

# BASIC ASSESSMENT REPORT & ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

2023

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**Prospecting Right Application in respect of Coal Resources on Portion of the Remaining Extent of the farm Mambuka 16919, Portion of the Remaining Extent of the farm Lot 308 Empangeni 13742 and Portion of the Remaining Extent of the farm Lot 307 Empangeni 13746, situated in the Magisterial District of King Cetshwayo, KwaZulu-Natal Province.**

## PREPARED ON BEHALF OF:

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**DMRE REF: KZN 30/5/1/1/2/ 11413 PR**



mineral resources  
& energy

Department:  
Mineral Resources and Energy  
REPUBLIC OF SOUTH AFRICA

**BASIC ASSESSMENT REPORT  
AND  
ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT**

SUBMITTED FOR ENVIRONMENTAL AUTHORIZATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AND THE NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT, 2008 IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA) (AS AMENDED).

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<b>File reference number SAMRAD</b>	DMRE REF: (KZN 30/5/1/1/2/11413 PR)

## IMPORTANT NOTICE

In terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002 as amended), the Minister must grant a prospecting or mining right if among others the mining “will not result in unacceptable pollution, ecological degradation or damage to the environment”.

Unless an Environmental Authorization can be granted following the evaluation of an Environmental Impact Assessment and an Environmental Management Programme report in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), it cannot be concluded that the said activities will not result in unacceptable pollution, ecological degradation or damage to the environment.

In terms of section 16(3)(b) of the EIA Regulations, 2014, any report submitted as part of an application must be prepared in a format that may be determined by the Competent Authority and in terms of section 17 (1) (c) the competent Authority must check whether the application has taken into account any minimum requirements applicable or instructions or guidance provided by the competent authority to the submission of applications.

**It is therefore an instruction** that the prescribed reports required in respect of applications for an environmental authorization for listed activities triggered by an application for a right or a permit are submitted in the exact format of, and provide all the information required in terms of, this template. Furthermore, please be advised that failure to submit the information required in the format provided in this template will be regarded as a failure to meet the requirements of the Regulation and will lead to the Environmental Authorization being refused.

**It is furthermore an instruction that** the Environmental Assessment Practitioner must process and interpret his/her research and analysis and use the findings thereof to compile the information required herein. (Unprocessed supporting information may be attached as appendices). The EAP must ensure that the information required is placed correctly in the relevant sections of the Report, in the order, and under the provided headings as set out below, and ensure that the report is not cluttered with un-interpreted information and that it unambiguously represents the interpretation of the applicant.

## OBJECTIVE OF THE BASIC ASSESSMENT PROCESS

The objective of the basic assessment process is to, through a consultative process—

- (a) determine the policy and legislative context within which the proposed activity is located and how the activity complies with and responds to the policy and legislative context;
- (b) identify the alternatives considered, including the activity, location, and technology alternatives;
- (c) describe the need and desirability of the proposed alternatives,
- (d) through the undertaking of an impact and risk assessment process inclusive of cumulative impacts which focused on determining the geographical, physical, biological, social, economic, heritage and cultural sensitivity of the sites and locations within sites and the risk of impact of the proposed activity and technology alternatives on these aspects to determine:
  - i. the nature, significance, consequence, extent, duration and probability of the impacts occurring to; and
  - ii. the degree to which these impacts—
    - a. can be reversed;
    - b. may cause irreplaceable loss of resources; and
    - c. can be managed, avoided or mitigated;
- (e) through a ranking of the site sensitivities and possible impacts the activity and technology alternatives will impose on the sites and location identified through the life of the activity to—
  - i. identify and motivate a preferred site, activity and technology alternative;
  - ii. identify suitable measures to manage, avoid or mitigate identified impacts; and
  - iii. identify residual risks that need to be managed and monitored.



## Document Control

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**Document Title:** Basic Assessment Report and Environmental Management Programme report for Coal within portion of the remaining extent of the Farm Mambuka 16919, Portion of the Remaining Extent of the farm Lot 308 Empangeni 13742 and Portion of the Remaining Extent of the farm Lot 307 Empangeni 13746, situated in the Magisterial District of King Cetshwayo in KwaZulu-Natal Province **DMRE REF: KZN 30/5/1/1/2/11413 PR.**

Version 1: Draft Basic Assessment Report and Environmental Management

		QUALITY CONTROL			
Name	M Mangcu	K Mathako	R Shonisani Radebe	Dr NK Singo	Distribution to Stakeholders.
Designation	Public Participation Officer	Compiler	EAP	Principal EAP	

## **i. Abbreviations**

BAR	Basic Assessment Report
BID	Background Information Document
CBA	Critical Biodiversity Area
DWS	Department of Water and Sanitation
DMRE	Department of Mineral Resources and Energy
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
GDP	Gross Domestic Product
I&APs	Interested And Affected parties
IDP	Integrated Development Plan
NDP	National Development Plan
PPP	Public Participation Process
PWP	Prospecting Works Programme
SAHRA	South African Heritage Resource Agency
SANAS	South African National Accreditation System
SANS	South African National Standards
WMA	Water Management Area

**DISCLAIMER**

The opinion expressed in this, and associated reports are based on the information provided by [MDZ Fleet Solutions (Pty) Ltd] to Singo Consulting (Pty) Ltd ("Singo Consulting") and is specific to the scope of work agreed with MDZ Fleet Solutions (Pty) Ltd.

Singo Consulting acts as an advisor to the MDZ Fleet Solutions (Pty) Ltd and exercises all reasonable skill and care in the provision of its professional services in a manner consistent with the level of care and expertise exercised by members of the environmental profession. Except where expressly stated, Singo Consulting has not verified the validity, accuracy or comprehensiveness of any information supplied for its reports. Singo Consulting shall not be held liable for any errors or omissions in the information given or any consequential loss resulting from commercial decisions or acts arising from them.

Where site inspections, testing or fieldwork have taken place, the report is based on the information made available by the MDZ Fleet Solutions (Pty) Ltd or their nominees during the visit, visual observations and any subsequent discussions with regulatory authorities. The validity and comprehensiveness of supplied information has not been independently verified and, for the purposes of this report, it is assumed that the information provided to Singo Consulting is both complete and accurate. It is further assumed that normal activities were being undertaken at the site on the day of the site visit(s), unless explicitly stated otherwise.

These views do not generally refer to circumstances and features that may occur after the date of this study, which were not previously known to Singo Consulting (Pty) Ltd or had the opportunity to assess.

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## **INTRODUCTION AND EXECUTIVE SUMMARY**

Singo Consulting (Pty) Ltd on behalf of MDZ Fleet Solutions (Pty) Ltd submitted an application for a Prospecting Right subject to Section 16 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) (MPRDA) and an application for an Environmental Authorisation in terms to Chapter 6 of GNR 982 enacted under the National Environmental Management Act (Act 107 of 1998) (NEMA) for coal.

The proposed project will aim to ascertain if economically viable mineral deposits exist within the application area. In order to undertake the Proposed prospecting activities, MDZ Fleet Solutions (Pty) Ltd will require a Prospecting Right in terms of the Mineral and Petroleum Resources Development Act (MPRDA, Act No.28 of 2002). The Applicant is also required to obtain an Environmental Authorisation (EA) in terms of the National Environmental Management Act (NEMA, Act No. 107 of 1998) which involves the submission of a Basic Assessment Report and Environmental Management Programme report (BAR & EMPr).

Singo Consulting (Pty) Ltd has been appointed by MDZ Fleet Solutions (Pty) Ltd to manage the Environmental Authorisation process by conducting Environmental Impact Assessment, Public Participation for the proposed project and to compile the Basic Assessment Report and Environmental Management Programme report in support of the Prospecting Right application which in turn will be submitted to the Department of Mineral Resources and Energy for adjudication. This BAR & EMPr has been designed to meet the specifications as set out in the NEMA's 2014 EIA Regulations. Feedback received from stakeholders will form basis of this BAR & EMPr.

On Portion of the Remaining Extent of the farm Mambuka 16919, Portion of the Remaining Extent of the farm Lot 308 Empangeni 13742 and Portion of the Remaining Extent of the farm Lot 307 Empangeni 13746 with DMRE Ref: KZN 30/5/1/1/2/11413 PR is the proposed project area. Stakeholders were consulted through Newspaper, which was published on 2 June 2023; emails were sent on 5 June 2023 and face to face started on 12 June 2023. The stakeholders that have started engagement for the proposed project so far, Chief Mthiyane and the community were consulted and a meeting was held on the 13<sup>th</sup> of June 2023. According to the WinDeed search the landowner is Ingonyama Trust, a consultation email was sent, and no response has been received so far. However, a follow-up will be conducted on until a response is received. Other stakeholders have not commented or raised issues. A draft BAR & EMPr will be shared for 30 days review period.

Locality Description: The proposed Prospecting Right Application covers the Portion of the Remaining Extent of the farm Mambuka 16919, Portion of the Remaining Extent of the farm Lot 308

Empangeni 13742 and Portion of the Remaining Extent of the farm Lot 307 Empangeni 13746, encircling a total of 417.17 Ha. The proposed project area is situated under the jurisdiction of the UMfolozi Local Municipality. The project area is located approximately 26.36 km northwest of Richards Bay and 18.60 km north-northwest of Empangeni and is also located around villages such as Magwetshana village and Mningi village. Accessibility to the site is convenient as it is located around residential areas. The area can be easily accessed through the use of R34 and N2 as well as multiple gravel roads that cuts through the prospecting right area. Soil baseline study, Hydrological baseline study and some Hydrogeological baseline study were conducted, and some specialist studies will not be conducted based on the theme sensitivities from screening tool as some sensitivities were not confirmed during ground truthing. However, boreholes that are in high sensitivity area will be repositioned to less sensitivity areas and other studies such as Heritage study will be conducted upon the request from SAHRA.

A Prospecting Work Programme (PWP) has been developed to include both non-invasive and invasive prospecting activities. The target geological formation of the PWP is the Karoo Supergroup Vryheid formation.

Based on information available from the Council for Geosciences portal, there is available historical borehole data for the project area, however, this information has not yet been retrieved from the Council for Geosciences. From google earth imagery, there seems to be no mining operations located near the project area. Literature review shows that the area is located in geological formations of the Karoo Supergroup known to host coal deposits in the KwaZulu Natal region, particularly the Volksrust and Emakwezini Formations.

The project area is currently dominantly covered by natural vegetation, built-up Area and rivers. 100m buffer will be applied around the water bodies present within the prospecting right area. A railway line is cutting through the boundary of the site and a 100m buffer will be applied. There are heritage resources identified on the site during site assessment, however, if other heritage resources are identified during any stage of prospecting, then SAHRA will be informed immediately.

## PART A

### SCOPE OF ASSESSMENT AND BASIC ASSESSMENT REPORT

#### 1. Contact Person and correspondence address

a) Details of applicant

##### APPLICANT CONTACT DETAILS

<b>NAME OF APPLICANT</b>	: MDZ Fleet Solutions (Pty) Ltd
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<b>DMRE Reference No.</b>	: DMRE Ref: KZN 30/5/1/1/2/11413 PR

## 1.1 Contact person and correspondence address

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### 1.1.3 Details of the Environmental Assessment Practitioner (EAP)

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Email	<a href="mailto:rudzani@singoconsulting.co.za">rudzani@singoconsulting.co.za</a>

### 1.1.4 Details of the Principal Environmental Assessment Practitioner (EAP)

Name of the Practitioner	NK Singo
Designation	Principal EAP
Tel No.	+27 13 692 0041
Cell No.	+27 78 2727 839
Fax No.	+27 86 514 4103
Email	<a href="mailto:kenneth@singoconsulting.co.za">kenneth@singoconsulting.co.za</a>

## 1.2 Expertise of the EAP supervisor

Due to POPIA qualifications of the EAP will only be made available for final submission to the competent Authority.

