



Setjo Sesho Consultants

HERITAGE IMPACT ASSESSMENT

FOR THE PROPOSED TOWNSHIP ESTABLISHMENT ON THE
REMAINDER OF THE FARM DORP FRANKFORT 74, MAFUBE
LOCAL MUNICIPALITY IN FREE STATE PROVINCE.

Phase 1 Heritage Impact Assessment

Report

FOR THE PROPOSED TOWNSHIP ESTABLISHMENT ON THE
REMAINDER OF THE FARM DORP FRANKFORT 74,
MAFUBE LOCAL MUNICIPALITY IN FREE STATE
PROVINCE

Prepared by:



Setjo Sesho Consultants

Prepared for:



December 2021

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EXECUTIVE SUMMARY

The overall aim of the executive summary is to communicate the information in this report in a format suited to produce specific results quickly and facilitate management decisions. The summary does not repeat all the information in the report in shorthand but rather states its decision-making results.

This study focuses on the proposed township establishment on the remainder of the farm Dorp Frankfort 74, Mafube local municipality in Free State province of South Africa.

This study comprises of the heritage impact investigation. A preliminary layout has been supplied to lead this phase of the study.

SCOPE OF WORK

A Heritage Impact Assessment study was conducted to determine the impacts on heritage resources within the study area. The following objectives structured the assessment:

- To produce a desk-top investigation in the area.
- To complete a site inspection of the proposed area of development.
- To identify possible archaeological, cultural and historical sites within the proposed area of development.
- To evaluate the potential impacts of construction and operation of the proposed development on archaeological, cultural, built and historical sites within the proposed area and,
- To recommend mitigation measures to alleviate any negative impacts on areas of archaeological, cultural, built and historical importance.

The study's primary purpose is to determine the possible occurrence of cultural heritage significance within the proposed study area. It is based on archival and document searches combined with fieldwork investigations.

FINDINGS

There were no archaeological materials found on the surface of the ground during the field survey. The overall region, however, contains an abundance of archaeological materials.

RECOMMENDATIONS

Setjo Sesho Consultants recommend that the proposed development be approved by the Free-State Heritage Resource Authority (FSHRA) since no archaeological materials were found on site.

Table 1: Requirements for specialist reports, as detailed in the NEMA Act No. 25 of 2014.

NEMA Regulation (2014)	Relevant section in the report
Details of the specialist who prepared the report	Page (vii) of the report- Project management
The expertise of that person to compile a specialist report, including a curriculum vitae	Section 1.5
A declaration that the person is independent in a form as may be specified by the competent authority	Page (vi) of the report
An indication of the scope of, and the purpose for which the report was prepared	Section 1.4
The date and season of the site investigation and the relevance of the season to the outcome of the assessment	Section 4.3
A description of the methodology adopted in preparing the report or carrying out the specialized process	Section 4
The specific identified sensitivity of the site related to the activity and its associated structures and infrastructure	Not applicable

An identification of any areas to be avoided, including buffer	Section 5
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A map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers;	Section 5
A description of any assumptions made and any uncertainties or gaps in knowledge	Section 3
Any mitigation measures for inclusion in the EMPr	Section 5
Any conditions for inclusion in the environmental authorization	Section 11
Any monitoring requirements for inclusion in the EMPr or environmental authorization	None
A reasoned opinion as to whether the proposed activity or portions thereof should be authorized and	Section 11
If the opinion is that the proposed activity or portions thereof should be authorized, any avoidance, management and mitigation measures that should be included in the EMPr, and where applicable, the closure plan	

A description of any consultation process that was undertaken during the course of carrying out the study	Section 8
A summary and copies if any comments that were received during any consultation process	None Formal consultation was conducted by the Environmental consultants and the heritage aspects were covered. No comments were made by the public
Any other information requested by the competent authority	None

Declaration of Independence

I, **Jennifer Mokakabye**, declare that –

- I act as the independent heritage practitioner in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favorable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work.
- I have expertise in conducting heritage impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity
- I will comply with the Act, Regulations, and all other applicable legislation.
- I will consider, to the extent possible, the matters listed in section 38 of the NHRA when preparing the application and any report relating to the application
- I have no, and will not engage in, conflicting interests in the undertaking

of the activity.

- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority.
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favorable to the applicant or not
- All the particulars furnished by me in this form are true and correct;
- I will perform all other obligations as expected from a heritage practitioner in terms of the Act and the constitutions of my affiliated professional bodies; and
- I acknowledge that a false declaration is an offence in terms of regulation 71 of the Regulations and is punishable in terms of section 24F of the NEMA.

Disclosure of Vested Interest

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the regulations.

PROJECT MANAGEMENT

Site name and location: Proposed township establishment on the remainder of the farm Dorp Frankfort 74, in free state province.

Municipal Area: Mafube local municipality of Fezile Dabi district municipality

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GLOSSARY OF TERMS

The following terms used in this Archaeology 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 artefacts, human and hominid remains, and artificial features and structures.

Artifact: Any movable object that has been used, modified or manufactured by humans.

Conservation: All the processes of looking after a site/heritage place or landscape including maintenance, preservation, restoration, reconstruction, and adaptation.

Cultural Heritage Resources: refers to physical cultural properties such as archaeological sites, palaeontological sites, historic and prehistorical places, buildings, structures, and material remains cultural sites such as places of rituals, burial sites or graves and their associated materials, geological or natural features of cultural importance or scientific significance. This includes intangible resources such as religious practices, ritual ceremonies, oral histories, memories indigenous knowledge.

