA (affiliation member) and more than 15 years of experience in archaeological and heritage impact assessment and management. Mlilo is an accredited member of the Association for Southern African Professional Archaeologists (ASAPA), Amafa akwaZulu Natali and Eastern Cape Heritage Resources Agency (ECPHRA). He has conducted more than hundred AIA/HIA Studies, heritage mitigation work and heritage development projects over the past 15 years of service. The completed projects vary from Phase 1 and Phase 2 as well as heritage nominations, heritage management work for government, municipalities (Ekurhuleni) parastatals (Eskom) and several private companies such as BHP Billiton, Rhino Minerals.

Independence

The views expressed in this document are the objective, independent views of Mr Trust Mlilo and the survey was carried out under 2MC Consulting Engineers (Pty) Ltd. Integrated Specialist Services (Pty) Ltd has no any business, personal, financial or other interest in the on going development apart from fair remuneration for the work performed.

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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.

Signed by

A handwritten signature in black ink, appearing to be 'H. P. ...'.

19 April 2018

Acknowledgements

The author acknowledges 2MC Consulting Engineers resident project engineer, project managers and staff at the construction site for their assistance with project information, and previous reports for the project as well as responding to technical queries related to the project.

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3 EXECUTIVE BRIEF

This report outlines the heritage investigation results of an abandoned burial site discovered during clearance for the main sewer pipeline for Alliance Extension 8,12 and 17 housing project in Ekurhuleni. Integrated Specialist Services (Pty) Ltd undertook the investigation of the burial site in respect of the on-going housing and municipal services development. The Phase 2 mitigation exercise was commissioned by 2MC Consulting Engineers (Pty) Ltd. The exercise constitutes a Phase 2 mitigation process of inspecting and verification of the affected burial site and also to establish the extent of the site.

The heritage mitigation exercise involves assessing, classification, searching and proposing viable mitigation measures to protect the burial site while construction goes on. The site inspection confirmed that the main sewer pipeline cuts through a burial site with more than 600 historical graves. The current pipeline route to K16 main hole will certainly affect more than 50 graves located on the site. Accordingly, the site was geo-referenced and documented. The site inspection was conducted in accordance with relevant legislations including the Section 36 of the National Heritage Resources Act (Act No 25 of 1999) and the Human Tissue Act (1983).

Based on the confirmation and mapping of the affected burial, it was recommended that the current plan to connect to K16 main hole must be abandoned. Three viable options to connect to 3 different main holes were suggested during the inspection exercise and the technical team will decide which option is most viable from a technical point of view. The exercise involved the archaeologist, ECO and site engineer.

4 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
ISS	Integrated Specialist Services (Pty) Ltd
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

5 DEFINITIONS

The following terms used in this Archaeological /Heritage Impact Assessment are defined in the National Heritage Resources Act [NHRA], Act Nr. 25 of 1999, South African Heritage Resources Agency [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 artifacts, human and hominid remains, and artificial features and structures.

Chance Finds means 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 powerline pole position excavations.

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

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

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

Cultural Significance also encompasses 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.

Environment The surroundings within which humans exist and that are made up of: i. the land, water and atmosphere of the earth;

ii. micro-organisms, plant and animal life;

iii. any part or combination of (i) and (ii) and the interrelationships among and between them; and,

iv. the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being. This includes the economic, social, cultural, historical and political circumstances, conditions and objects that affect the existence and development of an individual, organism or group.

Environmental impact assessment An Environmental Impact Assessment (EIA) refers to the process of identifying, predicting and assessing the potential positive and negative social, economic and biophysical impacts of any proposed project, plan, programme or policy which requires authorisation of permission by law and which

may significantly affect the environment. The EIA includes an evaluation of alternatives. As well as recommendations for appropriate mitigation measures for minimising or avoiding negative impacts, measures enhancing the positive aspects of the proposal and environmental management and monitoring measures.

Expansion means the modification, extension, alteration or upgrading of a facility, structure or infrastructure at which an activity takes place in such a manner that the capacity of the facility or the footprint of the activity is increased;

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

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 (*contemporary*) or **Burial Ground** (*historic*).

Heritage impact assessment (HIA) refers to the process of identifying, predicting and assessing the potential positive and negative cultural, social, economic and biophysical impacts of any proposed project, plan, programme or policy which requires authorisation of permission by law and which may significantly affect the cultural and natural heritage resources. The HIA includes recommendations for appropriate mitigation measures for minimising or avoiding negative impacts, measures enhancing the positive aspects of the proposal and heritage management and monitoring measures.

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.

Impact The positive or negative effects on human well-being and / or on the environment.

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.

Interested and affected parties Individuals, communities or groups, other than the proponent or the authorities, whose interests may be positively or negatively affected by the proposal or activity and/ or who are concerned with a proposal or activity and its consequences.

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

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

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

Mitigate The implementation of practical measures to reduce adverse impacts or enhance beneficial impacts of an action.

Place means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

Protected area means those protected areas contemplated in section 9 of the NEMPAA and the core area of a biosphere reserve and shall include their buffers;

Public participation process A process of involving the public in order to identify issues and concerns, and obtain feedback on options and impacts associated with a proposed project, programme or development. Public Participation Process in terms of NEMA refers to: a process in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to specific matters

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

Significance can be differentiated into impact magnitude and impact significance. Impact magnitude is the measurable change (*i.e. intensity, duration and likelihood*). Impact significance is the value placed on the change by different affected parties (*i.e. level of significance and acceptability*). It is an anthropocentric concept, which makes use of value judgments and science-based criteria (*i.e. biophysical, physical cultural, social and economic*).

Site A distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

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

6 INTRODUCTION

Brief Background

In the course of on-going clearance for housing developments and municipal services on Portion 32 of the farm Modderfontein 76 IR in Ekurhuleni Metropolitan Municipality, Gauteng Province, construction workers discovered a burial site towards the terminal position of sewer pipeline (K16 main hole). The burial site is located on the farm Modderfontein 76 IR at GPS coordinates S26° 11' 22" E028° 25' 51." Work along the pipeline was accordingly halted pending verification by a professional archaeologist. Heritage specialists from ISS visited and inspected the site on the 6th of April 2018. The site inspection and verification exercise recorded more than 600 graves along the pipeline route. Note that the affected section of the sewer pipeline is less than 300m required for a full HIA study. The inspection was conducted in accordance with National Heritage Resources Act (Section 36(3b) and the Human Tissue Act.

