Cultural Heritage Impact Assessment:

Phase 1 Investigation for the Proposed Prospecting Right Application to Prospect for Diamonds (Alluvial), Diamonds (General), Diamonds (DIA) & Gold Ore, including Associated Infrastructure on the Remaining Extent of Portion 2 and Portion 9, Portion 7, Portion 8 and a Certain Portion of Portion 12 (Portion of Portion 9) of the Farm Rooipoort 202 IP and Portion 11 (Portion of Portion 1) and Portion 15 (Portion of Portion 11) of the Farm Wildfontein 201 IP, Ditsobotla Local Municipality and JB Marks local Municipality, Ngaka Modiri Molema District Municipality and Kenneth Kaunda District Municipality, North West Province

AND

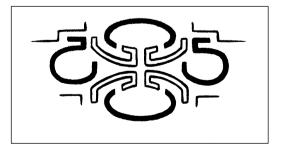
Proposed Mining Permit Application for the Mining of Diamonds Alluvial, Diamonds General and Diamonds including Associated Infrastructure, Structure and Earthworks on a Certain 4.7711 hectares area of the Portion of Portion 12 (Portion of Portion 9) on the Farm Rooipoort 202 IP, JB Marks Local Municipality, Dr Kenneth Kaunda District Municipality, North West Province



For

Environmental Consultant
Milnex CC
P.O. Box 1086
4 Botha Street
Schweizer-Reneke
2780
Tel No: (018) 011 1925

Fax No: (053) 963 2009 e-mail: christiaan@milnex-sa.co.za



By Francois P Coetzee Heritage Consultant ASAPA Professional Member No: 028 99 Van Deventer Road, Pierre van Ryneveld, Centurion, 0157

Tel: (012) 429 6297 Fax: (012) 429 6091 Cell: 0827077338 coetzfp@unisa.ac.za

Date:	July 2023
Version:	1 (Final Draft)

1

Executive Summary

This report contains a comprehensive heritage impact assessment investigation in accordance with the provisions of Sections 38(1) and 38(3) of the National Heritage Resources Act (Act No. 25 of 1999) (NHRA) and focuses on the survey results from a cultural heritage survey as requested by Milnex CC. Milnex CC was contracted by CTN Mining (Pty) Ltd as the independent environmental consultant to undertake the Basic Assessment (BAR) and EMPr process for a Mining Permit for the mining of Diamonds Alluvial, Diamonds General and Diamonds including associated infrastructure, structure and earthworks on a certain 5 ha area of the Portion of Portion 12 (Portion of Portion 9) the farm Rooipoort 202 IP, JB Marks Local Municipality, Dr Kenneth Kaunda District Municipality, North West Province. Milnex CC was also contracted by CTN Mining (Pty) Ltd to undertake the Scoping and EIA process for the proposed prospecting of Diamonds Alluvial (DA), Diamonds General (D), Diamonds (DIA) and Gold Ore, including associated infrastructure, structure and earthworks, on the Remaining Extent of Portion 2 and 9, Portion 7, Portion 8 and a certain portion of Portion 12 (Portion of Portion 9) of the Farm Rooipoort 202 IP and Portion 11 (Portion of Portion 1) and Portion 15 (Portion of Portion 11) of the Farm Wildfontein 201 IP. The properties are situated approximately 30 kilometres west of Ventersdorp. The these applications are conducted in terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002 as amended) and the National Environmental Management Act (Act No. 107 of 1998) (NEMA) as well as Section 16(3)(b) of the EIA Regulations, 2014.

A total of eight heritage sites were recorded during the survey of which four are historical structures (Sites 1, 4, 5 & 6) and four are graveyards (sites 2, 3, 7 & 8). The historical structures are probably associated with a late 19th and early 20th phase of occupation as we know the Deed of Transfers were already granted in the 1850s and 1860s. These were old farm lands as also evident by the upright stone lintels used as fence poles. Two farmhouse complexes were recorded and two associated livestock enclosures.

In this regard please note the following proposed mitigation measures:

- Take note of the position of the existing heritage sites;
- A buffer zone of 50 metres should be maintained;
- Graveyards should be fenced off with access gate installed; and
- Care should be taken to prevent any indirect impacts on the historical structures.

No archaeological (both Stone Age and Iron Age) artefacts, assemblages, features, structures or settlements were recorded during the survey of the project footprint. It is well known that Late Iron Age stone-walled settlements do not usually occur in open exposed ridges and low-lying grasslands.

Site No	Site Type	Field Rating of Significance	Direct Impacts	Significance of Impact before Mitigation	Significance of Impact after Mitigation		Proposed Mitigation
1	Historical livestock enclosure	Generally Protected C Low significance	None	80	5	•	Maintain 50 m buffer zone during proposed prospecting and mining
2	Graveyard	Generally Protected A High significance	None	80	5	•	Maintain 50 m buffer zone during proposed prospecting and mining Should be fenced off
3	Graveyard	Generally Protected A High significance	None	80	5	•	Maintain 50 m buffer zone during proposed prospecting and mining Should be fenced off
4	Historical Farmhouse	Generally Protected C Low significance	None	80	5	•	Maintain 50 m buffer zone during proposed prospecting

Coetzee, FP

HIA: Proposed Prospecting Right and Mining Permit Application on the Farms Rooipoort 202 IP and Wildfontein 201 IP, North West Province

	Complex					and mining
5	Foundation of livestock enclosure	Generally Protected C Low significance	None	80	5	Maintain 50 m buffer zone during proposed prospecting and mining
6	Historical farmhouse	Generally Protected C Low significance	None	80	5	Maintain 50 m buffer zone during proposed prospecting and mining
7	Graveyard	Generally Protected A High significance	None	80	5	 Maintain 50 m buffer zone during proposed prospecting and mining Should be fenced off
8	Graveyard	Generally Protected A High significance	None	80	5	 Maintain 50 m buffer zone during proposed prospecting and mining Should be fenced off

It is therefore recommended, from a cultural heritage perspective that the proposed prospecting and mining may proceed, taking into account the mitigation measures.

Also, please note:

Archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* NHRA (Act No. 25 of 1999), Section 36 (6)).

Definitions and abbreviations

Midden: Refuse that accumulates in a concentrated heap.

Stone Age: An archaeological term used to define a period of stone tool use and

manufacture

Iron Age: An archaeological term used to define a period associated with domesticated

livestock and grains, metal working and ceramic manufacture

LIA: Late Iron Age sites are usually demarcated by stone-walled enclosures

NHRA: National Heritage Resources Act (Act No. 25 of 1999)

SAHRA: South African Heritage Resources Agency

SAHRIS: South African Heritage Resources Information System PHRA-G: Provincial Heritage Resources Authority - Gauteng

GDARD: Gauteng Department of Agriculture and Rural Development

HIA: Heritage Impact Assessment BAR: Basic Assessment Report

EMPr: Environmental Management Programme report

DMR: Department of Mineral Resources

DEDECT: Department of Economic Development, Environment, Conservation and

Tourism

I&APs: Interested and Affected Parties

I, Francois Coetzee, hereby confirm my independence as a cultural heritage specialist and declare that I do not have any interest, be it business, financial, personal or other, in any proposed activity, application or appeal in respect of the listed environmental processes, other than fair remuneration for work performed on this project.

Francois P Coetzee

Cultural Heritage Consultant

Accredited Archaeologist for the SADC Region

Professional Member of ASAPA (CRM Section) Reg no: 28

Contents

1. Introduction	and Terms of Reference	8
2. Objectives		8
3. Description	of Physical Environment of Study Area	8
	oject Description	
_	ework	
U	ach/Methodology	
	f existing information/data	
	fological sensitivity	
	S	
	teraction and current inhabitants	
	onsultation and Stakeholder Engagement	
	ions, restrictions, gaps and limitations	
	l Heritage Sites	
	occurrences	
	sites	
	rd Evaluation of Sites	
	t Measurest	
	ations and Conclusions	
v		
	haeological and Historical Sequence	
	cription of the Recorded Sites	
	veyor General Farm Diagram	
Aaaenaum 4: Keio	ocation of Graves	07
	Eigures.	
	Figures	
Figure 1. Regiona	al context of the survey footprint located west of Ventersdorp (indicated by	١,
	ontext of the survey footprint located west of Ventersdorp (indicated by th	
,	ontext of the survey footprint (1:250 000 Topographical Map 2626)	
	wey area (Prospecting Right Application) as indicated on the 1:50 000	11
	2626BC	12
Figure 5: The sur	vey area (Mining Permit Application) as indicated on the 1:50 000	14
topographic map		12
1 0 1	vey footprint within regional context (Google Earth Pro 2023)	
	footprint within local context (Google Earth 170 2023)footprint within local context (Google Earth Pro 2023)	
	footprint of the Mining Permit Application within local context (Google	13
		11
	view of the southern section of the survey footprint	
	al view of the southern section of the survey footprint (farm	14
_		11
	al view of the southern sections of the survey footprint (fallow agricultura	
	al view of the southern section of the survey footprint (dam and water	13
_		15

Figure 13: General view of the southern section of the survey footprint	15
Figure 14: General view of the southern section of the survey footprint	
Figure 15: General view of the southern section of the survey footprint	
Figure 16: General view of the southern section of the survey footprint	
Figure 17: General view of the central section of the survey footprint (access road)	
Figure 18: General view of the central section of the survey footprint (infrastructure)	
Figure 19: General view of the central section of the survey footprint (dam)	
Figure 20: General view of the central section of the survey footprint (old railway line, tro	
removed)	
Figure 21: General view of the central section of the survey footprint	17
Figure 22: General view of the northern section of the survey footprint (railway line)	
Figure 23: General view of the northern section of the survey footprint (agricultural fields	
(used and fallow))	17
Figure 24: General view of the northern section of the survey footprint (agricultural fields	5
(used and fallow))	18
Figure 25: General view of the northern section of the survey footprint (infrastructure)	18
Figure 26: General view of the northern section of the survey footprint	
Figure 27: General view of the northern section of the survey footprint (farm	
accommodation)	18
Figure 28: General view of the northern section of the survey footprint (dam)	18
Figure 29: Recorded survey tracks on the survey footprint	
Figure 30: Recorded sites near the survey footprint (SAHRIS as at July 2023)	29
Figure 31: Declared heritage sites in Ventersdorp and surrounds (SAHRIS as at July 202.	
	30
Figure 32: Jeppe's Map dating to 1899 indicates the location of the farms west of	
Ventersdorp	30
Figure 33: South African War (1899-1902): Map of Transvaal (1899)	30
Figure 34: Surveyed in 1902 of Transvaal by Major HM Jackson for the Surveyors General	al's
Office	31
Figure 35: Surveyed in 1910, by a survey party under the direction of Capt. C.St.B. Stades	n,
R.E., and Lieut. K.W. Lee, R.F.A. Transvaal Topographical Series	31
Figure 36: War Office Map indicating the location of the survey areas north and south of	
Figure 36: War Office Map indicating the location of the survey areas north and south of Ventersdorp in 1899	31
Ventersdorp in 1899.	
	31
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954)	<i>31</i> <i>3</i> 2
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC	31 32
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954	31 32 32
Ventersdorp in 1899	31 32 C 32 C
Ventersdorp in 1899	31 32 C 32 C 33
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954 Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992) Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHR)	31 32 32 C 33
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954 Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992) Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHR) 2023)	31 32 32 C 33 VS 33
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954 Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992) Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHRI 2023) Figure 41: Location of the recorded heritage sites within the survey footprint	31 32 C 33 IS 33
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954 Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992) Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHRI 2023) Figure 41: Location of the recorded heritage sites within the survey footprint Figure 42: Ethnographic map of the region around Ventersdorp (after Breutz 1954)	31 32 C 33 !S 33 36
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954 Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992) Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHRI 2023) Figure 41: Location of the recorded heritage sites within the survey footprint Figure 42: Ethnographic map of the region around Ventersdorp (after Breutz 1954) Figure 43: General view of the cattle dip	31 32 C 33 IS 36 36
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954 Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992) Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHRI 2023) Figure 41: Location of the recorded heritage sites within the survey footprint Figure 42: Ethnographic map of the region around Ventersdorp (after Breutz 1954) Figure 43: General view of the western façade of the historical structure	31 32 C 33 IS 36 36 51
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954 Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992) Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHRI 2023) Figure 41: Location of the recorded heritage sites within the survey footprint Figure 42: Ethnographic map of the region around Ventersdorp (after Breutz 1954) Figure 43: General view of the cattle dip	31 32 33 33 36 48 51 52
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954 Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992) Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHRI 2023) Figure 41: Location of the recorded heritage sites within the survey footprint Figure 42: Ethnographic map of the region around Ventersdorp (after Breutz 1954) Figure 43: General view of the cattle dip Figure 44: General view of the western façade of the historical structure Figure 45: The two graves demarcated with brick bases and cement headstones Figure 46: General view of the three graves	31 C 32 C 33 36 48 51 53
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954 Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992) Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHRI 2023) Figure 41: Location of the recorded heritage sites within the survey footprint Figure 42: Ethnographic map of the region around Ventersdorp (after Breutz 1954) Figure 43: General view of the western façade of the historical structure Figure 45: The two graves demarcated with brick bases and cement headstones Figure 47: General view of the southern façade of the farmhouse	31 32 C 33 IS 33 36 48 51 52 53 55
Ventersdorp in 1899 Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954) Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954 Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992) Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHRI 2023) Figure 41: Location of the recorded heritage sites within the survey footprint Figure 42: Ethnographic map of the region around Ventersdorp (after Breutz 1954) Figure 43: General view of the cattle dip Figure 44: General view of the western façade of the historical structure Figure 45: The two graves demarcated with brick bases and cement headstones Figure 46: General view of the three graves	3132 C33 IS363652535556

Coetzee, FP	HIA: Proposed Prospecting Right and Mining Permit Application on the	
Eigens 51. Con and view of	Farms Rooipoort 202 IP and Wildfontein 201 IP, North West Province	50
	he shed associated with the main farmhouse ℓ	
	he graveyard6	
	he graveyard6)4
Figure 54: Surveyor Genera	l's sketch of the farm Wildfontein 201 IP which was first	
surveyed in 1909		55
Figure 55: Surveyor Genera	l's sketch of the farm Rooipoort 202 IP which was first surveyed	d
·		
	$T_{ij}LL_{ij}$	
	Tables	
Table 1: Physical Environme	ent	9
Table 2: Socio-economic env	vironment1	10
Table 3: Legal framework		20
ũ v	gulations 2017 (as amended)2	
	2	
	gulations 2017 (as amended)2	
0	er Section 38 of the NHRA2	
	· ·	
	to determine site significance	
	uation of sites3	
Table 11: Significance of the	impact3	íδ

1. Introduction and Terms of Reference

Milnex CC was contracted by CTN Mining (Pty) Ltd as the independent environmental consultant to undertake the Basic Assessment (BAR) and EMPr process for a Mining Permit for the mining of Diamonds Alluvial, Diamonds General and Diamonds including associated infrastructure, structure and earthworks on a certain 5 ha area of the Portion of Portion 12 (Portion of Portion 9) the farm Rooipoort 202 IP, JB Marks Local Municipality, Dr Kenneth Kaunda District Municipality, North West Province. Milnex CC was also contracted by CTN Mining (Pty) Ltd to undertake the Scoping and EIA process for the proposed prospecting of Diamonds Alluvial (DA), Diamonds General (D), Diamonds (DIA) and Gold Ore, including associated infrastructure, structure and earthworks, on the Remaining Extent of Portion 2 and 9, Portion 7, Portion 8 and a certain portion of Portion 12 (Portion of Portion 9) of the Farm Rooipoort 202 IP and Portion 11 (Portion of Portion 1) and Portion 15 (Portion of Portion 11) of the Farm Wildfontein 201 IP. The properties are situated approximately 30 kilometres west of Ventersdorp. The these applications are conducted in terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002 as amended) and the National Environmental Management Act (Act No. 107 of 1998) (NEMA) as well as Section 16(3)(b) of the EIA Regulations, 2014. A Cultural Heritage Impact Assessment (HIA) was requested by Milnex CC on behalf of the client to evaluate the potential impact of the proposed prospecting activities. Mining Permit application Reference No: NW30/5/1/3/2/11191MP Prospecting Right Application Reference No: NW30/5/1/1/2/13702PR.