## 2 Location of the Activity

### b) Location of the overall Activity.

Table 1: Location of the activity

<b>Farm Name:</b>	On Portion of the Remaining Extent of the farm Mambuka 16919, Portion of the Remaining Extent of the farm Lot 308 Empangeni 13742 and Portion of the Remaining Extent of the farm Lot 307 Empangeni 13746
<b>Application area (Ha)</b>	4 175.17 Ha
<b>Magisterial district:</b>	King Cetshwayo, KwaZulu Natal Province
<b>Local Municipality</b>	UMfolozi and UMhlathuze
<b>Distance and direction from nearest town</b>	Approximately 19.05 km North of Empangeni and 1 km from Magwetshana and Mningi communities. It is also 20 km away from Richards bay port.
<b>21digit SG Code</b>	NOGU00000001374600000 NOGU00000001374200000 NOGU00000001691900000

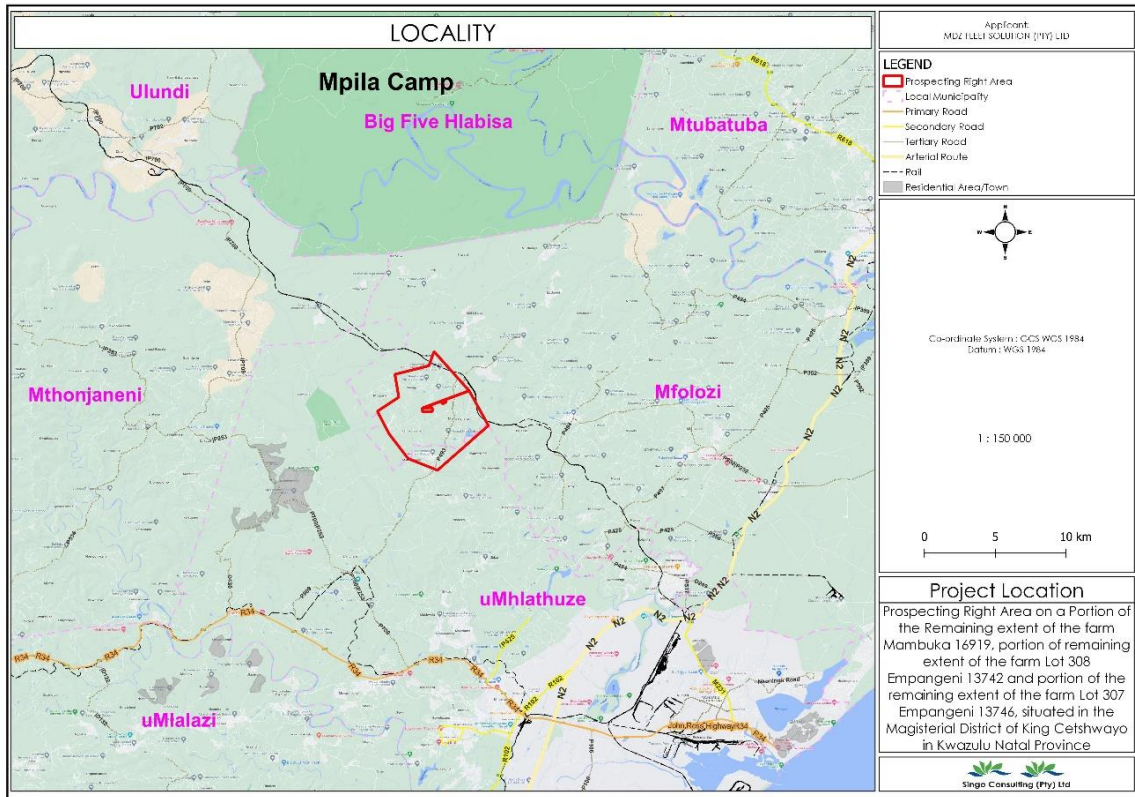
### c) Locality map

(Show nearest town, scale not smaller than 1:250000).

The proposed project area as seen in figure 1, 2 and 3 below, is on on Portion of the Remaining Extent of the farm Mambuka 16919, Portion of the Remaining Extent of the farm Lot 308 Empangeni 13742 and Portion of the Remaining Extent of the farm Lot 307 Empangeni 13746, situated under UMfolozi Local Municipality and UMhlathuze Local Municipality which falls within the jurisdiction of the Magisterial District of King Cetshwayo, in KwaZulu-Natal province. The proposed prospecting project area is situated approximately 19.05 km North of Empangeni and 1 km from Magwetshana



and Mningi communities. It is also 20 km away from Richards bay port. The farm can be accessed from the gravel that extends from the secondary road R34 and multiple gravel roads that cuts through the prospecting right area.



**Figure 1: Locality map of the proposed project (Singo GIS, 2023)**

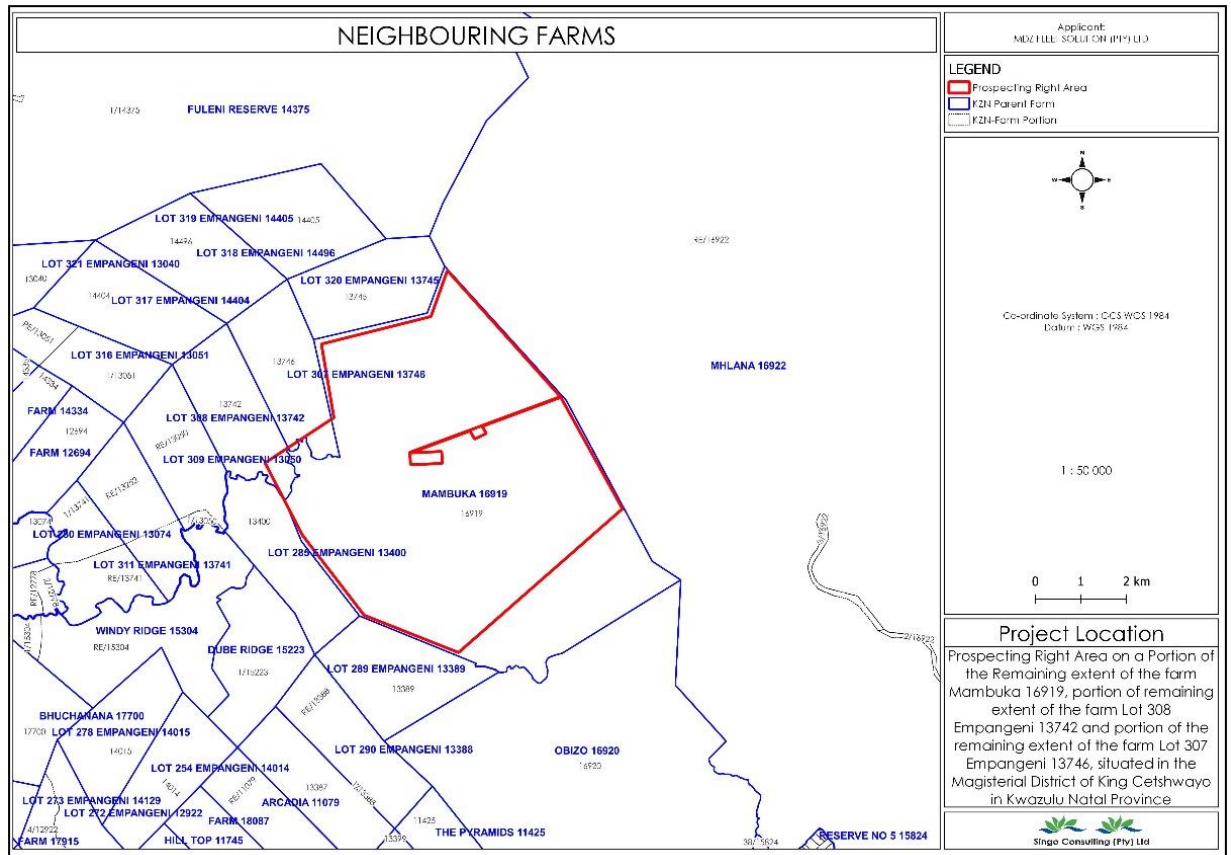


Figure 2: Adjacent Farms of the proposed project (Singo GIS, 2023)



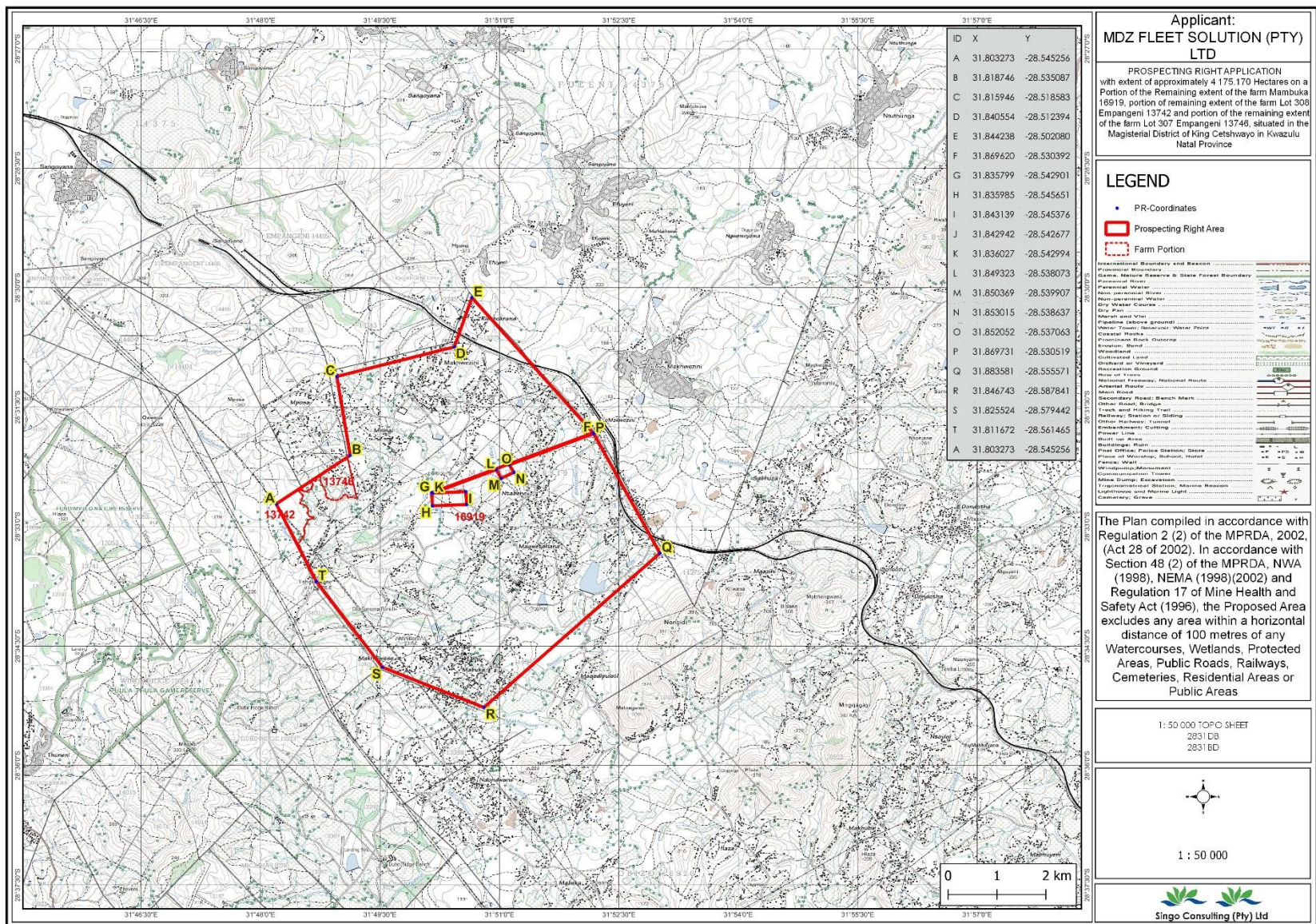


Figure 3: Regulation map showing Regulation Map of the proposed project area (Indicated by red) (Singo GIS, 2023)

**d) Description of the scope of the proposed overall activity.**

(Provide a plan drawn to a scale acceptable to the competent authority but not less than 1: 10 000 that shows the location, and area (hectares) of all the previously mentioned main and listed activities, and infrastructure to be placed on site).