Cultural landscape: “the combined works of nature and man” and demonstrate “the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both internal and external”.

Cultural Resources Management (CRM): the conservation of cultural heritage resources, management, and sustainable utilization and present for present and for the future generations

Cultural Significance: is the aesthetic, historical, scientific and social value for past, present and future generations.

Chance Finds: means Archaeological artifacts, 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 earthmoving activities such as water pipeline trench excavations.

Compatible use: means a use, which respects the cultural significance of a place. Such 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.

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.

Grave: A place of interment (variably referred to as burial), including the contents, headstone or other markers of such a place, and any other structure on or associated with such a place.

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 the authorization of permission by law and which may significantly affect the cultural and natural heritage resources. The HIA includes recommendations for appropriate mitigation measures for minimizing 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: means material culture and surrounding deposits in their original location and context, for instance, archaeological remains that have not been disturbed.

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 artifacts 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, a 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. the 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 spatial cluster of artifacts, structures, and organic and environmental remains, as residues of past human activity.

LIST OF ABBREVIATIONS

BP.....	Before Present
EIA	Early Iron Age
ESA	Early Stone Age
FSHRA.....	Free-State Heritage Resource Authority
GPS.....	Geographic Positioning System
HIA.....	Heritage Impact Assessment
LIA.....	Late Iron Age
LSA	Late Stone Age
MYA	Million Years Ago
MSA.....	Middle Stone Age
NHRA.....	National Heritage Resources Act no 22 of 1999
SAHRA	South African Heritage Resource Agency
S&EIR	Scoping & Environmental Impact Reporting

1. INTRODUCTION

Mang Geoenviro Services appointed Setjo Sesho Consultants to conduct a Phase 1 Heritage Impact Assessment (HIA) for a proposed township establishment on the remainder of the farm Dorp Frankfort 74, Mafube local municipality in Free State province. It is intended to determine if cultural heritage materials are present within the proposed development area. A combination of archival and document searches coupled with fieldwork investigations produced the study results.

In support of the Environmental Impact Assessment, Setjo Sesho Consultants conducted an HIA study in order to comply with section 38(1) of the South African Heritage Resources Act (SAHRA) (25 of 1999) and Section 38(8) of the National Heritage Resource Act, 1999 (Act 25 of 1999) (NHRA), as well as for Mang Geoenviro Services to comply with Environment Conservation Act, 1989 (Act 73 of 1989), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act 50 of 1991), or any other legislation.

1.1 Project Background

1.1.1 Project Overview

On the remaining portion of farm Dorp Frankfort 74 in the Free State Province, Mafube Municipality proposes the establishment of Frankfort township. Approximately 86.0624 hectares of land will be developed for the proposed Frankfort township, including the following infrastructure:




-  Residential,
-  Open space and,
-  roads



Figure 1: locality map of the proposed area of development @ Manga Geoenviro Services

1.1.2. Project Location

On the remaining portion of farm Dorp 74 in the Free State Province, Mafube Municipality proposes the establishment of Frankfort township. The proposed development area was easily accessed and visible in most parts, but it was not possible to traverse some parts of the area others. The bigger portion of the land which was not accessible had a river-rine vegetation and other areas were wetland(Figure 3 & 4). Other sites had houses already constructed (Figure 5). The houses are not older than 60 years and therefore not protected by section 34 of the National Heritage Resource Act. The proposed area to be developed and the town has a designated graveyard; no burials are done inside the yards.



Figure 2: Overview of the proposed developmental area © Setjo Sesho drone picture



Figure 3: View of the river-rine vegetation © Setjo Sesho drone picture

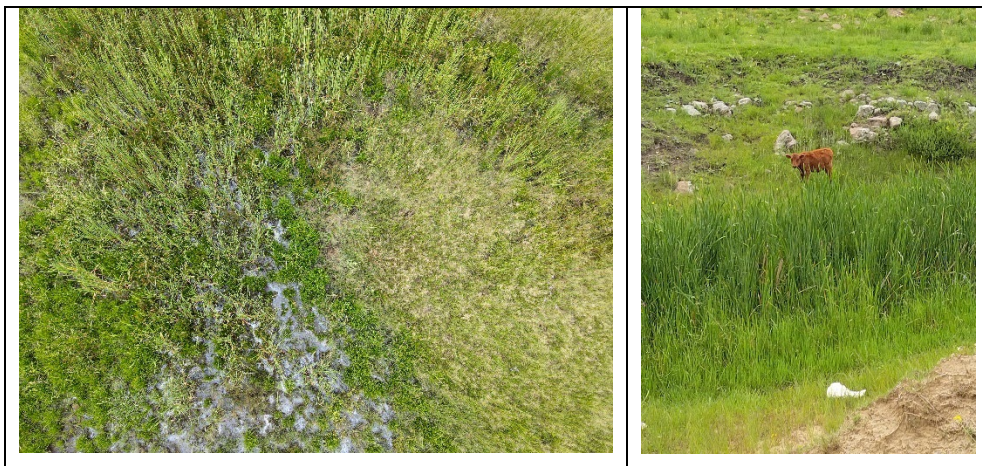


Figure 4: View of the wetland inside the proposed area of development © Setjo Sesho drone picture



Figure 5: View of the already existing houses inside the proposed area of development © Setjo Sesho drone picture

1.2 GPS track path

GPS track path showing the areas intensively traversed during fieldwork. The areas not traversed were because of not being accessible on foot.