2. Objectives

The general objective of the cultural heritage survey is to record and document cultural heritage remains consisting of both tangible and intangible archaeological and historical artefacts, structures (including graves), settlements and oral traditions of cultural significance.

As such the terms of reference of this survey are as follows:

- Identify and provide a detailed description of all artefacts, assemblages, settlements and structures of an archaeological or historical nature (cultural heritage sites) located on the study area,
- Estimate the level of significance/importance of these remains in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value,
- Assess any impact on the archaeological and historical remains within the area emanating from the development activities, and
- Propose recommendations to mitigate heritage resources where complete or partial conservation may not be possible and thereby limit or prevent any further impact.

3. Description of Physical Environment of Study Area

The heritage survey focussed on two farms namely Rooipoort 202 IP and Wildfontein 201 IP which are situated approximately 30 kilometres west of Ventersdorp. The survey footprint is divided by a railway line and the N4 running parallel east-west through the region.

Farm Name(s) and Portions	Proposed Prospecting Right Application:
	Rooipoort 202 IP
	 Remaining Extent of Portion 2
	o Portion 9
	o Portion 7
	o Portion 8

	Portion of Portion 12 (Portion of Portion 9)		
	`		
	Wildfontein 201 IP		
	o Portion 11 (Portion Of Portion 1)		
	o Portion 15 (Portion Of Portion 11)		
	Proposed Mining Permit Application:		
	Rooipoort 202 IP		
	 Portion of Portion 12 (Portion of Portion 9) 		
Size of Survey Areas	Proposed Prospecting Right Application:		
	2223, 7093 hectares		
	Proposed Mining Permit Application:		
	5 hectares		
Magisterial District	Ditsobotla Local Municipality and JB Marks local Municipality		
	Ngaka Modiri Molema District Municipality and Kenneth Kaunda		
	District Municipality		
1:50 000 Map Sheet	2626BC		
1:250 0000 Map Sheet	2626		
Central Coordinates of the	26.559100°E		
Development	26.347280°S		

Table 1: Physical Environment

The survey footprint falls within the Grassland Biome, particularly the Dry Highveld Grassland Bioregion and more specifically the Vaal-Vet Sandy Grassland (Gh 10). This vegetation type occurs in North West and Free State Provinces specifically south of Lichtenburg and Ventersdorp, stretching southwards to Klerksdorp, Leeudoringstad, Bothaville and to the Brandfort area north of Bloemfontein (Mucina & Rutherford 2006).

The survey footprint is characterised as open and flat with undulating outcrop in the southern sections. The region is dominated by agricultural land (both active and fallow) and has been extensively ploughed. The landscape is dominated by extensive farming and agropastoralist activities and which include fences (grazing camps), access roads, dams, sheds, farmworker accommodation and several farmhouse complexes. The infrastructure also includes powerlines, a railway line and tarred roads.

Venstersdorp normally receives about 341 mm of rain per year, with most rainfall occurring mainly during mid-summer. It receives the lowest rainfall (1 mm) in July and the highest (70 mm) in December. The monthly distribution of average daily maximum temperatures shows that the average midday temperatures for Ventersdorp range from 18.1°C in July to 28.9°C in January. The region is the coldest during July when the mercury drops to 5.7°C on average during the night (SAExplorer 2023).

Current Zoning	Farming Cattle grazing (pastoralism) and agriculture
Economic activities	Farming
Soil and basic geology	The geology of the Farm Rooipoort 202 IP is marked by arenaceous sediments of Bothaville Formation in the southern portion and tholeitic lavas of Allanridge Formation in the north. The Bothaville Formation rests unconformably on volcanic and clastic rocks of the Rietgat Formation with conglomerate and quartzite units. Conglomerate units occur at the basal part of the formation and comprises of well-rounded pebbles and boulders of quartz vein, quartzite, granite, chert, banded iron formation and quartz porphyry. The northern portion of the farm is marked by the younger, uppermost unit of the Ventersdorp Supergroup,

	the Allengidge Fermation The Allengidge Fermation comprises of
	the Allanridge Formation. The Allanridge Formation comprises of
	pyroclastic rocks and dark blue-grey to green andesites and basaltic
	andesites.
Prior activities	Livestock farming and agriculture
Socio Economic	Ventersdorp Region consists of a vast rural / commercial farming area as
Environment	well as the urban area of Ventersdorp, Tshing and Toevlug and has six
	villages namely Goedgevonden, Welgevonden, Tsetse, Ga-Magopa,
	Boikhutso and Boikhutsong. The North-West Province has close to 4.1
	million inhabitants. Bojanala Platinum District comprise close to 47% of
	the total population of North West, Dr Keneth Kaunda DM (19%),
	Ngaka Modiri Molema DM (22%) and Dr Ruth Segomotsi Mompati DM
	(12%). Approximately 49,1% (2,0M) of the population in the North West
	is female and males 49.12%. Bojanala Platinum DM is the only district
	with a higher proportion of males. North West has close to 32% of
	children under 15 whilst Gauteng has the highest proportion of Youth
	and Adults (15-59). Around 47% of North West Population is considered
	poor based on the Lower Bound Poverty Line. (Money metric Poverty).
	46,2% of Female headed households in North West do not have an
	employed household member. Most provinces are closer to the SA
	average for obtaining NSC, however still large disparity in obtaining post
	school qualifications by province, in the North West province 28.7% are
	able to obtain NSC/Grade 12 and 9.13% are able to obtain post school
	education. Grants remain a significant source of income for SA
	households, particularly in rural areas, 36% of household income is
	sourced from remittances and grants in North West.
Evaluation of Impact	An evaluation of the impact of the development on heritage resources
_	relative to the sustainable social and economic benefits NHRA (Act No.
	25 of 1999, Section 38(3d)): Positive

Table 2: Socio-economic environment

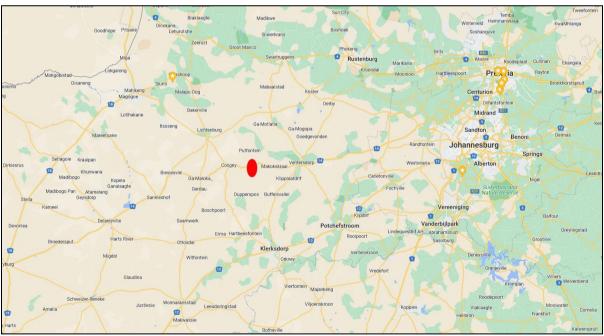


Figure 1: Regional context of the survey footprint located west of Ventersdorp (indicated by the red areas)

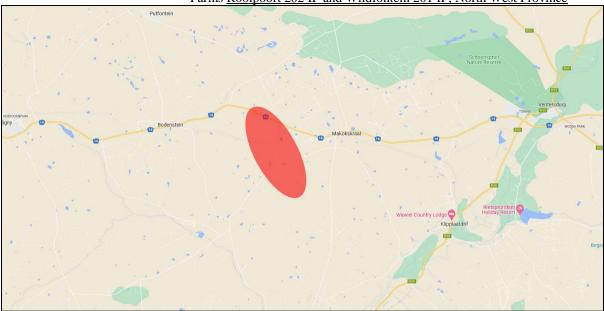


Figure 2: Local context of the survey footprint located west of Ventersdorp (indicated by the red areas)



Figure 3: Local context of the survey footprint (1:250 000 Topographical Map 2626)

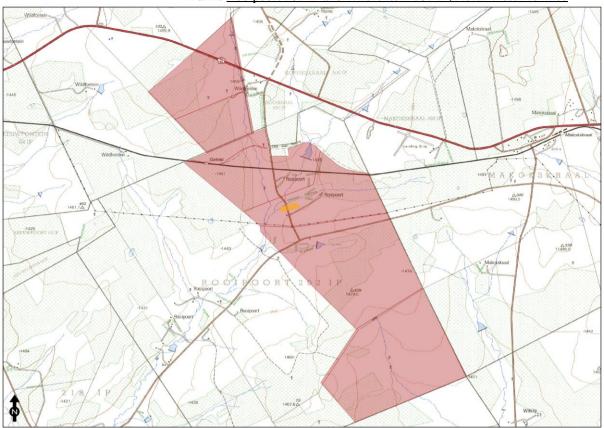


Figure 4: The survey area (Prospecting Right Application) as indicated on the 1:50 000 topographic map 2626BC

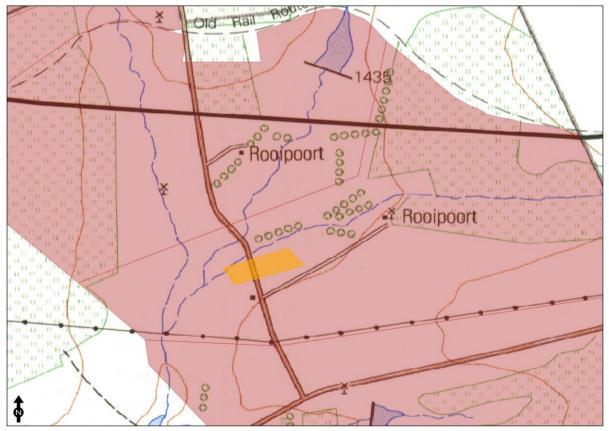


Figure 5: The survey area (Mining Permit Application) as indicated on the 1:50 000 topographic map 2626BC



Figure 6: The survey footprint within regional context (Google Earth Pro 2023)



Figure 7: Survey footprint within local context (Google Earth Pro 2023)



Figure 8: Survey footprint of the Mining Permit Application within local context (Google Earth Pro 2023)



Figure 9: General view of the southern section of the survey footprint



Figure 10: General view of the southern section of the survey footprint (farm accommodation)



Figure 11: General view of the southern sections of the survey footprint (fallow agricultural fields)



Figure 12: General view of the southern section of the survey footprint (dam and water trough)



Figure 13: General view of the southern section of the survey footprint



Figure 14: General view of the southern section of the survey footprint



Figure 15: General view of the southern section of the survey footprint



Figure 16: General view of the southern section of the survey footprint



Figure 17: General view of the central section of the survey footprint (access road)



Figure 18: General view of the central section of the survey footprint (infrastructure)



Figure 19: General view of the central section of the survey footprint (dam)



Figure 20: General view of the central section of the survey footprint (old railway line, track removed)



Figure 21: General view of the central section of the survey footprint



Figure 22: General view of the northern section of the survey footprint (railway line)



Figure 23: General view of the northern section of the survey footprint (agricultural fields (used and fallow))



Figure 24: General view of the northern section of the survey footprint (agricultural fields (used and fallow))



Figure 25: General view of the northern section of the survey footprint (infrastructure)



Figure 26: General view of the northern section of the survey footprint



Figure 27: General view of the northern section of the survey footprint (farm accommodation)



Figure 28: General view of the northern section of the survey footprint (dam)

4. Proposed Project Description

Proposed Prospecting Right Application

Pits

A trial pit/test pit or inspection pit investigation is a highly effective way of obtaining data on the sub surface soil and rock conditions which underlie a prospecting sight. It allows for the various soils and rock types to be locked, the soil to be sampled and a preliminary assessment to be made. Pits will be dug, locked, sampled and backfilled.

It is planned that 100 pits will be dug (it may be less depending on the results) at an extent of 4m (length) x 3m (breath) x 4m (depth).

- 10 pits / 9 months
- Total area disturbed for 10 months = 100 pits x (4m x 3m) / 10 000 = 0.12 ha disturbed

Trenches

Due to nature of the alluvial diamond deposit, samples are not taken for assay as would be normal practice to evaluate hard rock precious or base-metal prospects. The diamond distribution pattern grade of alluvial diamonds is also of such a nature that there is no repeatability of sample results, even from adjacent samples. Bulk samples will have to be taken to determine the average sample grade. By taking of the bulk samples, the applicant foresees to determine the grade of the diamond deposits as the number of carats contained in 100 tons (cpht) of gravel and to determine the average diamond sizes. Alluvial diamond deposits can only be sampled through bulk sampling comprising thousands of cubic meters of gravel. Given the extent of the area and the grades expected to be very low, the applicant will have to process bulk samples of approximately 120 000 tonnes. The bulk samples will be made in the form of box cuts the dimensions of these individual box cuts will on average be 40m long x 30m wide. It is estimated that the bulk samples will be 4m in depth. Gravel will be removed by excavators and will be loaded directly into dump trucks. Ore will be hauled to the screening plant. The material will be screened where after the screened material will be moved to the processing plant where the gravel will be processed. Concentrate will be moved to the sorting plant were the concentrate will be sorted.

It is estimated that pitting and trenching will take approximately 21 months. It is planned that 25 trenches will be dug at an extent of 40m (length) x 30m (breath) x 4m (depth).

- 25 trenches for 21 months of trenching
- Total area disturbed for 21 months = 25 trenches x (40m x 30m) / 10 000 = 3Ha disturbed

Ablution

Chemical toilets shall be used, no french drains and pits shall be permitted.

Storage of dangerous goods

During the prospecting activities, limited quantities of diesel and fuel, oil and lubricants if any will be stored on site. These goods should be placed in a bunded area one and a half times the volume of the total amount of goods to be stored. No more than $80m^3$ of dangerous goods will be stored at any given time.

Proposed Mining Permit Application

CTN Mining (Pty) Ltd has embarked on a process for applying for a Mining Permit for the mining of Diamonds Alluvial, Diamonds General and Diamonds including associated infrastructure, structure and earthworks on a certain 4,7711ha area.

Access Roads

Access will be obtained from existing roads off the N14 into the property with the use of gravel roads. Roads will be created on site for moving equipment and for vehicles which will be on site.

Ablutions

Chemical toilets shall be used. In an event that alternatives are needed and there will be no services for the chemical toilets then the use of French drains will be investigated.

Storage of Dangerous Goods

During mining activities, limited quantities of diesel and fuel, oil and lubricants if any will be stored on site. These goods should be placed in a bounded area one and a half times the volume of the total amount of goods to be stored. Types of lubricants should be dependent on the machines used, this will include diesel, fuel and oil. It should be noted that no more than 80 000 cubes metres of diesel may be stored on site.

5. Legal Framework

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE APPLIED
The Constitution of the Republic of South Africa (Act No. 108 of 1996)	
The National Environmental Management Act (Act No. 107 of 1998)	Section 24(1) Section 28(1)
The National Water Act (Act No. 36 of 1998)	Section 21 (a)(b)
Air Quality Act (Act No. 39 of 2004)	
National Forests Act, Act of 84 of 1998	-
The National Heritage Resources Act (Act No. 25 of 1999)	Section 38, 34, 35, 36
Conservation of Agricultural Resources Act (Act No. 85 of 1983)	
Mineral and Petroleum Resources Development Act (Act No. 28 of 2002)	
The National Water Act (Act No. 36 of 1998);	
Mine Health and Safety Act (Act No. 29 of 1996) (MHSA)	
Biodiversity Act (Act 10 of 2004)	
Ditsobotla Local Municipality IDP 2022	
JB Marks local Municipality IDP 2022	

Table 3: Legal framework

Proposed Prospecting Right Application

Description of the overall	Listing Notice 1: GNR 327, Activity 19: The infilling or depositing
activity.	of any material of more than 10 cubic metres into, or the dredging,
(Indicate Mining Right,	excavation, removal or moving of soil, sand, shells, shell grit, pebbles
Mining Permit, Prospecting	or rock of more than 10 cubic metres from a watercourse;
right, Bulk Sampling,	Listing Notice 1, GNR 327, Activity 20 (As amended GNR 517:
Production Right,	, , ,
Exploration Right,	2021): "Any activity including the operation of that activity which
Reconnaissance permit,	requires a prospecting right in terms of section 16 of the Mineral and
Technical co-operation	Petroleum Resources Development Act, as well as any other
permit, Additional listed	applicable activity as contained in this Listing Notice or in Listing
activity)	Notice 3 of 2014, required to exercise the prospecting right"

HIA: Proposed Prospecting Right and Mining Permit Application on the Farms Rooipoort 202 IP and Wildfontein 201 IP, North West Province

Listing Notice 1, GNR 327, Activity 27: "The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation."

