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Sweet Sensation Vaal Sands (Pty) Ltd Environmental Management Programme Amendment

Heritage Site Management Plan

Prepared for: Sweet Sensation Vaal Sands (Pty) Ltd Project Number: SWS6801

February 2021

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EXECUTIVE SUMMARY

Sweet Sensation Vaal Sands (Pty) Ltd (hereinafter Sweet Sensation) holds a Mining Right (MR) and Environmental Management Programme (EMPr) to undertake sand mining on the Remaining Extent (RE) of the farm Du Pont No. 228 in the Free State Province. Sweet Sensation intends to amend these Environmental Authorisations (EAs) to include a screening process to improve the efficiency of the process and maximise the saleable product (the Project). The Department of Mineral Resources and Energy (DMRE) requires Sweet Sensation to complete a Regulation 31 Amendment Process in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) Environmental Impact Assessment (EIA) Regulations, 2014 (Government Notice Regulation [GN R] 982 of 4 December 2014 as amended) for which Digby Wells Environmental (hereinafter Digby Wells) was appointed.

Sweet Sensation appointed G&A Heritage to complete a Heritage Impact Assessment (HIA) as part of the EIA process in support of the original EA applications. G&A Heritage submitted the HIA report to the Heritage Resources Authorities (HRAs), including the South African Heritage Resources Agency (SAHRA) who subsequently approved the report.

Given the scope of the Project and the recent submission of the HIA report, SAHRA has approved the current HIA for this application. SAHRA do, however, require the conditions attached to the approval be implemented.

This document constitutes a Heritage Site Management Plan (HSMP) for the mudbrick structure identified during the HIA in partial compliance with the SAHRA Final Comments. The objective, purpose and aim of the HSMP is summarised as follows:

Objective	Define management and mitigation measures for <i>in situ</i> conservation that aims to remove/reduce the risk to the heritage resources				
Purpose	 The purpose of the HSMP is to: 1. Recognise the cultural significance of the identified heritage resources; 2. Acknowledge the sensitivities of the heritage resources; 3. Understand the potential risks to the resources from the organisation's mining and mining-related activities; and 4. Ensure the potential risks or manifested impacts to the heritage resources are assessed, prioritised and controlled to a level that is acceptable to the various management structures. 				
Scope	Applies to all Sweet Sensation employees and contractors.				

Sweet Sensation is responsible for the implementation of this HSMP and must define the roles and responsibilities of the Responsible Persons within their management structure.



	Identify heritage resources within the MR Area to be conserved in situ.		
	Clearly determine extent of each of the heritage sites and delineate boundaries.		
	Identify <i>bona fide</i> Next-of-Kin (NoK) where burial grounds and graves are known to exist.		
Preventative protection	Establish fencing with access gates to provide physical barriers to the sites (<i>in consultation with NoK in the case of burial grounds and graves</i>).		
	Place signage along access routes and adjacent to heritage sites to warn of their presence.		
	Establish no-go buffer zones at suitable distances around identified heritage resources.		
	Establish a monitoring procedure in line with the existing monitoring instruments.		
Monitoring	Monitoring measures must be aligned with Sweet Sensation's current monitoring instruments.		
	Monthly monitoring during mining activities.		
Progress Reporting	Completed on a monthly basis following the identification of heritage resources and distributed to the various management structures via the South African Heritage Resources Information System (SAHRIS) portal.		

The preservation mechanisms defined in this HSMP for implementation include:

Sweet Sensation must consider this document a 'living document' to be updated as often as required, for example, where additional heritage resources are identified for *in situ* conservation or where action items are updated or completed.

Should unidentified heritage resources be encountered during Project activities, Sweet Sensation must implement the Chance Finds Procedure or the Fossil Finds Procedure as required.



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1. Introduction

Sweet Sensation Vaal Sands (Pty) Ltd (hereinafter Sweet Sensation) holds a Mining Right¹ (MR) and Environmental Management Programme² (EMPr) to undertake sand mining on the Remaining Extent (RE) of the farm Du Pont No. 228 in the Free State Province. The MR and EMPr have been approved in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA) and the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA).

The Mining Right Area (MRA) includes approximately 102 hectares (ha), of which 95 ha is being mined. Sweet Sensation commenced with the sand mining activities in 2017. The sand mine has a Life of Mine (LoM) of 22 years and the MR will expire on 30 March 2026.

The MR Application was supported by an Environmental Impact Assessment (EIA) process which included a Heritage Impact Assessment (HIA) process in compliance with Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA). Sweet Sensation, and the appointed Environmental Assessment Practitioner (EAP), appointed G & A Heritage to undertake the HIA process. The report (Gaigher, 2015) was submitted to the Heritage Resources Authorities (HRAs) online via the South African Heritage Resources Information System³ (SAHRIS). In this instance, the HRAs include Heritage Free State (HFS) and South African Heritage Resources Agency (SAHRA). The HIA was subsequently approved by SAHRA⁴.

Sweet Sensation intends to amend the MR and EMPr to include a screening process, which was not previously approved (the Project). This process aims to improve the efficiency of the sand mine and maximise the saleable product. To this effect, Sweet Sensation appointed Digby Wells Environmental (hereinafter Digby Wells) to complete an application in accordance with Regulation 29(a) of the NEMA EIA Regulations, 2014 (Government Notice Regulation [GN R] 982 of 4 December 2014 as amended).

Digby Wells submitted the amendment application to the Department of Mineral Resources and Energy (DMRE) on 28 May 2020. A number of Interested and Affected Parties (I&APs) subsequently raised objections to the Project and the DMRE now requires Sweet Sensation to complete a Regulation 31 Amendment Process in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) Environmental Impact Assessment (EIA) Regulations, 2014 (Government Notice Regulation [GN R] 982 of 4 December 2014 as amended). The Section 31 Regulation Amendment Process includes various specialist studies in support of the application.

¹ Reference Number: FS30/5/1/2/2/10018 MR, approved 11 October 2016

² Reference Number: FS30/5/1/2/2/10018 EM, approved 11 October 2016

³ Submitted 27 May 2015, SAHRIS Case ID 8128, accessible at: <u>https://sahris.sahra.org.za/cases/fs-30512210018-mr</u>

⁴ Dated 22 July 2015, accessible at: <u>https://sahris.sahra.org.za/node/316620</u>



The specialist studies do not include an HIA as the current HIA report is not older than 5 years and the screening process will not change the scope of the current Environmental Authorisation (EA) or the level or nature of the impacts. SAHRA has approved⁵ this approach subject to the conditions of the approval being implemented.

This document constitutes a Heritage Site Management Plan (HSMP) for a burial ground and a dilapidated structure⁶ identified within the MRA in partial compliance⁷ with the SAHRA Final Comments. This document must be considered a living document to be updated as necessary, should a new heritage resource to be conserved⁸ *in situ* be identified or should the Masterplan of Action (refer to Section 4.2) require updating.

1.1. Document Objective

The objective of this document is to define management and mitigation measures for *in situ* conservation of heritage resources that aims to remove or reduce the risk to heritage resources⁹ as well as the risks *to* Sweet Sensation and service providers. These potential risks may include litigation in terms of Section 51 of the NHRA and/or social or reputational repercussions should heritage resources be negatively impacted through Project-related activities.

1.2. Purpose

The purpose of the HSMP is to:

- Collate all relevant information into a single management document;
- Recognise the Cultural Significance (CS) of the heritage resources within the Sweet Sensation sand mine MRA;
- Acknowledge the sensitivities of the heritage resources;
- Understand the potential risks to the heritage resources from Sweet Sensation's mining and mining-related activities;
- Ensure that the potential risks or manifested impacts to the heritage resources are assessed, prioritised and controlled through the various management structures to an acceptable level (refer to Section 3); and

⁵ Final Comment on SAHRIS Case ID 15129, dated 06 July 2020 and accessible at: <u>https://sahris.sahra.org.za/node/537787</u>

⁶ This structure is referred to as a mudbrick structure in the HIA report but is referred to here as a dilapidated structure as it does not appear to be made of brick. Refer to Section 2 for a description of the cultural heritage landscape.

⁷ Appendix B includes the SAHRA Statutory Comments to which Sweet Sensation must comply. Digby Wells has compiled the Chance Finds Procedure (CFP) required by the Statutory Comment in a separate document.

⁸ There is potential for unidentified burial grounds and graves to be encountered in proximity of the mudbrick structure. Should any other heritage resources, including burial grounds and graves, be encountered, Sweet Sensation must employ the Chance Finds Procedure (CFP). Where heritage resources are earmarked for *in situ* conservation, these heritage resources must be incorporated into this HSMP.

⁹ Refer to Section 2 for a more detailed description of these heritage resources.



• Present the tools for implementation of prescribed management and mitigation requirements.

1.3. Scope

The scope of this document is to provide:

- A description of the various heritage resources and sites within Sweet Sensation sand mine MRA;
- The delimitations of the applicable heritage resources and sites;
- The relevant management structures to implement the stipulated requirements;
- The principles for planning and action;
- Applicable preservation mechanisms that consider current and future risks; and
- Possible awareness requirements and initiatives.

This document applies to all Sweet Sensation employees, and any service providers or contractors working within the MRA.