Figure 6: Map showing the walk path as highlighted in red @Setjo Sesho

1.3 Terms of reference

Mang Geoenviron Services appointed Setjo Sesho Consultants as the specialist heritage practitioners to undertake heritage specialist studies in order to comply with the requirements for section 38(1) of the South African Heritage

Resources Act (SAHRA) (25 of 1999) and Section 38(8) of the National Heritage Resource Act, 1999 (Act 25 of 1999) (NHRA). As well as for Mang Geoenviro Services to comply with Environment Conservation Act, 1989 (Act 73 of 1989), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act 50 of 1991), or any other legislation.

1.4 Scope of work

A Heritage Impact Assessment was conducted to determine what impact the study area would have on heritage resources. During the investigation, these tasks were performed:

- A desk-top investigation of the area.
- A site inspection of the proposed area of development.
- Identification of possible archaeological, cultural and historical sites within the proposed area of development.
- An evaluation of the potential impacts of construction and operation of the proposed development on archaeological, cultural, built, and historical sites within the proposed area and
- A recommendation of measures to mitigate any negative impacts on areas of archaeological, cultural, built and historical importance.

1.5 Expertise of the Specialist

Jennifer Mokakabye has nine years' experience in the heritage sector. Previously employed by several consulting companies, she is highly experienced with the process of heritage assessment, archaeological mitigation, grave relocations, rescue excavation and the application of the NHRA section. She holds a Bachelor of Environmental Sciences degree, Bachelor of Arts Honors in Archaeology (*Cum-laude*) and Master of Arts in Ethno-Archaeology, all of which were obtained from the University of Venda. Jennifer also completed various short courses such as Forensic Anthropology and Archaeology from Durham University (2020), How to do Archaeology

from DigVentures (2020) and Heritage Resource Management course with the University of Cape Town (2021). She is a published author of over ten peer reviewed articles. She is a professional member of the Association of Southern African Archaeologist (ASAPA) and accredited by the association's Cultural Resources Management (CRM). Jennifer is also affiliated with AMAFA as a professional heritage specialist and is a member of the South African Archaeologist Society, KZN region.

2. LEGISLATIVE AND POLICY FRAMEWORK

The identification, evaluation and assessment of any cultural heritage site, artefact or find in the South African context is required and governed by the following legislation:

- National Environmental Management Act (NEMA) Act 107 of 1998
- National Heritage Resources Act (NHRA) Act 25 of 1999
- Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
- Development Facilitation Act (DFA) Act 67 of 1995

The following sections in each Act refer directly to the identification, evaluation and assessment of cultural heritage resources.

- National Environmental Management Act (NEMA) Act 107 of 1998
 - a. Basic Environmental Assessment (BEA) – Section (23) (2)(d)
 - b. Environmental Scoping Report (ESR) – Section (29) (1)(d)
 - c. Environmental Impacts Assessment (EIA) – Section (32) (2)(d)
 - d. Environmental Management Plan (EMP) – Section (34) (b)
- National Heritage Resources Act (NHRA) Act 25 of 1999
 - a. Protection of Heritage Resources – Sections 34 to 36; and
 - b. Heritage Resources Management – Section 38

- Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002a. Section 39(3)

As per the NHRA, it is prohibited to disturb cultural heritage resources without the permission of the relevant heritage authority. The NHRA states in Section 34 (1) that "no building or part of a building which is older than 60 years may be altered or demolished without a permit from the relevant provincial heritage authority...". According to the NEMA (Act No 107 of 1998), an integrated EMP should (23: 2 (b)) identify, predict and evaluate the impact on the environment, socio-economic conditions and cultural heritage. In addition to incorporating legislative requirements and EIA rating criteria, the regulations of SAHRA and ASAPA have also been incorporated to ensure a comprehensive, legally compatible HIA report.

3. ASSUMPTIONS AND LIMITATIONS

The limitations and assumptions associated with this heritage impact assessment are as follows:

- It was assumed that the public participation process performed as part of the Basic Assessment process included the Heritage section and therefore not to be repeated in the Heritage Assessment Phase of the study.
- Whilst every attempt was made to obtain the latest available information. The reviewed literature does not represent an exhaustive list of information sources for the various study areas.
- Archaeological materials often occur at subsurface levels. Without destructive and intrusive methodologies, it may be impossible to accurately document or record these kinds of materials. Accordingly, the reviewed literature, previously completed assessments, and the results of the field survey are merely surface observations.
- It is assumed that the information provided by the client is accurate and up to date.

- Setjo Sesho Consultants archaeologist conducted the field survey on foot throughout the proposed developed area.
- The site was easily accessed with good visibility at most parts of the proposed developed area and not accessible at some.

4. METHODOLOGY

4.1 Inventory

Archaeological inventory studies involve surveying and recording archaeological resources within the limits of a proposed development. In most cases, it is the results of the overview study that determine the scope and nature of this type of study. Site-specific developments may eliminate the need for an overview since an inventory study can be implemented directly.

Conducting inventory studies can be accomplished using several different methods. Consequently, in collaboration with the Heritage consultant, the developer must develop an inventory plan for the SAHRA to review and approve prior to implementation.

4.2 Evaluating Heritage Impacts

Document research, geographical suitability evaluations, and the evaluation of aerial photographs were used to identify which areas could and should be accessed. The site was mapped on a GPS and then accessed on foot. Digital photographs, taken with a Canon EOS 1300D and drone, were used to document the site, along with GPS readings using an Android phone application.