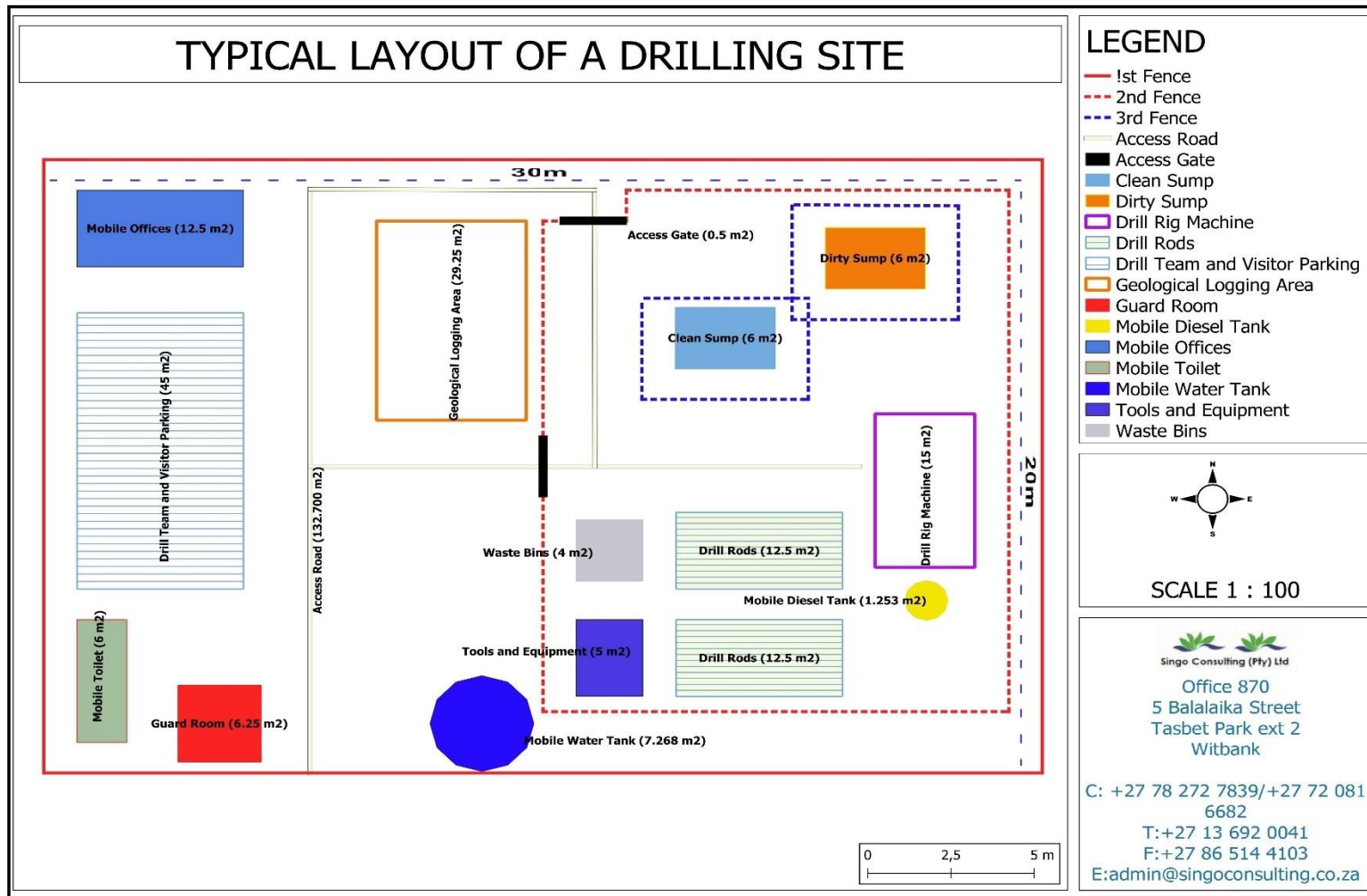
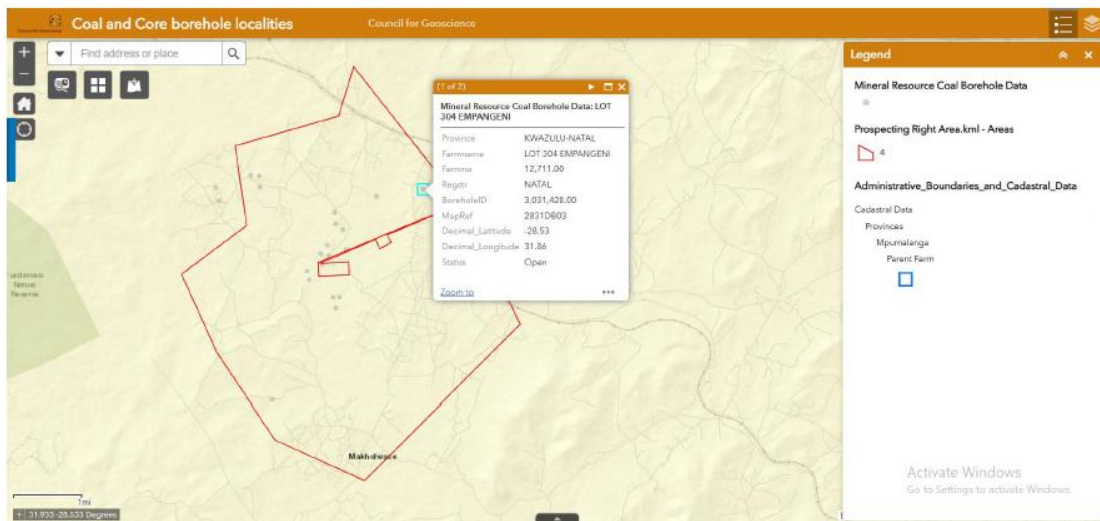


Figure 4: The drill site layout plan showing areas where specific activities will take place in the project area (Singo GIS, 2023)



**Figure 5: Council for Geosciences coal and core borehole results for the project area. (Singo Consulting (Pty) Ltd, 2023)**

Based on information available from the Council for Geosciences portal, there is available historical borehole data for the project area; however, this information has not yet been retrieved from the Council for Geosciences. From google earth imagery, there seems to be no mining operations located near the project area. Literature review shows that the area is located in geological formations of the Karoo Supergroup known to host coal deposits in the KwaZulu Natal region, particularly the Volksrust and Emakwezini Formations.

Based on the lack of evidence proving occurrence of coal within the area of interest, the prospecting right area still needs to be explored for the mineral of interest in order to prove its occurrence in the project area. Therefore, detailed exploration is required in the project area in the form of mapping, sampling and drilling in order to understand the occurrence of the mineral deposit.

As part of the prospecting phase, physical prospecting is planned to be conducted on site and will involve the use of diamond core drilling to investigate the existence of the expected mineralization, the thickness of the orebodies and its distribution. Core logs will be taken off-site to be sampled and analysed. An estimated 15 boreholes will be drilled one at a time at various locations within the proposed project area. The depths of the drill holes will average 200 m and will be determined onsite whilst the drilling programme is underway as influenced by the depths and dips measured in other holes. A buffer of 500 m will be kept from identified wetlands. A buffer of 100 meters will be kept from public roads.

The drill site will be fenced off, cleared and drilled. Rehabilitation will occur immediately after drilling. As a site is drilled, it will be rehabilitated, and the drilling crew will move onto the next planned hole. This procedure will be followed until all the holes are drilled. Drilling will be conducted in consultation with the landowners.

Bulk sampling, Excavation, Trenching and Pitting – None of the listed will be conducted during the prospecting phase.

### 3 DESCRIPTION OF ACTIVITY

#### i. Listed and specified activities

Section 16 of the Mineral and Petroleum Resources Development Act (MPRDA) (No. 28 of 2002) requires, upon request by the Minister, that an Environmental Management Programme should be submitted and that the applicant notifies and consults with Interested and Affected Parties (I&APs). Section 24 of the National Environmental Management Act (NEMA) requires that activities which may impact the environment be authorized by the relevant authority before commencing with that activity. Such activities are listed under Regulations Listing Notice 1 Government Notice (GN) 327 of the NEMA. See Table 2 for details of the listed activities.

Table 2: NEMA-Triggered Activities

NAME OF ACTIVITY  (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc. 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, plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)	Aerial extent of the Activity Ha or m <sup>2</sup>	LISTED ACTIVITY  (Mark with an X where applicable or affected).	APPLICABLE LISTING NOTICE GNR 517, June 2021	WASTE MANAGEMENT AUTHORISATION  (Indicate whether an authorisation is required in terms of the Waste Management Act). (Mark with an X)
Prospecting Area	4175.17 Ha	X	GNR 517 Listing	



			Notice 1, Activity 20.	Not required
<b>Vegetation clearing</b>	- 600m <sup>2</sup> * 15 = - 9000m <sup>2</sup> - 0.9 ha		GNR 517 Listing Notice 1, Activity 27	
<b>Drilling</b>	0.9 ha		Not Listed	
<b>Site Camp</b>	600m <sup>2</sup>		Not Listed	
<b>Temporary road creation</b>	5 725 m <sup>2</sup>	X	GNR 517, Listing Notice 1 Activity 56	

Total area to be disturbed

$9\ 000\ m^2 \div 10\ 000 = 0.9\ ha$

$30 * 20 = 600\ m^2$

$15\ boreholes * 600\ m^2 = 9000\ m^2$

## ii. Description of the activities to be undertaken

(Describe Methodology or technology to be employed, including the type of commodity to be prospected/mined and for a linear activity, a description of the route of the activity).

Coal prospecting activities will be conducted over a period of five years in the following phases:

### 3.1.1 Phase 1: Non-invasive prospecting

#### Phase 1A: Data collection and review.

This phase includes data collection and review of all available information relating to the project, such as property description, tenure and permitting, accessibility, climate, environmentally sensitive areas, historical work and geology. A site visit will be conducted during this phase.

#### Phase 1B: Field Mapping

Geological mapping involves plotting the location and altitude of the various rock units, faults, and folds on a base map. Geological maps are used to investigate geological hazards, mineral resources, groundwater aquifers, and just plain science. This method includes ground mapping of geological features including rock outcrops, lithological contact zones, any geological structural features, surface depressions.

### **Phase 1C: Data review report and analysis.**

This phase involves confirming adequacy of baseline project data available to support preparation of a Bankable Feasibility Study (BFS). Upon gap analysis completion, recommendations will be made to fill the shortfall in any technical or study area that may directly impact the quality of the Bankable Feasibility study. Phase 1A and 1B (combined) will be conducted for about 1–2 months.

#### **3.1.2 Phase 2: Geology and resources.**

This phase includes drilling, geochemical sample analysis, data verification and mineral resource estimation according to international reporting codes, such as the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC). Data acquisition and test work in the form of diamond or directional drilling (for geochemical assay and metallurgical test work) is required to support the study. Once the geochemical analytical results have been obtained, the generation of a geological and resource model and resulting SAMREC-compliant (or similar) mineral resource estimate may be completed. The drilling program will include at least 15 boreholes (Table 3) mainly aimed at verifying the acquired historical data by obtaining reliable samples from different depths below surface. The potential drilling method are described below.

##### **Diamond core drilling**

Diamond core drilling comprises a drill bit studded with diamond, which is mounted on a cylindrical rotating shaft. A hydraulic or mechanical chuck holds the drill shaft and mounted drill bit firmly, allowing it to rotate at the desired speed. The feed frame applies the necessary force to exert the right pressure on the bit for effective cutting. The flush pump passes water or other flushing fluids down the rod string and past the core barrel and core bit. This cools the bit and carries the cutting up to the surface outside the drill rod, reducing friction between the drill string and the borehole wall. The bit cuts out a core of rock, which moves up into the core barrel until the barrel is filled. When full, the rod string is hoisted until the core barrel reaches the surface where it can be emptied.