1.4. **Principles**

The principles of this document are informed by the South African national regulatory framework. Principles include *inter alia*:

- The general principles for heritage resource management as encapsulated within Section 50F¹⁰ of the NHRA are applicable and must be considered;
- Proposed management measures must be realistic;
- The management plan must promote co-operative governance and stakeholder engagement;
- The relevant HRAs must endorse the management plan once finalised;
- Sweet Sensation acknowledges that heritage resources are non-renewable and irreplaceable resources intrinsic to the history and beliefs of communities. These heritage resources are protected by various sections of the NHRA and cannot be

¹⁰ (1)(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;

⁽¹⁾⁽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;

⁽¹⁾⁽c) Heritage resources have the capacity to promote reconciliation, understanding and respect, and contribute to the development of a unifying South African identity; and

⁽¹⁾⁽d) Heritage resources management must guard against the use of heritage for sectarian purposes or political gain.



altered or destroyed without the correct permits issued in terms of the relevant sections of the NHRA;

- Sweet Sensation acknowledges that graves are special places that serve as bridges to the past, memorialise the deceased and serve as sacred places to remember and celebrate lives of the deceased;
- The relocation of graves is inherently sensitive and must be approached with due sensitivity and respect. Sweet Sensation must therefore follow an approach that is balanced between their requirements, respect for the deceased, family directives, cultural considerations and in compliance with the applicable national, provincial and local legislation;
- Sweet Sensation will not exhume, or cause to exhume, any grave without the consent of *bona fide* Next-of-Kin (NoK) obtained through extensive consultation. Proof of this consultation and consent will be required in the event that the relevant permit application processes are undertaken;
- In the event that the NoK do not consent to grave relocation, Sweet Sensation will:
 - Conduct impact assessments on such graves to determine, for example: the effect of mining around such graves and the effect of mitigation measures, such as the implementation of no-go buffer zones and/or demarcating burial grounds; and
 - Periodically inspect *in situ* graves to monitor any damage that may occur. Where such damage does occur, Sweet Sensation must immediately repair the damage;
- Sweet Sensation must:
 - Keep all stakeholders informed of major developments within the MRA;
 - Provide timely, honest, transparent and accurate information; and
 - Treat all stakeholders with dignity and respect.

2. Site Definition

2.1. Description and Significance

Guidance Note

Site descriptions and the ensuing discussions of CS drive the management of the heritage sites. Management plans must include clear descriptions to the character and extent of the site and define the cultural significance built upon by verifiable sources, robust criteria and motivations.

2.1.1. Description

Table 2-1 presents the details of the heritage resources to be included in this document. These include a dilapidated structure and a burial ground. Gaigher (2015) identified a small, dilapidated structure (referred to as a mudbrick structure) within the Sweet Sensation MRA that must be avoided. There is potential for graves to be present in proximity to this structure.



The graves were identified through the NoK requested access to the burial ground. Sweet Sensation provided this access and recorded the location of the burial ground. The identified burial ground includes ten visible graves, one of which is marked by cement dressings and the other nine of which are marked by heaped soil and stone. Given the size of the burial ground and the location of the graves within the burial ground, there could potentially be additional graves without surface indicators within the boundaries of the burial ground.

Where any additional graves are present or identified elsewhere, Sweet Sensation must record the location and details as to the condition, date, details of who is interred and the condition of the burial ground(s) and individual graves. This must be updated as necessary, when new heritage resources are identified within the Sweet Sensation MRA.

Resource Type	Site Name	Description
Burial Ground Graves		A burial ground comprising ten visible graves. One grave is marked with a cement headstone and cement dressings. The inscription on the headstone is poorly legible but dates to 1954. The other graves are marked with stone and soil heaps and do not have headstones.
		At the time of the site inspection, the burial ground had been cleared and demarcated with a temporary high-visibility barrier.
Built Heritage	Dilapidated Structure	A small, dilapidated structure made of brick and plaster. Only one wall remains standing and there is rubble in proximity to the wall. Gaigher (2015) describes this as a mudbrick structure.

Table 2-1: Summary of the Heritage resources to be included in the HSMP

2.1.2. Evaluation of Cultural Significance

CS¹¹ is determined on identified resources' importance or their contribution to four broad value categories: aesthetic, historical, scientific and social values, as described in Table 2-2. These categories summarised the CS and other values described in Section 3(3) of the NHRA. The resources' importance or contributions to these values are considered in terms of associative (qualitative) and/or rarity (quantitative) attributes, based on data collected through the Heritage Resources Management (HRM) process. The integrity or condition of resources further influences the CS. Integrity is largely determined based on resources' current, observed state of conservation, as well as notable changes made to it over the years.

¹¹ Cultural Significance is defined in the NHRA as the intrinsic "aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance" of a heritage resource. These attributes are combined and reduced to four themes used in the Digby Wells significance matrix: aesthetic, historical, scientific and social.



Value Category		Attributes	NHRA Reference	
	1.	Importance in aesthetic characteristics	S. 3(3)(e)	
Aesthetic	2.	Degree of technical / creative skill at a particular period	S. 3(3)(f)	
	3.	Importance to a community or pattern in the country's history	S. 3(3)(a)	
Historical	4.	Site of significance relating to history of slavery	S. 3(3)(i)	
	5.	Association with life or work of a person, group or organisation of importance in the history of the country	S. 3(3)(h)	
	6.	Possession of uncommon, rare or endangered natural or cultural aspects	S. 3(3)(b)	
Scientific	7.	The potential to yield information	S. 3(3)(c)	
	8.	Importance in demonstrating principle characteristics	S. 3(3)(d)	
Social	9.	Association to a community or cultural group for social, cultural or spiritual reasons S. 3(3)(

Table 2-2: Broad Value Categories to Inform CS

Field ratings assist the responsible heritage resources authority to grade heritage resources into national (Grade I), provincial (Grade II) or local (Grade III) categories and are required under Chapter II Section 7(J) of the SAHRA Minimum Standards.

Field ratings considered the assigned CS and the level of official management required or the local competency of heritage authorities¹².

Table 2-3 below presents the CS and Field Ratings ascribed to the identified heritage resource. Where other heritage resources are identified within the Project area and which must be included in the HSMP, a suitably qualified heritage practitioner must assess the CS and Field Ratings of those heritage resources on an individual basis. This document must be updated to include these values.

¹² Currently HFS is only competent to manage and issue permits on NHRA Section 34 heritage resources, and no local (i.e., local government) competency exists within the province. All decisions relating to archaeology, palaeontology and burial grounds and graves therefore fall under the ambit of SAHRA.

Heritage Site Management Plan

Sweet Sensation Vaal Sands (Pty) Ltd Environmental Management Programme Amendment

SWS6801



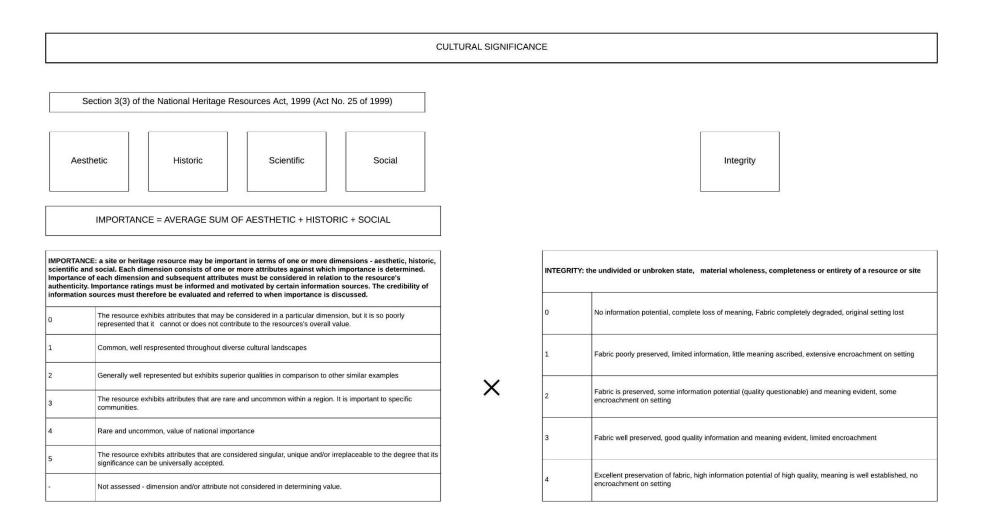


Figure 2-1: Digby Wells CS Determination Methodology

Resource ID	Туре	Aesthetic	Historic	Scientific	Social	INTEGRITY	VALUE	Designation	Recommended Field Rating
Dilapidated Structure	Built Heritage	1 The technical skill demonstrated by this resource is commonly represented in diverse cultural landscapes.	1 This structure is not representative of a specific timeframe or event but represents a more general timeframe commonly represented in diverse cultural landscapes.	1 The cultural heritage aspects and information potential represented by this resource are commonly represented in a range of cultural landscapes.	1 This heritage resource is not affiliated with a specific social or cultural group and its social significance is commonly represented in diverse cultural landscapes.	1 The fabric of this resource is mostly intact but there is limited information potential, and the setting has been encroached upon.	1	Negligible	General Protection IV C
Graves	Burial Ground and Graves	- Burial grounds and graves were not assessed against aesthetic criteria as defined in Section 3(3) of the NHRA.	- Burial grounds and graves were not assessed against historic criteria as defined in Section 3(3) of the NHRA.	- Burial grounds and graves were not assessed against scientific criteria as defined in Section 3(3) of the NHRA.	5 Burial grounds and graves have specific connections to communities or groups for spiritual reasons. The significance is universally accepted.	4 The integrity of burial grounds is considered to be excellent with both tangible and intangible fabric preserved.	20	Very High	Grade I

Table 2-3: Typical CS and Field Ratings for Burial Grounds and Graves



Field Rating Description	Minimum Required Mitigation
Resources under general protection in terms of NHRA Sections 34 to 37 with negligible significance.	Sufficiently recorded, no mitigation required.
Heritage resources with qualities so exceptional that they are of special national significance.	Project design must change to avoid the resource completely where possible and resources must be included in an HSMP. Where project redesign is not possible, a Grave Relocation Process (GRP) may be necessary.