In addition to the provided information, information from a literature review and archival studies based on the SAHRis database was analyzed. Written documents, maps, aerial photographs, and other archival sources combined with results of site investigations constitute the bulk of this HIA.

4.3 Fieldwork and Report Compilation

An archaeologist of Setjo Sesho Consultants conducted fieldwork at the site on the 18th of December 2021. An on-foot field investigation was conducted to identify any cultural and historic materials/artefacts within the development footprint. A GPS-equipped survey device and a path-tracking application were used to track the survey (Figure 6). The study area was surveyed according to standard archaeological surveying techniques. After both archival and site surveys were completed, the findings were merged into a report.

5. FIELD FINDINGS

The field investigation combined with archival search yielded no materials of archaeological significance on site. Most parts of the proposed area for development are currently used for human settlement and livestock farming, meaning there is little chance of finding archaeological artefacts in the affected parts. Also, during the site visit, there was livestock grazing observed. Adjacent to the proposed development area, there is also the debris and rubbles of building materials.

In terms of the archaeological component of Section 35 of the NHRA, no archaeological significant site was recorded in the study area. Because the town of Frankfort is quite old, there are high chances of archaeological materials in the greater vicinity. No further mitigation prior to construction is recommended in terms of Section 35 for the proposed development to proceed.

In terms of the area's-built environment (Section 34), no standing structures older than 60 years occur within the study area. In terms of Section 36 of the Act no burial sites were recorded in the study area. However, suppose any graves are located during the constructions phase. In that case, the environmental consultants are advised to stop construction immediately,

barricade the grave with a 2 meter buffer and contact the archaeologist or the provincial heritage authority personnel (Free State Heritage Resource Authority (FSHRA)) for advice. Due to the subsurface nature of archaeological remains and the fact that graves can occur anywhere on the landscape, it is recommended that the Environmental consultant implements a chance find procedure.

6. APPLICABLE HERITAGE LEGISLATION

Several legislations provide the legal basis for protecting and preserving both cultural and natural resources. These include the National Environment Management Act (No. 107 of 1998); Mineral Amendment Act (No 103 of 1993); Tourism Act (No. 72 of 1993); Cultural Institution Act (No. 119 of 1998), and the National Heritage Resources Act (Act 25 of 1999). Section 38 (1) of the National Heritage Resources Act requires that where relevant, an Impact Assessment is undertaken in the case where a listed activity is triggered. Such activities include:

- (a) the construction of a road, wall, powerline, pipeline, canal or other similar forms of linear development or barrier exceeding 300m in length.*
- (b) the construction of a bridge or similar structure exceeding 50 m in length;
and*
- (c) any development or other activity which will change the character of an area of land, or water -*
 - (i) exceeding 5 000 m² in extent.*
 - (ii) involving three or more existing erven or subdivisions thereof; or*
 - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or*
 - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a Provincial Heritage Resources Authority.*
- (d) the re-zoning of a site exceeding 10 000 m² in extent; or*
- (e) any other category of development provided for in regulations by SAHRA*

or a Provincial Heritage Resources Authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature, and extent of the proposed development.

Section 3 of the National Heritage Resources Act (25 of 1999) lists a wide range of national resources protected under the act as they are deemed to be a national estate. When conducting Heritage Impact Assessment (HIA) the following heritage resources have to be identified:

- (a) Places, buildings structures, and equipment of cultural significance*
- (b) Places to which oral traditions are attached or which are associated with living heritage*
- (c) Historical settlements and townscapes*
- (d) Landscapes and natural features of cultural significance*
- (e) Geological sites of scientific or cultural importance*
- (f) Archaeological and paleontological sites*
- (g) Graves and burial grounds including-*
 - (i) ancestral graves*
 - (ii) royal graves and graves of traditional leaders*
 - (iii) graves of victims of conflict*
 - (iv) graves of individuals designated by the Minister by notice in the Gazette*
 - (v) historical graves and cemeteries; and*
 - (vi) other human remains which are not covered by in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983)*
- (h) Sites of significance relating to the history of slavery in South Africa*
- (i) moveable objects, including -*

- (i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens*
- (ii) objects to which oral traditions are attached or which are associated with living heritage*
- (iii) ethnographic art and objects*
- (iv) military objects*
- (v) objects of decorative or fine art*
- (vi) objects of scientific or technological interest; and*
- (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).*

Other sections of the Act with direct relevance to the AIA are the following:

Section 34(1) *No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.*

Section 35(4) *No person may, without a permit issued by the responsible heritage resources authority:*

- destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite*

Section 36 (3) *No person may, without a permit issued by SAHRA or a provincial heritage resources authority:*

- 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 formal cemetery administered by a local authority; or*

- *bring onto or use at a burial ground or grave any excavation equipment, or any equipment which assists in detection or recovery of metals.*

7. DEGREE OF SIGNIFICANCE

Setjo Sesho Consultants compiled a Heritage Impact Assessment (HIA) report to establish a township on the remaining farm Dorp Frankfort 74, Mafube local municipality in Free State province.

The relevant maps, tables and figures are included, as stipulated in the NHRA (no 25 of 1999) and the National Environmental Management Act (NEMA) (no 107 of 1998). The HIA process consisted of three steps:

- **Literature Review:** The background information to the field survey relies greatly on the heritage background research. This is obtained through SAHRis website, journals, books etc.
- **Physical Survey:** On the 18th of December 2021, an archaeologist from Setjo Sesho personnel conducted a field survey on foot throughout the proposed project area. The aim of the survey was to locate and document heritage or cultural materials within and nearby the proposed development footprint.
- Final steps included **recording and documenting** archaeological resources, determining which resources meet the HIA criteria, preparing a report, and planning constructive recommendations.