**Figure 6: Typical example of borehole drilling** (*Singo Drilling, 2023*)

**Table 3: Proposed prospecting phases and time frames**

Phase	Activity	Skill(s) required	Timeframe	Outcome	Timeframe outcome for	What technical expert will sign off on the outcome?
<b>Phase 1: Invasive Prospecting</b>						
	Diamond drilling (5 boreholes)	Exploration Geologist	Month 1 (30 days)	Borehole core data coal samples	Month 1	Exploration Geologist
	Sampling	Exploration Geologist		Rock core samples  Core analyses Rock core analyses	Month 2 – 3	Laboratory analyst
<b>Phase 1: Non-invasive Prospecting</b>						
	Consultations with landowners	Land Tenure Specialist	Month 1	Legal Access Agreement	Month 1	Land Tenure Specialist
	Data processing and validation	Exploration Geologist	Month 7-8	Stratigraphic correct borehole data Analytical correct borehole data	Month 8 – 10  Month 8 - 10	Exploration Geologist /Database administrator Exploration Geologist /Database administrator
	Lithofacies and Coal quality modelling	Exploration Geologist	Month 10-12	Contour maps Reserve breakdown	Month 10-12	Exploration Geologist /Modeller
	Inspection/Consultation with landowners	Land Tenure Specialist /Drilling contractor	Month 5-6	Rehabilitation clearance certificate	Month 5 - 6	Land Tenure Specialist / Environmental officer
<b>Phase 2: Invasive Prospecting</b>						

	Diamond drilling (5 borehole)	Exploration Geologist	Month 13	Borehole core data Coal core samples  Rock core samples Core analyses Rock core analyses	Month 13  Month 13-14	Exploration Geologist Laboratory analyst
	Geophysical survey (Optional)	Geophysicist Exploration Geologist	Month 13-15	Lithology data Structural data	Month 13-14	Geophysicist
	Geohydrological survey (Optional)	Geohydrologist Exploration Geologist	Month 13-14	Borehole water yield Water samples	Month 17-20	Geohydrologist
<b>Phase 2: Non-invasive Prospecting</b>						
	Consultation with landowners	Mining Rights officer	Month 12	Legal Access Agreement	Month 12	Land Tenure Specialist
<b>Phase</b>	<b>Activity</b>	<b>Skill(s) required</b>	<b>Timeframe</b>	<b>Outcome</b>	<b>Timeframe outcome</b>	<b>for</b> <b>What technical expert will sign off on the outcome?</b>
	Data processing and validation	Exploration Geologist	Month 17-18	Stratigraphic correct borehole data Analytical correct borehole data	Month 20 – 22  Month 20 - 22	Exploration Geologist /Database administrator Exploration Geologist /Database administrator
	Lithofacies and coal quality modelling	Exploration Geologist	Month 22-24	Contour maps Reserve breakdown	Month 22-24	Exploration Geologist /Modeler
	Inspection/Consultation with landowners	Mining Rights officer	Month 16-17	Rehabilitation clearance certificate	Month 16 - 17	Land Tenure Specialist / Environmental officer
<b>Phase 3: Invasive Prospecting</b>						

	Diamond drilling (5 borehole)	Exploration Geologist	Month 25	Borehole core data Coal core samples Rock core samples Coal core analyses Rock core analyses	Month 25  Month 25-36	Exploration Geologist  Laboratory analyst
	Directional drilling (Optional)	Exploration Geologist	Month 24-30	Lithological data	Month 24-36	Exploration Geologist
	Geophysical survey (Optional)	Geophysicist Exploration Geologist	Month 25-27	Lithology data Structural data	Month 25-36	Geophysicist
	Geohydrological survey (Optional)	Geohydrologist Exploration Geologist	Month 25-26	Borehole water yield Water samples	Month 29-36	Geohydrologist
<b>Phase 3: Non-invasive Prospecting</b>						
	Consultation with landowners	Mining Rights officer	Month 24	Legal agreement	Month 24	Land Tenure Specialist
	Data processing and validation	Exploration Geologist	Month 29-30	Stratigraphic correct borehole data Analytical correct borehole data	Month 32 – 36  Month 32 - 36	Exploration Geologist /Database administrator Exploration Geologist /Database administrator
	Lithofacies and Coal	Exploration Geologist	Month 34-36	Contour maps Reserve breakdown	Month 34-36	Exploration Geologist /Modeler
	Inspection/consultation with landowners	Land Tenure Specialist	Month 28-29	Rehabilitation clearance certificate	Month 28 - 36	Land Tenure Specialist / Environmental officer

Table 4: Proposed drilling Programme

Drilling method	Diamond core drilling
Number of boreholes	15
Depth of boreholes	200 m
Duration of drilling	A borehole takes about 2 days to complete; 15 boreholes will take about 30 days.
Demarcated working area	600 m <sup>2</sup> (600 m <sup>2</sup> per drilling site based on a 30 m x 20 m grid) which is equals to 0.06 ha per site
Total area to be disturbed	600 m <sup>2</sup> (600 m <sup>2</sup> x 15 boreholes = 9 000 m <sup>2</sup> (0.9 Ha))

### 3.1.3 Phase 3: Topographic survey

This phase includes a topographic survey. A detailed Digital Elevation Model (DEM) with 2m accuracy contour levels is required (existing LIDAr survey results to 5cm in the xyz space with a 1cm ortho-image is available).

### 3.1.4 Phase 4: Geophysical investigations

This phase involves collection of sub-surface information relative to the Karoo Supergroup stratigraphy; this will affirm the exact location of the and its depth; the nature and effects of dolerite intrusions; and the characteristics of the bed rock and overburden. Geophysical survey results will be interpreted with geological and drilling data to provide a firm basis for analysis of the Coal characteristics and its potential of being converted from resource to reserves.

### 3.1.5 Phase 5: Mineral processing and metallurgical testing

This phase involves following standard procedures for Feasibility studies to obtain test work results to determine the Run of Mine (RoM) ore quality. RoM ore quality is needed to establish basic beneficiation plant design criteria and start with basic engineering, layout planning, preliminary tendering and cost estimates of initial capital costs for each of the main components, production planning and operating cost estimates.

### 3.1.6 Phase 6: Reporting

This phase includes review, interpretation, peer review, conclusions and recommendations, and the compilation of the final Bankable Feasibility report signed off by the Competent Person. The Mineral and Ore Reserve Report produced during this phase, will be SAMREC-compliant.



## **3.2 EQUIPMENT**

The equipment to be used is as follows:

- a) Drill Equipment
- b) Mechanical Shovel
- c) Temporary Fencing
- d) Wooden pegs
- e) Safety Cones
- f) Field vehicles
- g) Spades
- h) First aid kit
- i) Sample bags
- j) PPE (dust mask; gloves; goggles reflector vest)

Equipment will be stored at the active drill site.

## **3.3 Auxiliary Activities**

### **3.3.1 Access roads**

The project area is located approximately 26.36 km northwest of Richards Bay and 18.60 km north-northwest of Empangeni and is located around villages such as Magwetshana village and Makholwase village. Accessibility to the site is convenient as it is located around residential areas. The area can be easily accessed through the use of R34 and multiple gravel roads that cuts through the prospecting right area.



**Figure 7: Different existing access roads to the proposed project area (Singo Consulting (Pty) Ltd, 2023)**

### 3.3.2 Ablution facilities

Mobile toilets will be installed on site for ablution purposes, and they will be removed after the prospecting period.



**Figure 8: An image showing a typical example of mobile toilets (Singo Consulting (Pty) Ltd, 2023)**

### **3.3.3 Temporary Office Area**

A temporary site office shaded area will be erected at the drill sites. No on - site electricity generation through the use of generators will be undertaken. Meals will be provided to the staff and workers as no heating and / or cold storage facilities will be available. A shaded eating area will be provided.

### **3.3.4 Accommodation**

Accommodation for staff and workers will not be provided on site, but in nearby towns (e.g Empangeni) around the proposed project area as there are Lodges and guest houses. Night security staff will be employed once equipment has been established on site.

### **3.3.5 Blasting**

As the Prospecting Works Programme (PWP) does not allow for bulk sampling, no blasting will take place.

### **3.3.6 Storage of dangerous goods**

During drilling activities, limited quantities of diesel fuel, oil and lubricants will be stored on site. The only dangerous goods that will be stored in any significant quantity is diesel fuel. Less than 30m<sup>3</sup> will be stored in above - ground diesel storage tanks.

## 4 LEGAL FRAMEWORK

### e) Policy and Legislative Context.

The following context includes the legislations that are associated with prospecting processes.

Table 5: Applicable legislation to this application.

Applicable legislation and guidelines used to compile the report	Reference where applied	How does this development comply with and respond to the policy and legislative context
<p>A description of the policy and legislative context within which the development is proposed, including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process.</p>		<p>E.g., In terms of the National Water Act, a Water Use License has been applied for.</p>
<p>Legislation</p>		
<p>NEMA, No. 107 of 1998 (as amended) Listing Activity 20 of Listing Notice 1 in terms of Regulation 983 of 2014</p>	<p>Prospecting activities</p>	<p>In terms of the NEMA, No. 107 of 1998 (as amended), an application for Environmental Authorization was submitted to the DMRE. DMRE Ref: <b>(KZN 30/5/1/1/2/11413 PR)</b>. MDZ Fleet Solutions (Pty) Ltd appointed Singo Consulting as an independent EAP to undertake the Basic Assessment Process associated with the Prospecting Right Application. All potential impacts of the proposed prospecting activities have been assessed. The EMPr includes mitigation measure implementation, which will apply throughout prospecting activities.</p>
<p>As per the Constitution of South Africa, specifically, everyone has a right to: an environment that is not harmful to their health or wellbeing; and have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that: prevent pollution and ecological degradation promote conservation secure</p>	<p>Prospecting activities</p>	<p>An EMPr for proposed prospecting activities has been drafted to ensure that prospecting activities are conducted in such a manner that significant environmental impacts are avoided. Where significant impacts cannot be avoided, they will be minimized and mitigated to protect the environmental right of South Africans.</p>

Applicable legislation and guidelines used to compile the report	Reference where applied	How does this development comply with and respond to the policy and legislative context
ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.		
MPRDA, No. 28 of 2002 Section 16 (as amended)	Prospecting activities	The applicant submitted a Prospecting Right Application to the DMRE. The conditions and requirements of the prospecting right will apply to the prospecting activities.
NEMA Biodiversity Act, 2004		The EMPr will regulate the applicant's implementation of biodiversity management measures. This is particularly relevant to all species of the Highveld Grassland family and the project area falls under unclassified.
National Water Act (NWA), Act 36 of 1998	N/A	Water use license has been applied for in terms of of Chapter 4 of the National Water Act, 1998 (Act 36 of 1998).
National Environmental Management: Waste Act, Act 59 of 2008 (NEMWA) (as amended)	Management measures environmental awareness plan	Waste generation will be minimized by ensuring employees of the drilling contractor are subjected to the appropriate environmental awareness campaign before drilling commences. All waste generated during the drilling activities will be disposed of in a responsible legal manner. Proof of legal disposal will be maintained on site.
National Heritage Resources Act (NHRA), 25 of 1999.	Management measures	Should archaeological artefacts or skeletal material be discovered in the area during development activities, activities will be stopped, and the South African Heritage Resource Agency (SAHRA) will be notified for an investigation and evaluation of the discoveries.
<b>Municipal plans and policies</b>		
Local Municipality Integrated Development Plan (IDP) 2022-2023	N/A	The prospecting and mining of key minerals like Coal is highlighted in the IDP. It also highlights the need to preserve the natural environment in the area by conducting mineral exploration that is minimally invasive to the environment.
Municipality 2014-2034 Spatial Development Framework (SDF)		The applicant acknowledges the need to maximize economic benefit from mining, industrial, business, agricultural and tourism development in the area and promote a climate for economic development in line with the municipal development frameworks.
<b>Standards, guidance and spatial tools</b>		
South African National Biodiversity Institute (SANBI) Biodiversity GIS (bgis.sanbi.org)	Baseline environmental description.	Used during desktop research to identify sensitive environments in the prospecting rights area.

Applicable legislation and guidelines used to compile the report	Reference where applied	How does this development comply with and respond to the policy and legislative context
QGIS Desktop: Version 2.18.10.	Baseline environmental description and mapping.	Used during desktop research to map the locality and sensitive environments in the prospecting rights area.

## 5 NEED AND DESIRABILITY

### f) Need and desirability of the proposed activities.

(Motivate the need and desirability of the proposed development including the need and desirability of the activity in the context of the preferred location).