2.2. Delimitation

Guidance Note

The precise position and delimitation of a site are important. They define where and to what extent actions and restrictions that are part of the management programme will be applicable and facilitated.

The MRA is positioned at the boundary of the Free State, Gauteng and North West Provinces. Table 2-4 presents a summary of the details of the Project area and Plan 1 shows the location geographically.

The MRA is located approximately 20 km north-east of the town of Parys and 23 km northwest from Sasolburg and the nearest communities include Vaal Eden, Vaal Oewer and Lindequesdrif. The Project area occurs within the Ngwathe Local Municipality of the Fezile Dabi District Municipality.

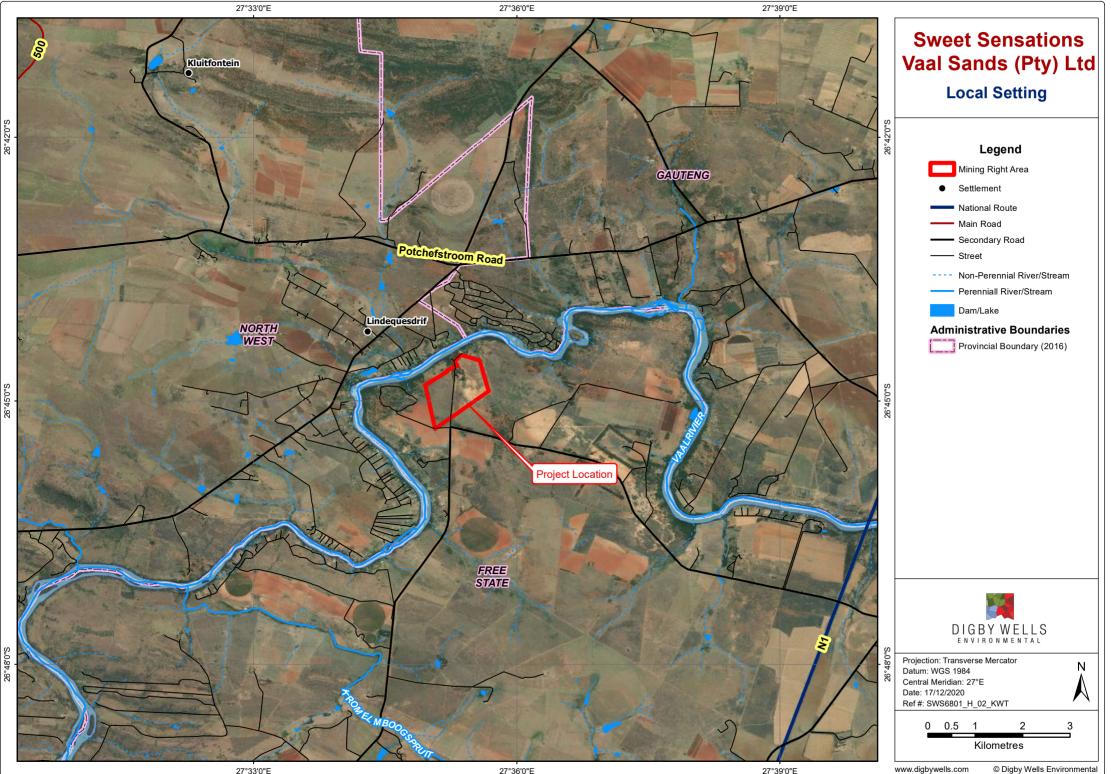
Province	Free State			
District Municipality	Ngwathe Local Municipality			
Local Municipality	Fezile Dabi District Municipalit	Fezile Dabi District Municipality		
Nearest town	Parys (20 km), Sasolburg (23 km)			
Name and	Property	Ownership		
ownership of property/properties	RE of Du Pont 228	Sakhu Indlu Development and Construction (Pty) Ltd (hereinafter Sakhu Indlu)		

Table 2-4: Summary of the Project Area Location Details

The MRA is located on the RE of the farm Du Pont 228 and covers an area of approximately 102 ha. Of the whole MRA, Sweet Sensation will mine 95 ha.

Both the dilapidated structure and the burial ground are located in areas of the MRA not intended for mining. Plan 2 presents an overview of the heritage resources identified within the MRA and the no-go buffer zones around the heritage resources that must be avoided. Digby Wells recommends Sweet Sensation incorporate a no-go buffer zone of around the identified dilapidated structure and 100 m around the identified burial ground.

Where other heritage resources are identified, Sweet Sensation may need to implement additional no-go buffer zones around those heritage resources.

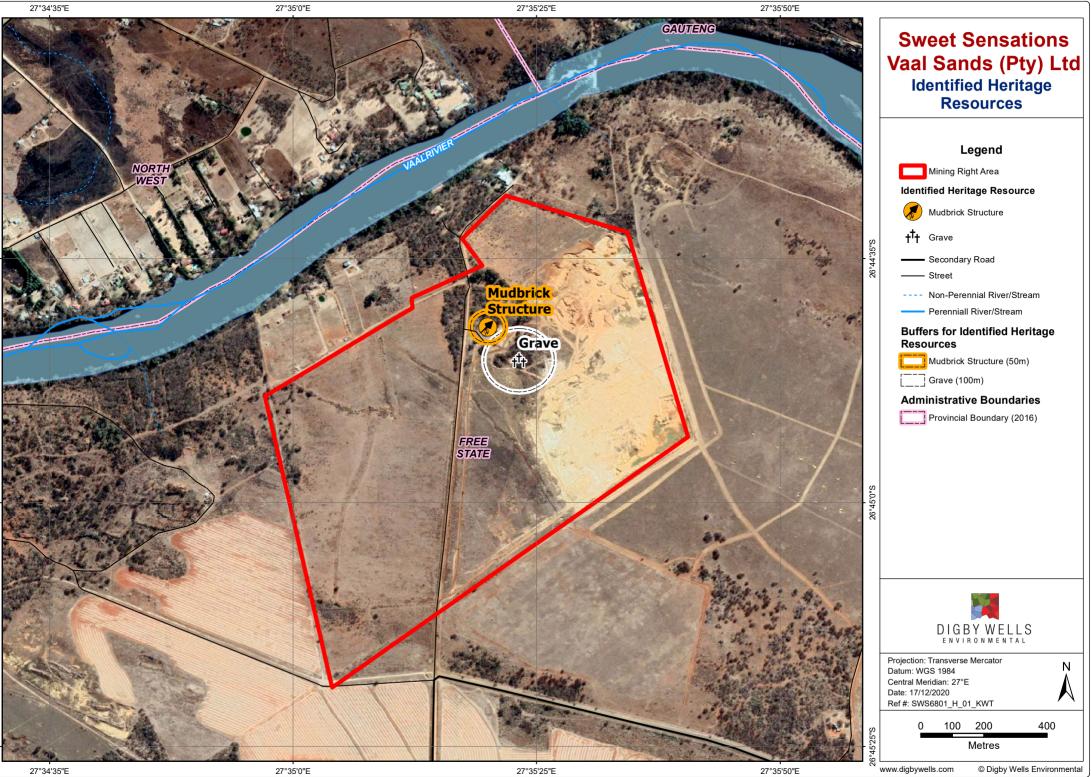


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27°39'0"E

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2.3. Ownership Structures

Table 2-5 below details the landowners for the properties comprising the Project area. Sweet Sensation does not own the land within the affected properties.

Table 2-5: Heritage Resources and Land Ownership

Landowner	Property	Heritage Resources
Sakhu Indlu	RE of Du Point 228	Mudbrick Structure

Historical structures are considered part of the national estate and fall within the sphere of operations of the HRAs in terms of Section 3(2) of the NHRA. As such, the property owners, landowners or land management entities are considered the custodians of the structures. As such, these custodians must assume the responsibility of preserving the structures and must adhere to the requirements of the NHRA and NHRA Regulations, as applicable. In cases where historical structures are being actively utilised in activities compatible with maintaining the CS of those resources, the user or resident is considered the custodian.

Ownership of graves resides with the *bona fide* NoK as defined in terms of the applicable legislation, specifically the Exhumation Ordinance of 1980 which has subsequently been repealed. Therefore, *in lieu* of an applicable national act or act specific to the Free State Province, Digby Wells will adopt the definition of NoK as defined in Section 14(3)(e)(iii) of the Mpumalanga Cemeteries, Crematoria and Exhumation of Bodies Act, 2005 (Act No. 8 of 2005) (MCCEBA) which is founded on those encapsulated within the Exhumation Ordinance of 1980. These include in order of relevance:

- 1. The surviving spouse or partner of the deceased;
- 2. In the absences of a surviving spouse or partner, the eldest adult child of the deceased;
- 3. In the absence of an adult child, a parent of the deceased;
- 4. In the absence of a parent, an adult sibling of the deceased; and
- 5. In the absence of a sibling, the closest adult relative to the deceased.

Where burial grounds are identified, Sweet Sensation must make reasonable efforts to identify the NoK. Where any mitigation measures are required, Sweet Sensation must meaningfully engage with the NoK and implement any mitigation measures must be undertaken in consultation with the NoK.

In an instance where no *bona fide* NoK are known, the landowners are considered the custodians of the grave.

This notwithstanding, Sweet Sensation's planned mining activities may impact the heritage resources. In these instances, Sweet Sensation will be responsible for managing the risk and the impact to the heritage resources, in consultation with the landowner or heritage user(s).



The management measures may include GRPs and/or permit application processes to obtain permits issued in terms of Section 34, Section 35, and Section 36, as may be necessary.

2.4. Access

Guidance Note

Access relates to the free movement of proprietors and users of the heritage site or the restriction of movement to the heritage site to manage identified risks and liabilities. The management plan must be developed to facilitate access to the best benefit of society.