The significance of identified heritage sites was based on four main criteria:

- Site integrity (i.e., primary vs. secondary context),
- Amount of deposit, range of features (e.g., stonewalling, stone tools, and enclosures),
- Density of scatter (dispersed scatter)
 - ✓ Low - <10/50m²

- ✓ Medium - 10-50/50m2
- ✓ High - >50/50m2
- Uniqueness; and
- Potential to answer present research questions.

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be expressed as follows:

A - No further action necessary.

B - Mapping of the site and controlled sampling required.

C - No-go or relocate development activity position.

D - Preserve site, or extensive data collection and mapping of the site; and

E - Preserve site.

Impacts on these sites by the development will be evaluated as follows:

Site Significance

Site significance classification standards prescribed by the SAHRA (2006) and approved by the ASAPA for the Southern African Development Community (SADC) region, were used for the purpose of this report.

Table 2: Site significance classification standards as prescribed by SAHRA.

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
National Significance (NS)	Grade 1		Conservation; National Site Nomination
Provincial Significance (PS)	Grade 2		Conservation; Provincial Site nomination
Local Significance (LS)	Grade 3A	High Significance	Conservation: Mitigation not advised
Local Significance (LS)	Grade 3B	High Significance	Mitigation (Part of site should be retained)
Generally Protected A (GP.A)	Grade 4A	High / Medium Significance	Mitigation before destruction

Generally Protected B (GP.B)	Grade 4B	Medium Significance	Recording before destruction
Generally Protected C (GP. A)	Grade 4C	Low Significance	Destruction

Standard impact assessment methodologies have been used to ensure consistency and to evaluate a wide variety of impacts. In line with the methodology for assessing impacts, the following criteria are considered:

- Significance.
- Spatial scale.
- Temporal scale.
- Probability; and
- Degree of certainty

The impacts of each of the above assessment criteria were described using a combination of quantitative and qualitative methods. Below is a synopsis of and quantitative rating scale for each of the qualitative descriptors:

Table 3: Impact Assessment Criteria

CRITERIA	CATEGORIES	EXPLANATION
Overall nature	Negative	Negative impact on affected biophysical or human environment.
	Positive	Benefit to the affected biophysical or human environment.
Spatial Extent over which impact may be experienced	Site	Immediate area of activity incorporating the 20m zone which extends from the edge of the afforestation area.
	Local	Area up to and/or within 10km of the 'Site' as defined above.
	Regional	Entire community, drainage basin, landscape etc.
	National	South Africa
Duration of impact	Short-term	Impact would last for the duration of the activity – e.g., activities: Land clearing. Quickly reversible.
	Medium-term	Impact would dissipate after the Project activity. E.g., activity: harvesting. Reversible over time.
	Long-term	Impact would persist. E.g., operational period the growth periods

		between each 'short term' activity.
	Permanent	It would continue to have an impact after the proposed development is complete. The process of harvesting and removing the trees.
Probability of occurrence	Unlikely	<40% probability.
	Possible	40% - 70% probability.
	Probable	>70% probability.
	Definite	>90% probability.
Mitigation Potential [i.e. the ability to manage or mitigate an impact given the necessary resources and feasibility of application]	High	Easy and cheap to manage. It is not generally necessary to have specialized equipment or expertise. By implementing management plans or undergoing good housekeeping, the potential impacts can be mitigated. It is necessary to monitor any negative effects regularly in order to maintain appropriate levels. The likelihood of an adverse impact remains low or negligible after mitigation.
	Moderate	To maintain acceptable levels of impacts, higher levels of expertise and resources are needed. Project design can incorporate mitigation measures. After mitigation, impacts will likely be moderate to low. Possibly impossible to mitigate the effects completely, with a residual impact.
	Low	Will not be possible to mitigate this impact entirely regardless of the expertise and resources applied. The potential to manage the impact may be beyond the scope of the Project. Management of this impact is not likely to result in a measurable change in the level of significance.
Significance of Impact (preliminary only)	Slight	Largely of HIGH mitigation potential.
	Moderate	Largely of MODERATE mitigation potential.
	Substantial	Largely of LOW mitigation potential.

Since nothing was discovered on site, the proposed development is classified as **A**. **The classification means that there are no further actions/mitigations to be undertaken for this study to proceed.**

8. CONSULTATION

During the development process, two types of consultations are normally held on site, informal and formal. Generally, an informal site survey provides an

opportunity to speak with key stakeholders such as farm managers, employees, drivers on the road, and older residents from the community. This type of consultation can contribute to identifying burial grounds and grave sites. It could be an informal graveyard or a burial ground without visible markers, for example, tombstones or related structures. Informal consulting may also reveal sacred sites or other places of cultural or religious significance that might otherwise be overlooked.

A formal consultation includes advertisements of the projects and requests to participate through newspaper ads, notices on websites, emails, and phone calls. Usually, this occurs at an arranged place, and the community, interested, and affected parties are informed of the project and are given an opportunity to provide their input, which is recorded formally.

During the field survey of the proposed development area, no informal consultations were conducted. The environmental consultants are assumed to have conducted the formal consultations.

