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Heritage Resources Management Process for the Portion 296 of the farm Zuurfontein 33 IR Proposed Residential Establishment Project

Notification of Intent to Develop

Project Number:

LES4548

Prepared for:

Shuma Africa Projects

31 May 2017



Digby Wells and Associates (South Africa) (Pty) Ltd
Co. Reg. No. 2010/008577/07. Turnberry Office Park, 48 Grosvenor Road, Bryanston, 2191. Private Bag
X10046, Randburg, 2125, South Africa
Tel: +27 11 789 9495, Fax: +27 11 789 9498, info@digbywells.com, www.digbywells.com

Directors: AJ Reynolds (Chairman) (British)*, GE Trusler (C.E.O), B Beringer, LF Koeslag, J Leaver*,
NA Mehlomakulu, DJ Otto
*Non-Executive



This document has been prepared by Digby Wells Environmental.

Report Type:	Notification of Intent to Develop
Project Name:	Heritage Resources Management Process for the Portion 296 of the farm Zuurfontein 33 IR Proposed Residential Establishment Project
Project Code:	LES4548

Name	Responsibility	Signature	Date
Shannon Hardwick Intern: HRM	Pre-disturbance survey NID compilation		31 May 2017
Justin du Piesanie Manager: HRM ASAPA Member: 270	Pre-disturbance survey Technical Review		

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Appendix A: Plans

1 Introduction

Shuma Africa Projects (Pty) Ltd (hereinafter Shuma Africa) appointed Digby Wells Environmental (hereinafter Digby Wells) to complete a Heritage Resources Management (HRM) process for a proposed residential establishment project on Portion 296 of the Farm Zuurfontein 33 IR, Gauteng Province.

This Notification of Intent to Develop (NID) serves to meet the regulatory requirements of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA); the NEMA Regulations, 2014¹ (Government Notice Regulations [GN R 982]), and Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA).

2 Project details

The Ekurhuleni Metropolitan Municipality (EMM) intends to establish a new residential housing development on Portion 296 of the Farm Zuurfontein 33 IR in the Gauteng Province. The proposed development will comprise an approximate 605 units, associated infrastructures and municipal services covering an extent of 8.282 ha.

To comply with the national regulatory framework, the EMM is required to apply for Environmental Authorisation (EA) in terms of the NEMA and NEMA Regulations, 2014. To this affect, the EMM appointed Shuma Africa as the professional service provider to complete the necessary EA process.

Details of the project site are presented in Table 1 and Table 2 respectively.

Table 1: Project location details

Name of property/ies	Zuurfontein 33 IR
Street address or location (e.g.: Off R44)	Off of Modderfontein Road (R25) and bounded by, Parkland Drive on the east, CR Swart Drive on the south and Zuurfontein Avenue on the west
Erf or farm number/s	Portion 296 of the Farm Zuurfontein 33 IR
Coordinates of approximate centre of project area	S -26.09075
	E 28.19648
Town or District	Kempton Park, Ekurhuleni
Responsible Municipality	Ekurhuleni
Maximum extent of proposed development	8,2842ha
Current use	Municipal and Social Infrastructure (Vacant)

¹ Assessing the potential impacts to heritage resources as part of the Basic Assessment process is required in terms of Appendix 1: Basic Assessment Process Section 2(d) and 3(1)(h)(iv) and (vii)

Predominant land use/s of surrounding properties	Residential (low density “Residential 1” stand to the north and to the east of the site; medium density residential to the south and west).
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Table 2: Landowner details

Name	Property	Notified
Provincial Government of Gauteng.	Portion 296 of the Farm Zuurfontein 33 IR	N/A

3 Baseline Description

The site-specific study area is underlain by geological strata associated with the Halfway House Granite Suite of the Basement Complex. These strata are considered to have low or no palaeontological sensitivity according to the SAHRIS palaeo-sensitivity map (PSM) and the palaeo-sensitivity of area is rated ‘insignificant or zero’. This determination is supported by a previously-completed desktop Palaeontological Impact Assessment undertaken as part of the construction of two industrial parks, Chloorkop North and Chloorkop South (Millstead 2014). It is reported here that no fossils are expected within the geological strata which underlies the project area. Accordingly, no specialist PIA is required for this project.

Based on the results of previously completed heritage studies in the general study area, the cultural landscape comprises:

- Stone Age period heritage resources;
- Late Farming Community (LFC) period sites recorded as stonewalled settlements; and
- Historical period sites consisting of built structures and graves.