Sweet Sensation must define or establish access routes to the heritage resources within the MRA to allow heritage users access in the event they wish to perform any cultural practices at these resources as may be necessary. Digby Wells recommends Sweet Sensation, in consultation with the heritage users, demarcate the heritage resources to make Sweet Sensation employees or contractors aware of the location of the heritage resources and the extent of the no-go buffer zone to minimise the potential for accidental damage during Project activities.

Access routes to the heritage sites must be defined or established to allow NoK access to the burial grounds and graves. Digby Wells recommends Sweet Sensation, in consultation with the NoK, fence off identified burial grounds and graves to minimise the potential for accidental damage during earth moving activities. Such fencing must include a pedestrian gate to allow for free access to the site(s).

The free movement of individuals to the heritage resources is however, a concern in terms of the management of risks and liabilities to Sweet Sensation. To give effect to the NHRA requirement to safeguard the CS of heritage resources through sustainable use, Sweet Sensation must implement remedial action that will enable access to the heritage sites for living heritage purposes. Visitors to the heritage site(s) must adhere to the requirements of the Mine Health and Safety Act, 1996 (Act No. 29 of 1996) (MHSA) and any Sweet Sensation internal policies that are based on these requirements.

Access must be arranged in compliance with the requirements of the MHSA. Where community member(s) or NoK wish to visit a heritage resource in a space deemed too hazardous for a member of the public to access, Sweet Sensation does retain the right to refuse entry on these grounds.

3. Management Structures

Guidance Note

Implementation of an HSMP requires co-operation between several entities that have bearing on the way various interests and policy objectives are implemented. These need to be captured in an HSMP to define competencies, responsibilities and modalities of co-ordination. The site management plan should contain a description of all these entities as well as a binding agreement of their competences and responsibilities in the context of the plan.



3.1. Legal Status of Entities

Table 3-1 outlines the various entities applicable to the implementation of the HSMP.

Entity	Role	Competencies	
Sakhu Indlu	Owner / custodian	N/A	
Sweet Sensation	Implementation	N/A	
SAHRA	Competent authority	NHRA NHRA Regulations (GN R 548)	
HFS	Commenting authority ¹³	SAHRA Minimum Standards (2007)	

Table 3-1: Entities applicable to implementation

3.2. Competencies and Responsibilities

Sweet Sensation is ultimately responsible for the conservation and ethical management of the impacts posed to heritage resources within the MRA. Sweet Sensation's internal management structures, roles and responsibilities must therefore be replicated in this document for reference.

HFS is competent to assess and manage Section 34 structures. This HSMP will be submitted to HFS¹⁴ for noting and for adjudication with reference to the structures afforded general protection by Section 34 of the NHRA.

The Archaeology, Palaeontology and Meteorites (APM) Unit of SAHRA is the competent authority responsible for the management of NHRA Section 35 heritage resources and the issuing of any permits related to these resources. Should any Section 35 heritage resources be identified and included in this HSMP, the updated document must be submitted to the APM Unit for adjudication.

The *bona fide* NoK are ultimately responsible for the maintenance of the burial grounds and graves. In the absence of *bona fide* NoK, the current landowners are considered the custodians of these heritage resources (refer to Section 2.3 above). The Burial Grounds and Graves (BGG) Unit of SAHRA is the competent authority responsible for the regulation of the HSMP in terms of the national legislative framework with reference to the burial grounds and graves. Should any Section 36 heritage resources be identified and included in this HSMP, the updated document must be submitted to the BGG Unit for adjudication.

¹³ At the time of compilation of this HSMP, HFS has not been assessed as competent to manage NHRA Section 35 or Section 36 heritage resources, i.e., archaeological or palaeontological resources or burial grounds and graves.

¹⁴ Where Section 34 structures are identified and included in this HSMP, any progress reports must be submitted to HFS for noting or adjudication.



This HSMP, including all progress reporting, will be submitted to HFS and the SAHRA APM and BGG Units in accordance with the scope and procedures contained herein.

3.3. Coordination Mechanism between Entities

The SAHRIS¹⁵ platform will be the primary co-ordination mechanism between the various entities. The SAHRIS platform is in the public domain and will allow for process transparency.

All documentation, including the HSMP, progress reporting and correspondence will be captured under the unique SAHRIS Case ID.

4. Principles for Planning and Actions

4.1. Objectives, Targets and Strategies

Guidance Note

Principles for planning and actions are anchored in general strategies and policies. These will have specific targets that should be defined and met through the implementation of the HSMP. What is best for a heritage site considering the specific, defined CS and the opportunities is the main objective of any HSMP. Several aspects, such as preservation, access, provisions for science and research should be integrated with this objective, as well as a vision for the future and sustainable use.

The principles for planning and actions are directly correlated to and guided by defined objectives, targets and strategies. Table 4-1 details the applicable objectives, targets and strategies.

¹⁵ www.sahra.org.za/sahris/



Objective	Target	Strategy
To comply with the requirements of the national legislative framework, with specific reference to the NHRA in terms of Section 34(1) ¹⁶ . To comply with the requirements of the national legislative framework, with specific	 In situ conservation of heritage resources; 	Update the HSMP for
reference to the NHRA in terms of Section 35(3) and (4) as above.	 Identification of risks; Proactive management of identified risks; 	approval by the competent authority.
To comply with the requirements of the national legislative framework, with specific reference to the NHRA in terms of Section 36(3) ¹⁷ .	 Monitoring of identified heritage resources; and Management of manifested risks. 	
To safeguard tangible cultural heritage.		Implement scope and procedures defined in the
To facilitate sustainable use of the heritage site or sites.		HSMP (refer to Section 5).

Table 4-1: Objectives, targets and strategies

4.2. Masterplan of Action

Figure 4-1 presents the Masterplan of Action and includes the progress to date. A checkmark indicates an item has been completed for all heritage resources, while a hyphen indicates that partial progress has been achieved (either partial progress at some or all heritage resources) or full progress at some heritage resources).

Sweet Sensation must update this regularly.

¹⁶ 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.

¹⁷ Where no person may, without a permit issued by SAHRA, (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.



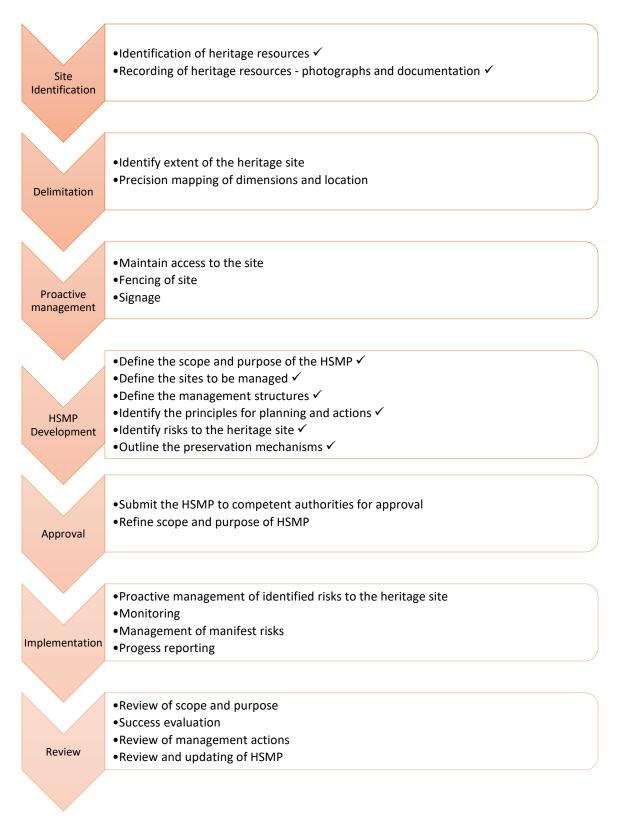


Figure 4-1: Masterplan of Action



5. Preservation Mechanism

Guidance Note

Preservation, as the broadest objective of a site management plan, is undertaken for specific purposes that must consider all aspects. A site management plan must aim to balance the benefits of preservation with acceptable levels of degradation.

Commensurate to the objectives of this HSMP (as detailed in Section 4.1) preservation mechanisms include *inter alia*:

- Preventative protection;
- Monitoring;
- Progress reporting; and
- Reactive management (should identified risks manifest).

To develop appropriate preservation mechanisms, potential current and future risks must be identified and recorded within the existing Sweet Sensation instruments.

5.1. Current and Future Risks

Guidance Note

Current and future threats to heritage sites must be identified, defined and assessed. The site management plan must aim at balancing risks with preservation to ensure threats become opportunities.

This section describes the identified risks to the heritage sites, and the potential impacts if manifested. The potential impacts will depend on the location of the identified heritage resources in relation to Project activities and the sensitivity of the heritage resource to change. Table 5-1 presents a description and assessment of the potential impacts per identified risk, as well as the consequence of each.

Where heritage resources are identified and intended for *in situ* conservation, this table must be updated according to the notes in Table 5-1 below.

This HSMP aims at balancing the preservation of the heritage sites *in situ* against the identified risks and potential impacts. Various preservation mechanisms are identified for implementation. These are discussed separately under Sections 5.2 to 5.4 below.