This site condition survey and site inspection report details the results of the inspection and verification exercise conducted by ISS specialists. The site inspection revealed that the burial site covers approximately 80m x 60m north of Modderfontein East Substation. The pipeline route is cutting through more than 50 graves. Given the complexities associated with relocation of graves, the most feasible mitigation measure would be to shift the pipeline route further south to avoid the burial site. As indicated 3 viable optional routes were suggested and surveyed accordingly. The heritage inspection recorded more than 600 graves arranged in rows, most of the graves are concealed by thick grass cover but those with tombstones and distinct headstones were clearly visible. Most of the graves seem older than 60 years and fall under the NHRA. The site might have been previously fenced but to date, the site is not protected in any way. There are no signs of families conducting rituals at the graves. During the exercise we realized that three graves may have been exhumed but we could not verify whether the graves were robbed or exhumed legally. As such the heritage specialist concluded that the site must be preserved *in situ* and the municipality must fence and demarcate the burial site for future reference.

7 AIMS OF THE INVESTIGATION

The aims of the site investigations were as follows:

- Establish the extent (size) of the discovered burial site in relation to the approved sewer pipeline and auxiliary developments.
- To investigate potential options or mitigation measures to avoid the affected burial site without altering the development plan significantly.
- To investigate the nature of the site, the age, types of burials in order to determine their protection level ie older than 60 years are protected by the NHRA and graves younger than 60 years are protect by the Human Tissue Act.
- To establish whether the site is still active or not and whether there are any custodian or families coming to conduct rituals at the site. This information is vital when eventually you want to track custodians to relocate the graves or to fence around the site.
- To investigate if any other burial sites occur within the entire development footprint

The inspection process at the affected site was necessitated by the discovery of a burial site along the main sewer pipe line route. This exercise involved the heritage specialists, the contractor and the site Engineer. ISS Heritage specialists were responsible for assessing and suggesting mitigation measures.

8 METHODOLOGY

This document falls under Phase 2 heritage mitigation and therefore aims at providing an informed heritage-related opinion about the discovered burial site in respect of the main sewer pipe line instalation. This is usually achieved through a combination of a review of any existing literature and a basic site inspection. As part of the desktop study, published literature and cartographic data, as well as archival data on heritage the history and of the project area were studied. The desktop study was followed by field investigation conducted on the 6th of April 2018 by team of two archaeologists and the site engineer. The field assessment was conducted according to generally accepted HIA practices and aimed at locating all graves located in the recently discovered burial site. We conducted a random transect walk across the site to eastablish the extent of the site in relation to the on going sewer pipe line development. Initially a

drive-through was undertaken around the proposed development as a way of acquiring the heritage impression of the project area. This was then followed by a walk down survey along the pipeline routes in the project area. The site was geo-referenced with a hand held Global Positioning System (GPS) for recording the location/position of each possible burial site. Detailed photographic recording of graves was also undertaken where relevant. The findings were then analysed in view of the proposed development in order to suggest viable mitigation measures. The result of this investigation is a report indicating the presence of an abandoned burial site and how to manage it in the context of the current infrastructure development project. The main focus of the survey involved a pedestrian survey which was conducted across the project site. The pedestrian survey focussed on parts of the project area where it seemed as if disturbances may have occurred in the past, for example bald spots in the grass veld; stands of grass which are taller than the surrounding grass veld; the presence of exotic trees; evidence for building rubble, and ecological indicators such as invader weeds.

9 CONTEXT OF THE BURIAL SITE DISCOVERY

The burial site in question is not marked and was not previously recorded. The site is also not indicated on the Topographic Map 1:50 000 2628AB Benoni. It occurs on a seemingly open space between Modder East Substation and Cloverfields. Archival records indicate that the farm Modderfontein 76 IR belonged to Modderfontein B Gold mines (Pty) Ltd and Portion 32 (a portion of portion 3) belonged to Rochdale Enterprises (Pty) Ltd. There is mention of establishment of a pound to serve the inhabitants of Daveyton, there is also mention of establishing an eating house as well as documents relating to Modder East Substation, Modder East residents and Rand Water infrastructure. There are no records relating to the existence of the burial site in question. The lack of information relating to the burial site suggests that the burial site is neither in the municipality records nor surveyor general's records. However, the Topographic map 2628 AB (1939, 1937, 1976, 1983, 1995, 2002 & 2010 Editions) show ruined buildings which were confirmed by this study. It is not clear if the ruined building predates the site or they are contemporaries. The study also noted coal residue associated with the ruined structures which suggest that the derelict buildings might have been the eating house mentioned in archival records about the farm. In addition, there are fruit trees which suggests that the site might have been a farm or mine compound. However, the number of graves on the site suggests that they must have been a large settlement or compound with a large population of people living in and around the site. Huffman (2009) indicates that there was settlement for black people on the farm Modderfontein 76 IR. The study also mentions an African burial site located on the west of the current project area. This burial site appears on the Topographic Map 2628 AB 1976 Edition and it is far from the current development.