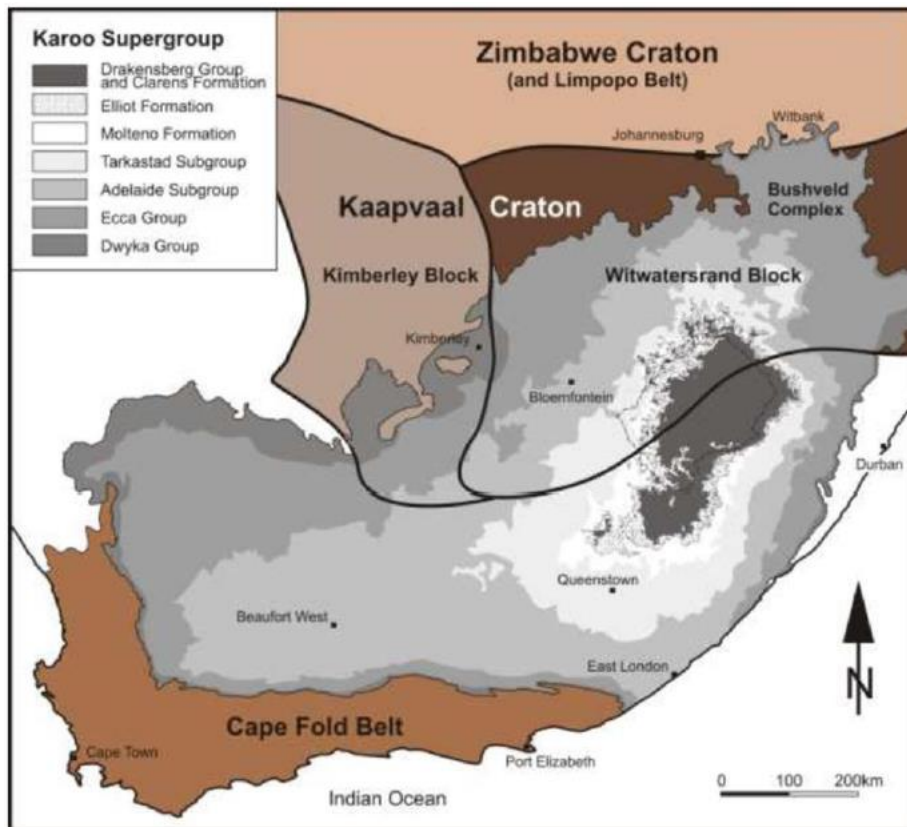
NEED AND DESIRABILITY OF THE PROPOSED PROJECT		
PART I: NEED		
Questions (Notice 792, NEMA, 2012)		Answers
1.	Is the land use associated with the activity being applied for considered within the timeframe intended by the existing approved SDF agreed to be the relevant environmental authority?	Prospecting is an integral part of its rationale to make use of the abundant natural resources in the area to create strong, resilient, and prosperous district. The land use is not associated with prospecting.
2.	Should the development, or if applicable, expansion of the town/area concerned in terms of this land use occurs here at this point in time?	Should a mining right be applied for and be approved in future, the integrity of the existing environmental management priorities of the area may be compromised, and a full Environmental Impact Assessment must then be conducted to determine the sustainability of the prospecting activities. The proposed project will have a positive impact on the socio-economic conditions of the local communities involved, should the results of the prospecting show that feasible reserves are present to mine and a mining right is approved.
3.	Does the community/area need the activity and the associated land use concerned?	According to the IDP (2022/2023), The informal economy of the municipalities

	This refers to the strategic as well as local level.	only employs paltry 10.3%, much lower than the district (18.5%) and province (12.6%). This should be an opportunity for the UMfolozi and UMhlathuze municipality to consider SMME support interventions, or business incubation programmes aimed at achieving SMME growth and expansion. The MDZ Fleet Solutions (Pty) Ltd prospecting will yield positive impact on the socio-economic conditions especially if it graduates to mining, by creating more jobs and providing developments to the local dwellers and more to the farm workers.
4.	Are the necessary services with adequate capacity currently available (at the time of application) or must additional capacity be created to cater for the development?	All service and capacity infrastructure will be temporary and provided for the proposed prospecting/drilling activities. Mobile toilets and temporary shaded areas (in the form of gazebos) are examples of temporary infrastructure. The drilling mechanisms used will be diamond core drilling. The road networks are completely intact, and the project will have no significant impact on traffic congestion. Existing routes will be used and maintained, as will the structures in the areas, for the duration of the drilling project.
5.	Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of the services and opportunity cost)?	The development is not provided for in the infrastructure planning of the municipality as it is a small development of local importance. Thus, the proposed project will not have any implications for the infrastructure planning, as no services and/or infrastructure needs to be upgraded or created to cater for this project. The proposed project will be making use of mobile structures.
6.	Is the project part of a national programme to address an issue of national concern or importance?	The mining sector is a significant contributor to the National GDP as well as a massive employer of people. This project will contribute to the National Development Plan of eradicating poverty/unemployment. Chapter 6 of the National Development Plan highlights an "inclusive rural economy"

		and the objectives of this plan are to create jobs in mining and industry and activating rural economies through service to small and micro mining.
<b>PART II: DESIRABILITY</b>		
7.	Is the development the best practicable environmental option for this land/site?	The project area lies on unclassified areas. The activities currently dominated by natural vegetation and little of plantation and cultivation. The disturbed areas (drill sites) will be rehabilitated after prospecting activities.
8.	Would the approval of this application compromise the integrity of the existing approved and credible IDP, and SDF as agreed to by the relevant authorities?	The approval of this prospecting application will not compromise the integrity of the existing environmental management priorities of the area provided that sensitive areas are avoided, and the mitigation measures as recommended in this report and in the EMPr are implemented.
9.	Would the approval of this application compromise the integrity of the existing environmental management priorities for the area (e.g. as defined in EMFs), and if so, can it be justified in terms of sustainability considerations?	The integrity of the existing environmental management priorities for the area will not be compromised by this development.
10.	Do location factors favour this land use at this place? (this relates to the contextualization of the proposed land use on this site within its broader context).	Coal is formed by the accumulation of plant debris, which typically occurs in a swamp environment. The rate of plant debris accumulation must be greater than the rate of decay in order to form the thick layer of plant debris required to produce a coal seam. When a thick layer of plant debris forms, it must be buried by sediments like mud or sand. Typically, these are washed into the swamp by a raging river. The weight of these materials compacts plant debris, assisting in its conversion to coal. One foot of coal is equivalent to about ten feet of plant debris.
11.	How will the activity of the land use associate with the activity being applied	As far as the Basic Assessment on the area of question, there is known heritage



	for, impact on sensitive natural and cultural areas (built and rural/natural environment)?	or cultural significance as numerous graves were confirmed on site and Heritage study will be conducted with recommendations to the applicant.
12.	How will the development impact on people's health and well-being? (E.g. In terms of noise, odours, visual character and sense of place, etc.)?	<p>In summary, due to the fact that this area has a low density of residents (Community but has farmers, the impacts on well-being, following mitigation, will be as follows:</p> <ul style="list-style-type: none"> <li>• Visual: Medium to low</li> <li>• Dust: Low</li> <li>• Noise: Low</li> <li>• Vibrations: Low</li> </ul> <p>Strict adherence to the recommendations &amp; mitigation measures identified will be ensured.</p>
13.	Will the proposed activity or the land use associated with the activity being applied for, result in unacceptable opportunity costs?	For a long time, the mining industry in KwaZulu Natal has been a pillar of the economy. South Africa continues to demonstrate that mineral revenues can generate significant economic benefits in the countries where they are extracted. In order to maintain the need for electricity in the UMfolozi and UMhlathuze Local Municipality, the applied commodity contributes significantly to the Municipal GDP.
14.	Will the proposed land use result in unacceptable cumulative impacts?	The proposed project only has minimal cumulative impacts that can be mitigated to an acceptable level. The measures outlined in the attached EMP will be used to keep the proposed project from having any significant long-term cumulative impacts on the receiving environment.



**Figure 9:** General representation of the Karoo Supergroup (Hancox and Gotz, 2014).

Although prospecting activities are not labour intensive, few people will be hired to assist with general activities. The services required can also be sourced locally depending on their availability thus growing the economy of UMfolozi and UMhlatuze Local Municipality.

## 6 ALTERNATIVES

### **g) Motivation for the overall preferred site, activities and technology alternative.**

Soil baseline study, Hydrological baseline study and some Hydrogeological baseline study were conducted, and some specialist studies will not be conducted based on the theme sensitivities from screening tool, as some sensitivities were not confirmed during ground truthing. However, boreholes that are in high sensitivity area will be repositioned to less sensitivity areas and other studies such as Heritage study will be conducted upon the request from SAHRA.

Geophysical surveys and drilling are the only major methods used in exploring for deposits of this type and for resource definition and evaluation. The technology to be used cannot be replaced by any other methods thus these are the preferred activities.

There is no other site alternative as the property provides the ideal geological formation for the presence of the minerals applied for. Literature review shows that the area is located in geological formations of the Karoo Supergroup known to host coal deposits in the KwaZulu Natal region, particularly the Volksrust and Emakwezini Formations. Therefore, the prospecting right area needs to be explored for the mineral of interest in order to prove its occurrence in the project area.

#### **h) Full description of the process followed to reach the proposed preferred alternatives within the site.**

NB!! – This section is about the determination of the specific site layout and the location of infrastructure and activities on site, having taken into consideration the issues raised by interested and affected parties, and the consideration of alternatives to the initially proposed site layout.

Each phase depends on the result of the preceding one. As such, mapping of the prospecting activities could not be undertaken for inclusion in this report.

#### **i. Details of the development footprint alternatives considered.**

With reference to the site plan provided as Appendix A and the location of the individual activities on site, provide details of the alternatives considered with respect to:

- a. Property on which or location where it is proposed to undertake the activity;
- b. Type of activity to be undertaken;
- c. Design or layout of the activity;
- d. Technology to be used in the activity;
- e. Operational aspects of the activity; and
- f. Option of not implementing the activity.

## **6.1 Property**

MDZ Fleet Solutions (Pty) Ltd is applying for Coal Prospecting Right on Portion of the Remaining Extent of the farm Mambuka 16919, Portion of the Remaining Extent of the farm Lot 308 Empangeni 13742 and Portion of the Remaining Extent of the farm Lot 307 Empangeni 13746, based on existing knowledge of the geological information of that area. The site was identified based on knowledge of the Coal deposits and as such, no site alternatives have been considered for the proposed activities.

The following buffers will be applied to the final site selection:

- No drill site will be positioned within 100 m of a structure
- No drill site will be positioned within 500 m of a water course or wetland
- Where possible existing access roads will be utilized to access the drill sites.

## **6.2 Type of Activity**

Techniques were chosen based on the long-term success of the selected drilling method and prospecting process.

- A total number of 15 drill holes are proposed for the site.
- It will be possible to drill 100m-120m per day, covering about 2 days to drill one hole.
- All holes will be drilled by means of a diamond drill rig.
- The holes will be drilled to an average of 200 m and broadness (diameter) may vary between 60 mm - 75.7 mm. This will allow establishment of the thickness of the overburden.
- Holes will not be drilled closer than 500 m to any stream/river and not within 500 m from a natural wetland. Identified heritage sites will be marked and avoided.
- Overburden will be recorded, and the holes filled back simultaneously.
- Drilling will take place one hole at a time. The drill site will be cleared of obstructions and debris and then drilled. Rehabilitation will occur concurrently with drilling.

## **6.3 Design & Layout**

Since exploration is temporary in nature no permanent structures will be constructed, Negotiations and agreements will be made with the farm owners to use any existing infrastructure like access roads. No infrastructure will be developed on site; portable ablution facilities will be used.

- Activities will be limited to the drilling of 15 boreholes to be determined by the geological formations found during prospecting.
- It is planned to use one rig for all drill holes. Rehabilitation will be closely controlled, and supervision will be focused.
- No changes to the layout are considered but with the geophysical survey information, the holes can be orientated to match the shape of the orebody.

#### **6.4 Technology**

The biggest technology intervention is the use of geophysical surveys, which makes the requirement for less holes apparent. Geophysical surveys also provide an added advantage of being done quickly and so execution can commence early. The safety factor of utilizing geophysical surveys is also apparent, as there is less time to keep people exposed to moving machinery.

#### **6.5 No-Go Option**

The existing agricultural livestock activities will continue. If prospecting is not approved, the presence of Coal will not be assessed. The feasibility for mining at the proposed site will not be established. The Coal which is important to the on-going industrialization of the South African economy may not be identified, recovered, processed and deployed to grow the economy.

### **7 PUBLIC PARTICIPATION PROCESS**

#### **ii. Details of the Public Participation Process Followed**

(Describe the process undertaken to consult interested and affected parties including public meetings and one on one consultation. NB: the affected parties must be specifically consulted regardless of whether they attended public meetings. Information to be provided to affected parties must include enough detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land).

The Public Participation Process (PPP) mainly comprises the communications and discussions with Interested and Affected Parties (I&APs) and is of utmost importance in any assessment process. The PPP provides people who may be interested in or affected by the proposed development with an opportunity to provide comments and to raise issues or concern, or to make suggestions that may result in enhanced benefits for the project. The PPP, inter alia, involves the following:

The main aspect around public participation is finding the relevant I&APs, in this project the relevant I&APs were.