The Stone Age is a period of time from roughly four million years ago to four thousand years ago (i.e. 2000 BCE) and is divided into three phases: Early Stone Age (ESA); Middle Stone Age (MSA) and Later Stone Age (LSA). Human evolution occurred throughout the Stone Age, from *Australopithecus* to *Homo* species, and fossils and stone tools remain from these periods. Following the Stone Age, the period of farming communities (FC) is characterised by migrations and Bantu-speakers moving into the country to settle permanently. This occurred between four thousand and five hundred years ago (i.e. roughly 2000 BC to AD 1500). The historical period followed on from this, characterised by the influx of European colonists and settlers and their contact with indigenous populations.

In one of the completed studies in the area under consideration it was noted by the authors that there was a complete lack of tangible heritage resources in the area (Van der Walt 2008, van der Walt 2014b). The lack of heritage resources at other sites has been communicated to the South African Heritage Resources Agency (SAHRA) in various

documents such as letters and Requests for Exemption (RfE); these are available on the South African Heritage Resource Information Systems (SAHRIS) database.

Huffman (2012) identified several archaeological sites spanning the Middle Stone Age (MSA) through to the historical period comprising low density lithic surface scatters, quarries, hunting blinds and settlements. The majority of recorded heritage resources however, relate to the historical period and are commonly recorded as built environment resources and graves (National Cultural History Museum, 2000; Van der Walt, 2014a; Van der Walt, 2014b; Seaton Thomson & Associates 2016).

3.1 Data Sources

The following works were consulted:

- Huffman, T.N. 2012. Heritage survey for the Witfontein Project, Gauteng, Phase II. A Phase II report prepared for Seaton Thompson and Associates.
- Millstead, B.D. 2014. Desktop Palaeontological Heritage Impact Assessment Report on the Site of two Proposed Industrial Parks known as Chloorkop North (located on the remainder Portion 57 and Portion 58 of the Farm Klipfontein 12 IR) and Chloorkop South (to be located on Portion 73, Remainder Portion 43 and remainder Portion 53 of the Farm Klipfontein 12 IR 53), Gauteng Province. Report prepared for Heritage Contract and Archaeological Consulting CC, on behalf of Eco Assessments CC.
- National Cultural History Museum, 2000. A survey of resources at the proposed Glen Erasmia Development, Kempton Park, Gauteng. Report prepared for Cave Klapwijk & Associates.
- Seaton Thomson & Associates. 2016. Realignment of the K155 (Existing R23) over the Swartspuit, including the construction of Riverfields Boulevard and new bridge over the Swartspuit, in the Riverfields Development area, Kempton Park, Ekurhuleni. Draft EIA prepared for Hunkydory Investments 201 (Pty) Ltd.
- South African Heritage Resources Agency (SAHRA). 2017. South African Heritage Resource Information Systems. <http://www.sahra.org.za/sahris/>
- Van der Walt, J. 2008. Proposed development on Part of Portion 23, Portion 69 and the remainder of Portions 22 and 36 of the Farm Klipfontein 12IR, Ekurhuleni, Gauteng Province. Heritage Scoping Report prepared for Eco Assessments CC.
- Van der Walt, J. 2014a. Archaeological Impact Assessment of the Proposed Industrial Park known as Chloorkop South, Gauteng. Report prepared for Eco Assessments CC.
- Van der Walt, J. 2014b. Archaeological Impact Assessment of the Proposed Industrial Park known as Chloorkop North, Gauteng. Report prepared for Eco Assessments CC.

3.2 Pre-disturbance Survey

A pedestrian pre-disturbance survey of the proposed development site was conducted by Justin du Piesanie and Shannon Hardwick on 18 May 2017. The survey aimed to identify any tangible heritage resources that may be impacted on by the construction of the residential housing development. Photographs of the site are included as Figure 1 and Figure 2. The site was characterised by tall grass and short grass which had been recently cut. The vacant lot is maintained by employees of Ekurhuleni municipality and the grass is cut on a regular basis. The site has been extensively disturbed through various anthropogenic factors.

No heritage resources or visible surface indicators of heritage resources were identified. An exposed geotrench was inspected to assess the potential for subsurface deposits occurring in the project site.



Figure 1: Photograph of site showing a. short, recently-cut grass and b. tall, uncut grass.



Figure 2: Geotrench exposed in the proposed footprint.

4 Assessment processes

The following impact assessment processes are currently being conducted for the proposed project.