Listing Notice 2, GNR 325, Activity 19 (As amended GNR 517: 2021): "The removal and disposal of minerals which requires permission contemplated in terms of section 20 of the Mineral and Petroleum Resources Development Act, as well as any other applicable activity as contained in this Listing Notice, Listing Notice 1 of 2014 or in Listing Notice 3 of 2014, required to exercise the permission.

Listing Notice 3 (GNR 324), Activity 4: The development of a road wider than 4 metres with a reserve less than 13,5 metres. (h) North West (ii) Sensitive areas as identified in an environmental management framework contemplated in chapter 5 of the Act and as adopted by the competent authority (iv) CBA as identified in systematic biodiversity plans adopted by the competent authority. Listing Notice 3 (GNR 324), Activity 10: The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres. (h) North West (iv) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority; (v) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; or (vi) Areas within a watercourse or wetland, or within 100 metres from the edge of a watercourse or wetland.

Listing Notice 3 (GNR 324), Activity 12: "The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. (h) North West (iv) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority; (v) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; or (vi) Areas within a watercourse or wetland, or within 100 metres from the edge of a watercourse or wetland.

Prospecting right with bulk samples for the prospecting of **Diamonds** Alluvial (DA), **Diamonds General (D)**, **Diamonds (DIA) & Gold Ore** including associated infrastructure, structure and earthworks.

Please note the establishment or reclamation of residue stockpiles or residue deposits will still take place, but is now exempt from the list of Waste Management Activities (GNR 921, as amended

Table 4: Listing Notices: Regulations 2017 (as amended)

HIA: Proposed Prospecting Right and Mining Permit Application on the

-	specing Right and Minning P		
	02 IP and Wildfontein 201 II		
NAME OF ACTIVITY (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etcetc E.g. for mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetc.)	Aerial extent of the Activity Ha or m ²	LISTED ACTIVITY Mark with an X where applicable or affected.	APPLICAB LE LISTING NOTICE (GNR 324, GNR 325 or GNR 326)
BULK SAMPLING: 120 000 tonnes 2223,7093ha Pits: 100 pits with dimensions of (4m x 3m x4m)	Extent of the proposed portions is 2223,7093ha Concurrent backfilling will take place in order to rehabilitate.		Listing Notice 1: (GNR327), Activity 19
BULK SAMPLING: 120 000 tonnes 2223,7093ha Pits: 100 pits with dimensions of (4m x 3m x4m)	portions is 2223,7093ha Concurrent backfilling will take place in order to rehabilitate.		Listing Notice 1 (GNR 327), Activity 20 (Amended GNR 517: 2021)
Clearance of indigenous vegetation: BULK SAMPLING: 120 000 tonnes 2223,7093ha	portions is 2223,7093ha Concurrent backfilling will take place in order to		Listing Notice 1, (GNR 327), Activity 27

HIA: Proposed Prospecting Right and Mining Permit Application on the Farms Rooipoort 202 IP and Wildfontein 201 IP, North West Province

Farms Rooipoort 20	02 IP and Wildfontein 201 II		<u>rovince</u>
Prospecting:	Extent of the proposed	X	Listing Notice 2,
BULK SAMPLING: 120 000 tonnes	portions is 2223,7093ha		GNR 325,
2223,7093ha	Concurrent backfilling will		Activity 19 (As
Pits: 100 pits with dimensions of (4m x 3m x4m)	take place in order to		amended GNR
Trenches: 25 trenches with dimensions (40m x 30m	rehabilitate		517: 2021)
x4m)			
Listing Notice 2, GNR 325, Activity 19 (As			
amended GNR 517: 2021): "The removal and			
disposal of minerals which requires permission			
contemplated in terms of section 20 of the Mineral			
and Petroleum Resources Development Act, as well			
as any other applicable activity as contained in this			
Listing Notice, Listing Notice 1 of 2014 or in Listing			
Notice 3 of 2014, required to exercise the			
permission.			
Clearance of vegetation:	Extent of the proposed	X	Listing Notice 3,
BULK SAMPLING: 120 000 tonnes	portions is 2223,7093ha		GNR 324,
2223,7093ha	Concurrent backfilling will		Activity
Pits: 100 pits with dimensions of (4m x 3m x4m)	take place in order to		4(h)(ii)(iv)
	rehabilitate		
x4m)			
Listing Notice 3 (GNR 324), Activity 4: The			
development of a road wider than 4 metres with a			
reserve less than 13,5 metres. (h) North West (ii)			
Sensitive areas as identified in an environmental			
management framework contemplated in chapter 5 of			
the Act and as adopted by the competent authority			
(iv) CBA as identified in systematic biodiversity			
plans adopted by the competent authority.			
Storage of dangerous goods:	Extent of the proposed	X	Listing Notice 3,
BULK SAMPLING: 120 000 tonnes	portions is 2223,7093ha		GNR 324,
2223,7093ha	Concurrent backfilling will		Activity
Pits: 100 pits with dimensions of (4m x 3m x4m)	take place in order to		10(h)(iv)(v)(vi)
Trenches: 25 trenches with dimensions (40m x 30m			()()(-)(-)
x4m)			
Listing Notice 3 (GNR 324), Activity 10: The			
development and related operation of facilities or			
infrastructure for the storage, or storage and			
handling of a dangerous good, where such storage			
occurs in containers with a combined capacity of 30			
but not exceeding 80 cubic metres. (h) North West			
(iv) Critical biodiversity areas as identified in			
systematic biodiversity plans adopted by the			
competent authority; (v) Sensitive areas as identified			
in an environmental management framework as			
contemplated in chapter 5 of the Act and as adopted			
by the competent authority; or (vi) Areas within a			
watercourse or wetland, or within 100 metres from			
the edge of a watercourse or wetland.			
The same of a maner course of mentana.			

	b a d		
Clearance of vegetation:	Extent of the proposed	X	Listing Notice 3,
BULK SAMPLING: 120 000 tonnes	portions is 2223,7093ha		GNR 324,
2223,7093ha	Concurrent backfilling will		Activity
Pits: 100 pits with dimensions of (4m x 3m x4m)	take place in order to		12(h)(iv)(v)(vi)
Trenches: 25 trenches with dimensions (40m x 30m	rehabilitate		
x4m)			
Listing Notice 3 (GNR 324), Activity 12: "The			
clearance of an area of 300 square metres or more of			
indigenous vegetation except where such clearance			
of indigenous vegetation is required for maintenance			
purposes undertaken in accordance with a			
maintenance management plan. (h) North West (iv)			
Critical biodiversity areas as identified in systematic			
biodiversity plans adopted by the competent			
authority; (v) Sensitive areas as identified in an			
environmental management framework as			
contemplated in chapter 5 of the Act and as adopted			
by the competent authority; or (vi) Areas within a			
watercourse or wetland, or within 100 metres from			
the edge of a watercourse or wetland.			

Table 5: Listing notices

Proposed Mining Permit Application

Description of the overall activity.
(Indicate Mining Right, Mining Permit, Prospecting right, Bulk Sampling, Production Right, Exploration Right, Reconnaissance permit, Technical co-operation permit, Additional listed activity)

- 1. Listing Notice 1 (GNR 327) as amended (GNR 517), Activity 21: Any activity including the operation of that activity which requires a mining permit in terms of section 27 of the Mineral and Petroleum Resources Development Act, as well as any other applicable activity as contained in this Listing Notice on in Listing Notice 3 of 2014, required to exercise the mining permit
- **2.** Listing Notice 1, GNR 327, Activity 27: The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation.
- **3. Listing Notice 3 (GNR 324), Activity 4:** The development of a road wider than 4 metres with a reserve less than 13,5 metres. (h): North West: (ii) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (iv) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority;
- **4.** Listing Notice 3 (GNR 324), Activity 10: The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres. (h) North West (iv) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority; (v) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; or (vi) Areas within a watercourse or wetland, or within 100 metres from the edge of a watercourse or wetland.
- **5. Listing Notice 3 (GNR 324), Activity 12:** The clearance of an area of 300 square metres or more of indigenous vegetation (h) North West: (iv) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority; (v) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; or (vi) Areas within a watercourse or wetland, or within 100 metres from the edge of a watercourse or wetland."

Coetzee, FP	HIA: Proposed Prospecting Right and Mining Permit Application on the
	Farms Rooipoort 202 IP and Wildfontein 201 IP, North West Province
	Mining Permit for the mining of Diamonds Alluvial , Diamonds General &
	Diamonds including associated infrastructure, structure and earthworks.
	Please note the establishment or reclamation of residue stockpiles or
	residue deposits will still take place, but is now exempt from the list of
	Waste Management Activities (GNR 921, as amended)
Table 6: Listing Notices: Regula	ations 2017 (as amended)

NAME OF ACTIVITY (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etcetc E.g. for mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etcetc.)	Aerial extent of the Activity Ha or m ²	LISTED ACTIVITY Mark with an X where applicable or affected.	APPLICAB LE LISTING NOTICE (GNR 324, GNR 325 or GNR 326)
Mining permit: Listing Notice 1 (GNR 327) as amended (GNR 517), Activity 21: "Any activity including the operation of that activity which requires a mining permit in terms of section 27 of the Mineral and Petroleum Resources Development Act, as well as any other applicable activity as contained in this Listing Notice on in Listing Notice 3 of 2014, required to exercise the mining permit"	The application area is 4,7711ha		Listing Notice 1 (GNR 327) as amended (GNR 517), Activity 21
Clearance of indigenous vegetation: Listing Notice 1 (GNR 327), Activity 27: "The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation."	The application area is 4,7711ha		Listing Notice 1 (GNR 327), Activity 27
Creation of a road: Listing Notice 3 (GNR 324), Activity 4: "The development of a road wider than 4 metres with a reserve less than 13,5 metres. (h): North West: (ii) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (iv) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority"	The application area is 4,7711ha		Listing Notice 3 (GNR 324), Activity 4
Mining activities: Listing Notice 3 (GNR 324), Activity 10: "The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres. (h) North West (iv) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority; (v) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; or (vi) Areas within a watercourse or wetland, or within 100 metres from the edge of a watercourse or wetland"	4,7711ha		Listing Notice 3 (GNR 324), Activity 10

Clearance of vegetation:	The application area is	X	Listing Notice 3
e	4.7711ha		(GNR 324),
clearance of an area of 300 square metres or more of	,		Activity 12
indigenous vegetation (h) North West: (iv) Critical			11001/103/11
biodiversity areas as identified in systematic			
biodiversity plans adopted by the competent			
authority; (v) Sensitive areas as identified in an			
environmental management framework as			
contemplated in chapter 5 of the Act and as adopted			
by the competent authority; or (vi) Areas within a			
watercourse or wetland, or within 100 metres from			
the edge of a watercourse or wetland"			
contemplated in chapter 5 of the Act and as adopted by the competent authority; or (vi) Areas within a watercourse or wetland, or within 100 metres from			

Table 7: Listing notices

Section 38 of the NHRA (Act No. 25 of 1999) stipulates that the following activities trigger a heritage survey:

Development criteria in terms of Section 38(1a-e) of the NHRA (Act No. 25 of 1999)	
Construction of road, wall, powerline, pipeline, canal or other linear form of	No
development or barrier exceeding 300m in length	
Construction of bridge or similar structure exceeding 50m in length	No
Development exceeding 5000 m ² in extent	
Development involving three or more existing erven or subdivisions	
Development involving three or more erven or divisions that have been	
consolidated within past five years	
Rezoning of site exceeding 10 000 m ²	
Any other development category, public open space, squares, parks, recreation grounds	

Table 8: Activities that trigger Section 38 of the NHRA

- Field rating system as recommended by SAHRA:

Field Rating	Grade	Significance	Recommended Mitigation
National Significance	Grade I	High significance	Conservation by SAHRA, national site nomination, mention any relevant international ranking. No alteration whatsoever without permit from SAHRA.
Provincial Significance	Grade II	High significance	Conservation by provincial heritage authority, provincial site nomination. No alteration whatsoever without permit from provincial heritage authority.
Local Significance	Grade III-A	High significance	Conservation by local authority, no alteration whatsoever without permit from provincial heritage authority. Mitigation as part of development process not advised.
Local Significance	Grade III-B	High significance	Conservation by local authority, no external alteration without permit from provincial heritage authority. Could be mitigated and (part) retained as heritage register site.
Generally Protected A	Grade IV-A	High/medium significance	Conservation by local authority. Site should be mitigated before destruction. Destruction permit required from provincial heritage authority.
Generally Protected B	Grade IV-B	Medium significance	Conservation by local authority. Site should be recorded before destruction. Destruction permit required from provincial heritage authority.
Generally Protected C	Grade IV-C	Low significance	Conservation by local authority. Site has been sufficiently recorded in the Phase 1 HIA. It requires no further recording before destruction. Destruction permit required from provincial heritage authority.

Table 9: Field rating system to determine site significance

- Heritage resources have lasting value in their own right and provide evidence of the origins of South African society and they are valuable, finite, non-renewable and irreplaceable.
- All archaeological remains, features, structures and artefacts older than 100 years and historic structures older than 60 years are protected by the relevant legislation, in this case the National Heritage Resources Act (NHRA) (Act No. 25 of 1999, Section 34 & 35). The Act makes an archaeological impact assessment as part of an EIA and EMPR mandatory (see Section 38). No archaeological artefact, assemblage or settlement (site) may be moved or destroyed without the necessary approval from the South African Heritage Resources Agency (SAHRA). Full cognisance is taken of this Act in making recommendations in this report.
- Cognisance will also be taken of the Mineral and Petroleum Resources Development Act (Act No 28 of 2002) and the National Environmental Management Act (Act No 107 of 1998) when making any recommendations.
- Human remains older than 60 years are protected by the NHRA, with reference to Section 36. Human remains that are less than 60 years old are protected by the Regulations Relating to the Management of Human Remains (GNR 363 of 22 May 2013) made in terms of the National Health Act No. 61 of 2003 as well as local Ordinances and regulations.
- With reference to the evaluation of sites, the certainty of prediction is definite, unless stated otherwise.
- The guidelines as provided by the NHRA (Act No. 25 of 1999) in Section 3, with special reference to subsection 3, and the Australian ICOMOS (International Council on Monuments and Sites) Charter (also known as the Burra Charter) are used when determining the cultural significance or other special value of archaeological or historical sites.
- A copy of this report will be submitted on SAHRIS as stipulated by the National Heritage Resources Act (NHRA) (Act No. 25 of 1999), Section 38 (especially subsection 4) and the relevant Provincial Heritage Resources Authority (PHRA).
- Note that the final decision for the approval of permits, or the removal or destruction of sites, structures and artefacts identified in this report, rests with the SAHRA (or relevant PHRA).

6. Study Approach/Methodology

Geographical information (KML shapefiles) on the proposed prospecting activities was supplied by Milnex CC. The most up-to-date Google Earth images and topographic maps were used to indicate the survey area. Topographic maps were sources from the Surveyor General. Please note that all maps are orientated with north facing upwards (unless stated otherwise).

The strategy during this survey was to conduct a thorough investigation of the various sections of the farm that form part of the application. The aim was therefore to conduct a detailed pedestrian (foot) and predictive survey of the survey footprint. Existing infrastructure

was used to gain access to the area followed by detailed pedestrian investigations. Note that most areas in the survey footprint were ploughed for agricultural fields.