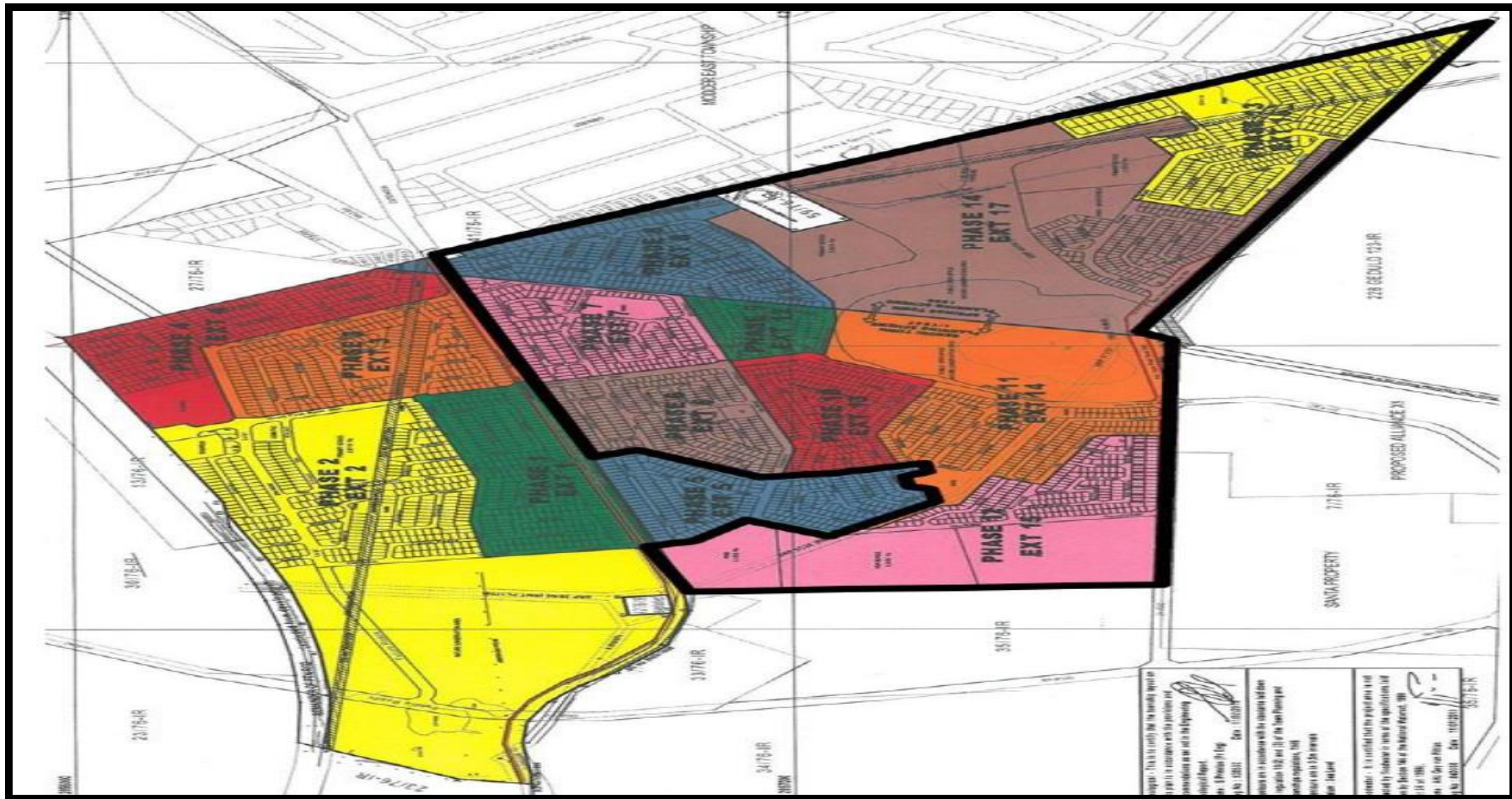


Figure 1: Layout plan for the development.

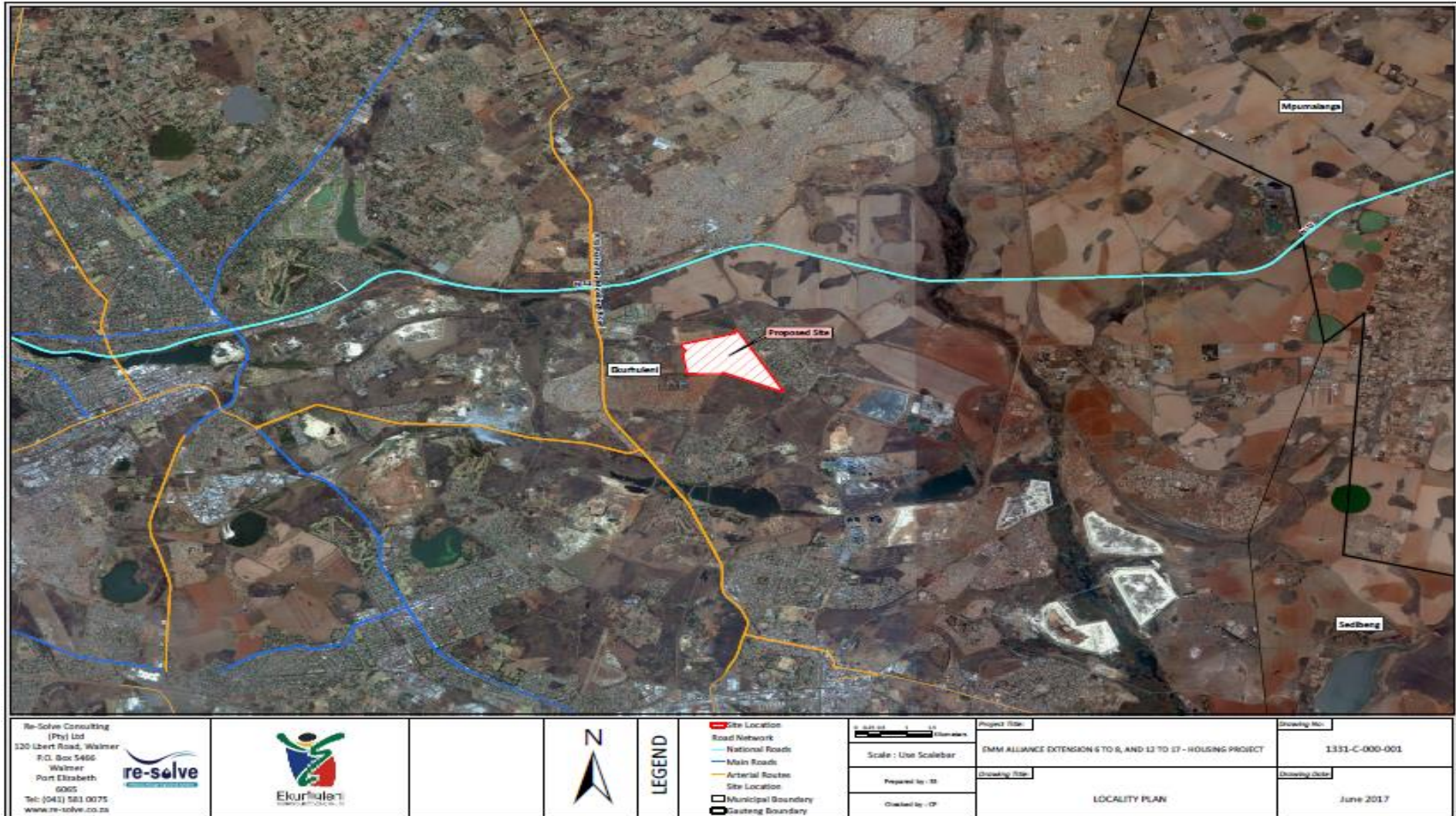


Figure 2: Google Earth map showing project area (2MC Consulting Engineers 2018)