- Landowners
- Adjacent Landowners

- Local Municipality
- Government Departments

**i. Notification of potentially interested and affected parties.**

The PPP commenced on Friday 2 June 2023. Potentially Interested and Affected Parties were notified of the proposed application by: -

- A Background Information Document (BID), which was prepared and distributed via email to all possible I&APs from the 6<sup>th</sup> of June 2023.
- Newspaper Advertisement was published on Friday the 2<sup>nd</sup> of June 2023 in English and Zulu on the ZO Classifieds. Please refer to Figure 11 below.
- Site notices (A2) were accessible by the public around the project area on the 12<sup>th</sup> of June 2023 to 14<sup>th</sup> of June 2023.

Stakeholder engagement & consultation through BID commenced for 30 days from the day of announcement: 2<sup>nd</sup> of June 2023 to 3<sup>rd</sup> of July 2023, unfortunately it could not be released to stakeholders and I&APs for review on the 3<sup>rd</sup> of July 2023, due to finalisation of the studies. The Draft BAR and EMPr will be released for a period of 30 days, starting from the day the Draft and EMPr are distributed to stakeholders.

0055 SALES/ MARKETING

EXCITING

Opportunity for self motivated individuals to join a dynamic Marketing Co. as sales reps with an opportunity to grow into management position within 6 to 12 months exists at our Richards Bay branch. Interviews will be conducted in Richards Bay.

Call Pearl 067 135 5684

0074 TRAINING

MLETHI SECURITY AND TRAINING CC

Security courses: Grade E, D, C, B & A. One week per course. Jobs available after training. Contact Sikhawini 035 988 0824 082 420 7092

0077 DOMESTIC EMPLOYMENT/ ACCOM.

Beware, do not pay any money in advance for any employment you are offered. That is not the way business operates. Don't pay money to obtain the position, medals, uniforms, etc.

0900 LEGALS

0910 PUBLIC LEGAL NOTICES

CITY OF UMHLATHUZE INVITATION TO COMMENT ON AN APPLICATION SUBMITTED IN TERMS OF SECTIONS 27(1)(E) AND (G) OF THE UMHLATHUZE SPATIAL PLANNING AND LAND USE MANAGEMENT BY-LAW 2017 (AS AMENDED) FOR THE SUBDIVISION OF THE FARM MERCHISTON NO. 12085 INTO PROPOSED PORTION 1 AND

REMAINDER OF THE FARM MERCHISTON NO. 12085 INTO PROPOSED PORTION 2 AND REMAINDER OF PROPOSED PORTION 3 OF THE FARM MEYAMHLOPE NO. 18039 WITH PROPOSED PORTIONS 8 AND 9 (OF 4) BOTH OF THE FARM MERCHISTON NO. 12085 TO FORM THE FARM MEYAMHLOPE NO. 18047 AND

REMAINDER OF THE FARM MEYAMHLOPE NO. 18039 AND PORTION 1 OF THE FARM AITHERFOLD NO. 11162 TO FORM THE FARM SIMPSON NO. 18048

Notice is hereby given that the Umhlathuze Municipality is about to consider an application submitted as follows: a) Subdivision of the Farm Merchiston No. 12085 into proposed Portion 1 and Remainder; b) Subdivision of the Farm Merchiston No. 12085 into proposed Portion 2 and Remainder; c) Subdivision of the Farm Merchiston No. 12085 into proposed Portion 3 and Remainder; d) Consolidation of proposed Portion 1 of the Farm Merchiston No. 12085 with proposed Portion 8 and 9 (of 4) both of the Farm Merchiston No. 12085 to form the Farm Merchiston No. 18047;

Consolidation of the Farm Merchiston No. 18039 and Portion 1 of the farm Aitherfold No. 11162 to form the farm Simpson Farm No. 18048. The application sites are located along provincial road R34 about 13km west of Empangeni (EC).

3900 @umhlathuze.gov.za The applicant documents may also be downloaded from Council's Website at www.umhlathuze.gov.za under 'Notices' from 1 June 2023.

MR NKOSEYE ZULU CITY MANAGER

02-06-2023

CITY OF UMHLATHUZE INVITATION TO COMMENT ON AN APPLICATION SUBMITTED IN TERMS OF SECTIONS 27(1)(E) AND (G) OF THE UMHLATHUZE SPATIAL PLANNING AND LAND USE MANAGEMENT BY-LAW 2017 (AS AMENDED) FOR THE SUBDIVISION OF PORTION 2 OF FARM MERCHISTON NO. 12085 INTO PROPOSED PORTIONS 10 AND 11 OF THE FARM MERCHISTON NO. 12085 AND THE REMAINDER

Notice is hereby given that the Umhlathuze Municipality is about to consider an application submitted in terms of Sections 27(1)(E) and (G) of the Umhlathuze Spatial Planning and Land Use Management By-law, 2017 (as amended), for the subdivision of Portion 2 of the Farm Merchiston No. 12085, into proposed Portion 10 and proposed Portion 11 and the Remainder.

3900 @umhlathuze.gov.za The applicant documents may also be downloaded from Council's Website at www.umhlathuze.gov.za under 'Notices' from 1 June 2023.

02-06-2023 CIVIC OFFICES Private Bag 11004 RICHARDS BAY

MR NKOSEYE ZULU CITY MANAGER

02-06-2023

ESTATE NOTICE IN THE ESTATE OF THE LATE JOSEPH MADZISE IDENTITY NUMBER: 60268589900 ESTATE NUMBER: 00268589900 DBN

MR NKOSEYE ZULU CITY MANAGER 02-06-2023

BUTHELEZI ZUNGU INC. 3rd Floor, ABSA Building, RICHARDS BAY

02-06-2023

Public Notice APPLICATION IN TERMS OF THE SPATIAL PLANNING AND LAND USE MANAGEMENT ACT (ACT 16 OF 2012) AND ITS REGULATIONS READ WITH THE UPHONGOLO MUNICIPALITY SPATIAL PLANNING AND LAND USE MANAGEMENT BY-LAW INVITATION TO COMMENT

Notice is hereby given in terms of the Spatial Planning and Land Use Management Act (Act 16 of 2012) and its Regulations read with the Uphongolo Municipality Spatial Planning and Land Use Management By-law that an application has been lodged with Uphongolo Municipal Council, for:

Special Consent application for the purpose of the establishment of a free standing telecommunication base station mast on Remainder of the Farm Highlands, 29, situated at Itshelejeba neighbourhood, Pongola, Registration Division-Uh, Uphongolo Municipality, KwaZulu Natal Province in terms of Section 47 (c) of Chapter 4 of the Uphongolo Spatial Planning and Land Use Management By-Law read with the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013).

Documentation relating to the application is available for inspection between 07:30 to 16:15, Monday - Friday at the Town Planning Offices, 61 Marsh Street, Uphongolo Local Municipality for a period not less than 30 days as from the first day of this publication.

Any person having an interest here must lodge written comments within 30 days from the date of this notice, to the Manager Town Planning and Housing, Mr. B. Dlamini, P.O. Box 191, Pongola, 3170 or email gndlamini@uphongolo.gov.za

MR MVM MBATHA DIRECTOR: DEVELOPMENT PLANNING, HOUSING AND LED

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PUBLIC & LEGAL NOTICES

PUBLIC NOTICE

APPLICATION IN TERMS OF THE SPATIAL PLANNING AND LAND USE MANAGEMENT ACT (ACT 16 OF 2012) AND ITS REGULATIONS READ WITH THE UPHONGOLO MUNICIPALITY SPATIAL PLANNING AND LAND USE MANAGEMENT BY-LAW INVITATION TO COMMENT

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MR MVM MBATHA DIRECTOR: DEVELOPMENT PLANNING, HOUSING AND LED

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PUBLIC & LEGAL NOTICES

PUBLIC NOTICE

NOTICE OF PUBLIC PARTICIPATION FOR PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORIZATION APPLICATION

ISIZULU Isaziso Sobhelo Lokucela Iingelosi Lokubheka Ngokukhuluma ngokMithetho Wolininer kanye nePetroleum Resources Development Act (MPRDA) (Act 28 of 2002) mayelana nokulawula kwamaBheka kwengxenywe esele yezulazi-1 Mambaka 16918 kanye yezulazi-1 Lot 307 Empangeni 13746 kunye nengxenywe esele yezulazi-1 Lot 308 Empangeni 13742 endaweni yeFunda sikaMantshi saseKing Cetshwayo lufundazwe saKwa-Zulu Natal.

ISIMEMO SOKUBHALISA & PAWULWA Isaziso sikhawisa ngokMithetho wokuthubukiswa kwezMibha Nazimbazoni kanye nePetroleum Resources Development Act (MPRDA) (Act 28 of 2002) kanye nemithetho yase-EIA ka-2014, esichelwe ngaphansi kwesaziso sakhulumeni esingunombolo 982 kuGazethi No. 3822 miba zingu-8 kuZindoloni, kunyaka ka-2014, esichelwe miba zingu-7 kuLubasa kunyaka ka-2017 futhi ngu GN 517 ngq-11 Juni 2021, sokuthi MDZ Fleet Solutions (Pty) Ltd lufake isakelo seLungelo Lokuhlola amamineral ashwo ngenhla DMRE Ref: KZN 305/11/211413 PR.

Ngenengxenywe yenqubo ye-EIA, ikakhulukazi inqubo yokubamba izakha kumpikathi kule projekthi elingokuzwayo, Abanombhalekeli Nabathintekayo (S&Ps) bayaminywa ukuba babhalise futhi bathumele ngokwama noma yikuphi ukuphawula noma ukukhathazeka ukuze kufinyelele kw-Public Participation Officer: uNkosi Mazhiti Mangu, kusethenziswa imininingwane yokuthumana enikezwe ngezansi. Umphakathi uyaminywa futhi ukuthi ubuyezwe futhi uphawule mayelana Nohlazi Lombiko Wokuhlola Okuyisakelo kanye ne-EMPR Uthaka lwe-BAR & EMPr luzotholokala ukuthi libuyezwe esikhaleni sakhaleni kuzokuba ezingama-30 kusukela ngoMsimbuluko miba zingu-1 kuNkululekazi wazi-2023 ukuya ngqo wasibili miba zivi-1 kuNcwaba wazi-2023 (ngaphandle kwamaholidi).

Lo mbiko uzotholokala KwamBonambi Public Library (KwaMbonambi, 3915), Nambanana Untapo Wolwazi Public Library (+28.694023, 31.848237) kunye noMasipata wasekhaya UMfolozi (25 Bedelia Street, KwaMbonambi) ikhophi ethambile iyatholokala kwa-Singo Consulting (Pty) Ltd una izakha, kusethenziswa imininingwane yokuthumana yomisi ka-Environmental Assessment Practitioner (EAP), Amazwana nge-DBAR & EMPr kufanele athanyiswe ngaphambi kombiza zivi-1 kuNcwaba 2023.

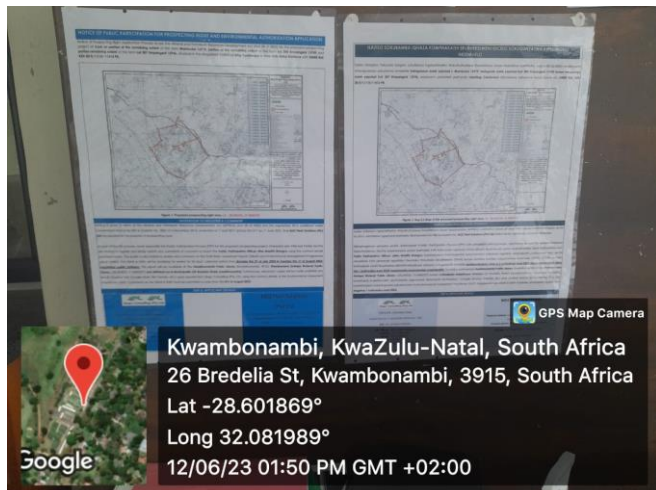
EAP Contact Details: Singo Consulting (Pty) Ltd Physical Address: Office 870, 5 Balaakla Street, Tsebet Park Ext. 2, eMalaheni (Witbank), 1040 EAP: Mr. Khondani Mathiso PPP Officer: Miss. Mazhiti Mangu Cell No.: +27 74 884 1000 Tel No.: +27 13 652 0041 Fax No.: +27 13 651 4103 Email: mazihi@singoconsulting.co.za

Applicant Details: MDZ FLEET SOLUTIONS (Pty) Ltd Physical Address: Unit 147, Fernridge Estate, 1944 Fourways Ext 34, Fourways, 2191 Contact person: Mr. Ramabulana Aluwani Percy Cell No.: +27 79 467 7347 / +27 79 402 3625 Tel No.: +27 1000 4096 Email: aluwani@mdzfleetings.co.za

Comments on the Draft BAR & EMPr should be submitted no later than the 1st of August 2023.