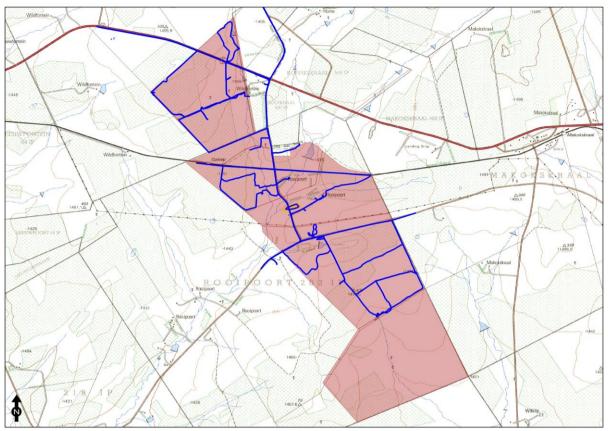


Figure 29: Recorded survey tracks on the survey footprint

6.1 Review of existing information/data

Additional information on the cultural heritage of the area was sourced from the following records:

- National Mapping Project by SAHRA (which lists heritage impact assessment reports submitted for South Africa);
- Environmental Potential Atlas (ENPAT);
- Online SAHRIS database;
- National Automated Archival Information retrieval System (NAAIRS);
- Maps and information documents supplied by the client; and
- Several heritage surveys have been conducted in the vicinity of the survey area (published and unpublished material on the area (Birkholtz 2008; Kusel 2007; Mlilo 2017; Munyai & Roodt 2007; Pelser 2013; Van Schalkwyk 2015, 2021).

Several heritage surveys and research projects have been conducted near the project footprint during the last few years. Although several heritage impact assessments have been completed in the general vicinity of the survey area, no heritage sites were recorded inside the survey footprint.

Mlilo conducted a survey further south of the survey footprint and recorded a historical building and a formal cemetery (Mlilo 2017). A survey by Munyai and Roodt on the farm Palmietfontein 189 yielded no heritage remains (Munyai & Roodt 2007). The Rietspruit Dam (constructed in 1940) and surrounding area situated to the south of Ventersdorp was surveyed

in 2015 with no heritage sites recorded (Van Schalkwyk 2015). A survey conducted on the farms Nooitgedacht 131 IP, Zwartland 145 IP and Hartbeeslaagte 146 IP, situated north of Ventersdorp, yielded two cemeteries and a number of historical semi-circular stone-walled structures, as well as Later Stone Age deposits (Birkholtz 2008). A survey conducted on the farm Klipplaatdrift 214 IP near Ventersdorp did not yield any heritage remains (Kusel 2007). An assessment of the existing Sun Valley Broiler Facilities situated on the farm Welgegund 375 IQ south of Ventersdorp yielded no Iron Age remains, however a few Later Stone Age and Middle Stone Age scatters were recorded (Pelser 2013). A survey of a large area north of the present survey footprint yielded two Later Stone Age sites, seven informal burial sites and a number of historical homesteads (Van Schalkwyk 2021).

The following heritage sites have been recorded in Ventersdorp (see Figure 30):

- Irish soldier monument, Grey Street (Site Ref: DC40/NAMM/0051);
- Burgher Memorial (Site Ref: 9/2/276/0002);
- J.B Marks Statue, JB Marks Monument (Site Ref: DC40/NAMM/0057);
- JB Marks Grave Site, Toevlug (Site Ref: DC40/NAMM/0019).

The following declared Provincial/National Heritage Site has been recorded in Venstersdorp (see Figure 31):

• JB Marks Grave Site, Toevlug (Site Ref: DC40/NAMM/0019)

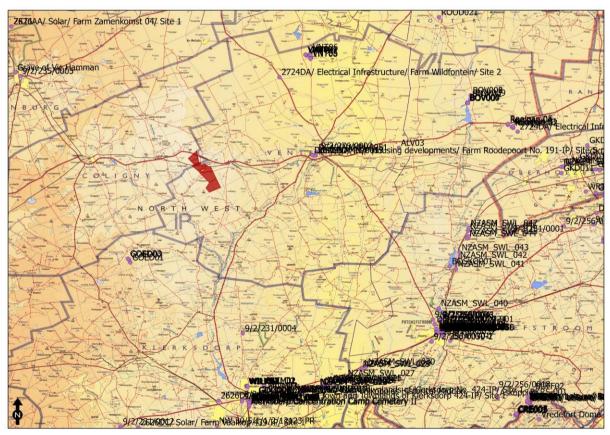


Figure 30: Recorded sites near the survey footprint (SAHRIS as at July 2023)

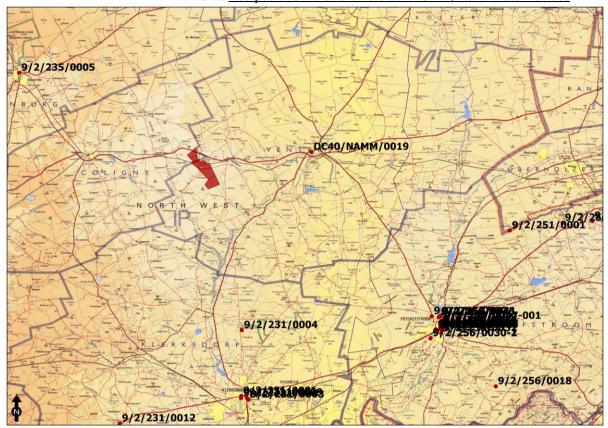


Figure 31: Declared heritage sites in Ventersdorp and surrounds (SAHRIS as at July 2023)

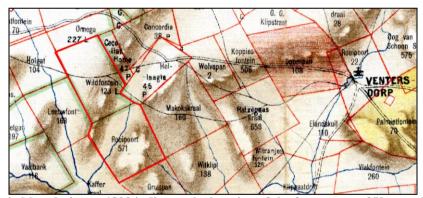


Figure 32: Jeppe's Map dating to 1899 indicates the location of the farms west of Ventersdorp

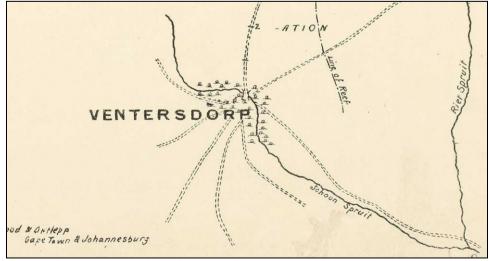


Figure 33: South African War (1899-1902): Map of Transvaal (1899)

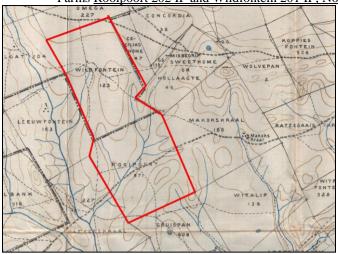


Figure 34: Surveyed in 1902 of Transvaal by Major HM Jackson for the Surveyors General's Office

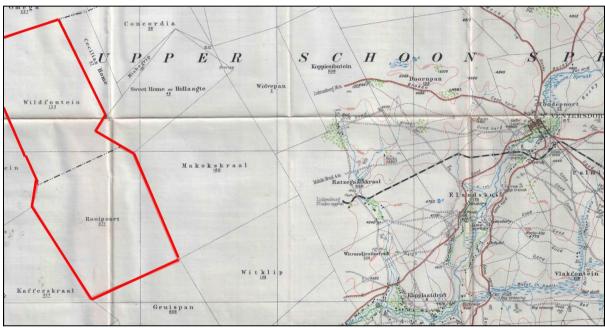


Figure 35: Surveyed in 1910, by a survey party under the direction of Capt. C.St.B. Staden, R.E., and Lieut. K.W. Lee, R.F.A. Transvaal Topographical Series



Figure 36: War Office Map indicating the location of the survey areas north and south of Ventersdorp in 1899

According to the Surveyor General's database the farm Rooipoort 202 IP was originally surveyed in 1889 with the Deed of Transfer awarded to TJ de Bruyn on 9 November 1858. The farm Wildfontein 201 IP was first surveyed in 1909 with the Deed of Transfer awarded to WA Lombard on 8 June 1860 (see Addendum 3).

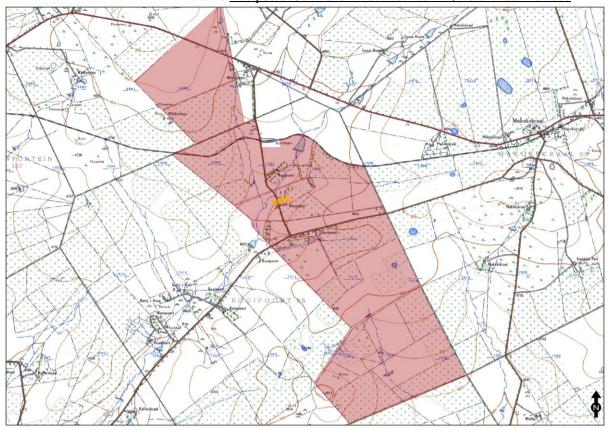


Figure 37: The survey footprint as indicated on the 1:50 000 topographic map 2626BC (1954)

The railway line, running from Welverdient, via Ventersdorp and Coligny, to Delareyville, was completed in 1911. Note that the original station along this line was called Korhaan as still indicated on the 1954 topographic map (see Figure 38). However, this section of the railway line was moved southwards and the tracks have been lifted. This new section with the Gatiep station resulted in a straight section which eliminated the detour linked with the Korhaan station (see Figure 39).

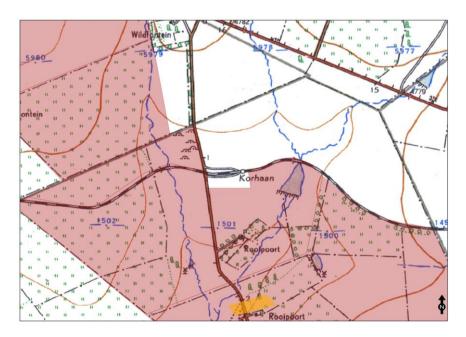


Figure 38: The old railway section as indicated on the 1:50 000 topographic map 2626BC 1954

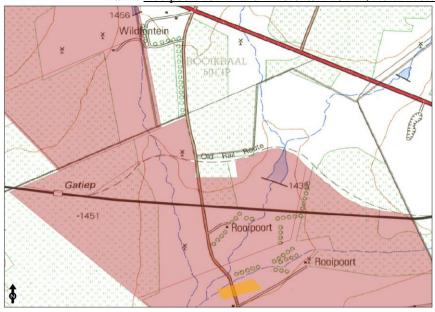


Figure 39: The new railway section as indicated on the 1:50 000 topographic map 2626BC (1992)

6.2 Palaeontological sensitivity

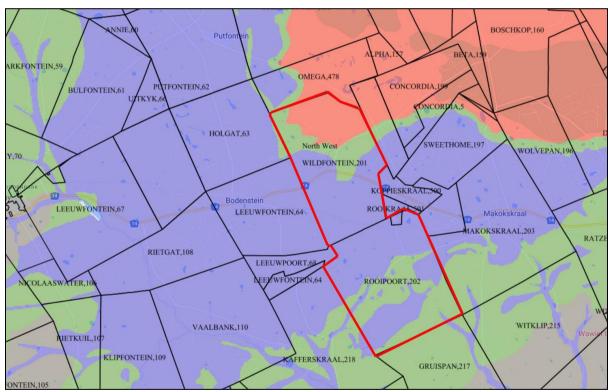


Figure 40: Palaeontological sensitivity zones as indicated for the survey footprint (SAHRIS 2023)

Colour	Sensitivity	Required Action
RED	VERY HIGH	Field assessment and protocol for finds is required
ORANGE/YELLOW		Desktop study is required and based on the outcome of the desktop study, a field assessment is likely
GREEN	MODERATE	Desktop study is required
BLUE	I OW	No palaeontological studies are required however a protocol for finds is required

GREY	INSIGNIFICANT/ZERO	No palaeontological studies are required
WHITE/CLEAR	UNKNOWN	Will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

The palaeontological sensitivity map was extracted from the SAHRIS database and indicates mostly a blue (low) sensitivity for the survey footprint. As a result no desktop palaeontological study will be required for the area.

6.3 Site visits

The field survey was conducted on 28 and 29 July 2023.

6.4 Social interaction and current inhabitants

Local residents and the farm owners were consulted during the survey to locate known heritage sites in the region.

6.5 Public Consultation and Stakeholder Engagement

An advertisement was placed in English in the local newspaper (Noordwester) notifying the public of the EIA process and requesting Interested and Affected Parties (I&APs) to register with, and submit their comments to Milnex CC. I&APs were given the opportunity to raise comments within 30 days of the advertisement. Site notices were placed on site in English to inform surrounding communities and immediately adjacent landowners of the proposed development. I&APs will be given the opportunity to raise comments.

6.6 Assumptions, restrictions, gaps and limitations

No severe physical restrictions were encountered as the survey area was generally accessible. However, some of the agricultural fields were inaccessible and were therefore excluded from the survey as most severely disturbed areas. Also note that the southernmost section of the survey footprint could not be accessed due to the farmer unwillingness to grant access to the land. As a result the area was remotely surveyed using aerial photographs and Google Earth images.

6.7 Methodology for assessment of potential impacts

All impacts identified during the EIA stage of the study will be classified in terms of their significance. Issues were assessed in terms of the following criteria:

- The **nature**, a description of what causes the effect, what will be affected and how it will be affected:
- The **physical extent**, wherein it is indicated whether:
 - o 1 the impact will be limited to the site;
 - o 2 the impact will be limited to the local area;
 - o 3 the impact will be limited to the region;
 - o 4 the impact will be national; or
 - o 5 the impact will be international.
- The **duration**, wherein it is indicated whether the lifetime of the impact will be:
 - o 1 of a very short duration (0–1 years);

- o 2 of a short duration (2-5 years);
- o 3 of a medium-term (5–15 years);
- o 4 of a long term (> 15 years); or
- o 5 permanent.
- The **magnitude** of impact, quantified on a scale from 0-10, where a score is assigned:
 - o 0 small and will have no effect;
 - o 2 minor and will not result in an impact;
 - o 4 low and will cause a slight impact;
 - o 6 moderate and will result in processes continuing but in a modified way;
 - o 8 high, (processes are altered to the extent that they temporarily cease); or
 - o 10 very high and results in complete destruction of patterns and permanent cessation of processes;
- The **probability** of occurrence, which describes the likelihood of the impact actually occurring and is estimated on a scale where:
 - o 1 very improbable (probably will not happen);
 - o 2 improbable (some possibility, but low likelihood);
 - o 3 probable (distinct possibility);
 - o 4 highly probable (most likely); or
 - o 5 definite (impact will occur regardless of any prevention measures);
- The **significance**, which is determined through a synthesis of the characteristics described above (refer formula below) and can be assessed as low, medium or high;
- The **status**, which is described as either positive, negative or neutral;
 - o The degree to which the impact can be reversed;
 - o The degree to which the impact may cause irreplaceable loss of resources; and
 - o The degree to which the impact can be mitigated.

The significance is determined by combining the criteria in the following formula:

 $S = (E+D+M) \times P$; where:

S = Significance weighting

E = Extent

D = Duration

M = Magnitude

P = Probability

Points	Significance Weighting	Discussion
< 30 points	Low	Where this impact would not have a direct influence on
< 30 points	its Low	the decision to develop in the area.
31-60	Medium	Where the impact could influence the decision to
point	Medium	develop in the area unless it is effectively mitigated.
> 60 mainta	> 60 points High	Where the impact must have an influence on the
> oo points		decision process to develop in the area.

7. The Cultural Heritage Sites

7.1. Isolated occurrences

Isolated occurrences are artefacts or small features recorded on the surface with no contextual information. No other associated material culture (in the form of structures or deposits) was noted that might provide any further context. This can be the result of various impacts and environmental factors such as erosion and modern developments. By contrast archaeological

sites are often complex sites with evidence of archaeological deposit and various interrelated features such as complex deposits, stone walls and middens. However, these isolated occurrences are seen as remains of erstwhile complex or larger sites and they therefore provide a broad indication of possible types of sites or structures that might be expected to occur or have occurred in the survey footprint.