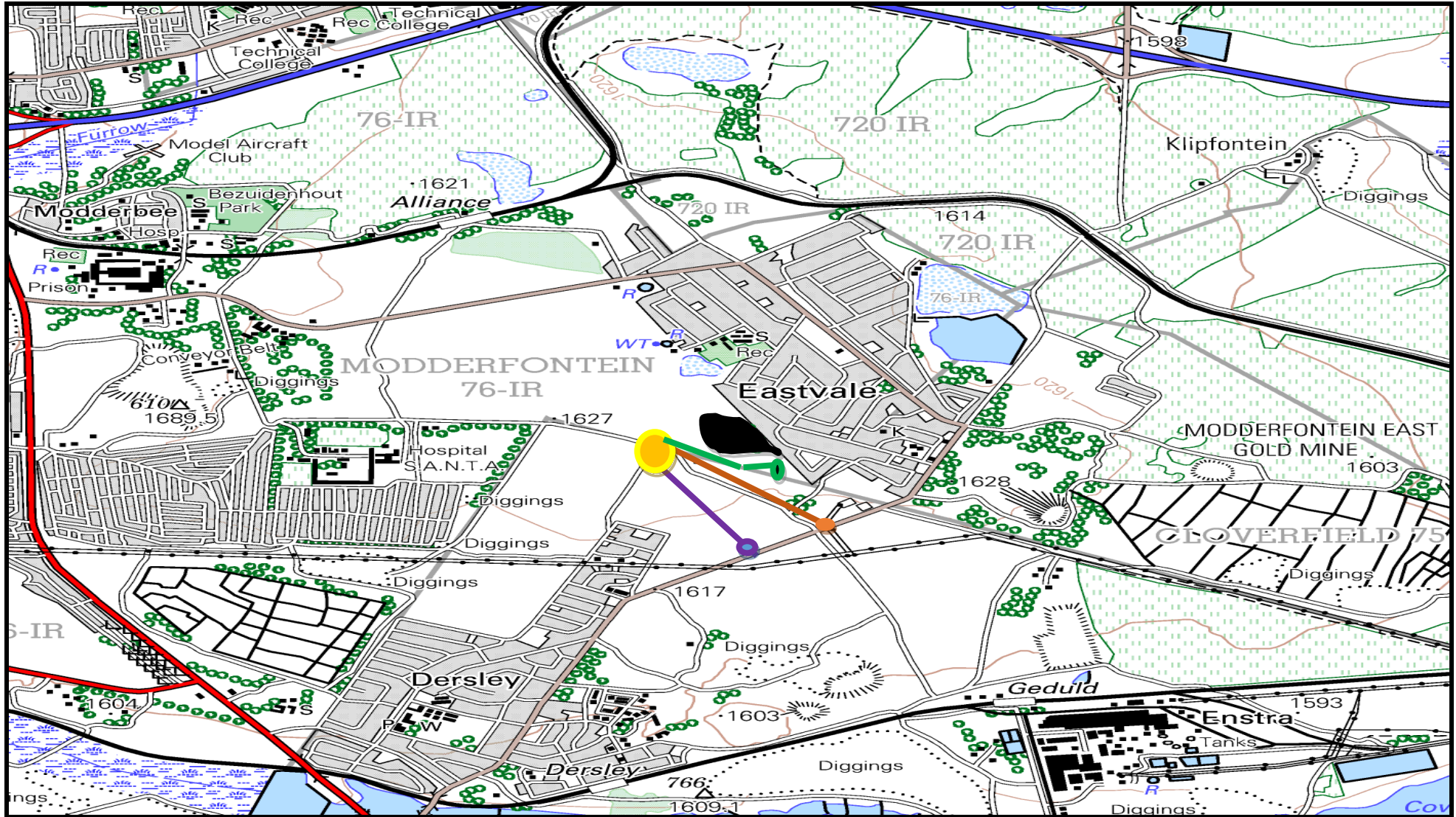


Figure 3. showing the three optional routes (Purple, brown and green) The burial site is marked in black.(not drawn to scale)