Table 5-1: Identified and Future Risks, Potential Impacts and Assessment

Risk	Description	Potential Impact	Assessment in terms of Dilapidated Structure	Assessment in terms of Burial Grounds and Graves
Land clearance	Clearing of land and Destruction stripping of / damage topsoil		Potential damage to or the destruction of the historical structure may occur considering the location of these structures relative to the activities. Considering preventative protection measures, the effects will be short-term as they will be mitigated through the implementation of this HSMP. If manifested, it will require the involvement of HFS as the competent authority.	Potential damage to or destruction of the burial grounds and graves is unlikely to occur considering the location of the burial grounds and graves relative to these activities and considering preventative protection measures, will be short-term as it will be mitigated through the implementation of this HSMP. If manifested, it will require the involvement of the SAHRA BGG Unit as the competent authority.
			Consequence ¹⁸ : Negligible detrimental to minor detrimental	Consequence: Moderately detrimental to Extremely Detrimental
Sand Mining	Strip mining of the sand resources	Destruction / damage	Potential damage to or the destruction of the historical structure may occur considering the location of these structures relative to the activities. Considering preventative protection measures, the effects will be short-term as they will be mitigated through the implementation of this HSMP. If manifested, it will require the involvement of HFS as the competent authority.	Potential damage to or destruction of the burial grounds and graves unlikely to occur considering the location of the burial grounds and graves relative to these activities and considering preventative protection measures, will be short-term as it will be mitigated through the implementation of this HSMP. If manifested, it will require the involvement of the SAHRA BGG Unit as the competent authority.
			Consequence: Negligible detrimental to minor detrimental	Consequence: Moderately detrimental to Extremely Detrimental

¹⁸ The impact to a resource is directly related to the designated CS, as it provides minimum accepted levels of change to the resource.



Risk	Description	Potential Impact	Assessment in terms of Dilapidated Structure	Assessment in terms of Burial Grounds and Graves
Screening	Operation of the mobile screening plan	Destruction / damage	Potential damage to or the destruction of the historical structure is unlikely, given the nature of the screening process which will be operated within the area disturbed by the strip-mining of the sand resources. Should such an impact occur and considering preventative protection measures, the effects will be short-term as they will be mitigated through the implementation of this HSMP. If manifested, it will require the involvement of HFS as the competent authority.	Potential damage to or destruction of the burial grounds and graves is unlikely to occur considering the location of the burial grounds and graves relative to these activities and considering preventative protection measures, will be short-term as it will be mitigated through the implementation of this HSMP. If manifested, it will require the involvement of the SAHRA BGG Unit as the competent authority.
			Consequence: Negligible detrimental to minor detrimental	Consequence: Moderately detrimental to Extremely Detrimental



5.2. **Preventative Protection**

Where heritage resources are encountered during Project activities, Sweet Sensation must implement the Chance Finds Procedure (CFP) and/or Fossil Finds Procedure (FFP)¹⁹.

Table 5-2 outlines the preventative protection measures for implementation in line with the scope of this HSMP. This table must be updated as heritage resources and risks to heritage resources are identified and actions are implemented.

Objective	Action	Status
	Determine extent of dilapidated structure. Sweet Sensation must delineate these boundaries.	Complete
	Clearly determine extent of the burial ground(s) and graves. Sweet Sensation must delineate these boundaries.	Complete
Activity as per	Identify NoK	In process
Activity as per Table 5-1	Implement an appropriate no-go buffer zone around identified heritage sites.	Not yet started
	Establish fencing with access gate to provide physical barrier to the burial grounds and graves.	Not yet started
	Place signage along access routes and adjacent to heritage sites to warn of presence.	Not yet started

Table 5-2: Preventative protection measures

5.3. Monitoring

Guidance Note

A site management plan cannot be static and must be conceived in terms of a cycle. Defined measures must be implemented, evaluated, reviewed, and if necessary, altered or withdrawn. Monitoring should target specific issues, measure specific parameters of change or react to specific events. Monitoring should be measured against recorded baseline conditions.

Sweet Sensation must establish a monitoring plan in line with existing monitoring instruments, such as those included in the EMPr. Digby Wells recommends Sweet Sensation monitors the *status quo* of the structure once a month when mining activities occur within 500 m of the structure and/or the burial ground.

Sweet Sensation's monitoring instruments and requirements must be replicated here for ease of reference.

¹⁹ Digby Wells has developed the CFP and the FFP as a document separate from the HSMP.

5.4. **Progress Reporting**

Guidance Note

Progress reporting should present details to the status quo, state of degradation or stability to guide proactive management measures and competent authority decisions. Progress reporting is important as it correlates baseline conditions to the effectiveness of measures contained in the site management plan.

Following the identification of heritage resources, Sweet Sensation must update this HSMP to include the heritage resources to be conserved *in* situ. Following the update, progress reporting must be completed monthly during sand-mining activities and distributed to the various management structures via the SAHRIS portal (refer to Section 3.3). Progress reporting will be undertaken in accordance with the competences and responsibilities as defined in Section 3.2.

6. Awareness

Guidance Note

The site management plan must make provision for the dissemination of information to the public. Means of communication may vary considerably across various platforms. Nonetheless, information pertaining to the heritage site and the proposed management thereof must be freely available.

The HSMP will be publicly available via the SAHRIS portal (refer to Section 3.3). Furthermore, awareness of the site will be created through appropriate signage along various access routes and at the heritage sites (as detailed in Table 5-2).

Where additional heritage resources are identified, Sweet Sensation must notify Stakeholders and I&APs through the existing engagement mechanisms. These mechanisms must be replicated here for reference and must be updated as new information or engagements occur.

7. Resources

Guidance Note

A site management plan must detail the resources required for its implementation. Resources from other entities that promote the management objectives and actions should be listed.

Sweet Sensation employees and contractors will implement the HSMP in line with the Sweet Sensation management structures, competences and responsibilities defined in Section 3.

Should the monitoring plan described in Section 5.3 indicate the identified risks are manifested, Sweet Sensation must enlist the services of a qualified and accredited archaeologist or palaeontologist.

8. Sustainable Use and Vision for the Future

Guidance Note

A site management plan must adapt through time to meet the specific requirements for the continued use of the heritage site and benefits for society.

Sweet Sensation will endeavour to maintain the *in situ* conservation of any heritage resources (including NHRA Section 34, Section 35 and Section 36 resources) identified within the MRA throughout the LoM. Sweet Sensation will promote the sustainable use thereof via the various measures contained in this HSMP (refer to Section 5).



Appendix A: Specialist CV



Miss Shannon Hardwick Heritage Resources Management Consultant Social and Heritage Services Digby Wells Environmental

1 Education

Date	Degree(s) or Diploma(s) obtained	Institution
2013	MSc (Archaeology)	University of the Witwatersrand
2010	BSc (Honours) (Archaeology)	University of the Witwatersrand
2009	BSc	University of the Witwatersrand
2006	Matric	Rand Park High School

2 Language Skills

Language	Written	Spoken	
English	Excellent	Excellent	
Afrikaans	Fair	Basic	

3 Employment

Period	Company	Title/position
2019 to Present	Digby Wells Environmental	Heritage Resources Management Consultant
2017 to 2019	Digby Wells Environmental	Assistant Heritage Resources Management Consultant
2017 to 2017	Digby Wells Environmental	Social and Heritage Services Intern
2016 to 2017	Tarsus Academy	Facilitator
2011 to 2016	University of the Witwatersrand	Teaching Assistant
2011	University of the Witwatersrand	Collections Assistant



4 **Experience**

I joined the Digby Wells team in May 2017 as a Heritage Management Intern and has most recently been appointed as a Heritage Resources Management Consultant. I am an archaeologist and obtained a Master of Science (MSc) degree from the University of the Witwatersrand in 2013, specialising in historical archaeobotany in the Limpopo Province. I am a published co-author of one paper in *Journal of Ethnobiology*.

Since joining Digby Wells, I have gained generalist experience through the compilation of various heritage assessments, including Notification of Intent to Develop (NIDs), Heritage Scoping Reports (HSRs), Heritage Impact Assessment (HIA) reports, Heritage Basic Assessment Reports (HBARs) and permit applications to undertake permitted activities in terms of Sections 34 and 35 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA). I have also obtained experience in compiling socio-economic documents, including a Community Health, Safety and Security Management Plan (CHSSMP) and social baselines and data analysis for Projects in South Africa, Malawi, Mali and Sierra Leone. My fieldwork experience includes heritage pre-disturbance surveys in South Africa, Malawi and the Democratic Republic of the Congo and social fieldwork in Malawi.

I am a registered member of the Association of Southern African Professional Archaeologists (ASAPA) and the International Council on Monuments and Sites (ICOMOS).

5 **Project Experience**

My project experience is listed in the table below.