Table 3: Current assessment processes

Legislation (e.g. NEMA, MPRDA, etc.)	Current phase of assessment process (e.g. Scoping, EIA, etc.)	Authorities who has / will receive information	Capacity of Authorities
NEMA	Application for Environmental Authorisation - Basic Assessment	Gauteng Province Department of Agriculture and Rural Development (GDARD)	Licensing Authority
NHRA	Notification of Intent to Develop & Request for Exemption	SAHRA	Commenting

	Notification of Intent to Develop & Request for Exemption	Provincial Heritage Resources Authority of Gauteng (PHRA-G)	Noting ²
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These assessments are required in terms of legislated and / or regulated activities outlined in Sections 4.1 to 4.3 below.

4.1 EIA Regulations listed activities

The proposed development will include the following activities listed in the EIA Regulations, which generally require impact assessments.

Table 4: Identified listed activities

NEMA Activity No.	NHRA Trigger	Description	Expected duration/phase
Listing Notice 1 Activity 27	Section 38(1)(c)(i)	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation	Construction

4.2 NHRA Section 38(1) activities

The proposed development will include the following activities listed in Section 38(1) of the NHRA, which generally require heritage assessments to be undertaken.

Table 5: NHRA Section 38 triggers

	NHRA Section 38 (1) Activities / Triggers		Summary description (e.g. 500 m conveyor belt, open cast pit, etc.)	
<input checked="" type="checkbox"/>	a	Any linear development or barrier >300 m	Construction of internal roads associated with the housing development.	
<input type="checkbox"/>	b	Any bridge or similar structure >50 m	-	
<input type="checkbox"/>	c	Any development or activity that will change the character of a site:	-	
	<input checked="" type="checkbox"/>	i	≥5 000m ² in extent	The proposed development area is approximately 8 ha.
	<input type="checkbox"/>	ii	Involving ≥3 existing erven/ subdivisions	-
	<input type="checkbox"/>	iii	Involving ≥3 or more erven/ divisions consolidated within past 5 years.	-

² The NID and RfE will be submitted to the PHRA-G via email for noting only, as no heritage resources will be impacted on that fall within the PHRA-G's competency, i.e. NHRA Section 34 protected structures.

	NHRA Section 38 (1) Activities / Triggers		Summary description (e.g. 500 m conveyor belt, open cast pit, etc.)
<input checked="" type="checkbox"/>	d	Rezoning of a site $\geq 10\,000\text{m}^2$ in extent.	The site will be rezoned from "Municipal and Social Infrastructure" to "Residential".
<input checked="" type="checkbox"/>	e	Other triggers, e.g.: in terms of other legislation, (i.e.: National Environment Management Act, etc.)	NEMA

4.3 Identified / known heritage resources and potential impacts

Certain categories of heritage resources, if identified / existing, generally require heritage assessments to be conducted before any development may take place. These categories may also be formally or generally protected in terms of the NHRA:

Table 6: Identified heritage resources in terms of Section 3 of the NHRA

	Section	Description
<input type="checkbox"/>	3(2)(a)	Places, buildings, structures and equipment of cultural significance Description of resource: None identified Potential impact: None
<input type="checkbox"/>	3(2)(b)	Places to which oral traditions are attached or which are associated with living Description of resource: None identified Potential impact: None
<input type="checkbox"/>	3(2)(c)	Historical settlements and townscapes Description of resource: None identified Potential impact: None
<input type="checkbox"/>	3(2)(d)	Landscapes and natural features of cultural significance Description of resource: None identified Potential impact: None
<input type="checkbox"/>	3(2)(e)	Geological resources of scientific or cultural importance Description of resource: None identified. Potential impact: None
<input type="checkbox"/>	3(2)(f)	Archaeology and/or palaeontology (Including archaeological sites and material, fossils, rock art, battlefields & wrecks) Description of resource: None identified Potential impact: None
<input type="checkbox"/>	3(2)(g)	Graves and burial grounds (e.g. ancestral graves, graves of victims of conflict, historical graves & cemeteries) Description of resource: None identified Potential impact: None
<input type="checkbox"/>	3(2)(h)	Other human remains Description of resource: None identified Potential impact: None

	Section	Description
<input type="checkbox"/>	3(2)(i)	Sites of significance relating to the history of slavery in South Africa
		Description of resource: None identified
		Potential impact: None
<input type="checkbox"/>	3(2)(j)	Movable objects
		Description of resource: None identified
		Potential impact: None

5 Illustrative Material

Illustrative material is provided in Appendix A. The illustrative material demonstrates the general Project locality, and the site specific study area that was assessed as part of the pre-disturbance survey.