No isolate finds were recorded during the survey.

7.2 Heritage sites

A total of eight heritage sites were recorded during the survey of which four are historical structures (Sites 1, 4, 5 & 6) and four are graveyards (sites 2, 3, 7 & 8). The historical structures are probably associated with a late 19th and early 20th phase of occupation as we know the Deed of Transfers were already granted in the 1850s and 1860s. These were old farm lands as also evident by the upright stone lintels used as fence poles. Two farmhouse complexes were recorded and two associated livestock enclosures.

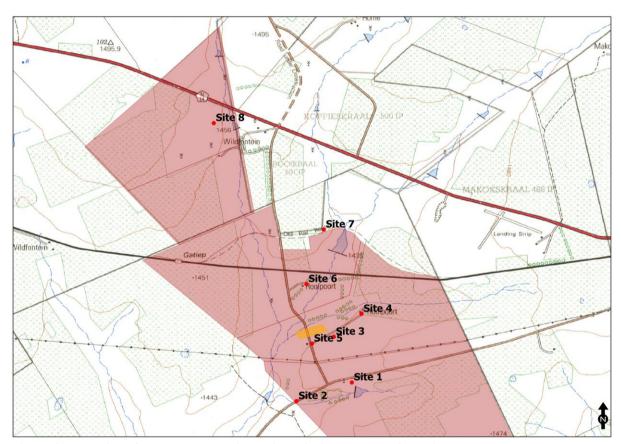


Figure 41: Location of the recorded heritage sites within the survey footprint

8. Locations and Evaluation of Sites

Site No	Coordinates	Site Type	Field Rating of Significance	Impact	Proposed Mitigation
1	26.364336°S 26.572218°E	Historical livestock enclosure	Generally Protected C Low significance	None	Maintain 50 m buffer zone during proposed prospecting and mining
2	26.366965°S 26.564397°E	Graveyard	Generally Protected A High significance	None	Maintain 50 m buffer zone during proposed prospecting and mining Should be fenced off

3	26.357896°S 26.569677°E	Graveyard	Generally Protected A High significance	None	Maintain 50 m buffer zone during proposed prospecting and mining Should be fenced off
4	26.354671°S 26.573569°E	Historical Farmhouse Complex	Generally Protected C Low significance	None	Maintain 50 m buffer zone during proposed prospecting and mining
5	26.358863°S 26.566584°E	Foundation of livestock enclosure	Generally Protected C Low significance	None	Maintain 50 m buffer zone during proposed prospecting and mining
6	26.350473°S 26.565803°E	Historical farmhouse	Generally Protected C Low significance	None	Maintain 50 m buffer zone during proposed prospecting and mining
7	26.342774°S 26.568247°E	Graveyard	Generally Protected A High significance	None	Maintain 50 m buffer zone during proposed prospecting and mining Should be fenced off
8	26.327757°S 26.552719°E	Graveyard	Generally Protected A High significance	None	Maintain 50 m buffer zone during proposed prospecting and mining Should be fenced off

Table 10: Location and evaluation of sites

9. Management Measures

Heritage sites are fixed features in the environment, occurring within specific spatial confines. Any impact upon them is permanent and non-reversible. Those resources that cannot be avoided and that are directly impacted by the proposed development can be excavated/recorded and a management plan can be developed for future action. Those sites that are not impacted on can be written into the management plan, whence they can be avoided or cared for in the future.

9.1 Objectives

- Protection of archaeological, historical and any other site or land considered being of cultural value within the project boundary against vandalism, destruction and theft.
- The preservation and appropriate management of new discoveries in accordance with the NHRA, should these be discovered during construction activities

The following shall apply:

- Known sites should be clearly marked in order that they can be avoided during construction activities.
- The contractors and workers should be notified that archaeological sites might be exposed during the construction activities.
- Should any heritage artefacts be exposed during excavation, work on the area where the artefacts were discovered, shall cease immediately and the Environmental Control Officer shall be notified as soon as possible;
- All discoveries shall be reported immediately to a heritage practitioner so that an investigation and evaluation of the finds can be made. Acting upon advice from these specialists, the Environmental Control Officer will advise the necessary actions to be taken:
- Under no circumstances shall any artefacts be removed, destroyed or interfered with by anyone on the site; and
- Contractors and workers shall be advised of the penalties associated with the unlawful removal of cultural, historical, archaeological or palaeontological artefacts, as set out in the NHRA (Act No. 25 of 1999), Section 51. (1).

9.2 Control

In order to achieve this, the following should be in place:

- A person or entity, e.g. the Environmental Control Officer, should be tasked to take responsibility for the heritage sites and should be held accountable for any damage.
- Known sites should be located and isolated, e.g. by fencing them off. All construction workers should be informed that these are no-go areas, unless accompanied by the individual or persons representing the Environmental Control Officer as identified above.
- In areas where the vegetation is threatening the heritage sites, e.g. growing trees pushing walls over, it should be removed, but only after permission for the methods proposed has been granted by SAHRA. A heritage official should be part of the team executing these measures.

10. Recommendations and Conclusions

A total of eight heritage sites were recorded during the survey of which four are historical structures (Sites 1, 4, 5 & 6) and four are graveyards (sites 2, 3, 7 & 8). The historical structures are probably associated with a late 19th and early 20th phase of occupation as we know the Deed of Transfers were already granted in the 1850s and 1860s. These were old farm lands as also evident by the upright stone lintels used as fence poles. Two farmhouse complexes were recorded and two associated livestock enclosures.

In this regard please note the following proposed mitigation measures:

- Take note of the position of the existing heritage sites;
- A buffer zone of 50 metres should be maintained;
- Graveyards should be fenced off with access gate installed; and
- Care should be taken to prevent any indirect impacts on the historical structures.

No archaeological (both Stone Age and Iron Age) artefacts, assemblages, features, structures or settlements were recorded during the survey of the project footprint. It is well known that Late Iron Age stone-walled settlements do not usually occur in open exposed ridges and lowlying grasslands.

Nature: Eight historical structures and graveyards				
	Without mitigation	With mitigation		
Construction Phase				
Probability	Definite (5)	Very Improbable (1)		
Duration	Permanent (5)	Short term (2)		
Extent	Limited to the site (1)	Limited to the site (1)		
Magnitude	Very High (10)	Minor (2)		
Significance of Impact	80 (High)	5 (Low)		
Status (positive or negative)	Negative	Positive		
Reversibility	Low	Low		
Irreplaceable loss of resources?	Yes	None		
Cumulative impacts and indirect impacts	S Construction phase may cause excessive vibrations.			
Can impacts be mitigated?	Yes, buffer zones (50 metres) should be maintained during prospecting and mining activities			

Table 11: Significance of the impact

It is therefore recommended, from a cultural heritage perspective that the proposed prospecting and mining may proceed, taking into account the mitigation measures.

Also, please note: Archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (cf. NHRA (Act No. 25 of 1999), Section 36 (6)).

11. References

Birkholtz, P. D. 2008. Phase 1 Heritage Impact Assessment: Proposed Etruscan Diamonds (Pty) Ltd Development situated on the remaining extent of the Farm Nooitgedacht 131 IP, Zwartrand 145 IP and Hartbeeslaagte 146 IP, Magestirial District of Ventersdorp, North West Province.

Breutz, P.L. 1954. Die Stamme van die Distrik Ventersdorp, Ethnologiese Reeks Nr. 31, Department van Naturellesake. Die Staatsdrukker, Pretoria.

Huffman, T. N. 2007. *Handbook to the Iron Age: the Archaeology of Pre-Colonial Farming Societies in Southern Africa*. University of KZN Press: Pietermaritzburg.

Jeppe, F. 1899. Jeppe's Map of the Transvaal. London: Edward Stanford.

Kusel, U. 2007. Cultural Heritage resources Impact Assessment of Portion 9 and 146 of the farm Klipplaatdrift 214 IP, Ventersdorp, North West Province.

Lombard, M., Wadley, L., Deacon, J., Wurz, S., Parsons, I., Mohapi, M., Swart, J. & Mitchell, P. 2012. South African and Lesotho Stone Age Sequence Update (I). *The South African Archaeological Bulletin*. Vol 67 (195): 123-144.

Mlilo, T. 2017. Phase 1 Archaeological Impact Assessment for the Proposed Section 102 EMP Amendment for Mivami Agri-Mining Pty Ltd to include the Remaining Extent of Kwaggaslaagte 121 IP into the Prospecting Right for Dunbar 119 IP and Portion 9 of Houtkop 152 IP, in Ditsobotla Local Municipality, North of Ngaka Modiri Molema District Muncipality, North West Province.

Mucina, L. & Rutherford, M.C. 2010. The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia 19*. Pretoria: South African National Biodiversity Institute.

Munyai, R. R. & Roodt, F. 2007. Heritage Resources Scoping Report: Proposed construction of Chicken Broilers and Associated Building Structures at Portion 26 and 49 of the Farm Palmietfontein 189, Ventersdorp.

National Heritage Resources Act. Act No. 25 of 1999. Government Printer: Pretoria.

Ordnance Survey Office (Intelligence Division). 1899. Transvaal and Orange Free State: Kimberley. War Office No. 1367. Southampton: War Office.

Office of the President. 27 November 1998. National Environmental Management Act (Act No. 107 of 1998). Government Gazette Vol 401 (19519). Pretoria: Government Printer.

Pelser, A. 2013. A Report on a Phase I Heritage Assessment for the Proposed Expansion of The Sun Valley Broiler Facilities, Near Potchefstroom, Northwest Province.

SAHRA, 2005. Minimum Standards for the Archaeological and the Palaeontological Components of Impact Assessment Reports, Draft version 1.4.

South African Heritage Resources Agency (SAHRA). Report Mapping Project. Version 1.0, 2009.

Van Schalkwyk, J.A. 2015. Documentation of the Rietspruit Dam, Located South of Ventersdorp in North West Province.

Van Schalkwyk, J.A. 2021. Phase 1 Cultural Heritage Impact Assessment: The Proposed Mining Right Application for the Mining of Diamonds General (D) on various Portions of the Farms Sterkfontein 155, Putfontein 62, Omega 478, Holgat 63, Wildfontein 201, Leeuwfontein 64 and Farm 533, Registration Division: IP, Ditsobotla Local Municipality, North West Province.

Other Sources

Google Earth Pro 2022 (Images: 2022)

http://samilitaryhistory.org/vol041dp.html (Accessed: July 2022)

National Archives (NAAIRS) (Accessed: July 2022)

Prehistory of the Rustenburg Area (<u>www.sahistory.org.za/article/prehistory-rustenburg-area</u>) (Accessed: July 2022)

SAHRIS Database. http://www.sahra.org.za/sahris (Accessed: July 2022)

www.saexplorer.co.za (Accessed: July 2022)

https://www.cwgc.org [Commonwealth War Grace Commission] (Accessed: July 2022)

Addendum 1: Archaeological and Historical Sequence

The table provides a general overview of the chronological sequence of the archaeological periods in South Africa.

PERIOD	APPROXIMATE DATES
Earlier Stone Age	more than 2 million years ago to >200 000 years ago
Middle Stone Age	<300 000 years ago to >20 000 years ago
Later Stone Age	< 40 000 years ago up to historical times in certain
(Includes hunter-gatherer rock art)	areas
Early Iron Age	c. AD 200 - c. AD 900
Middle Iron Age	c. AD 900 – c. AD 1300
Late Iron Age	c. AD 1300 - c. AD 1840
(Stonewalled sites)	(c. AD 1640 - c. AD 1840)

< = less than; > = greater than

Archaeological Context

Stone Age Sequence

Concentrations of Early Stone Age (ESA) sites are usually present on the flood-plains of perennial rivers and may date to over 2 million years ago. These ESA open sites may contain scatters of stone tools and manufacturing debris and secondly, large concentrated deposits ranging from pebble tool choppers to core tools such as handaxes and cleavers. The earliest hominins who made these stone tools, probably not always actively hunted, instead relying on the opportunistic scavenging of meat from carnivore fill sites.

Middle Stone Age (MSA) sites also occur on flood plains, but are also associated with caves and rock shelters (overhangs). Sites usually consist of large concentrations of knapped stone flakes such as scrapers, points and blades and associated manufacturing debris. Tools may have been hafted but organic materials, such as those used in hafting, seldom preserve. Limited drive-hunting activities are also associated with this period.

Sites dating to the Later Stone Age (LSA) are better preserved in rock shelters, although open sites with scatters of mainly stone tools can occur. Well-protected deposits in shelters allow for stable conditions that result in the preservation of organic materials such as wood, bone, hearths, ostrich eggshell beads and even bedding material. By using San (Bushman) ethnographic data a better understanding of this period is possible. South African rock art is also associated with the LSA.

The following chronological sequence was recently established by prominent Stone Age archaeologists (Lombard et al 2012):

Later Stone Age

• Age Range: recent to 20-40 thousand years ago

• General characteristics: expect variability between assemblages, a wide range of formal tools, particularly scrapers (microlithic and macrolithic), backed artefacts, evidence of hafted stone and bone tools, borers, bored stones, upper and lower grindstones, grooved stones, ostrich eggshell (OES) beads and other orna ments, undecorated/decorated OES fragments, flasks/flask fragments, bone tools (sometimes with decoration), fishing equipment, rock art, and ceramics in the final phase.

o Ceramic or Final Later Stone Age

- Generally < 2 thousand years ago
- MIS 1
- Contemporaneous with, and broadly similar to, final Later Stone Age, but includes ceramics
- Economy may be associated with hunter-gatherers or herders

Technological characteristics

- Stone tool assemblages are often microlithic
- In some areas they are dominated by long end scrapers and few backed microliths; in others formal tools are absent or rare
- Grindstones are common, ground stone artefacts, stone bowls and boat-shaped grinding grooves may occur
- Includes grit- or grass-tempered pottery
- Ceramics can be coarse, or well-fired and thin-walled; some times with lugs, spouts and conical bases; sometimes with decoration; sometimes shaped as bowls
- Ochre is common
- Ostrich eggshell (OES) is common
- Metal objects, glass beads and glass artefacts also occur

Final Later Stone Age

- 100 4000 years ago
- MIS 1
- Hunter-gatherer economy

Technological characteristics

- Much variability can be expected
- Variants include macrolithic (similar to Smithfield [Sampson 1974]) and/or microlithic (similar to Wilton) assemblages
- Assemblages are mostly informal (Smithfield)
- Often characterised by large untrimmed flakes (Smithfield)
- Sometimes microlithic with scrapers, blades and bladelets, backed tools and adzes (Wilton-like)
- Worked bone is common
- OES is common
- Ochre is common
- Iron objects are rare
- Ceramics are absent

Wilton

- 4000 8000 years ago
- MIS 1

• At some sites continues into the final Later Stone Age as regional variants (e.g. Wilton Large Rock Shelter and Cave James)

Technological characteristics

- Fully developed microlithic tradition with numerous formal tools
- Highly standardised backed microliths and small convex scrapers (for definition
- of standardisation see Eerkens & Bettinger 2001)
- OES is common
- Ochre is common
- Bone, shell and wooden artefacts occur

Oakhurst

- 7000 12 000 years ago
- MIS 1
- Includes Albany, Lockshoek and Kuruman as regional variants

Technological characteristics

- Flake based industry
- Characterised by round, end, and D-shaped scrapers and adzes
- Wide range of polished bone tools
- Few or no microliths

Robberg

- 12 000 to 18 000 years ago
- MIS 2

Technological characteristics

- Characterised by systematic bladelet (<26mm) production and the occurance of outils ecailles or scaled pieces
- Significant numbers of unretouched bladelets and bladelet cores
- Few formal tools
- Some sites have significant macrolithic elements

• Early Late Stone Age

- o 18 000 40 000 years ago
- o MIS 2-3
- o Informal designation
- Also known as transitional MSA-LSA
- o Overlapping in time with final Middle Stone Age

Technological Characteristics

- Characterised by unstandardised, often microlithic, pieces and includes the bipolar technique
- Described at some sites, but not always clear whether assemblages represent a real archaeological phase or a mixture of LSA/MSA artefacts

Middle Stone Age

• Age Range: 20 000 – 30 000 years ago

- General characteristics: Levallois or prepared core techniques (for definitions see Van Peer 1992; Boeda 1995; Pleurdeau 2005) occur in which triangular flakes with convergent dorsal scars, often with faceted striking platforms, are produced. Discoidal systems (for definition see Inizan et al. 1999) and intentional blade production from volumetric cores (for definition see Pleurdeau 2005) also occur; formal tools may include unifacially and bifacially retouched points, backed artefacts, scrapers, and denticulates (for definition see Bisson 2000); evidence of hafted tools; occasionally includes marine shell beads, bone points, engraved ochre nodules, engraved OES fragments, engraved bone fragments, and grindstones.
- In the sequence below we highlight differences or characteristics that may be used to refine interpretations depending on context.