Project Title	Name of Client		Date of	Project / Experience Description
Environmental Authorisation for the Dagsoom Coal Mining Project near Ermelo, Mpumalanga Province	Dagsoom Coal Mining (Pty) Ltd	Ermelo, Mpumalanga Province	Ongoing	Heritage Impact Assessment
Regional Tailings Storage Facility Heritage Mitigations	Ergo Mining (Pty) Ltd	Randfontein, Gauteng	Ongoing	Section 34 Permit Application Process
Weltervreden Mine Environmental Authorisation, Water Use Licence and Mining Right Application Project	Mbuyelo Group (Pty) Ltd	Belfast, Mpumalanga	Ongoing	Heritage Impact Assessment

Project Experience



Project Title	Name of Client	Project Location	Date of Completion	Project / Experience Description
Environmental Authorisation for the proposed Lephalale Pipeline Project, Limpopo Province	MDT Environmental (Pty) Ltd	Lephalale, Limpopo Province	2019	Notification of Intent to Develop
Heritage Resources Management Process Update for the Exxaro Matla Mine	Exxaro Coal Mpumalanga (Pty) Ltd	Kriel, Mpumalanga Province	2019	Heritage Site Management Plan Update
Environmental Authorisation for the proposed Musina- Makhado Special Economic Zone Development Project, Limpopo Province	Limpopo Economic Development Agency	Vhembe District Municipality, Limpopo Province	Ongoing	Heritage Impact Assessment Project Management
Songwe Hills Rare Earth Elements Project	Mkango Resources Limited	Phalombe District, Malawi	Ongoing	Heritage Impact Assessment
Elandsfontein Colliery Burial Grounds and Graves Chance Finds	Anker Coal and Mineral Holdings SA (Pty) Ltd Elandsfontein Colliery (Pty) Ltd	Clewer, Emalahleni, Mpumalanga Province	December 2018	Site Inspection Project Management
Environmental Authorisation Process to Decommission a Conveyor Belt Servitude, Road and Quarry at Twistdraai East Colliery	Sasol Mining (Pty) Ltd	Secunda, Mpumalanga Province	Ongoing	Notification of Intent to Develop
Environmental and Social Impact Assessment for the Bougouni Lithium Project, Mali	Future Minerals S.A.R.L.	Bougouni, Mali	Ongoing	Heritage Impact Assessment
Environmental Authorisation for the Nomalanga Estates Expansion Project, KwaZulu- Natal	Nomalanga Property Holdings (Pty) Ltd	Greytown. KwaZulu-Natal	Ongoing	Heritage Impact Assessment
Environmental Authorisation for the Temo Mine proposed Rail, Road and Pipeline Development, Limpopo Province	Temo Coal Mining (Pty) Ltd	Lephalale, Limpopo Province	Ongoing	Heritage Impact Assessment



Project Title	Name of Client	Project Location	Date of Completion	Project / Experience Description
Gorumbwa RAP Audit	Randgold Resources Limited	Kibali Sector, Democratic Republic of the Congo	December 2018	Resettlement Action Plan Audit
Sasol Sigma Defunct Colliery Surface Mitigation Project: Proposed Rover Diversion and Flood Protection Berms	Sasol Mining (Pty) Ltd	Sasolburg, Free State Province	November 2018	Notification of Intent to Develop
Basic Assessment and Regulation 31 Amendment / Consolidation for Sigma Colliery: Mooikraal and Sigma Colliery: 3 Shaft	Sasol Mining (Pty) Ltd	Sasolburg, Free State Province	Ongoing	Notification of Intent to Develop
Sasol Mining Sigma Colliery Ash Backfilling Project, Sasolburg, Free State Province	Sasol Mining (Pty) Ltd	Sasolburg, Free State Province	July 2018	Heritage Basic Assessment Report Update
Constructed Landfill Site for the Sierra Rutile Limited Mining Operation, Southern Province, Sierra Leone	Sierra Rutile Limited	Southern Province, Sierra Leone	May 2019	Social Impact Assessment
Environmental Impact Assessment for the Klipspruit Colliery Water Treatment Plant and associated pipeline, Mpumalanga	South32 SA Coal Holdings (Pty) Ltd	Ogies, Mpumalanga Province	Ongoing	Notification of Intent to Develop; Social baseline
Proposed construction of a Water Treatment Plant and associated infrastructure for the Treatment of Mine-Affected Water at the Kilbarchan Colliery	Eskom Holdings SOC Limited	Newcastle, KwaZulu-Natal Province	Ongoing	Heritage Impact Assessment
Belfast Implementation Project	Exxaro Coal Mpumalanga (Pty) Ltd	Belfast, Mpumalanga Province	Ongoing	Section 34 Permit Application



Project Title	Name of Client	Project Location	Date of Completion	Project / Experience Description
Newcastle Landfill Project	GCS Water and Environmental Consultants	Newcastle, KwaZulu-Natal	March 2019	Heritage Impact Assessment
NHRA Section 34 Permit Application process for the Davin and Queens Court Buildings on Erf 173 and 174, West Germiston, Gauteng Province	IDC Architects	Johannesburg, Gauteng Province	May 2018	Section 34 Permit Application Process
Basic Assessment and Environmental Management Plan for the Proposed pipeline from the Mbali Colliery to the Tweefontein Water Reclamation Plant, Mpumalanga Province	HCI Coal (Pty) Ltd Mbali Colliery	Ogies, Mpumalanga Province	February 2018	Heritage Basic Assessment Report
The South African Radio Astronomy Observatory Square Kilometre Array Heritage Impact Assessment and Conservation Management Plan Project	The South African Radio Astronomy Observatory (SARAO)	Carnarvon, Northern Cape Province	July 2018	Heritage Impact Assessment; Conservation Management Plan
Environmental Impact Assessment for the proposed Future Developments within the Sun City Resort Complex	Sun International (Pty) Ltd	Rustenburg, North West Province	Ongoing	Heritage Impact Assessment Conservation Management Plan Social Baseline
Environmental Fatal Flaw Analysis for the Mabula Filling Station	Mr van den Bergh	Waterberg, Limpopo Province	November 2017	Fatal Flaw Analysis
Environmental Impact Assessment for the Blyvoor Gold Mining Project near Carletonville, Gauteng Province	Blyvoor Gold Capital (Pty) Ltd	Carletonville, Gauteng	Ongoing	Notification of Intent to Develop; Social Baseline



Project Title	Name of Client	Project Location	Date of Completion	Project / Experience Description
Heritage Resources Management Process for the Exxaro Matla Mine	Exxaro Coal Mpumalanga (Pty) Ltd	Kriel, Mpumalanga Province	October 2018	Heritage Impact Assessment
Liwonde Additional Studies	Mota-Engil Africa	Liwonde, Malawi	June 2018	Community Health, Safety and Security Management Plan
Environmental Impact Assessment for the Millsite TSF Complex	Sibanye-Stillwater	Randfontein, Gauteng	December 2017	Heritage Impact Assessment
Heritage Resources Management Process for the Portion 296 of the farm Zuurfontein 33 IR Proposed Residential Establishment Project	Shuma Africa Projects (Pty) Ltd	Ekurhuleni (Johannesburg), Gauteng	June 2017	Notification of Intent to Develop
NHRA Section 35 Archaeological Investigations, Lanxess Chrome Mine, North- West Province	Lanxess Chrome Mine (Pty) Ltd	Rustenburg, North West Province	August 2017	Archaeological Phase 2 Mitigation
Environmental and Social Input for the Pre-Feasibility Study	Birimium Gold	Bougouni, Mali	October 2018	Pre-Feasibility Study; Heritage Impact Assessment

6 Professional Registration

Position	Professional Body	Member Number
Member	Association of Southern African Professional Archaeologists (ASAPA)	451
Member	International Council on Monuments and Sites (ICOMOS)	38048



7 **Publications**

Esterhuysen, A.B. & Hardwick, S.K. 2017. Plant remains recovered from the 1854 siege of the Kekana Ndebele, Historic Cave, Makapan Valley, South Africa. *Journal of Ethnobiology* 37(1): 97-119.



Mr. Justin du Piesanie Divisional Manager Social and Heritage Services Digby Wells Environmental

1 Education

Date	Degree(s) or Diploma(s) obtained	Institution
2015	Continued Professional Development, Intermediate Project Management Course	PM.Ideas: A division of the Mindset Group
2013	Continued Professional Development Programme, Architectural and Urban Conservation: Researching and Assessing Local Environments	University of Cape Town
2008	MSc	University of the Witwatersrand
2005	BA (Honours) (Archaeology)	University of the Witwatersrand
2004	BA	University of the Witwatersrand
2001	Matric	Norkem Park High School

2 Language Skills

Language	Written	Spoken
English	Excellent	Excellent
Afrikaans	Proficient	Good



3 Employment

Period	Company	Title/position
2018 to present	Digby Wells Environmental	Divisional Manager: Social and Heritage Services
2016-2018	Digby Wells Environmental	Unit Manager: Heritage Resources Management
2011-2016	Digby Wells Environmental	Heritage Management Consultant: Archaeologist
2009-2011	University of the Witwatersrand	Archaeology Collections Manager
2009-2011	Independent	Archaeologist
2006-2007	Maropeng & Sterkfontein Caves UNESCO World Heritage Site	Tour guide

4 **Experience**

I joined the company in August 2011 as an archaeologist. Subsequently, Digby Wells appointed me as the Heritage Unit Manager and Divisional Manager for Social and Heritage Services in 2016 and 2018 respectively. I obtained my Master of Science (MSc) degree in Archaeology from the University of the Witwatersrand in 2008, specialising in the Southern African Iron Age. I further attended courses in architectural and urban conservation through the University of Cape Town's Faculty of Engineering and the Built Environment Continuing Professional Development Programme in 2013. I am a professional member of the Association of Southern African Professional Archaeologists (ASAPA), and accredited by the association's Cultural Resources Management (CRM) section. I am also a member of the International Council on Monuments and Sites (ICOMOS), an advisory body to the UNESCO World Heritage Convention. I have over 10 years combined experience in HRM in South Africa, including heritage assessments, archaeological mitigation, grave relocation, and NHRA Section 34 application processes. I gained further generalist experience since my appointment at Digby Wells in Botswana, Burkina Faso, Cameroon, the Democratic Republic of Congo, Liberia, Malawi, Mali, Senegal and Tanzania on projects that have required compliance with IFC requirements such as Performance Standard 8: Cultural Heritage. Furthermore, I have acted as a technical expert reviewer of HRM projects undertaken in Cameroon and Senegal. As Divisional Manager for Social and Heritage Services at Digby Wells Environmental, I manage several large capital Projects and multidisciplinary teams placing me in the best position to identify and exploit points of integration between the HRM process and greater social landscape. This approach to HRM, as an integrated discipline, is grounded in



international HRM principles and standards that has allowed me to provide comprehensive, project-specific solutions that promote ethical heritage management and assist in achieving the strategic objectives of our clients, as well as maintain or enhance Cultural Significance of the relevant cultural heritage resources.