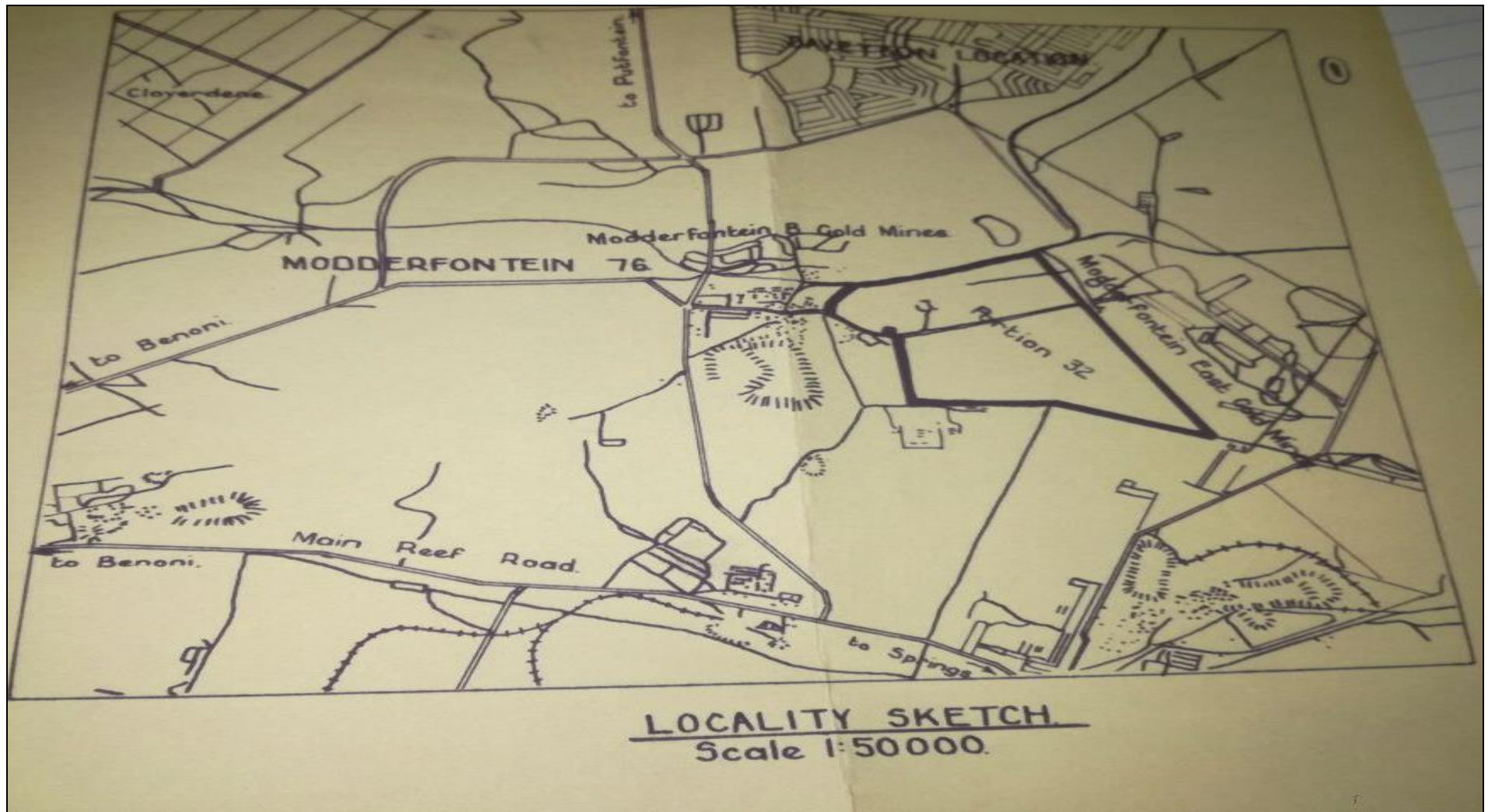


Figure 4. showing historical map of Portion 32 of the farm Modderfontein 76 IR produced during application for establishment of Modderfontein East Substation in 1959 (National Archives)

10 LEGAL CONTEXT

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 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 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 to) 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).

The NHRA classify Graves and burial grounds into the following categories

- ❖ ancestral graves
- ❖ royal graves and graves of traditional leaders
- ❖ graves of victims of conflict
- ❖ graves designated by the Minister
- ❖ historical graves and cemeteries
- ❖ human remains

11 PUBLIC CONSULTATION

The study team consulted a few residents in the project area who confirmed that they know the burial site. The site predates their stay in the area and they attribute it to historical mine workers or farm workers. The number of graves suggest that a large population lived in around the site and it is most likely to those of mine workers because they are mines around the site. The parks and cemeteries department must be notified about the existence of the burial site for possible protection.

12 RESULTS OF THE SITE INVESTIGATION

Human remains and burials are commonly found close to archaeological sites; they may be found in abandoned and neglected burial sites, or occur sporadically anywhere as a result of prehistoric activity, victims of conflict or crime. It is often difficult to detect the presence of archaeological human remains on the landscape as these burials, in most cases, are not marked at the surface. Archaeological and historical burials are usually identified when they are exposed through erosion and earth moving activities for infrastructure developments such as pipelines, powerlines and roads. In some instances, packed stones or stones may indicate the presence of informal pre-colonial burials.

The field survey recorded a large burial site on the direct path of the main sewer pipe line meant to connect at K16 main hole. The burial site is not included on the Topographic Map 2628 AB (Benoni) which indicate that the site is neither on the municipal records nor surveyor general's records. There are more than 600 graves on the burial site, however, most of them are not very visible because of thick grass cover. The graves are arranged in rows. Some of the graves are marked by tombstones and inscribed headstones (see Plate 4, 9 &13), oval shaped stone piles (see Plate 21) others are marked by cement plaster and head stones (see Plate 5, 6 &7). Three graves were either exhumed legally or most likely robbed because they were not back filled after exhumation (see Plate 10, 11. 14). There are no grave goods to indicate interaction of custodians with the burial site. The graves are in a poor state of conservation and they are not protected at all (see Plate 8,9, 10& 13). The graves are likely to be belonging to historical mine workers because it seems the site is not maintained by the municipality. Some of the graves date to the 1920 and 1930s. As such the graves are older than 60 years and protected by the NHRA.

The study concluded that it is not viable to relocate more than 50 graves to open up space for installation of an 80m sewer pipe line. The burial site must be preserved *in situ* fenced and clearly marked to avoid future encroachment. Formal cemeteries do not create problems for any infrastructure developments because they are known and developments can be planned to avoid them. In this case the burial site is

now known and the pipeline route will be redirected to avoid the site. The possibility of encountering previously unidentified burial sites is high along the proposed optional pipe line routes presented in this report, should such sites be identified during construction, they are still protected by applicable legislations and they should be protected (also see Appendixes for more details). Burial sites older than 60 years are protected by the NHRA and those younger than 60 years are protected by the Human Tissue Act. Exhumation of graves must confirm to the standards set out in the ordinance on excavation (Ordinance no.12 of 1980 which replaced the old Transvaal Ordinance no.7 of 1925).

Significance valuation for Burial Ground, Historic Cemeteries, and Individual Graves

The significance of burial grounds and gravesites is closely tied to their age and historical, cultural, and social context. Nonetheless, every burial should be considered as of high socio-cultural significance protected by practices, a series of legislations, and municipal ordinances.

Table 1: Optional routes to avoid the burial site

Suggested routes	Main hole	Bend	Terminal main hole	Remarks
Option 1	26° 11'.20.68" S, 28° 25.48.0" E.	N/A	26° 11'.32.0.5"S, 28° 25'.56 .46"E.	Option 1 cuts through Eskom infrastructure and derelict buildings
Option 2	26° 11'.20.68" S, 28° 25.48.0" E.	N/A	26° 11'.36.9" S, 28° 25.47 .6" E.	Option 2 cuts through derelict buildings and sewer spillage swamps
Option 3	26° 11'.20.68" S, 28° 25'.48.0" E.	26° 11.36.0" S, 28° 25.47.6" E	26° 11'.24.48" S, 28° 25'.51 .76"E	Option 3 is the most viable one because it is the shortest and nearest to the original plan.