6 Recommendation

A summary and motivation of the specialist recommendations is provided in Table 7:

Table 7: Specialist heritage recommendations

Is a Heritage Impact Assessment required?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<p>If NO, provide motivation:</p> <p>A baseline description as presented in Section 3 above demonstrates that the greater study area comprises a cultural landscape predominantly associated with low density Stone Age scatters, LFC resources, as well as historical period built environment and graves. Much of the archaeology in the area is of low significance as determined in previously completed heritage studies. Some heritage assessments have reported a lack of heritage resources in very disturbed contexts.</p> <p>A pedestrian pre-disturbance survey of the proposed development site was conducted on 18 May 2017 by Justin du Piesanie and Shannon Hardwick to identify any tangible heritage resources that may be impacted upon by project related activities. Particular attention was paid to exposed geotechnical trenches to assess the potential for subsurface deposits occurring in the immediate development footprint.</p> <p>No heritage resources were recorded. Although there was a lack of visible surface indicators for heritage resources, and the absence of any subsurface deposits in the exposed geotechnical trenches, a low probability that unrecorded subsurface heritage resources may be exposed during earth moving activities remains.</p> <p>Considering the cultural landscape baseline, review of previously completed heritage studies within the general study area, and the results of the pre-disturbance survey, Digby Wells is of the opinion that no further heritage assessment in terms of Section 38 of the NHRA is required.</p> <p>Digby Wells therefore submits as part of this NID a Request for Exemption (RfE) for the proposed residential development project on Portion 296 of the farm Zuurfontein 33 IR from further heritage assessments, including a specialist PIA on condition that:</p> <ul style="list-style-type: none"> ■ The proponent develops a project specific Chance Find Protocol (CFP) for implementation during the 		

establishment and construction phase of the Project; and ■ The proponent immediately informs SAHRA of any chance finds identified and enlists the services of a qualified and accredited archaeologist to assess and recommend appropriate mitigation measures.					
If YES, provide suggested components that may be required or undertaken during HIA.					
<input type="checkbox"/>	Archaeology	<input type="checkbox"/>	Architecture		
<input type="checkbox"/>	Built Environment	<input type="checkbox"/>	Burial Grounds and Graves		
<input type="checkbox"/>	Palaeontology	<input type="checkbox"/>	Public Participation		
<input type="checkbox"/>	Townscapes	<input type="checkbox"/>	Visual Impact		
<input type="checkbox"/>	Other:				
Recommendation made by: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Name: Shannon Hardwick Capacity: Heritage Resources Unit Intern </td> <td style="width: 50%; vertical-align: top;"> Name: Justin du Piesanie Capacity: Heritage Resources Unit Manager </td> </tr> </table>				Name: Shannon Hardwick Capacity: Heritage Resources Unit Intern	Name: Justin du Piesanie Capacity: Heritage Resources Unit Manager
Name: Shannon Hardwick Capacity: Heritage Resources Unit Intern	Name: Justin du Piesanie Capacity: Heritage Resources Unit Manager				

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Appendix A: Plans

Zuurfontein NID

Local Setting

Legend

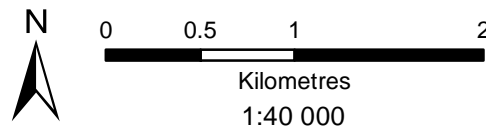
-  Portion 296 Zuurfontein
-  Major Town
-  Other Town
-  Power Line
-  National / Arterial Route
-  Main Road
-  Minor Road
-  Track
-  Railway Line
-  Non-Perennial Stream
-  Dam Wall
-  Dam / Lake
-  Non-Perennial Pan / Stream



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Projection: Transverse Mercator	Ref #: kwt.LES4548.201705.114
Datum: WGS 1984	Revision Number: 1
Central Meridian: 29°E	Date: 01/04/2015



Zuurfontein NID

Field Tracks

Legend

-  Portion 296 Zuurfontein
-  Field Tracks
-  Power Line
-  National / Arterial Route
-  Main Road
-  Minor Road



• Sustainability • Service • Positive Change • Professionalism • Future Focused • Integrity

Projection: Transverse Mercator Ref #: kwt.LES4548.201705.115
Datum: WGS 1984 Revision Number: 1
Central Meridian: 29°E Date: 22/05/2017