9. SOCIO-CULTURAL AND HISTORICAL BACKGROUND

In this section, we provide insights into the archaeology and cultural heritage of the receiving environment. References to archaeology and other heritage resources within the broader region of Free-State will be included as needed.

In Southern Africa, archaeology is divided into three chronological periods: the Stone Age, the Iron Age, and the Historical Period. Diverse groups of people settled the Southern African landscape during these periods. Among the major researchers on culture, archaeology, and rock art in Southern Africa are Huffman (2002; 2007); Mason (1968; 1982; 1986); Sutton (2012); Kuman & Field (2009); Kuman et al. (1997). Unfortunately, the proposed development area has not been thoroughly investigated.

Stone Age

There are three main periods of Stone Age hunter-gatherer activity: Early Stone Age, Middle Stone Age, and Late Stone Age. In Klein (2000) and Mitchell (2002)'s view, the ESA is composed of two stone tool complexes-the Oldowan stone tool complex (from 2 and 1.75-1.7 million years ago) and Acheulean stone tool complex (from 1.75-1.7 million years ago and 250-200 thousand years ago). This style is characterized by small flakes, flaked cobbles, and percussive tools (Klein 2000; Mitchell 2002; Diez-Martn et al., 2015; De La Torre 2016).

Stone Age sites are usually associated with stone artefacts found scattered on the surface or as part of deposits in caves and rock shelters. No previously recorded Stone Age sites are on record for the study area. No significant Stone Age sites are expected for the study area. The Early to Middle Stone Age transition includes a change in technology from large stone tools to good quality raw material and bone tools, ochre, beads, and pendants (Clark, 1982; Deacon & Deacon, 1999, Wadley, 2007).

Based on archeological archives, the Free State has been inhabited by humans since the Early Stone Age. It has been recorded that very few of these early sites exist, but one example is that of the middle Pleistocene site of Cornelia, which produced a wide variety of animal fossils, as well as a hominid molar. The second best-known hominid site in the Free State is Florisbad, which is also one of the two more intensively studied Middle Stone Age sites in the region, along with Rose Cottage Cave near Ladybrand. These two sites have been designated National Monuments (Government Gazettes 17457 and 19719) (2003, State of the Environment Report). Nothing closer to the proposed development area from the Stone Age period has been uncovered.

Iron Age

Using Huffman's (2007) definition, the Iron Age can be divided into Early Iron Age (EIA), Middle Iron Age (MIA), and finally Late Iron Age (LIA). The Iron Age is distinguished by farming communities that domesticated animals, manufactured ceramic vessels, melted iron for weapons, and manufactured tools.

Apart from the sites that are now covered by the Gariiep and Van der Kloof dams in the Free State, not many later stone age sites have been intensively studied. In the 1960s, these were reported in a survey (Sampson, 1972). Three Stone Age industries in the Free State were named after type-sites (Fauresmith, Lockshoek, and Smithfield). Sites of rock art, such as rock engravings or rock paintings, are scattered throughout the Free State. Five of these sites are classified as national monuments, and some of them are well maintained. This area is largely un-researched and very few Khoi sites are known.

Although the specific area of development has no records of Iron Age materials and none was discovered on site, the general vicinity recorded materials belonging to the period. Stone walled settlements of Magg's Type V (named after the settlement of Vegkop near Heilbron) occur over a wider geographical area and include corbelled hut (Huffman 2007: 33). Pullen also mentions stonewall-built settlements in the Frankfort area in 1942.

Vegkop Iron Age (Barolong) settlement was the inspiration for Type V in the Free State. This type consists of cattle enclosures surrounded by beehive houses and grain bins, it however does not typically have an outer wall. It is believed that corbelled stone huts evolved from this settlement type. Herd boys lived in these low, corbelled stone huts near the central animal area, although they may have served as houses for adults in some areas of the Free State. These sites of this type were built between the 17th and early 19th centuries by Fokeng cluster people. The only area in the Free State with well-documented settlement evidence by the Fokeng group of Iron Age communities. This group

first settled between Frankfort and Vrede and then moved to the Metlaeeng area (Walton, 1953).

Early History

Located on the banks of the Wilge river in the Free State province of South Africa, Frankfort is a small farming town. The town was laid out in 1869 on the farm Roodepoort and was named "Frankfurt" after Albert van Gordon. In 1896, the town became a municipality. Currently, Frankfort is the capital city of the Mafube Municipality, which includes Villiers, Cornelia, and Tweeling. 'Brand Street' is the main street in Orange Free State, named after the 4th president, Sir Johannes Brand. During his visit to the town in 1883, he laid the cornerstone of the Dutch Reformed Church. British troops burned this church down during the Anglo-Boer War. It was rebuilt after the war and inaugurated in 1918.

10. PREVIOUS STUDIES

The South African Heritage Resources Information System (SAHRIS) search produced numerous studies conducted in the greater study area. Several assessments have been conducted in the greater area. However, only assessments that are of close range to the proposed area of development have been noted herein regardless of what was discovered on site. The proposed area of development falls under Free-State province

- Dreyer, C. 2008.

Archaeological and cultural heritage assessment of the proposed residential developments at Namahadi (Frankfort), Free State.

- Gaigher, S. 2019

Heritage impact walkdown report for the construction of a substation and 132kV powerline from Heilbron (via Frankfort) to Villiers, Free State province.

- Rossouw, L. 2016.

Phase 1 Archaeological Impact Assessment of three proposed new

water pipelines in Frankfort, Fexile Dabi District Municipality, FS Province.