Plates 1: Shows the cleared sewer pipeline route. Note that clearance work from the marked point was halted because the pipeline route cuts through a burial site. The route will be shifted from the marked point to avoid the site



Plates 2: Shows the burial site viewed from the south.



Plates 3: Shows burial site viewed from the west.



Plates 4: Shows some of the graves with inscribed tombstones which provides vital information regarding the deceased and the age of the burial site.



Plates 5: Shows a grave marked by cement plaster and headstone



Plates 6: Shows one of the graves which as a result of neglect tombstones are breaking and covered by thick grass cover.



Plate 7: Shows typical example of grave markers breaking as a result of neglect



Plate 8: Shows a closer view of graves concealed by grass cover.



Plate 9: Shows a grave marked by tombstone and head stones covered by grass cover.



Plate 10: Shows a grave which shows signs of exhumation. Note that the study could not establish if the grave was legally exhumed or a case of grave robbery.



Plate 11: Shows headstone of a grave that was probably exhumed. Note that if the grave was legally exhumed, the tombstone must have been relocated together with the remains.



Plate 12: Shows another example of a neglected grave with vital information about the site and the deceased.



Plate 13: Shows another grave with signs of exhumation, it is not clear if the exhumation was legal or not.



Plate 14: Shows one grave visible in this section of the site yet there are too many concealed by grass cover.



Plate 15: Shows another graves with signs of questionable exhumation.



Plate 16: Shows grave with inscriptions pilling off as a result of age and negligence



Plate 17: Shows proposed pipeline route Option 2 route



Plate 18: Shows several graves which are not visible because of grass cover.



Plate 19: Shows terminal position of proposed Option 3 pipe line route



Plate 20: Shows traditional graves marked by oval shaped stone piles. These graves may suggest that the graves may predate the establishment of Springs town.



Plate 21: Shows terminal position between Eskom structures along the Cloverfield road servitude, Modder East Springs.



Plate 22: Option 1 terminal position (Main hole) between Eskom powerline towers



Plate 23: Shows potsherds and rib bone exposed during clearance of construction site



Plate 24: Proposed Option 2 terminal position (Main hole along the road servitude)



Plate 25: Proposed Option 3 terminal position (Main hole).

13 MITIGATION MEASURES

The investigation confirmed that the 80m stretch of sewer pipe line if continued according to the current plan will affect more than 50 graves. As such it was decided that the most viable mitigation measure would be to shift the pipe line route to avoid the burial site. Three options were mooted.

- First Option will move further south of the burial site and connect to a main hole along the Cloverfield road servitude. This option covers a deviation of more than 400m and has a disadvantage of cutting through sewerage spill dam. It also runs through derelict buildings and structures (see Table 1 and Figure 3).
- Second Option will also move further south to connect to a main hole along the Cloverfield Road next to existing Eskom towers. This option has a disadvantage of connecting to a main hole located between Eskom powerline structures. It also runs near derelict buildings and structures (see Table 1).
- Third Option is the most feasible one, it is shorter and connects to the nearest main hole approximately 50m from the original main hole (K16). The pipe line route can be shifted to the south by approximately 40m from the burial site and then runs parallel the boundary line of the

burial site to the main hole providing adequate buffer as prescribed by SAHRA regulations (see Table 1).

14 ACCIDENTAL DISCOVERIES/DISTURBANCE OF GRAVES

This being a case of an abandoned burial site discovered during development, the regulations state that when a grave is damaged 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 site 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 suspected burial is likely to be so protected, no activity may be resumed in the immediate vicinity of the suspected grave, without due investigation approved by SAHRA or the provincial heritage resources authority). SAHRA or the provincial heritage resources authority may at its discretion modify these provisions in order to expedite the satisfactory resolution of the matter. Archaeological materials, which include human and hominid remains that are older than 100 years (see definition in section 2 of the Act), are 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.

15 RECOMENDATIONS

The original planned sewer connection at K16 main hole must be abandoned because it cuts through a burial site and it is the opinion of the author that it is not viable to remove more than 50 graves to open space for the sewer pipe line. The project must proceed subject to the following recommendations:

- The three optional routes presented are all feasible but Option 3 is the most viable given its shorter distance and also that they are no serious obstacles along the route.
- Option 3 pipeline route is adopted and it is the most preferred.
- The remaining part of the pipe line route must be excavated manually to avoid any potential damage by construction vehicles and to ensure that whenever a grave is accidentally disturbed, the damage will be minimal
- A professional archaeologist **must be appointed** to monitor during clearance and excavation of the remaining 80m stretch of the sewer pipeline
- The contractor must ensure that no grave goods or artefacts should be removed from the graves.

- No stone robbing or removal of any material is allowed. Any disturbance or alteration on this graveyard would be illegal and punishable by law, under section 36 (3) of the National Heritage Resources Act NHRA of 1999 (Act 25 of 1999);
- The developer/contractor must maintain a buffer zone around the identified graves of approximately 25m in accordance with heritage legislation.
- No dumping of construction material is allowed within the burial site and no un-monitored alteration or excavation within the cemetery may occur;
- Construction workers must be notified and oriented about the nature of the burial site before construction commences.
- Thus, prior to construction, contractors must be inducted on how to identify and protect archaeological/ human remains that may be discovered during the project. The pre-construction training should include some limited site recognition training for the types of archaeological sites that may occur in the construction areas. Below are some of the indicators of archaeological site that may be found during construction:
 - Wrapping blankets/cloth
 - Body bags
 - Potsherds
 - Flaked stone tools,
 - bone tools and loose pieces of flaked stone;
 - Ash and charcoal;
 - Bones and shell fragments;
 - Artefacts (e.g., beads or hearths);
 - Packed stones which might be uncounted underground, and might indicate a grave or collapse stone walling.