• Final Middle Stone Age

- o 20 000 40 000 years ago
- o MIS 3
- o Informal designation partly based on the Sibudu sequence

Technological characteristics

- Characterised by high regional variability that may include, e.g. bifacial tools, bifacially retouched points, hollow-based points
- Triangular flake and blade industries (similar to Strathalan and Melikane)
- Small bifacial and unifacial points (similar to Sibudu and Rose Cottage Cave)
- Sibudu point characteristics: short, stout, lighter in mass com pared to points from the Sibudu technocomplex, but heavier than those from the Still Bay
- Can be microlithic
- Can include bipolar technology
- Could include backed geometric shapes such as segments, as well as side scrapers

Sibudu

- 45 000 58 000 years ago
- MIS 3
- Previously published as informal late Middle Stone Age and post-Howieson's Poort at Sibudu
- Formerly known post-Howieson's Poort, MSA 3 generally, and MSA III at Klasies River

Technological characteristics

- Most points are produced using Levallois technique
- Most formal retouch aimed at producing unifacial points
- Sibudu unifacial point (type fossil) characteristics: faceted platform; shape is somewhat elongated with a mean length of 43.9 mm), a mean breadth of 26.8 mm and mean thickness of 8.8 mm (L/B ratio 1.7); their mean mass is 11.8 g (Mohapi, 2012)
- Some plain butts
- Rare bifacially retouched points
- Some side scrapers are present
- Backed pieces are rare
- Howieson's Poort
- 58 000 66 000 years ago
- MIS 3-4

Technological characteristics

- Characterised by blade technology
- Includes small (<4 cm) backed tools, e.g. segments, scrapers, trapezes and backed blades
- Some denticulate blades
- Pointed forms are rare or absent

• Still Bay

- o 70 000 77 000 years ago
- o MIS 4-5a

Technological characteristics

- Characterised by thin (<10 mm), bifacially worked foliate or lanceolate points
- Semi-circular or wide-angled pointed butts
- Could include blades and finely serrated points (Lombard et al. 2010)

• Pre-Still Bay

- o 72 000 96 000 years ago
- o MIS 4-5

Technological characteristics

• Characteristics currently being determined / studied

• Mossel Bay

- o 77 000 to —105 000 years ago
- o MIS 5a-4
- o Also known as MSA II at Klasies River or MSA 2b generally

Technological characteristics

- Characterised by recurrent unipolar Levallois point and blade reduction
- Products have straight profiles; percussion bulbs are prominent and often splintered or ring-cracked
- Formal retouch is infrequent and restricted to sharpening the tip orshaping the butt

Klasies River

- o 105 000 to —130 000 years ago
- o MIS 5d-5e
- o Also referred to as MSA I at Klasies River or MSA 2a generally

Technological characteristics

- Recurrent blade and convergent flake production
- End products are elongated and relatively thin, often with curved profiles
- Platforms are often small with diffused bulbs
- Low frequencies of retouch
- Denticulate pieces

• Early Middle Stone Age

- o Suggested age MIS 6 to MIS 8 (130 000 to —300 000 years ago)
- o Informal designation

Technological characteristics

- This phase needs future clarification regarding the designation of cultural material and sequencing
- Includes discoidal and Levallois flake technologies, blades from volumetric cores and a generalised toolkit

• Earlier Stone Age

- o Age range: >200 000 to 2 000 000 years ago
- General characteristics: early stages include simple flakes struck from cobbles, core and pebble tools; later stages include intentionally shaped handaxes, cleavers and picks; final or transitional stages have tools that are smaller than the preceding stages and include large blades.
- o In the sequence below we highlight differences or characteristics that may be used to refine interpretations depending on context.

• ESA-MSA transition

- 200 to —600 thousand years ago
- MIS 7-15

Technological characteristics

- Described at some sites as Fauresmith or Sangoan
- Relationships, descriptions, issues of mixing and ages yet to be clarified
- Fauresmith assemblages have large blades, points, Levallois technology, and the remaining ESA components have small bifaces
- The Sangoan contains small bifaces (<100 mm), picks, heavy and light-duty denticulated and notched scrapers
- The Sangoan is less well described than the Fauresmith

• Acheulean

- o 300 thousand to —1.5 million years ago
- o MIS 8-50

Technological characteristics

- Bifacially worked handaxes and cleavers, large flakes > 10 cm
- Some flakes with deliberate retouch, sometimes classified as scrapers
- Gives impression of being deliberately shaped, but could indicate result of knapping strategy
- Sometimes shows core preparation
- Generally found in disturbed open-air locations

Oldowan

- \circ 1.5 to >2 million years ago
- o MIS 50-75

Technological characteristics

- Cobble, core or flake tools with little retouch and no flaking to predetermined patterns
- Hammerstones, manuports, cores
- Polished bone fragments/tools

Iron Age Sequence

In the northern regions of South Africa at least three settlement phases have been distinguished for early prehistoric agropastoralist settlements during the **Early Iron Age** (EIA). Diagnostic pottery assemblages can be used to infer group identities and to trace movements across the landscape. The first phase of the Early Iron Age, known as **Happy Rest** (named after the site where the ceramics were first identified), is representative of the Western Stream of migrations, and dates to AD 400 - AD 600. The second phase of **Diamant** is dated to AD 600 - AD 900 and was first recognized at the eponymous site of Diamant in the western Waterberg. The third phase, characterised by herringbone-decorated pottery of the **Eiland** tradition, is regarded as the final expression of the Early Iron Age (EIA) and occurs over large parts of the North West Province, Northern Province, Gauteng and Mpumalanga. This phase has been dated to about AD 900 - AD 1200. These sites are usually located on low-lying spurs close to water.

The Late Iron Age (LIA) settlements are characterised by stone-walled enclosures situated on defensive hilltops c. AD 1640 - AD 1830). This occupation phase has been linked to the arrival of ancestral Northern Sotho, Tswana and Ndebele (Nguni–speakers) in the northern regions of South Africa with associated sites dating between the sixteenth and seventeenth centuries AD. The terminal LIA is represented by late 18th/early 19th century settlements with multichrome Moloko pottery commonly attributed to the Sotho-Tswana. These settlements can in many instances be correlated with oral traditions on population movements during which African farming communities sought refuge in mountainous regions during the processes of disruption in the northern interior of South Africa, resulting from the so-called difagane (or mfecane).

Ethno-historical Context

Bakwena ba Mogopa

The BaKwena consists of various subgroups of which the Mogopa (totem: crocodile) is only one. The earliest settlement recalled by the baMogopa is Rathateng (at the confluence of the Crocodile and Limpopo Rivers), from where they moved to Lokwadi (Zandrivierspoort 747) during the 17th century AD. The later resettled at Phalane mountains. During the 18th century AD they moved to the Mabjanamatswana mountain range to the north-east of Brits. They resettled west of the Pienaars River at Mangwatladi only to return to Mabjanamatswana before the end of the 18th century AD. Here they lived at Gwate (Mamogaleslaagte) at the foot of Thaba ya Morena. During the period known as the Difagane (AD 1830s), Mizilikazi and his armies entered and subdued the region. After the initial conflict the group scattered in various directions with the core moving to Botswana, where they remained until 1868. The baMogopa then returned to Mathare (north-east of Brits), Mantabole (Bethanie) and Makolokwe (Wolwekraal) where they reside until today. The baKwena ba Mogôpa is related to the bakwena ba Modimosana of Rustenburg, having split off from them in the past. While the largest settlement always remained in Rustenburg, there were also other settlements in Jericho, the Brits area, Hebron, the Pretoria district and Ventersdorp. The origins of the Bakwena ba Mogôpa can be traced back to Matlhare near present-day Brits. In approximately 1840-1845 a group associated with the Majakgomo regiment left Matlhare for Thaba Bosigo. After the Segiti war in 1868 they left Thaba Bosigo and became scattered across the Free State. It is from here that the group moved to Zwartkop in Ventersdorp. In 1905 Matladi Thomas S. More became kgsi of the Bakwena ba Mogôpa group scattered across the Free State. Between 1905 and 1913 he undertook to unify his followers again (Breutz 1954).

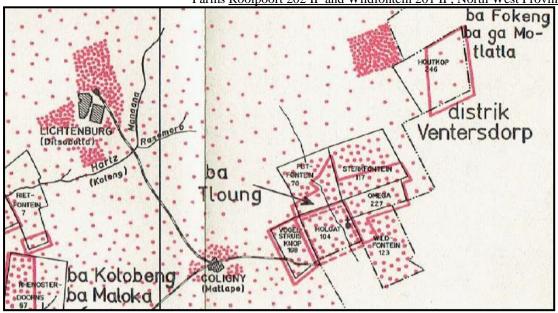


Figure 42: Ethnographic map of the region around Ventersdorp (after Breutz 1954)

BaTloung

The farms further northwest of the current survey footprint were occupied by the baTloung (totem: tlou (elephant)). According the Breutz (1954), they originally belonged to the Nduzundza Ndebele, who stayed in the region of the current Cullinan during the 17th century. After many years of moving and settling at different places, with sections under different leaders hiving off from the main group, they eventually settled in the current region. The mission station Bethel (also referred to as Botshabelo) on the farm Holgat was established in 1887 by Rev. Cassier of the Hermannsburg Mission Society (German). Shortly after that the baTloung settled in the vicinity of the mission station. As the congregation grew, it was decided to develop a school, which was opened by the missionaries in 1924. A number of outstations were established, e.g. on Putfontein, the latter which had a school, hospital and church (Van Schalkwyk 2021).

Coligny

White settlers moved into the area during the first half of the 19th century. They were largely self-sufficient, basing their survival on cattle/sheep farming and hunting. This remained so up to the present day. The only alternative activity was some sporadic diamond mining that took place in the region. During the Anglo Boer War some fighting took place in the larger region. Many soldiers that died during these battles were later reburied in a cemetery on the western side of the town of Coligny (Van den Bergh 1996). Coligny was first named Treurfontein, but in 1923 when it became a town its name was changed to in honour of Gaspard de Coligny, a 16th century Huguenot leader.

Ventersdorp

In 1866 a church centre was established on the farm Roodepoort owned by Johannes Venter. The area was later proclaimed a town on 17 February 1888 and named after the owner of the farm. The town lies in the valley of the Schoonspruit River which is contained in the Rietspruit Dam. Due to the ample water maize is the principle agricultural industry of the region. The cemetery located at the centre of the town contains graves of both English and Boer soldiers killed during the South African War (1899-1902). After 1920 alluvial diamonds were mined on various farms in the Ventersdorp district. This led to the district being

declared a labour district. This declaration was retracted in 1948 which suggests that the significance of diamond mining in the area had declined. Between 1925 and 1945 a large section of the black people of the district worked on the diamond mines (Breutz 1954).

Communist and liberation stalwart and hero JB Marks was reburied in Ventersdorp in March 2015. His remains were returned from Russia along with those of struggle icon Moses Kotane and he was buried in the Tshing township. His grave has been declared a National Monument.

Addendum 2: Description of the Recorded Sites

A system for grading the significance of heritage sites was established by the NHRA (Act No. 25 of 1999) and further developed by the South African Heritage Resources Agency (SAHRA 2007) and has been approved by ASAPA for use in southern Africa and was utilised during this assessment.

Site 1

A. GENERAL SITE DESCRIPTION						
Site type	Historical Structure					
Site Period	Late 19 th century					
Physical description	The site comprises an extensive stone-walled livestock enclosure consisting of several subdivisions and a cement cattle dip. Most of the walls are in good stable condition and were constructed with dressed stones. The structure is rectangular and 90° corners. The enclosures are currently being used by the local farmer. No other structures were recorded in association, although indications are that there might have been an old farmhouse located further north from the site.					
Integrity of deposits	The structure seems to be fairly stable		res are being used			
or structures	The structure seems to be fairly stable	out the enclosur	tes are being usea.			
Site extent	55 m x 160 m Height of walling: 1.7 metres					
B. SITE EVALUATION						
B1. HERITAGE VALU	JE			Yes	No	
Historic Value				1	1	
	community or pattern of South Africa's				X	
	association with the life or work of a	a person, group	or organisation of		X	
importance in the history					37	
Aesthetic Value	ng to the history of slavery in South Afr	1ca.			X	
	exhibiting particular aesthetic charac	otoristics volue	l by a particular		X	
community or cultural gr		ciensucs valued	i by a particular		Λ	
Scientific Value	oup.				1	
It has potential to yield information that will contribute to an understanding of South Africa's					X	
natural and cultural herit		va or tachnical	achievement at a		X	
	It has importance in demonstrating a high degree of creative or technical achievement at a particular period.					
It has importance to the	It has importance to the wider understanding of the temporal change of cultural landscapes, settlement patterns and human occupation.				X	
	uman occupation.					
	Social Value It has strong or special association with a particular community or cultural group for social, X					
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).				Λ		
Tourism Value	ins (sense of place).			l	.1	
It has significance through	gh its contribution towards the promoti	on of a local soc	ciocultural identity		X	
and can be developed as	tourist destination.				1	
Rarity Value	ommon rare or andongovad consists of	Couth Africa's	notined or automat		Tv	
heritage.	ommon, rare or endangered aspects of	South Africa s	natural or cultural		X	
Representative Value						
	nonstrating the principle characteristi	cs of a particul	ar class of South		X	
Africa's natural or cultur					1	
B2. REGIONAL CONT					1	
Other similar sites in the		TT' 1	M - 11	X		
C. SPHERE OF SIGNI	FICANCE	High	Medium		ow v	
International National					X X	
Provincial					<u>л</u> Х	
Tovincial						

Turing Itoolpoolt 202 II uite			
Local			X
Specific community			X
D. FIELD REGISTER RATING			
National/Grade 1 [should be registered, retained]			
Provincial/Grade 2 [should be registered, retained]			
Local/Grade 3A [should be registered, mitigation not advised]			
Local/Grade 3B [High significance; mitigation, partly retained]			
Generally Protected A [High/Medium significance, mitigation]			
Generally protected B [Medium significance, to be recorded]			
Generally Protected C [Low significance, no further action]			X
E. GENERAL STATEMENT OF SITE SIGNIFICANCE			
Low			X
Medium			
High			
F. RATING OF POTENTIAL IMPACT OF DEVELOPME	NT		
None			X
Peripheral			
Destruction			
Uncertain			

G. RECOMMENDED MITIGATION

- A buffer zone of 50 metres should be maintained along the structure; and
- Care should be taken during the mining and prospecting activities

H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS

• National Heritage Resources Act (Act No. 25 of 1999, Section 34)