5 **Project Experience**

PROJECT	LOCATION		DATES	PROJECT TYPE	CLIENT
LLWDP-II HRM Process	Lesotho	2020	-	Heritage Impact Assessment	Lesotho Lowlands Water Development Project II
Ergo City Deep Heritage Mitigations	Johannesburg, Gauteng, South Africa	2020	-	Heritage Impact Assessment, Rescue Permit Application and Monitoring	Ergo (Pty) Ltd
Marshall Street Barracks Archaeological Monitoring	Johannesburg, Gauteng, South Africa	2020	-	Archaeological Monitoring	GVK-Siya Zama Construction
Exxaro Belfast Site Inspection	Belfast, Mpumalanga, South Africa	2020	2020	Site Inspection	Exxaro Coal Mpumalanga (Pty) Ltd
Matla Mine 1 GRP	Kriel, Mpumalanga, South Africa	2020	-	Grave Relocation	Exxaro Coal Mpumalanga (Pty) Ltd
Mafube RAP and GRP	Middelburg, Mpumalanga, South Africa	2019	-	Grave Relocation	Mafube Coal
SARAO SKA Project: Heritage Mitigations	Carnarvon, Northern Cape, South Africa	2019	-	Heritage Management and Mitigation	SARAO
Kibali Kalimva & Ikamva Pit ESIA	Orientale Province, Democratic Republic of Congo	2019	2019	Heritage Impact Assessment	Barrick Gold Corporation
Ergo City Deep HSMP	Johannesburg, Gauteng, South Africa	2019	2019	Heritage Site Management Plan	Ergo (Pty) Ltd
Ergo RTSF Section 34 Process	Westonaria, Gauteng, South Africa	2019	-	Section 34 Destruction Permit Applications	

Please see the following table for relevant Project experience:



PROJECT	LOCATION		DATES	PROJECT TYPE	CLIENT
Twyfelaar EIA	Ermelo, Mpumalanga, South Africa	2019	2019	Heritage Impact Assessment	Dagsoom Coal Mining (Pty) Ltd
Sasol River Diversion	Sasolburg, Free State, South Africa	2019	2019	Heritage Impact Assessment	Sasol Mining
Sun City EIA and CMP	Pilanesberg, North-West Province, South Africa	2018	2019	Heritage Impact Assessment and Conservation Management Plan	Sun International
Exxaro Matla HRM	Kriel, Mpumalanga, South Africa	2017	2019	Heritage Impact Assessment and Conservation Management Plan	Exxaro Coal Mpumalanga (Pty) Ltd
Exxaro Belfast GRP	Belfast, Mpumalanga, South Africa	2013	2019	Grave Relocation	Exxaro Coal Mpumalanga (Pty) Ltd
Eskom Northern KZN Strengthening	KwaZulu- Natal, South Africa	2016	2018	Heritage Impact Assessment	ILISO Consulting
Thabametsi GRP	Lephalale, Limpopo Province, South Africa	2017	2018	Grave Relocation	Exxaro Resources Ltd
SKA HIA and CMP	Carnarvon, Northern Cape, South Africa	2017	2018	Heritage Impact Assessment and Conservation Management Plan	SARAO
Grootegeluk Watching Brief	Lephalale, Limpopo Province, South Africa	2017	2017	Watching Brief	Exxaro Resources Ltd
Matla HSMP	Kriel, Mpumalanga Province, South Africa	2017	2017	Heritage Site Management Plan	Exxaro Coal Mpumalanga (Pty) Ltd
Ledjadja Coal Borrow Pits	Lephalale, Limpopo Province, South Africa	2017	2017	Heritage Basic Assessment	Ledjadja Coal (Pty) Ltd
Exxaro Belfast Implementation Project PIA	Belfast, Mpumalanga, South Africa	2017	2017	Palaeontological Impact Assessment	Exxaro Coal Mpumalanga (Pty) Ltd



PROJECT	LOCATION		DATES	PROJECT TYPE	CLIENT
Lanxess Chrome Mine Archaeological Mitigation	Rustenburg, North West Province, South Africa	2017	2017	Phase 2 Excavations	Lanxess Chrome Mine (Pty) Ltd
Tharisa Apollo EIA Project	KwaZulu- Natal, South Africa	2017	2017	Heritage Impact Assessment	GCS (Pty) Ltd
Queen Street Section 34 Process	Germiston, Johannesburg, Gauteng, South Africa	2017	2017	Section 34 Destruction Permit Applications	IDC Architects
Goulamina EIA Project	Goulamina, Sikasso Region, Mali	2017	2017	Heritage Impact Assessment	Birimian Limited
Zuurfontein Residential Establishment Project	Ekurhuleni, Gauteng, South Africa	2017	2017	Notification of Intent to Develop	Shuma Africa Projects
Kibali Grave Relocation Training and Implementation	Orientale Province, Democratic Republic of Congo	2017	2017	Grave Relocation	Randgold Resources Limited
Massawa EIA	Senegal	2016	2017	Heritage Impact Assessment and Technical Reviewer	Randgold Resources Limited
Beatrix EIA and EMP	Welkom, Free State, South Africa	2016	2017	Heritage Impact Assessment	Sibanye Stillwater
Sun City Chair Lift	Pilanesberg, North-West Province, South Africa	2016	2017	Notification of Intent to Develop and Heritage Basic Assessment	Sun International
Hendrina Underground Coal Mine EIA	Hendrina, Mpumalanga, South Africa	2016	2017	Heritage Impact Assessment	Umcebo Mining (Pty) Ltd
Elandsfontein EMP Update	Clewer, Mpumalanga, South Africa	2016	2017	Heritage Impact Assessment	Anker Coal
Groningen and Inhambane PRA	Limpopo Province, South Africa	2016	2016	Heritage Basic Assessment	Rustenburg Platinum Mines Limited



PROJECT	LOCATION		DATES	PROJECT TYPE	CLIENT
Palmietkuilen MRA	Springs, Gauteng, South Africa	2016	2016	Heritage Impact Assessment	Canyon Resources (Pty) Ltd
Copper Sunset Sand Mining S.102	Free State, South Africa	2016	2016	Heritage Basic Assessment	Copper Sunset Sand (Pty) Ltd
Grootvlei MRA	Springs, Gauteng, South Africa	2016	2016	Notification of Intent to Develop	Ergo (Pty) Ltd
Lambda EMP	Mpumalanga, South Africa	2016	2016	Palaeontological Impact Assessment	Eskom Holdings SOC Limited
Kilbarchan Basic Assessment and EMP	Newcastle, KwaZulu- Natal, South Africa	2016	2016	Heritage Basic Assessment	Eskom Holdings SOC Limited
Grootegeluk Amendment	Lephalale, Limpopo Province, South Africa	2016	2016	Notification of Intent to Develop	Exxaro Coal Resources (Pty) Ltd
Garsfontein Township Development	Pretoria, Gauteng, South Africa	2016	2016	Notification of Intent to Develop	Leungo Construction Enterprises
Louis Botha Phase 2	Johannesburg, Gauteng, South Africa	2016	2016	Phase 2 Excavations	Royal Haskoning DHV
Sun City Heritage Mapping	Pilanesberg, North-West Province, South Africa	2016	2016	Phase 2 Mapping	Sun International
Gino's Building Section 34 Destruction Permit Application	Johannesburg, Gauteng, South Africa	2015	2016	HeritageImpactAssessmentandSection34DestructionPermitApplication	Bigen Africa Services (Pty) Ltd
EDC Block Refurbishment Project	Johannesburg, Gauteng, South Africa	2015	2016	Heritage Impact Assessment and Section 34 Permit Application	Bigen Africa Services (Pty) Ltd
Namane IPP and Transmission Line EIA	Steenbokpan, Limpopo Province, South Africa	2015	2016	Heritage Impact Assessment	Namane Resources (Pty) Ltd



PROJECT	LOCATION		DATES	PROJECT TYP	ΡE	CLIENT
Temo Coal Road Diversion and Rail Loop EIA	Steenbokpan, Limpopo Province, South Africa	2015	2016	Heritage Im Assessment	npact	Namane Resources (Pty) Ltd
Sibanye WRTRP	Gauteng, South Africa	2014	2016	Heritage Im Assessment	npact	Sibanye Stillwater
NTEM Iron Ore Mine and Pipeline Project	Cameroon	2014	2016	Technical Review	W	IMIC plc
NLGM Constructed Wetlands Project	Liberia	2015	2015	Heritage Im Assessment	npact	Aureus Mining
ERPM Section 34 Destruction Permits Applications	Johannesburg, Gauteng, South Africa	2015	2015	Section Destruction P Applications	34 Permit	Ergo (Pty) Ltd
JMEP II EIA	Botswana	2015	2015	Heritage In Assessment	npact	Jindal
Oakleaf ESIA Project	Bronkhorstspr uit, Gauteng, South Africa	2014	2015	Heritage Im Assessment	npact	Oakleaf Investment Holdings
Imvula Project	Kriel, Mpumalanga, South Africa	2014	2015	Heritage In Assessment	npact	Ixia Coal
VMIC Vanadium EIA Project	Mokopane, Limpopo, South Africa	2014	2015	Heritage In Assessment	npact	VM Investment Company
Everest North Mining Project	Steelpoort, Mpumalanga, South Africa	2012	2015	Heritage Im Assessment	npact	Aquarius Resources
Nzoro 2 Hydro Power Project	Orientale Province, Democratic Republic of Congo	2014	2014	Social consultati	ion	Randgold Resources Limited
Eastern Basin AMD Project	Springs, Gauteng, South Africa	2014	2014	Heritage In Assessment	npact	AECOM
Soweto Cluster Reclamation Project	Soweto, Gauteng, South Africa	2014	2014	Heritage In Assessment	npact	Ergo (Pty) Ltd
Klipspruit South Project	Ogies, Mpumalanga, South Africa	2014	2014	Heritage Im Assessment	npact	BHP Billiton