In the event that any of the above are unearthed, the chance find procedure apply, all construction within a radius of at least 10m of such indicator should cease and the area be demarcated by a danger tape. Accordingly, a professional archaeologist should be contacted immediately. In the meantime, it is the responsibility of the contractor to protect the site from publicity (i.e., media) until a mutual agreement is reached. Noteworthy that any measures to cover up the suspected archaeological material or to collect any resources or grave goods is illegal and punishable by law. In the same manner, no person may exhume or collect such remains, whether of recent origin or not, without the endorsement by relevant authority.

Chance finds procedures

It should be noted that sub-surface materials may still be lying hidden from surface surveys. Therefore, absence (during surface survey) is not evidence of absence all together. The following monitoring and reporting procedures must be followed in the event of a chance find, in order to ensure compliance with heritage laws and policies for best-practice. This procedure applies to the developer's permanent employees, its subsidiaries, contractors and subcontractors, and service providers. Accordingly, all construction teams must be properly inducted to ensure they are fully aware of the procedures regarding chance finds.

- If during the construction, operations or closure phases of this project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance, work must cease at the site of the find and this person must report this find to their immediate supervisor, and through their supervisor to the senior on-site manager.
- The site manager must then make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area before informing ISS.
- The client will then contact a professional archaeologist for an assessment of the finds who will in turn inform SAHRA/PHRA-G.

16 CONCLUDING REMARKS

Integrated Specialist Services (Pty) Ltd was appointed by 2MC Consulting Engineers (Pty) Ltd on behalf of Ekurhuleni Metropolitan Municipality to investigate the burial site located on the direct footprint of a sewer pipeline route and any potential occurrence of graves within the entire development site. Literature review and field research confirmed that the project area is situated within a contemporary cultural landscape dotted with settlements and mining areas with long local history. In terms of heritage in respect of the construction of municipal services and the sewer pipeline in particular, there are no obvious 'Fatal Flaws' or 'No-Go' areas. The recorded burial site can be avoided safely by shifting further south as indicated on the mitigation measures section (see Table 1). The field survey established that the affected project area is degraded by existing road construction and previous agriculture activities. This report concludes that the proposed development may proceed as planned subject to recommendations herein made (See Appendices 1, 2 &3). The measures are informed by the results of the study and principles of heritage management enshrined in the NHRA, Act 25 of 1999.

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18 APPENDIX 1: BURIAL RELOCATION PROJECT METHOD STATEMENT

19 1. Discovery and Notification

If human burial remains are accidentally discovered during development at the construction site the following guidelines apply:

- a) The finder will immediately cease any further activity at the site and report the site to the Project ECO. The ECO will notify the heritage expert (Archaeologist) and authorities.

2. SITE PROTECTION AND IDENTIFICATION

- a) The ECO and the Archaeologist and the permitting authority shall take reasonable measures to protect the site from environmental factors and any form of unauthorized interference or disturbance.
- b) Based on the evidence reported at the scene, the Archaeologist will investigate the site and make a preliminary determination as to the nature of the remains.
- c) Existing site inventories, land use records, and community, and authorities, should be consulted as soon as possible about possible identification of the remains. Some examination of the site/remains may be required to determine its cultural affiliation and age, and whether or not the site is modern or historic.
- d) The Archaeologist shall apply and acquire the relevant exhumation and rescue Permit from SAHRA Graves and Burial Unit.

3. INVESTIGATION AND REPORTING

- a) The ECO will direct the Archaeologist to carry out an investigation under any required permits, in consultation with the affected custodians (if available) and other affected parties, to make an initial report citing, if possible, the cultural affiliation of the human remains.
- b) Within a reasonable time to be specified by the EO, and the affected parties, the Archaeologist shall deliver a written report and any notification not yet made, to:
 - the ECO, and the affected custodians if appropriate;
 - the SAHRA;
 - the permitting authority of SAHRA Graves and Burials Unit
 - any other representative of the interred, if known.
- c) The written report shall attempt to identify:
 - the representative group of the interred;

- the geographic boundaries of the site;
 - the grave offerings or other heritage resources that may be associated with the remains or the site.
- d) The Archaeologist may, with the agreement of the proper authority and the representative of the interred, if known, remove all or part of the human remains for temporary custody where the remains may otherwise be at risk prior to their re-burial at a safe site.

3.1 REPORTING

- a) If the site is determined to be a contemporary burial site, the appropriate representative will be contacted in writing to provide further direction on the disposition of the remains.
- b) Project contractors carrying out authorized activity where a historic or archaeological burial site is discovered can continue that activity with the consent of the EO, where appropriate. The activity must stay 150 meters away from the grave while further arrangements are made by the Archaeologist to rescue and relocate the remains to a safe cemetery.
- d) The Archaeologist may publish notice of the discovery in a newspaper or other public notice seeking information on the remains and alerting members of the public about the impending relocation of the remains to a predetermined formal cemetery or burial ground.

4. SITE DISPOSITION AGREEMENT (MANAGEMENT PLAN)

4.1 When the site or remains are identified

- a) The site shall not be disturbed and the EO, if on direct path of Project development work, shall initiate discussions towards entering into a site disposition agreement with the representative of the interred where applicable.
- b) If the site is a historic or archaeological burial site, there must be joint approval of the site management plan on reburial as stated in the scope of services in terms of contract between Project proponents and ISS.
- c) Decisions regarding reburial, relocation or other disposition should be determined on a case by case basis in consultation with those concerned and in a timely manner.

Site disposition agreements shall determine such things as:

1. the interim care of the human remains;
2. the scope and extent of analysis to be performed on the human remains, if any;
3. the exact location of the place where the human remains are to remain or to be interred;
4. the style and manner of disinterment, if applicable;
5. the style and manner of reinterment, if applicable;
6. the time period in which disinterment and reinterment is to take place;

7. the procedures relating to, and the final disposition of any grave offerings discovered with the human remains and any additional analysis of them;
8. the provision for future maintenance of the cemetery or site where the human remains are to be located;
9. access to the site and ways to prevent disturbance;
10. any other issue agreed upon.

4.2 When no representative is identified or no disposition is specified:

If disposition is not specified by a representative, or the remains are not claimed or no affiliation is established within a reasonable time, the Archaeologist shall with the necessary SAHRA permits and approvals provide for the following disposition:

- a) cover and leave the remains where they were found and have the site recorded as a burial site/heritage site, if on land suitable for a burial site; or
- b) have the remains disinterred and reinterred in the nearest appropriate cemetery; or
- c) remove the remains from the site for analysis and may have them reinterred in a recognized cemetery or;
- d) may act as the temporary repository of the remains until they are re-located for reburial at designated cemetery.