I. PHOTOGRAPHS



Figure 43: General view of the cattle dip



Figure 44: General view of the western façade of the historical structure

A. GENERAL SITE DI	ESCRIPTION					
Site type	Site type Graveyard					
Site Period	Mid 20 th century					
Physical description	· ·	at least 15 gray	as The graves has	ve an e	act wact	
i nysicai description	The site comprises a graveyard with at least 15 graves. The graves have an east-west orientation with the headstone on the western side. The graves are demarcated with					
	cement bases and headstones. Some		•			
	bricks. Some of the graves have ins					
	by default regarded as older than 60 y		and graves writing are	шэчгү		
Integrity of deposits	Stable					
or structures						
Site extent	1x 20 metres					
B. SITE EVALUATION	N					
B1. HERITAGE VALU				Yes	No	
Historic Value					1	
	community or pattern of South Africa's	history or precole	onial history.		X	
	association with the life or work of a				X	
importance in the history		1 / 6 1	C			
	ng to the history of slavery in South Afr	ica.			X	
Aesthetic Value	· ·				1	
It has importance in	exhibiting particular aesthetic chara	cteristics valued	by a particular		X	
community or cultural gr			, 1			
Scientific Value	•			•		
It has potential to yield	information that will contribute to a	n understanding o	of South Africa's		X	
natural and cultural herit		C				
It has importance in de	emonstrating a high degree of creati	ve or technical a	achievement at a		X	
particular period.						
It has importance to th	It has importance to the wider understanding of the temporal change of cultural landscapes, X					
settlement patterns and human occupation.						
Social Value						
	association with a particular commu	unity or cultural	group for social,		X	
cultural or spiritual reasons (sense of place).						
Tourism Value						
It has significance through its contribution towards the promotion of a local sociocultural identity X					X	
and can be developed as	tourist destination.					
Rarity Value					1	
-	ommon, rare or endangered aspects of	f South Africa's r	natural or cultural		X	
heritage.						
Representative Value		C 1	1 60 1	1	T 77	
<u> </u>	monstrating the principle characteristi	cs of a particula	r class of South		X	
Africa's natural or cultur	•					
B2. REGIONAL CONT				1	v	
Other similar sites in the	· · · · · · · · · · · · · · · · · · ·	TT* 1	3.6.11	_	X	
C. SPHERE OF SIGNI	FICANCE	High	Medium		ow V	
	International X					
National			X	-		
Provincial Local	Provincial X					
		X X		-		
Specific community	DATING	Λ				
D. FIELD REGISTER						
National/Grade 1 [should	ild be registered, retained]			-		
				-		
Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained]						
	High/Medium significance, mitigation			 	X	
				 	Λ	
Generally protected B [Medium significance, to be recorded]						

Generally Protected C [Low significance, no further action]		
E. GENERAL STATEMENT OF SITE SIGNIFICANCE		
Low		
Medium		
High	X	
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT		
None	X	
Peripheral		
Destruction		
Uncertain		

G. RECOMMENDED MITIGATION

- Maintain a buffer zone of 50 metres; and
- Care should be taken during the mining and prospecting activities

H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS

- National Heritage Resources Act (Act No. 25 of 1999, Section 36)
- Regulations Relating to the Management of Human Remains, in terms of the National Health Act No. 61 of 2003
- Removal of Graves and Dead Bodies Ordinance (Ordinance No. 7 of 1925)
- Ordinance on Exhumations (Ordinance No. 12 of 1980)
- Local and regional provisions, laws and by-laws

I. PHOTOGRAPHS



Figure 45: The two graves demarcated with brick bases and cement headstones

A. GENERAL SITE DESCRIPTION						
Site type	Graveyard					
Site Period	Early 20 th century					
Physical description	The site comprises a graveyard with at least three graves. The graves have an east-west orientation with the headstone on the western side. The graves are demarcated with packed stones and no inscriptions were recorded. The grave sizes seem to indicate two adults and one child were buried here.					
Integrity of deposits or structures						
Site extent						
B. SITE EVALUATION	B. SITE EVALUATION					
B1. HERITAGE VALU	B1. HERITAGE VALUE Yes No					
Historic Value	Historic Value					
It has importance to the o	It has importance to the community or pattern of South Africa's history or precolonial history.					
It has strong or special	association with the life or work of a person, group or organisation of		X			

HIA: Proposed Prospecting Right and Mining Permit Application on the Farms Rooipoort 202 IP and Wildfontein 201 IP, North West Province

Farins <u>Roofpoort 202 if and</u>			
importance in the history of South Africa.			
It has significance relating to the history of slavery in South Afr	ica.		X
Aesthetic Value			
It has importance in exhibiting particular aesthetic characteristics valued by a particular			
community or cultural group.			
Scientific Value			
It has potential to yield information that will contribute to a	n understanding	of South Africa's	X
natural and cultural heritage.			
It has importance in demonstrating a high degree of creative or technical achievement at a			X
particular period.	1 1 6	1. 1.1	77
It has importance to the wider understanding of the tempor	al change of cul	itural landscapes,	X
settlement patterns and human occupation.			
Social Value	1. 1. 1	C . 1	77
It has strong or special association with a particular commu	inity or cultural	group for social,	X
cultural or spiritual reasons (sense of place).			
Tourism Value	C 1 1		T **
It has significance through its contribution towards the promoti	on of a local soci	ocultural identity	X
and can be developed as tourist destination.			
Rarity Value	20 4 40: :	, ₁ , ₂ ,	1
It possesses unique, uncommon, rare or endangered aspects of	South Africa's r	natural or cultural	X
heritage.			
Representative Value			
It is importance in demonstrating the principle characteristi	es of a particula	r class of South	X
Africa's natural or cultural places or objects.			
B2. REGIONAL CONTEXT		1	
Other similar sites in the regional landscape.			X
C. SPHERE OF SIGNIFICANCE	High	Medium	Low
International			X
National		X	
Provincial			
		X	
Local	X	X	
Specific community	X X	X	
Specific community D. FIELD REGISTER RATING		X	
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained]		X	
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained]		X	
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained]		X	
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained]		X	
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised]		X	X
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained]		X	X
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained] Generally Protected A [High/Medium significance, mitigation]		X	X
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained] Generally Protected A [High/Medium significance, mitigation] Generally protected B [Medium significance, to be recorded]		X	X
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained] Generally Protected A [High/Medium significance, mitigation] Generally Protected B [Medium significance, to be recorded] Generally Protected C [Low significance, no further action]		X	X
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained] Generally Protected A [High/Medium significance, mitigation] Generally protected B [Medium significance, to be recorded] Generally Protected C [Low significance, no further action] E. GENERAL STATEMENT OF SITE SIGNIFICANCE		X	X
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained] Generally Protected A [High/Medium significance, mitigation] Generally protected B [Medium significance, to be recorded] Generally Protected C [Low significance, no further action] E. GENERAL STATEMENT OF SITE SIGNIFICANCE Low Medium		X	X
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained] Generally Protected A [High/Medium significance, mitigation] Generally Protected B [Medium significance, to be recorded] Generally Protected C [Low significance, no further action] E. GENERAL STATEMENT OF SITE SIGNIFICANCE Low	X	X	
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained] Generally Protected A [High/Medium significance, mitigation] Generally Protected B [Medium significance, to be recorded] Generally Protected C [Low significance, no further action] E. GENERAL STATEMENT OF SITE SIGNIFICANCE Low Medium High	X	X	
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained] Generally Protected A [High/Medium significance, mitigation] Generally Protected B [Medium significance, to be recorded] Generally Protected C [Low significance, no further action] E. GENERAL STATEMENT OF SITE SIGNIFICANCE Low Medium High F. RATING OF POTENTIAL IMPACT OF DEVELOPME None	X	X	X
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained] Generally Protected A [High/Medium significance, mitigation] Generally protected B [Medium significance, to be recorded] Generally Protected C [Low significance, no further action] E. GENERAL STATEMENT OF SITE SIGNIFICANCE Low Medium High F. RATING OF POTENTIAL IMPACT OF DEVELOPME None Peripheral	X	X	X
Specific community D. FIELD REGISTER RATING National/Grade 1 [should be registered, retained] Provincial/Grade 2 [should be registered, retained] Local/Grade 3A [should be registered, mitigation not advised] Local/Grade 3B [High significance; mitigation, partly retained] Generally Protected A [High/Medium significance, mitigation] Generally Protected B [Medium significance, to be recorded] Generally Protected C [Low significance, no further action] E. GENERAL STATEMENT OF SITE SIGNIFICANCE Low Medium High F. RATING OF POTENTIAL IMPACT OF DEVELOPME None	X	X	X

G. RECOMMENDED MITIGATION

- Maintain a buffer zone of 50 metres; and
- Care should be taken during the mining and prospecting activities

H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS

- National Heritage Resources Act (Act No. 25 of 1999, Section 36)
- Regulations Relating to the Management of Human Remains, in terms of the National Health Act No. 61 of 2003
- Removal of Graves and Dead Bodies Ordinance (Ordinance No. 7 of 1925)
- Ordinance on Exhumations (Ordinance No. 12 of 1980)
- Local and regional provisions, laws and by-laws

I. PHOTOGRAPHS



Figure 46: General view of the three graves

Site 4

A. GENERAL SITE DI						
Site type	Historical Structure					
Site Period	Early to Mid 20 th century					
Physical description	The site comprises a historical farmhouse complex consisting of several outbuildings and the main farmhouse. The farmhouse is a multi-room structure built with bricks and wooden windows and door frames. The original roof is made of wooden trusses and corrugated iron sheets. However, note that the original structure have been extensively expanded, altered and renovated with the resultant loss of originality and significance.					
Integrity of deposits	The structure is fairly stable and is currently occupied.					
or structures	20 45					
Site extent	20 m x 15 m					
B. SITE EVALUATION			1			
B1. HERITAGE VALU	JE	Yes	No			
Historic Value						
	community or pattern of South Africa's history or precolonial history.		X			
	association with the life or work of a person, group or organisation of		X			
importance in the history			X			
Aesthetic Value	g to the history of slavery in South Africa.		Λ			
	exhibiting particular aesthetic characteristics valued by a particular		X			
community or cultural group.						
Scientific Value	oup.		1			
	information that will contribute to an understanding of South Africa's age.		X			
It has importance in demonstrating a high degree of creative or technical achievement at a particular period.						
It has importance to the wider understanding of the temporal change of cultural landscapes, settlement patterns and human occupation.						
Social Value	-					
	association with a particular community or cultural group for social,		X			
cultural or spiritual reaso	ons (sense of place).					
Tourism Value		1				
It has significance through its contribution towards the promotion of a local sociocultural identity X						
	and can be developed as tourist destination.					
Rarity Value			T +-			
	ommon, rare or endangered aspects of South Africa's natural or cultural		X			
heritage.			1			
Representative Value	nonstrating the principle characteristics of a particular class of South		X			
it is importance in den	nonstrating the principle characteristics of a particular class of South		Λ			

Tarms Roofpoort 202 II	and Whatomen 201	II , I (OI till VV CSt I I	Ovince	1	
Africa's natural or cultural places or objects.					
B2. REGIONAL CONTEXT					
Other similar sites in the regional landscape.			X		
C. SPHERE OF SIGNIFICANCE High Medium				ow	
International	nternational				
National			X		
Provincial				X	
Local				X	
Specific community				X	
D. FIELD REGISTER RATING					
National/Grade 1 [should be registered, retained]					
Provincial/Grade 2 [should be registered, retained]					
Local/Grade 3A [should be registered, mitigation not advised]					
Local/Grade 3B [High significance; mitigation, partly retained]					
Generally Protected A [High/Medium significance, mitigation]					
Generally protected B [Medium significance, to be recorded]]				
Generally Protected C [Low significance, no further action]				X	
E. GENERAL STATEMENT OF SITE SIGNIFICANCE	E .				
Low				X	
Medium					
High					
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT OF THE PROPERTY O	MENT				
None				X	
Peripheral	·				
Destruction					
Uncertain					
<u> </u>					

G. RECOMMENDED MITIGATION

- A buffer zone of 50 metres should be maintained along the structure; and
- Care should be taken during the mining and prospecting activities

H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS

• National Heritage Resources Act (Act No. 25 of 1999, Section 34)

I. PHOTOGRAPHS



Figure 47: General view of the southern façade of the farmhouse

A. GENERAL SITE DESCRIPTION		
Site type	Historical Structure	
Site Period	Late 19 th century	

HIA: Proposed Prospecting Right and Mining Permit Application on the Farms Rooipoort 202 IP and Wildfontein 201 IP, North West Province

	Farms Rooipoort 202 IP and				
Physical description	The site comprises the foundation of				
	the enclosure is square with the wal				
	were probably carted away and used i	n the construction	n of other structures	on the	farm.
Integrity of deposits	The structure is fairly stable				
or structures					
Site extent	15 m x 20 m				
B. SITE EVALUATION	N				
B1. HERITAGE VALU				Yes	No
Historic Value				ı	
	community or pattern of South Africa's	history or preco	lonial history.		X
	association with the life or work of a				X
importance in the history		, , ,	8		
	ng to the history of slavery in South Afr	ica.			X
Aesthetic Value	<u> </u>			<u>l</u>	1
	exhibiting particular aesthetic chara-	cteristics valued	l by a particular		X
community or cultural gr		, and	oj a paracular		
Scientific Value	. oup.			<u>I</u>	
	information that will contribute to an	understanding	of South Africa's		X
natural and cultural herit		i understanding	or south rinica s		11
	emonstrating a high degree of creati	ve or technical	achievement at a		X
particular period.	emonstrating a high degree of creati	ve or teeminear	acmevement at a		1
	e wider understanding of the tempor	al change of c	iltural landscanes		X
settlement patterns and h		al change of co	inturar ranuscapes,		Λ
Social Value	tuman occupation.				
	association with a particular commu	unity or oultural	group for social		X
cultural or spiritual reaso		ility of Cultural	group for social,		Λ
Tourism Value	ons (sense of prace).				
	gh its contribution towards the promoti	on of a local so	piogultural idantity		X
and can be developed as		on or a local soc	documental facility		Λ
Rarity Value	tourist destination.				
	ommon, rare or endangered aspects of	South Africa's	notural or cultural		X
heritage.	ommon, rare or endangered aspects or	South Africa S	natural of Cultural		Λ
Representative Value					
	monstrating the principle characteristi	os of a particul	or class of South		X
Africa's natural or cultur		es of a particul	ai class of South		Λ
B2. REGIONAL CONT					
Other similar sites in the				X	
C. SPHERE OF SIGNI		III ala	Madiana		
International	FICANCE	High	Medium		ow V
					X
National					X
Provincial				X	
Local					X
Specific community					X
D. FIELD REGISTER				ı	
National/Grade 1 [should					
	ald be registered, retained]				
	be registered, mitigation not advised]				
	gnificance; mitigation, partly retained]				
	High/Medium significance, mitigation]				
	Medium significance, to be recorded]				
·	Low significance, no further action]				X
E. GENERAL STATE	MENT OF SITE SIGNIFICANCE				
Low					X
Medium					
High					
	NTIAL IMPACT OF DEVELOPME	NT			
None					X
Peripheral					
Destruction					

Farms Rooipoort 202 IP and Wildfontein 201 IP, North West Province
Uncertain

G. RECOMMENDED MITIGATION

- A buffer zone of 50 metres should be maintained along the structure; and
- Care should be taken during the construction phase of the farming development.

H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS

• National Heritage Resources Act (Act No. 25 of 1999, Section 34)

I. PHOTOGRAPHS



Figure 48: General view of the foundations of the livestock enclosure

A. GENERAL SITE DESCRIPTION					
Site type	Historical Structure				
Site Period	Late 19 th to Early 20 th centuries				
Physical description	The site comprises a historical farmhouse complex consisting of several outbuildings and the main farmhouse. The farmhouse is a multi-room structure built with bricks and wooden windows and door frames. The roof is made of wooden trusses and corrugated iron sheets. The northern façade of the house is very impressive and prominent and according to local oral history built by the Visser family. A large shed was also recorded to the west of the farmhouse. No midden deposits were recorded near the structure.				
Integrity of deposits	The structure is fairly stable with wall plaster falling off in places. T	he buil	ding is		
or structures	currently occupied.				
Site extent	House: 20 m x 16 m				
B. SITE EVALUATION	Shed: 14 m x 8 m				
B1. HERITAGE VALUE		Yes	No		
Historic Value	<u> </u>	165	110		
	community or pattern of South Africa's history or precolonial history.		X		
It has strong or special association with the life or work of a person, group or organisation of			X		
importance in the history of South Africa.					
It has significance relating to the history of slavery in South Africa. X Aesthetic Value					
It has importance in exhibiting particular aesthetic characteristics valued by a particular X					
community or cultural group.					
Scientific Value					
It has potential to yield information that will contribute to an understanding of South Africa's X					
natural and cultural heritage.					
It has importance in demonstrating a high degree of creative or technical achievement at a			X		
particular period.					