➤ Rossouw, L. 2015.

Phase 1 Heritage impact assessment of the 40693 Namahadi / Frankfort WWTW, Frankfort, Free State Province.

➤ Van Der Walt, J. 2008.

Archaeological impact assessment on the Farm Strasburg 544, Frankfurt, Free State Province

11. RECOMMENDATIONS AND CONCLUSIONS

The proposed area of development was surveyed on foot by an archaeologist from Setjo Sesho Consultants with the aim of identifying and recording all archaeological materials that would be found on site. The survey was only limited to the proposed township establishment on the remainder of the farm Dorp Frankfort 74, Mafube local municipality in Free State province.

Since field survey and archival search yielded no significant archaeological materials within the area of study, Setjo Sesho Consultants recommend that the proposed development be granted the green light to proceed.

12. WORK CITED

Bennie, I. 1956. An Account of a Journey into Transorangia and the Pochefstroom-Winburg Trekker Republic in 1843. Cape Town: Balkema.

Berger L.R., De Ruiter, D.J., Churchill, S.E., Schmidt, P., Carlson, K.J., Dirks, P.H.G.M. & Kibii, J.M. 2010. Australopithecus sediba: a new species of Homo-Like australopithecine from South Africa. *Science* 328: 195–204.

Coertze, P.J. & Coertze, R.D. 1996. Verklarende vakwoordeboek vir Antropologie en Argeologie. Pretoria: R.D. Coertze.

Daubenton, F. 1938. A Preliminary Report on Stone Structures near Steynsrust, Orange Free State. *S .A. Journal of Science*, 35.

De La Torre, I. 2016. The origins of the Acheulean: past and present perspectives on a major transition in human evolution. *Philosophical Transactions of the Royal Society*, 371(1698)

Diez-Martín, F. & Sánchez Yustos, P. & Uribe Larrea, D. & Baquedano, E. & Mark, D. F. & Mabulla, A. & Fraile, C. & Duque, J. & Díaz, I. & Pérez-González, A. & Yravedra, J. & Egeland, C. P. & Organista, E & Domínguez- Rodrigo, M. 2015. The Origin of The Acheulean: The 1.7 Million-Year-Old Site of FLK West, Olduvai Gorge (Tanzania). *Scientific Reports*, 5, 17839

Dreyer, J.J.B. 1992. The Iron Age Archaeology of Doornpoort, Winburg, Orange Free State. *Navorsing van die Nasionale Museum, Bloemfontein*, Vol.8(7):262-390.

Goodwin H.J. & Van Riet Lowe, C. 1929. The Stone Age cultures of South Africa.

Annals of the South African Museum 27: 1 – 289.

Huffman, T. 2002. Regionality in the Iron Age: the case of the Sotho-Tswana. *Southern African Humanities*, 14: 1–22.

Huffman, T. 2007. *Handbook to the Iron Age*. Pietermaritzburg: University of Kwazulu-Natal Press.

Klein, R. G. 2000. The Earlier Stone Age of Southern Africa. *The South African Archaeological Bulletin*, 27(172): 107-122

Kuman, K., & Field, A. S., 2009. The Oldowan Industry from Sterkfontein caves, South Africa. In K. Schick, & N. Toth, *The Cutting Edge: New Approaches to the Archaeology of Human Origins*, pp. 151-169.

Kuman, K., Field, A. S., & Thackeray, J. F., 1997. Discovery of New Artefacts at Kromdraai. *South African Journal of Science*, 93 (4): 187-193.

Laidler, P. W. 1936. The Archaeology of certain Prehistoric Settlements in the Heilbron Area. *Trans. Roy. Soc. of SA*. 23(1).

Maggs, T.M. 1976. *Iron Age Communities of the Southern Highveld*. Pietermaritzburg: Natal Museum.

Mason, R. 1950. Two Smithfield Sites in the Transvaal. *The South African Archaeological Bulletin*, 5(20):127-132.

Mason, R. 1962. *The Prehistory of the Transvaal*. Witwatersrand University Press, Johannesburg.

Mason, R. 1967. Prehistory as a science of change. Occasional Paper No. 16 of

the Archaeological Research Unit. Johannesburg: Witwatersrand University Press. 1:16.

Mason, R. 1968. Transvaal and Natal Iron Age settlements revealed by aerial photography and excavation. *African Studies*, 27: 167-180.

Manson, R. 1969. *Prehistory of the Transvaal: A Record of Human Activity*. Johannesburg: Witwatersrand University Press.

Mason, R. 1973. Iron Age research in the western Transvaal, South Africa, 1971-72. *Current Anthropology*, 14(4): 485-487.

Mason, R. 1974. Background to the Transvaal Iron Age-new discoveries at Olifantspoort and Broederstroom. *Journal of the Southern African Institute of Mining and Metallurgy*, 74(6): 211-216.

Mason, R. 1982. Prehistoric mining in South Africa, and Iron Age copper mines in the Dwarsberg, Transvaal. *Journal of the South African Institute of Mining and Metallurgy*, 82: 134-144.

Mason, R. 1986. *Origins of black people of Johannesburg and the southern western central Transvaal, AD 350-1880*. Occasional Paper No. 16 of the Archaeological Research Unit. Johannesburg: Witwatersrand University Press.

Mbenga, B.K. & Manson, A. 2010. *People of the Dew: A History of the Bafokeng of Rustenburg District, South Africa, from early times to 2000*. Cape Town: Jacana Media.