(Where the remains were found on Construction Site but are not historic or archaeological remains, the Archaeologist may remove the remains in consultation with the Project EO and the affected parties.)

5. ARBITRATION

- a) If no disposition or reburial agreement or management plan is reached within a reasonable time the matter may be referred to arbitration for settlement.

6. RECORDS

- a) A record of the site and a report of the discovery and disposition plan shall be kept by the Archaeologist, for future reference to protect the site or identify the re-burial site.
- b) Access to information about discovered sites will be addressed in any site management plan developed under these guidelines, and will be protected under the Access to Information and Protection of Privacy legislations, and the NHRA.

7. BURIAL RELOCATION & REBURIAL

- Burial Relocation involves the identification of each grave and the manual excavation of the interred remains. Human remains, coffin features, and grave goods are exposed, their positions in the grave

are carefully recorded, and maps and photographs of each grave are made following standard archaeological recovery techniques.

- Once excavation and examination are completed, the interred along with their grave goods are inventoried and carefully wrapped in acid-free tissue. Human remains are arranged anatomically and all materials are placed in specially designed containers, specified by the laws and regulations governed by the state where the re-interment location has been determined. The goal of re-interment is to restore as much of the original mortuary meaning as possible.
- Burial relocation is extremely culturally sensitive and Project and contractors/service provider staff understands that the utmost respect must be shown to the interred, as well as the descendant communities. We advocate respectful involvement of descendent communities in the relocation process, whenever possible, and have an excellent reputation for communicating with descendant groups.
- BST Funeral and Integrated Specialist Services (Pty) Ltd has extensive experience conducting cemetery relocations for government agencies, other cultural resource firms, developers and private citizens in South Africa. We assure our clients as well as the descendent communities that the greatest amount of respect and care is taken when excavating and relocating these cemeteries.

8. RISKS

1. Legal Risks

Project is exposed to a myriad of legal requirements on the local and national level when having to relocate burials. Burial relocation can infringe a number of human rights enshrined in the Constitution and legislations such the NHRA. If not carried out properly, grave relocation can impact the right to burial and dignity. Community opposition may result in protests and delays on development.

Mitigation

When human remains are identified during the development, all measures must be taken to ensure the law applicable regulations are enforced including mandatory public notifications.

2. Reputational risk

Relocation of human burials in particular also brings with it high risks for the Project's reputation which is exacerbated by the instantaneous spread of news across the world via the internet. Lack of proper planning and management may lead to negative consequences, which in turn may affect the Project's reputation.

Mitigation

Human remains identified in development contexts should be handled with utter most care to ensure the exhumation and relocation takes place in accordance with the law.

3. Operational risks

Legal action arising from the inadequate planning and implementation of burial relocation may result in Project's permission to work on the mining site being revoked via preliminary injunctions.

Operational risks may also arise from community protests directly. Cases of community opposition and protests, has previously disrupted work for days and weeks, involving, for example, the blockage of construction sites and vital roads and infrastructure. Construction may be delayed or disrupted.

Protests may be violent and impact on the health and safety of Project staff perpetuating work delays in construction and operations. Project facilities, machinery, housing and other assets may be damaged and rendered unusable.

Mitigation

The security trench servitude should have adequate security. All burial related matters should be held by the professional heritage team and reburial specialists. Human remains discovered during development should be reported to the ECO urgently and the Archaeologist notified in time to avoid any delays with the remains exposed on site. All exhumations and reburial exercises should be handled or schedule in a manner that does not require the remains to be held elsewhere temporarily.

4. Financial risks

Legal, reputational and operational risks may also lead other financial costs to the project. Moreover, costs may arise from legal action or disruptions in operations and work delays. Additional costs may be incurred when public protests require work to stop on site as a result of human remains discovery on site.

5. Human Remains Handling Risks

Exhumation, handling, transportation and reburial of human remains also pose a threat to public health if not handled to strict protocols. This risk is particularly highest in contemporary burials.

20 APPENDIX 2: GENERAL PRECAUTIONS

The following precautionary measures can help employers and employees remain safe and healthy whilst handling human remains. The transportation, handling and storage of human remains must also be carried out in a manner that preserves public safety and maintains the dignity of the deceased person.

PERSONAL PROTECTIVE EQUIPMENT

Hand Protection:

When handling potentially infectious materials, use appropriate barrier protection including latex and nitrile gloves (powder-free latex gloves with reduced latex protein content can help avoid reaction to latex allergies). These gloves can be worn under heavy-duty gloves which will, in turn, protect the wearer from cuts, puncture wounds, or other injuries that break the skin (caused by sharp environmental debris or bone fragments). A combination of a cut-proof inner layer glove and a latex or similar outer layer is preferable.

Foot Protection:

Footwear should similarly protect against sharp debris.

Hygiene:

- Wash your hands with soap and water or with an alcohol-based hand cleaner immediately after you remove your gloves.
- Give prompt care to any wounds sustained during work with human remains, including immediate cleansing with soap and clean water. Workers should also be vaccinated against hepatitis B, and get a tetanus booster if indicated.
- Ensure disinfection of vehicles and equipment.

SUMMARY

- In general, personnel involved in the recovery and handling of human remains from a burial site can limit risk from potential exposure by following the guidelines below.
- Vinyl or Latex gloves should be worn.
- Masks and protective eyewear or face shields should be worn during procedures that are likely to generate fluids to prevent exposure of mucous membranes of the mouth, nose, and eyes.
- Gowns or aprons should be worn during procedures that are likely to generate splashes of blood or other body fluids.
- Hands and other skin surfaces should be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands should be washed immediately after gloves are removed.
- Ensure universal precautions for blood and body fluids.
- Ensure use of body bags.
- Ensure disinfection of vehicles and equipment.
- Bodies do not need to be disinfected before disposal (except in case of cholera).
- Vaccinate workers against hepatitis B.

21 APPENDIX 3: HUMAN REMAINS AND BURIALS IN DEVELOPMENT

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.

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 supported 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.
- 7). 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 August 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 reach an 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 re-interment 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.

l). 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 ancestry

22 APPENDIX 4: LEGAL BACKGROUND 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.