HIA: Proposed Prospecting Right and Mining Permit Application on the Farms Rooipoort 202 IP and Wildfontein 201 IP, North West Province

I willing Itoolpoolt 202 II will	TI TI GIOINE E O I	11 , 1 101011 11 000 110	11100	
t has importance to the wider understanding of the temporal change of cultural landscapes, X				X
settlement patterns and human occupation.	-			
Social Value			•	
It has strong or special association with a particular commu	t has strong or special association with a particular community or cultural group for social,			
cultural or spiritual reasons (sense of place).	·			
Tourism Value				
It has significance through its contribution towards the promoti	ion of a local soc	iocultural identity		X
and can be developed as tourist destination.				
Rarity Value				
It possesses unique, uncommon, rare or endangered aspects of	f South Africa's 1	natural or cultural		X
heritage.				
Representative Value				
It is importance in demonstrating the principle characteristi	cs of a particula	r class of South		X
Africa's natural or cultural places or objects.				
B2. REGIONAL CONTEXT				
Other similar sites in the regional landscape.			X	
C. SPHERE OF SIGNIFICANCE	High	Medium	Lo	w
International			X	-
National			X	
Provincial			X	-
Local			X	
Specific community			X	
D. FIELD REGISTER RATING				
National/Grade 1 [should be registered, retained]				
Provincial/Grade 2 [should be registered, retained]				
Local/Grade 3A [should be registered, mitigation not advised]				
Local/Grade 3B [High significance; mitigation, partly retained]				
Generally Protected A [High/Medium significance, mitigation]				
Generally protected B [Medium significance, to be recorded]				
Generally Protected C [Low significance, no further action]			X	-
E. GENERAL STATEMENT OF SITE SIGNIFICANCE				
Low			X	-
Medium				
High				
F. RATING OF POTENTIAL IMPACT OF DEVELOPME	NT			
None			X	:
Peripheral				
Destruction				
Uncertain				
G. RECOMMENDED MITIGATION				

- A buffer zone of 50 metres should be maintained along the structure; and
- Care should be taken during the mining and prospecting activities

H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS

• National Heritage Resources Act (Act No. 25 of 1999, Section 34)

I. PHOTOGRAPHS



Figure 49: General view of the northern façade of the historical farm house



Figure 50: General view of the front door and window (wooden frames)



Figure 51: General view of the shed associated with the main farmhouse

A. GENERAL SITE DESCRIPTION				
Site type	Graveyard			
Site Period	Mid to Late 20 th century			
Physical description	The site comprises a graveyard with at least 50 graves. The graves have an east-west orientation with the headstone on the western side. The graves are demarcated with packed stones, granite and brick bases. Most of the headstones have inscriptions.			

Integrity of deposits or structures	Stable Stable				
Site extent	45x 40 metres				
B. SITE EVALUATION					
B1. HERITAGE VALU				Yes	No
Historic Value) L			103	110
	community or pattern of South Africa's	history or precol	onial history	1	X
	association with the life or work of a				X
importance in the history		person, group (or organisation of		Λ
	ng to the history of slavery in South Afr.				X
Aesthetic Value	ig to the history of slavery in South Air	ıca.		<u> </u>	Λ
	archibiting monticular conthatic above	stamiatica valuad	hr: a mantiaulan	1	X
	exhibiting particular aesthetic charac	teristics valued	by a particular		Λ
community or cultural gr	roup.				
Scientific Value		1 , 1:	C C	1	T 77
	information that will contribute to ar	understanding	of South Africa's		X
natural and cultural herit					***
	emonstrating a high degree of creative	e or technical	achievement at a		X
particular period.		1 1 0			***
	e wider understanding of the tempor	at change of cu	itural landscapes,		X
settlement patterns and h	uman occupation.			<u> </u>	1
Social Value				1	T
	association with a particular commu	nity or cultural	group for social,		X
cultural or spiritual reaso	ons (sense of place).				
Tourism Value				1	1
	gh its contribution towards the promoti	on of a local soc	iocultural identity		X
and can be developed as	tourist destination.				
Rarity Value					
	ommon, rare or endangered aspects of	South Africa's 1	natural or cultural		X
heritage.					
Representative Value					
	monstrating the principle characteristic	es of a particula	ar class of South		X
Africa's natural or cultur					
B2. REGIONAL CONT					
Other similar sites in the					X
C. SPHERE OF SIGNI	FICANCE	High	Medium	L	ow
International					X
National			X		
Provincial			X		
Local		X			
Specific community		X			
D. FIELD REGISTER	RATING				
National/Grade 1 [should	d be registered, retained]				
	ıld be registered, retained]				
	be registered, mitigation not advised]				
Local/Grade 3B [High significance; mitigation, partly retained]				1	
Generally Protected A [High/Medium significance, mitigation]					X
Generally protected B [Medium significance, to be recorded]			<u> </u>		
Generally Protected C [Low significance, no further action]					
	MENT OF SITE SIGNIFICANCE				
Low					
Medium				<u> </u>	
High					X
,	NTIAL IMPACT OF DEVELOPME	VT			
None	THE EVERY OF DEVELOT ME				X
Peripheral				<u> </u>	. 1
Destruction				 	-
Uncertain				-	
G. RECOMMENDED	MITICATION				
• Iviaintain a buili	er zone of 50 metres; and				

• Care should be taken during the mining and prospecting activities

H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS

- National Heritage Resources Act (Act No. 25 of 1999, Section 36)
- Regulations Relating to the Management of Human Remains, in terms of the National Health Act No. 61 of 2003
- Removal of Graves and Dead Bodies Ordinance (Ordinance No. 7 of 1925)
- Ordinance on Exhumations (Ordinance No. 12 of 1980)
- Local and regional provisions, laws and by-laws

I. PHOTOGRAPHS



Figure 52: General view of the graveyard

A CENEDAL CITE D	EGCDIDEION			
A. GENERAL SITE D				
Site type	Graveyard			
Site Period	Early 20 th century			
Physical description	The site comprises a graveyard with at least 20 graves. The graves have orientation with the headstone on the western side. The graves are depacked stones and no inscriptions were recorded. However two graves with granite bases and headstone (Moloko family).	emarcat	ed with	
Integrity of deposits	Stable			
or structures				
Site extent	8x 10 metres			
B. SITE EVALUATIO	N			
B1. HERITAGE VALU	JE	Yes	No	
Historic Value				
	community or pattern of South Africa's history or precolonial history.		X	
It has strong or special association with the life or work of a person, group or organisation of			X	
importance in the history				
It has significance relation	ng to the history of slavery in South Africa.		X	
Aesthetic Value				
It has importance in community or cultural g	exhibiting particular aesthetic characteristics valued by a particular roup.		X	
Scientific Value				
It has potential to yield information that will contribute to an understanding of South Africa's				
natural and cultural herit				
It has importance in demonstrating a high degree of creative or technical achievement at a			X	
particular period.				
	ne wider understanding of the temporal change of cultural landscapes,		X	
settlement patterns and h	numan occupation.			
Social Value				
It has strong or special	l association with a particular community or cultural group for social,		X	

HIA: Proposed Prospecting Right and Mining Permit Application on the Farms Rooipoort 202 IP and Wildfontein 201 IP, North West Province

cultural or spiritual reasons (sense of place).				
Tourism Value				
It has significance through its contribution towards the promotion of a local sociocultural identity				
and can be developed as tourist destination.				
Rarity Value				
It possesses unique, uncommon, rare or endangered aspects of	of South Africa's	natural or cultural	X	
heritage.				
Representative Value		,		
It is importance in demonstrating the principle characterist	tics of a particul	ar class of South	X	
Africa's natural or cultural places or objects.				
B2. REGIONAL CONTEXT		,		
Other similar sites in the regional landscape.			X	
C. SPHERE OF SIGNIFICANCE	High	Medium	Low	
International			X	
National		X		
Provincial		X		
Local	X			
Specific community	X			
D. FIELD REGISTER RATING				
National/Grade 1 [should be registered, retained]				
Provincial/Grade 2 [should be registered, retained]				
Local/Grade 3A [should be registered, mitigation not advised]				
Local/Grade 3B [High significance; mitigation, partly retained]				
Generally Protected A [High/Medium significance, mitigation]				
Generally protected B [Medium significance, to be recorded]				
Generally Protected C [Low significance, no further action]				
E. GENERAL STATEMENT OF SITE SIGNIFICANCE				
Low				
Medium				
High				
F. RATING OF POTENTIAL IMPACT OF DEVELOPME	ENT			
None			X	
Peripheral				
Destruction				
Uncertain				
G. RECOMMENDED MITIGATION				

G. RECOMMENDED MITIGATION

- Maintain a buffer zone of 50 metres; and
- Care should be taken during the mining and prospecting activities

H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS

- National Heritage Resources Act (Act No. 25 of 1999, Section 36)
- Regulations Relating to the Management of Human Remains, in terms of the National Health Act No. 61 of 2003
- Removal of Graves and Dead Bodies Ordinance (Ordinance No. 7 of 1925)
- Ordinance on Exhumations (Ordinance No. 12 of 1980)
- Local and regional provisions, laws and by-laws

I. PHOTOGRAPHS



Figure 53: General view of the graveyard

Addendum 3: Surveyor General Farm Diagram

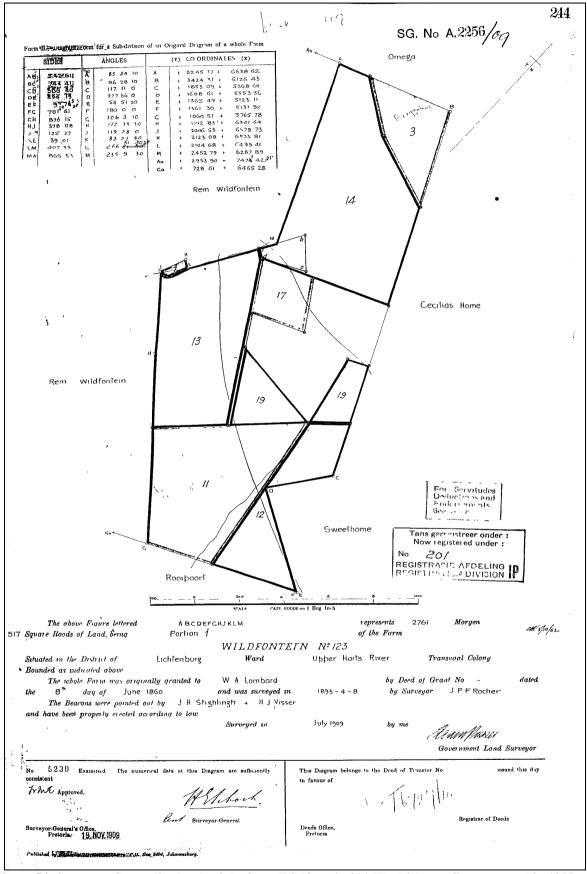


Figure 54: Surveyor General's sketch of the farm Wildfontein 201 IP which was first surveyed in 1909

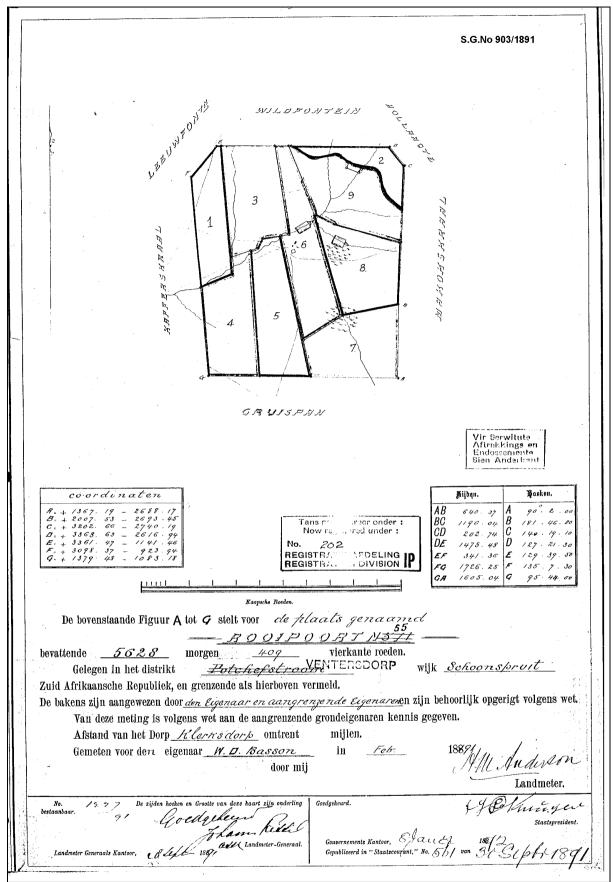


Figure 55: Surveyor General's sketch of the farm Rooipoort 202 IP which was first surveyed in 1891

Addendum 4: Relocation of Graves

Marked graves younger than 60 years do not fall under the protection of the NHRA (Act No. 25 of 1999) with the result that exhumation, relocation and reburial can be conducted by an undertaker. This will include logistical aspects such as social consultation, purchasing of plots in cemeteries, procurement of coffins, etc. Other legislative measures which may be pertinent include the Removal of Graves and Dead Bodies Ordinance (Ordinance No. 7 of 1925), Regulations Relating to the Management of Human Remains (GNR 363 of 22 May 2013) made in terms of the National Health Act No. 61 of 2003, Ordinance on Exhumations (Ordinance No. 12 of 1980) as well as any local and regional provisions, laws and by-laws that may be in place.

Marked graves older than 60 years are protected by the NHRA (Act No. 25 of 1999) an as a result an archaeologist must be in attendance to assist with the exhumation and documentation of the graves. Note that unmarked graves are by default regarded as older than 60 years and therefore also falls under the NHRA (Act No. 25 of 1999, Section 36).

The relocation of graves entails the following procedure:

- Notices of intent to relocate the graves must be put up at the burial site for a period of 60 days. This should contain contact information where communities and family members can register as interested and affected parties. All information pertaining to the identification of the graves must be documented for the application of a SAHRA permit. All notices must be in at least 3 languages, of which English is one. This is a requirement by law.
- These notices of intention must also be placed in at least two local newspapers and have the same information as above.
- Local radio stations can also be used to try contact family members. This is not required by law, but can be helpful.
- During this time (60 days) a suitable cemetery must be identified near to the development or otherwise one specified by the family of the deceased.
- An open day for family members should be arranged after the period of 60 days so that they can gather to discuss the way forward, and to sort out any problems. The developer needs to take the families requirements into account.
- Once the 60 days have passed and all the information from the family members have been received, a permit can be requested from SAHRA. This is a requirement by law.
- Once the permit has been issued, the graves may be exhumed and relocated.
- All headstones must be relocated with the graves as well as any remains and any additional objects found in the grave.

Information needed for the SAHRA permit application

- The permit application must be done by an archaeologist.
- A map of the area where the graves have been located.
- A survey report of the area prepared by an archaeologist.
- All the information on the families that have identified graves.
- A letter of permission from the landowner granting permission to the developer to exhume and relocate the graves.
- A letter (or proof of purchase of the plots) from the new cemetery confirming that the graves will be reburied there.

• Details of the farm name and number, magisterial district and GPS coordinates of the gravesite.

Graves are generally be classified into four categories. These are:

- Graves younger than 60 years;
- Graves older than 60 years, but younger than 100 years;
- Graves older than 100 years; and
- Graves of victims of conflict or of individuals of royal descent.