Figure 10: Newspaper Ad on ZOO Classified (2nd June 2023)

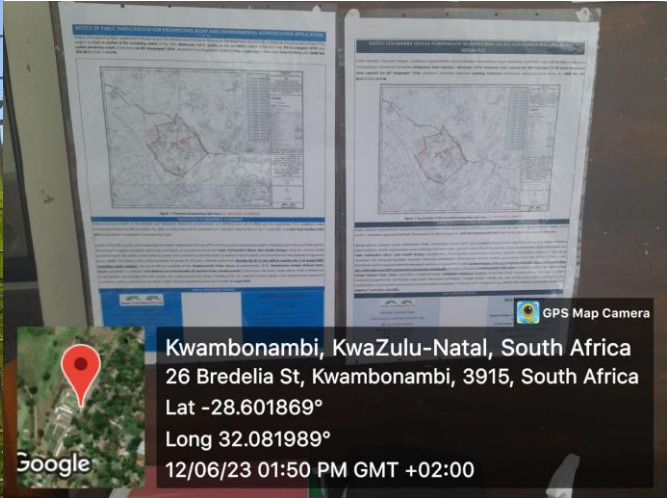








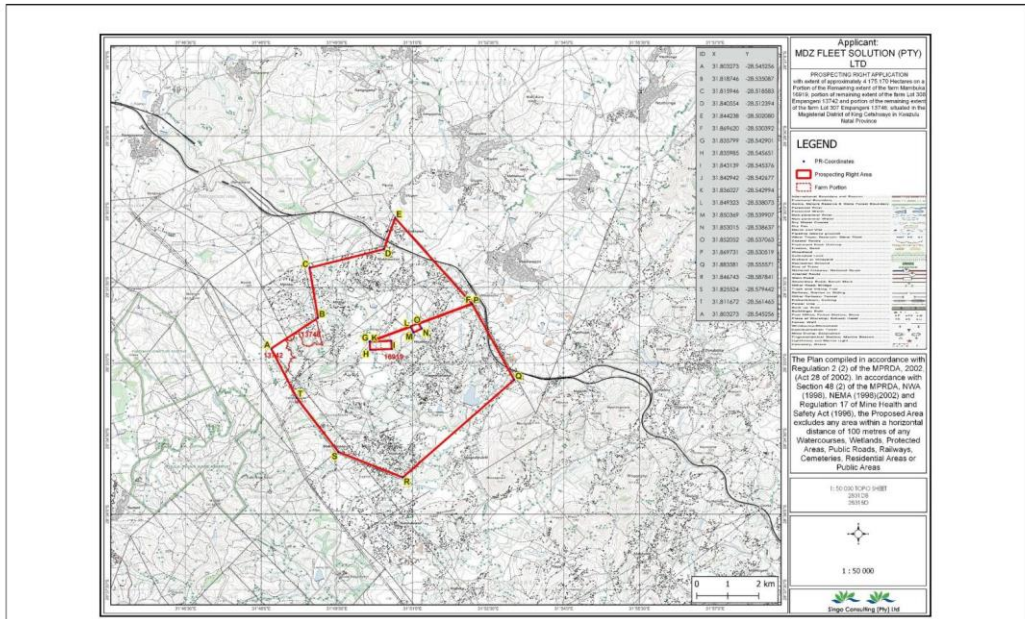
Magwetshana, KwaZulu-Natal, South Africa  
Unnamed Road, Magwetshana, South Africa  
Lat -28.563547°  
Long 31.853733°  
14/06/23 12:41 PM GMT +02:00



Kwambonambi, KwaZulu-Natal, South Africa  
26 Bredelia St, Kwambonambi, 3915, South Africa  
Lat -28.601869°  
Long 32.081989°  
12/06/23 01:50 PM GMT +02:00

**NOTICE OF PUBLIC PARTICIPATION FOR PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORIZATION APPLICATION**

Notice of Prospecting Right Application Process as per the Mineral and Petroleum Resources Development Act (Act 28 of 2002) for the proposed prospecting project of **Coal on portion of the remaining extent of the farm Mambuka 16919, portion of the remaining extent of the farm Lot 308 Empangeni 13742 and portion remaining extent of the farm Lot 307 Empangeni 13746**, situated in the Magisterial District of **King Cetshwayo** in **Kwa-Zulu Natal Province** with **DMRE Ref KZN 30/5/1/2/ 11413 PR**.



**INVITATION TO REGISTER & COMMENT**

Notice is given in terms of the Mineral and Petroleum Resources Development Act (MPRDA) (Act 28 of 2002) and EIA regulations 2014, published under Government Notice No.982 in Gazette No. 3822 of 4 December 2014, amended on 7 April 2017 and by GN 517 on 11 June 2021, that **MDZ Fleet Solutions (Pty) Ltd** has applied for the purpose of prospecting coal.

As part of the EIA process, more especially the Public Participation Process (PPP) for this proposed prospecting project, Interested and Affected Parties (I&APs) are invited to register and kindly submit any comments or concerns to reach the **Public Participation Officer: Miss Mazithi Mangcu** using the contact details provided below. The public is also invited to review and comment on the Draft Basic Assessment Report (DBAR) and Environmental Management Programme report (EMPr). The DBAR & EMPr will be available for review for 30 days' calendar period from **Monday the 3<sup>rd</sup> of July 2023 to Tuesday the 1<sup>st</sup> of August 2023, (excluding public holiday)**. This report will be available at the **KwaMbonambi Public Library** (KwaMbonambi, 3915), **Ntambanana Umfapo Wolwazi Public Library** (-28.694023, 31.8482327), **UMhlatuze Local Municipality** (6 Mark Strasse, Richards Bay Central,3900) and **UMfolozi Local Municipality (25 Bredelia Street, kwaMbonambi)**. Furthermore, electronic copies will be made available (via email; Dropbox link; Google drive; We Transfer, etc.) upon request from Singo Consulting (Pty) Ltd, using the contact details of the Environmental Assessment Practitioner (EAP). Comments on the DBAR & EMPr must be submitted no later than the **1<sup>st</sup> of August 2023**.

**EAP, PPP.OFFICER & APPLICANT DETAILS**

 <p>Office 870, 5 Balalaka Street, Tosbet Park Ext. 2, eMalahleni (Witbank), 1040 <b>EAP:</b> Mr. Khodani Mathaka <b>PPP Officer:</b> Miss Mazithi Mangcu <b>Email:</b> <a href="mailto:mazithi@singoconsulting.co.za">mazithi@singoconsulting.co.za</a> <b>Cell No.:</b> +27 74 684 1000 <b>Tel No.:</b> +27 13 6920 041 <b>Fax No.:</b> +27 86 5144 103</p>		<p><b>MDZ Fleet Solutions (Pty) Ltd</b></p> <p>Unit 147, Fernvage Estate, 1944 Fourways Ext 34, Fourways,2191 <b>Contact person:</b> Mr Ramabulana Aluwani Percy <b>Email:</b> <a href="mailto:aluwani@mdzholings.co.za">aluwani@mdzholings.co.za</a> <b>Cell No.:</b> +27 79 487 7347 / +27 79 402 3625 <b>Tel No.:</b> +27 10 487 7347</p>
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**Figure 11: Site Notices Placement (Singo Consulting (Pty) Ltd, 2023)**

## 7.1 Face to face consultation

UMhlatuze Local Municipality, UMfolozi Local Municipality, KwaMbonambi Library, Ntambanana Library, the affected community and the adjacent community were consulted and given the Background information document (BID) pertaining the proposed project from the **12<sup>th</sup> of June 2023 to the 14<sup>th</sup> of June 2023**. Refer to **Figure 12** for proof of consultation.





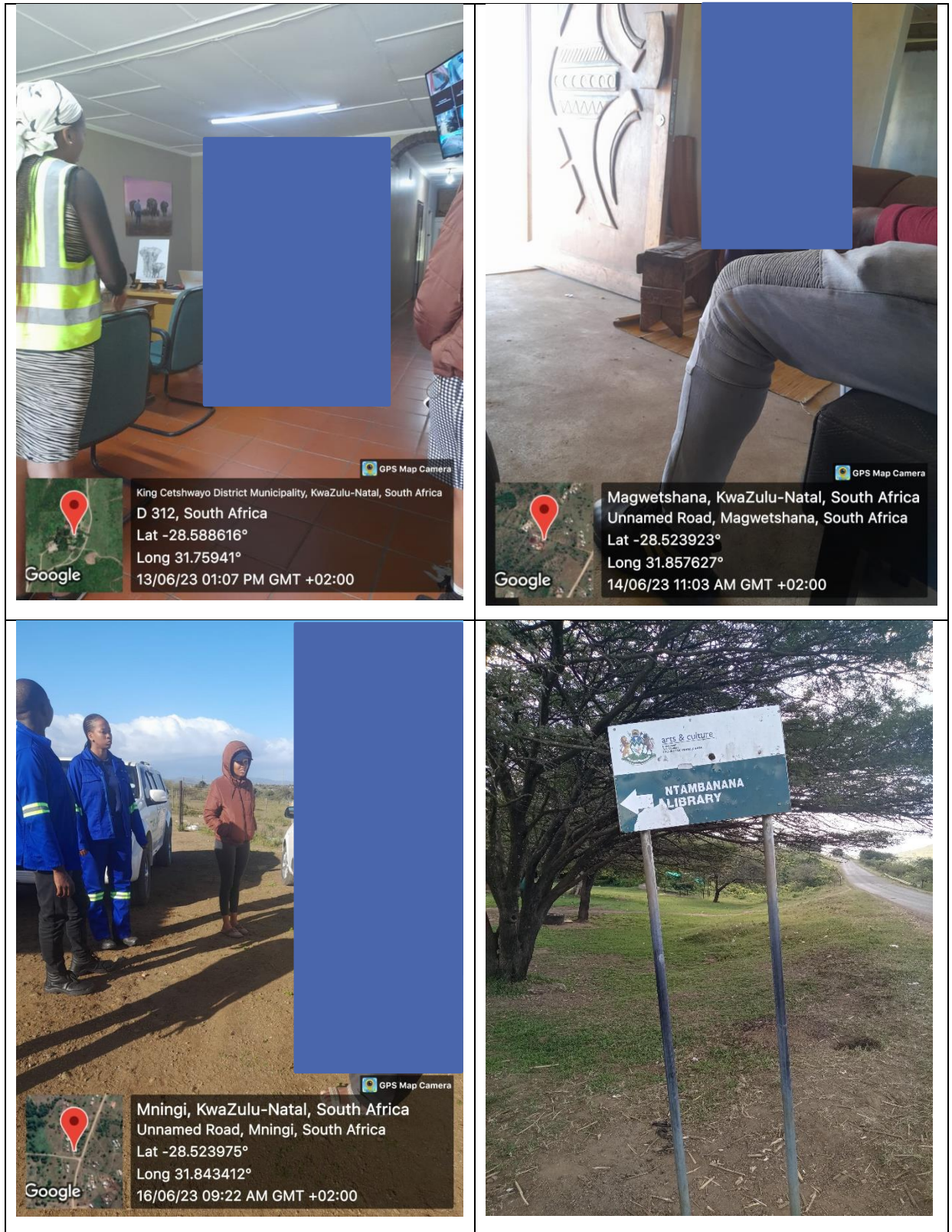


Figure 12: Face to face consultation (Singo Consulting (Pty) Ltd, 2023)

## 7.2 Community meeting with Mambuka Tribal Council

A community meeting was held at **Mambuka Tribal Council** on the **13<sup>th</sup> of June 2023**. Community members were given a chance to raise their concerns as well as their needs pertaining the proposed project. Attached **Figure 13** and **14** are the pictures of the meeting and the attendance register.



**Figure 13: Meeting with the Mambuka Tribal Council** (*Singo Consulting (Pty) Ltd, 2023*)

### **Singo Consulting Consultants, Tribal Authority Council and the community.**

A community meeting was held at **Mambuka Tribal Council** on the **13<sup>th</sup> of June 2023**. Community members were given a chance to raise their concerns as well as their needs pertaining the proposed project. Chief Mthiyane, Induna for the affected areas of Mningi and Magwetshana community were present. The adjacent Nduna's of Makholwase, Mfazana and Maqedipuleti were also present.