Mitchell, P. 2002. *The Archaeology of Southern Africa*. Cape Town: Cambridge University Press.

Mitchell, P. 2013. A regional overview of space, time and ceramics. In Mitchell, P. and Lane, P. *The Oxford Handbook of African Archaeology*. Oxford: Oxford University Press. 657-670.

Phillipson, D. W. 1994. *African Archaeology*. Cambridge: Cambridge University Press.

Sampson, C.G. 1968. *The Middle Stone Age of the Orange River Scheme Area*. National Museum, Bloemfontein. Memoir, no. 4.

Sampson 1972. *The Stone Age Industries of the Orange River Scheme and South Africa*. National Museum, Bloemfontein. Memoir, no. 6.

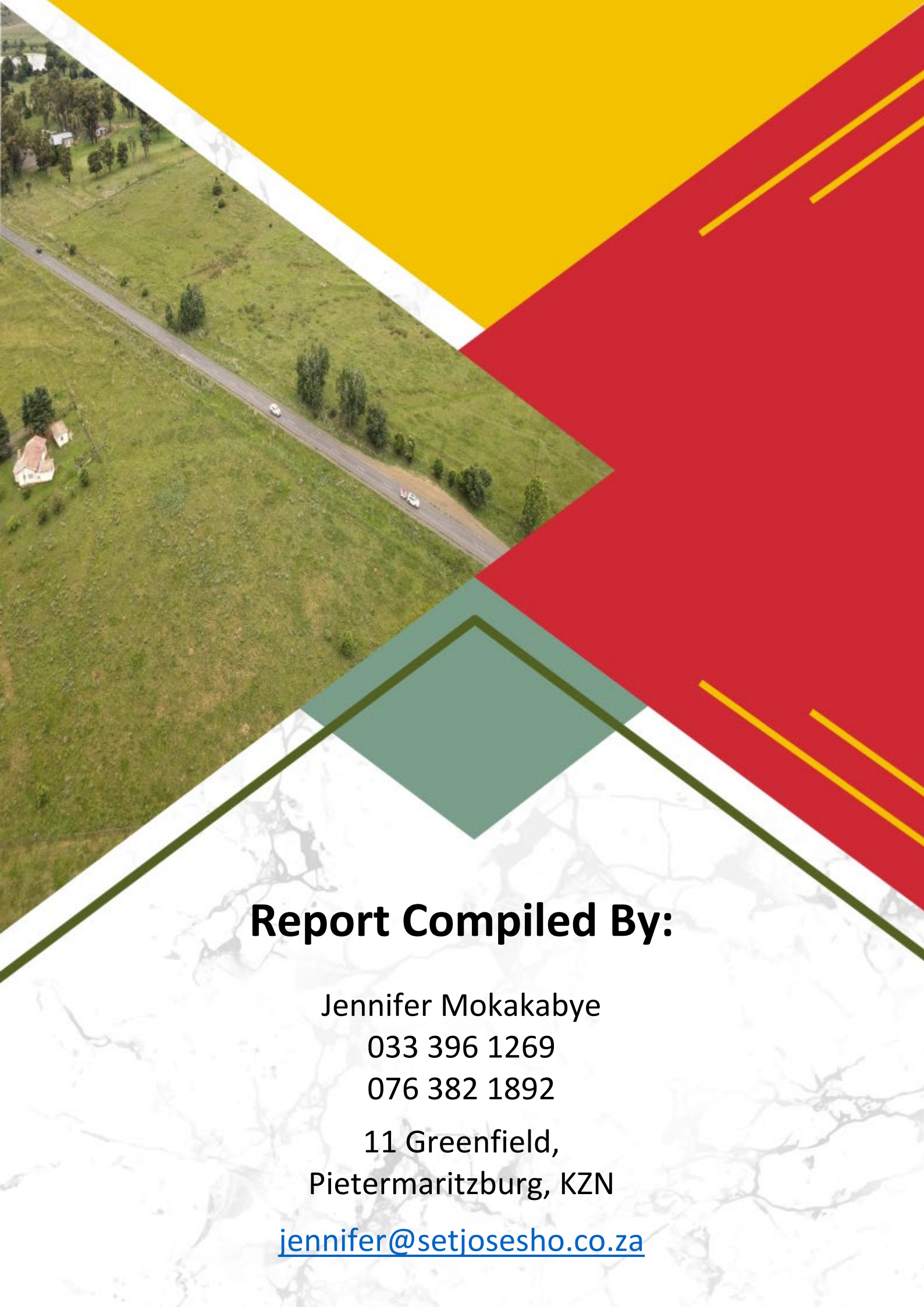
Stow, G.W. 1905. *The Native Races of South Africa*. London: Swan Sonnenschein

Taylor, M.O.V. 1986. Corbelled Stone Huts. *SA Jnl. of Sc.*, 82

Van Riet Lowe, C. 1927. A Preliminary Report on the Stone Huts of Vechtkop. *Jni. Roy. Anthr.Inst.*, 57

Wadley, L., 2007. The Middle Stone Age and Later Stone Age. In Bonner, P. & Esterhuysen, A. & Jenkins, T. A. *Search for Origins: Science, History and South Africa's 'Cradle of Humankind'*. Johannesburg: Wits University Press, 122 -135.

Walton, J. 1953. An Early Fokeng-Hlakoana Settlement at Metlaeeng, Basutoland. *The South African Archaeological Bulletin*, 8 (29):3-11.



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