PROJECT	LOCATION		DATES	PROJECT TYPE	CLIENT
Klipspruit Extension: Weltevreden Project	Ogies, Mpumalanga, South Africa	2014	2014	Heritage Impact Assessment	BHP Billiton
Ergo Rondebult Pipeline Basic Assessment	Johannesburg, South Africa	2014	2014	Heritage Basic Assessment	Ergo (Pty) Ltd
Kibali ESIA Update Project	Orientale Province, Democratic Republic of Congo	2014	2014	Heritage Impact Assessment	Randgold Resources Limited
GoldOne EMP Consolidation	Westonaria, Gauteng, South Africa	2014	2014	Gap analysis	Gold One International
Yzermite PIA	Wakkerstroom , Mpumalanga, South Africa	2014	2014	Palaeontological Impact Assessment	EcoPartners
Sasol Mooikraal Basic Assessment	Sasolburg, Free State, South Africa	2014	2014	Heritage Basic Assessment	Sasol Mining
Rea Vaya Phase II C Project	Johannesburg, Gauteng, South Africa	2014	2014	Heritage Impact Assessment	ILISO Consulting
New Liberty Gold Project	Liberia	2013	2014	Grave Relocation	Aureus Mining
Putu Iron Ore Mine Project	Petroken, Liberia	2013	2014	Heritage Impact Assessment	Atkins Limited
Sasol Twistdraai Project	Secunda, Mpumalanga, South Africa	2013	2014	Notification of Intent to Develop	ERM Southern Africa
Kibali Gold Hydro- Power Project	Orientale Province, Democratic Republic of Congo	2012	2014	Heritage Impact Assessment	Randgold Resources Limited
SEGA Gold Mining Project	Burkina Faso	2013	2013	Technical Reviewer	Cluff Gold PLC
Consbrey and Harwar Collieries Project	Breyton, Mpumalanga, South Africa	2013	2013	Heritage Impact Assessment	Msobo Coal
Falea Uranium Mine Environmental Assessment	Falea, Mali	2013	2013	Heritage Scoping	Rockgate Capital



PROJECT	LOCATION		DATES	PROJECT TYPE	CLIENT
Daleside Acetylene Gas Production Facility	Gauteng, South Africa	2013	2013	Heritage Impact Assessment	ERM Southern Africa
SEGA Gold Mining Project	Burkina Faso	2012	2013	Socio Economic and Asset Survey	Cluff Gold PLC
Kibali Gold Project Grave Relocation Plan	Orientale Province, Democratic Republic of Congo	2011	2013	Grave Relocation	Randgold Resources Limited
Everest North Mining Project	Steelpoort, Mpumalanga, South Africa	2012	2012	Heritage Impact Assessment	Aquarius Resources
Environmental Authorisation for the Gold One Geluksdal TSF and Pipeline	Gauteng, South Africa	2012	2012	Heritage Impact Assessment	Gold One International
Platreef Burial Grounds and Graves Survey	Mokopane, Limpopo Province, South Africa	2012	2012	Burial Grounds and Graves Survey	Platreef Resources
Resgen Boikarabelo Coal Mine	Limpopo Province, South Africa	2012	2012	Phase 2 Excavations	Resources Generation
Bokoni Platinum Road Watching Brief	Burgersfort, Limpopo Province, South Africa	2012	2012	Watching Brief	Bokoni Platinum Mine
Transnet NMPP Line	Kwa-Zulu Natal, South Africa	2010	2010	Heritage survey	Umlando Consultants
Archaeological Impact Assessment – Witpoortjie Project	Johannesburg, Gauteng, South Africa	2010	2010	Archaeological Impact Assessment	ARM
Der Brochen Archaeological Excavations	Steelpoort, Mpumalanga, South Africa	2010	2010	Phase 2 Excavations	Heritage Contracts Unit
De Brochen and Booysendal Archaeology Project	Steelpoort, Mpumalanga, South Africa	2010	2010	Site Recording: Mapping	Heritage Contracts Unit
Eskom Thohoyandou Electricity Master Network	Limpopo Province, South Africa	2010	2010	Heritage Statement	Strategic Environmental Focus



PROJECT	LOCATION		DATES	PROJECT TYPE	CLIENT
Batlhako Mine Expansion	North-West Province, South Africa	2010	2010	Phase 2 Mapping	Heritage Contracts Unit
Wenzelrust Excavations	Shoshanguve, Gauteng, South Africa	2009	2009	Phase 2 Excavations	Heritage Contracts Unit
University of the Witwatersrand Parys LIA Shelter Project	Parys, Free State, South Africa	2009	2009	Phase 2 Mapping	University of the Witwatersrand
Archaeological Assessment of Modderfontein AH Holdings	Johannesburg, Gauteng, South Africa	2008	2008	Heritage Basic Assessment	ARM
Heritage Assessment of Rhino Mines	Thabazimbi, Limpopo Province, South Africa	2008	2008	Heritage Impact Assessment	Rhino Mines
Cronimet Project	Thabazimbi, Limpopo Province, South Africa	2008	2008	Archaeological surveys	Cronimet
Eskom Thohoyandou SEA Project	Limpopo Province, South Africa	2008	2008	Heritage Statement	Eskom
Witbank Dam Archaeological Impact Assessment	Witbank, Mpumalanga, South Africa	2007	2007	Archaeological survey	ARM
Sun City Archaeological Site Mapping	Sun City, Pilanesberg, North West Province, South Africa	2006	2006	Site Recording: Mapping	Sun International
Klipriviersberg Archaeological Survey	Meyersdal, Gauteng, South Africa	2005	2006	Archaeological surveys	ARM

6 Professional Registration

Position	Professional Body	Registration Number
Member	Association for Southern African Professional Archaeologists (ASAPA);	270



Position	Professional Body	Registration Number
	ASAPA Cultural Resources Management (CRM) section	
Member	International Council on Monuments and Sites (ICOMOS)	14274
Member	Society for Africanist Archaeologists (SAfA)	N/A
Member	International Association of Impact Assessors (IAIA) South Africa	5494

7 **Publications**

Huffman, T.N. & du Piesanie, J.J. 2011. Khami and the Venda in the Mapungubwe Landscape. Journal of African Archaeology 9(2): 189-206

du Piesanie, J.J., 2017. Book Review: African Cultural Heritage Conservation and Management. South African Archaeological Bulletin 72(205)



Appendix B: SAHRA Final Comment

Our Ref:



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Ragna Redelstorff Tel: +27 (0)21 202 8651 Email: rredelstorff@sahra.org.za CaseID: 15129 Date: Monday July 06, 2020 Page No: 1

Final Comment

In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Sweet Sensation Vaal Sand (Pty) Ltd

FS5/1/2/2/10018 MR Regulation 29 Part 1a Amendment Application Process

The proposed project is an amendment to a sand mining permit FS 30/5/1/2/2/10018 MR (SAHRIS CaseID8128) to include the screening process, which will not change the scope of the existing and valid environmental authorisation, nor increase the level or nature of impacts.

The sand mining application was approved by SAHRA in a final comment on 22 July 2015 with the following conditions:

Following the author's recommendations, the SAHRA Archaeology, Palaeontology and Meteorites Unit has no objections against the proposed development, subject to the following conditions:

- 1. The dilapidated building should be avoided.
- 2. A management plan must be in place for potential graves.

3. Should any objects of archaeological or palaeontological remains be found during construction activities, work must immediately stop in that area and the Environmental Control Officer (ECO) must be informed.

4. The ECO must inform the South African Heritage Recourse Agency (SAHRA) and contact an archaeologist and/or palaeontologist, depending on the nature of the find, to assess the importance and rescue them if necessary (with the relevant SAHRA permit). No work may be resumed in this area without the permission from the ECO and SAHRA.

5. If the newly discovered heritage resource is considered significant a Phase 2 assessment may be required. A permit from the responsible heritage authority will be required.

Our Ref:



T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Ragna Redelstorff Tel: +27 (0)21 202 8651 Email: rredelstorff@sahra.org.za CaseID: 15129 Date: Monday July 06, 2020 Page No: 2

Final comment

As the amendment does not change the scope of the project approved by SAHRA in CaseID8128, the SAHRA Archaeology, Palaeontology and Meteorites Unit has no objections against the amendment subject to the conditions (as per the final comment from 22 July 2015 for CaseID8128):

1. The dilapidated building must be avoided.

2. A management plan must be in place for potential graves.

3. Should any objects of archaeological or palaeontological remains be found during construction activities, work must immediately stop in that area and the Environmental Control Officer must be informed.

4. The ECO must inform the South African Heritage Recourse Agency (SAHRA) and contact an archaeologist and/or palaeontologist, depending on the nature of the find, to assess the importance and rescue them if necessary (with the relevant SAHRA permit). No work may be resumed in this area without the permission from the ECO and SAHRA.

5. If the newly discovered heritage resource is considered significant a Phase 2 assessment may be required. A permit from the responsible heritage authority will be needed.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Ragna Redelstorff Heritage Officer South African Heritage Resources Agency

SWS6177 Regulation 29 Amendment

Our Ref:



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Ragna Redelstorff Tel: +27 (0)21 202 8651 Email: rredelstorff@sahra.org.za CaseID: 15129 Date: Monday July 06, 2020 Page No: 3

ADMIN:

Direct URL to case: http://www.sahra.org.za/node/537187 (, Ref: FS 30/5/1/2/2/10018 MR)

Terms & Conditions:

- 1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
- 2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
- 3. SAHRA reserves the right to request additional information as required.