#### **The following were discussed on the meeting.**

- The community is concerned about the Prospecting right and the consequences that comes with drilling.
- Livestock being affected.
- The proposed site being few meters from and within the residential area.
- Applicants not honoring the agreements they have with the community prior drilling when they start operating.

Chief Mthiyane gave the Consultants a permission to carry on with the site assessment and instructed the iNduna to escort the Consultants during the site visits.

SINGO CONSULTING (PTY) LTD  
 Meeting venue: Nombuka 4  
 Date: 13 June 2023  
 Time: 09:39



ATTENDANCE REGISTER

No.	Name & Surname	Designation	Company/Land Owner/ Other (Specify)	Contact Details	Email Address	Signature
1				0833748100		
2				0839412837		
3				0829749474		
4				0833146610		
5				0111685844		
6						
7						
8				073544681		
9				0732442351		
10				0822601870		
11				083941027		
12				0537955055		
13				0829749474		
14				0829749474		
15				0833146610		
16				0726200900		
17				07100849		
18				07299918		
19				08336307125		
20						
21						



22					0746160000	MBhe090
23						X
24					07300894 23	
25					682925988	SP
26					0727456008	CELL.
27					0823437982	M. Kevl
28					0740765944	W.
29					0633875249	GIDN
30					06600603135	MORTN
31					0728442163	F. M. C. H. G.
32					0295310057	M. D. B. G.
33					0769266747	M. G. G.
34						
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Figure 14: Attendance register (Singo Consulting (Pty) Ltd, 2023)

The following have been identified as I & Aps.

Table 6: Identified key stakeholders.

Names of I & AP's	Organisation	Email Address
[Redacted]	UMfolozi Local Municipality	[Redacted]
	UMhlathuze Local Municipality	
	UMhlathuze Local Municipality	
	Ward 17	
	Ward 32	
	Chief Mthiyane	
	Town Planner	
	Town Planner	
	SANRAL	
	Eskom	
	Kzndtea	
	Transnet	
	DALRRD	
	UKDM	
	Birdlife	
	Labour	
	Kznworks	
	DWS	
	Ezemvelo Kznwildlife	
	Kzntransport	
DAFF		
DARD		
Sanparks		



According to the Windeed search, Portion of the remaining extent of the farm Lot 307 Empangeni 13746, which is listed as portion 0 on the search results (see Figure 15 below), is owned by Ingonyama Trust Trustees with title deed number T32535/1994. Portion of remaining extent of the farm Lot 308 Empangeni 13742 which is listed as portion 0 on the search results, is owned by Ingonyama Trust-Trustees with title deed number T32535/1994. WinDeed search did not yield any results for Portion of the Remaining extent of the farm Mambuka 16919.



This report is compiled exclusively from the very latest data directly supplied to WinDeed by the Deeds Office.

Any personal information obtained from this search will only be used as per the Terms and Conditions agreed to and in accordance with applicable data protection laws including the Protection of Personal Information Act, 2013 (POPI), and shall not be used for marketing purposes.

\*\* ASTERISKS INDICATE THE INFORMATION IS ENRICHED FROM THE WINDEED DATABASE.

SEARCH CRITERIA			
Search Date	2023/06/06 11:35	Farm Number	13742
Reference	-	Registration Division	GU
Report Print Date	2023/06/06 11:58	Portion Number	-
Farm Name	LOT 308 EMPANGENI	Remaining Extent	NO
Deeds Office	Pietermaritzburg	Search Source	Deeds Office

PROPERTY INFORMATION			
Property Type	FARM	Diagram Deed Number	G132/950
Farm Name	LOT 308 EMPANGENI	Local Authority	NOT AVAILABLE
Farm Number	13742	Province	KWAZULU NATAL
Registration Division	GU	Remaining Extent	NO
Portion Number	0	Extent	549,1589HAUNKNOWN
Previous Description	(KWAZULU)	LPI Code	NOGU00000001374200000
Suburb / Town**	2KM NORTH OF MABUKATA	Co-ordinates (Lat/Long)**	-28.547986 / 31.802758

OWNER INFORMATION (1)			
INGONYAMA TRUST-TRUSTEES			Owner 1 of 1
Company Type**	TRUST	Document	T32535/1994
Registration Number	-	Microfilm / Scanned Date	-
Name	INGONYAMA TRUST-TRUSTEES	Purchase Price (R)	-
Multiple Owners**	NO	Purchase Date	-
Multiple Properties**	NO	Registration Date	1994/10/26
Share (%)	-		

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This report is compiled exclusively from the very latest data directly supplied to WinDeed by the Deeds Office.

Any personal information obtained from this search will only be used as per the Terms and Conditions agreed to and in accordance with applicable data protection laws including the Protection of Personal Information Act, 2013 (POPI), and shall not be used for marketing purposes.

**\*\* ASTERISKS INDICATE THE INFORMATION IS ENRICHED FROM THE WINDEED DATABASE.**

SEARCH CRITERIA			
Search Date	2023/06/06 12:01	Farm Number	13746
Reference	-	Registration Division	GU
Report Print Date	2023/06/06 12:02	Portion Number	-
Farm Name	LOT 307 EMPANGENI	Remaining Extent	NO
Deeds Office	Pietermaritzburg	Search Source	Deeds Office

PROPERTY INFORMATION			
Property Type	FARM	Diagram Deed Number	G2/951
Farm Name	LOT 307 EMPANGENI	Local Authority	NOT AVAILABLE
Farm Number	13746	Province	KWAZULU NATAL
Registration Division	GU	Remaining Extent	NO
Portion Number	0	Extent	558,0620HAUNKNOWN
Previous Description	(KWAZULU)	LPI Code	NOGU00000001374600000
Suburb / Town**	2KM NORTH OF MABUKATA	Co-ordinates (Lat/Long)**	-28.540094 / 31.812826

OWNER INFORMATION (1)			
INGONYAMA TRUST-TRUSTEES			Owner 1 of 1
Company Type**	TRUST	Document	T32535/1994
Registration Number	-	Microfilm / Scanned Date	-
Name	INGONYAMA TRUST-TRUSTEES	Purchase Price (R)	-
Multiple Owners**	NO	Purchase Date	-
Multiple Properties**	NO	Registration Date	1994/10/26
Share (%)	-		

**DISCLAIMER**  
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Figure 15: Windeed Results.



**i) Summary of issues raised by I&APs**




(Complete the table summarising comments and issues raised, and reaction to those responses)


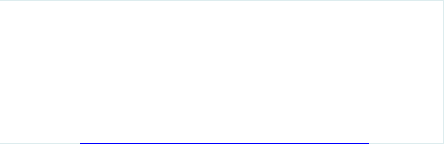
Table 7: Summary of issues raised during the public comment period.



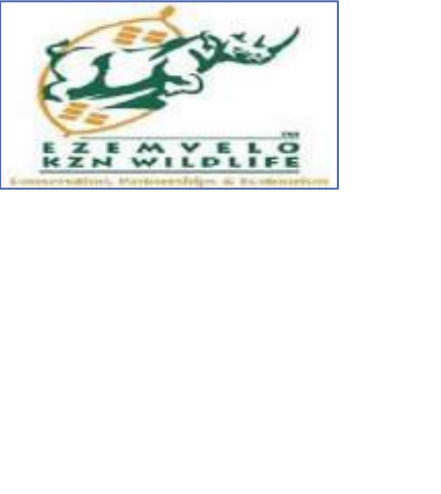
<p><b>Interested and Affected Parties</b></p> <p>List the names of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted.</p>	<p><b>Date</b></p> <p><b>Comments</b></p> <p><b>Received</b></p>	<p><b>Issues raised</b></p>	<p><b>EAPs response to issues as mandated by the applicant</b></p>	<p><b>Section and paragraph reference in this report where the issues and or response were incorporated.</b></p>	
<b><u>AFFECTED PARTIES</u></b>					
<b>Landowner/s:</b>					
<b>Chief Mthiyane</b>	<b>X</b>		<p>Issues raised:</p> <ul style="list-style-type: none"> <li>➤ The community is concerned about the Prospecting right and the consequences that comes with drilling.</li> <li>➤ Livestock being affected.</li> <li>➤ The proposed site being few meters from and within the residential area.</li> </ul>	<p>Face to face, consultation was done on the 13<sup>th</sup> of June 2023 and BIDs were shared.</p>	

			<ul style="list-style-type: none"> <li>➤ Applicants not honoring the agreements they have with the community prior drilling when they start operating.</li> </ul>		
<b>Ingonyama Trust</b>			No issues raised yet.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	
<b>District Municipality:</b>					
			No issues raised yet.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	
<b>Email:</b>					
<b>Local Municipality:</b>					
			<p>The following were discussed:</p> <ul style="list-style-type: none"> <li>• Drilling affecting water.</li> <li>• Operation is within the residential area.</li> <li>• Noise that comes with drilling.</li> </ul>	<p>Face to face consultation was done on the 12<sup>th</sup> of June 2023 and BIDs were shared.</p> <p>Consultation emails were sent on the 14<sup>th</sup> of June 2023 and 19<sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map to raise their comments in writing and to share with affected parties.</p>	



			No issues raised yet.	Environmental officer was unavailable at the time of visit. A consultation email was sent on the 14 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	
<b>Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, DWS):</b>					
	x		No issues raised yet.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	

 <p><b>public works</b> Department: Public Works PROVINCE OF KWAZULU-NATAL</p>	<b>X</b>		No issues raised yet.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	
	<b>X</b>		No issues raised yet.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	
 <p><b>agriculture &amp; rural development</b> Department: Agriculture and Rural Development PROVINCE OF KWAZULU-NATAL</p>	<b>X</b>		No issues raised yet.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	

 	x	Via email (06/06/2023)	<ul style="list-style-type: none"> <li>• The Applicant is reminded to identify all water uses applicable to the activity in terms of Section 21 of the National Water Act, 1998 (Act No.36 of 1998)(NWA) and to ensure that all applicable water uses are authorised as such.</li> <li>• The applicant is reminded to reflect the entire proposed infrastructure in legible, drawn to scale site layout maps.</li> <li>• The Applicant is reminded to include details on water and wastewater provisions for the proposed project.</li> </ul>	<p>A consultation email was sent on the 6<sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.</p> <p>The email has been acknowledged and comments will be incorporated into the Final BAR and EMPr.</p>	
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	X		No issues raised yet.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	
	X		No issues raised yet.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	
	X	Via email (20/07/2023)	<p>Ezemvelo strongly recommends that:</p> <ul style="list-style-type: none"> <li>• No prospecting activities are to be taken within the CBAs or FEPA.</li> <li>• Appropriate buffers to these biodiversity – sensitivity areas be applied.</li> <li>• Necessary specialist studies to be undertaken for any invasive prospecting with appropriate competent specialist appointed.</li> <li>• Appropriate measures to safeguard the ecological</li> </ul>	<p>A consultation email was sent on the 6<sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.</p> <p>Thank you, your comments have been acknowledged and will be incorporated into the Final BAR and EMPr. Species list for the farm Mambuka has been requested from Ezemvelo.</p>	



			integrity of the receiving environment be reviewed and implemented in accordance with suitable development principles of the National Environmental Management Act, 1998 (Act 107 of 1998 as amended).		
	X		No issues raised yet.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	
	X		No issues raised yet.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.	
	X		No issues raised yet.	An online consultation with SAHRA and Amafa was done.	

<a href="https://sahris.sahra.org.za">https://sahris.sahra.org.za</a>					
<b>Dept. Land Affairs:</b>					
	X	Email (26/06/2023)	There are no land claims on the proposed property.	A consultation email was sent on the 6 <sup>th</sup> of June 2023 with the attached BID and regulation 2.2 map.  Thank you for your assistance.	Refer to appendix 7
<b>Traditional Leaders:</b>					
<b>Chief Mthiyane</b>					

## **8 DESCRIPTION OF THE ENVIRONMENT**

### **The Environmental attributes associated with the alternatives.**

(The environmental attributes described must include socio-economic, social, heritage, cultural, geographical, physical and biological aspects)

#### **i) Baseline Environment**

In order to determine the baseline environment of the proposed location in UMfolozi and UMhlatuze, specialist investigations were initiated. The section to follow summarises these findings and recommendations.

#### **Type of environment affected by the proposed activity.**

(Its current geographical, physical, biological, socio-economic, and cultural character).

### **8.1 Geographical Character**

The regional geology of the area influences the geographical character of the area.

#### **8.1.1 Regional Geology**

The description of the geology is based on the existing knowledge and literature of the region.

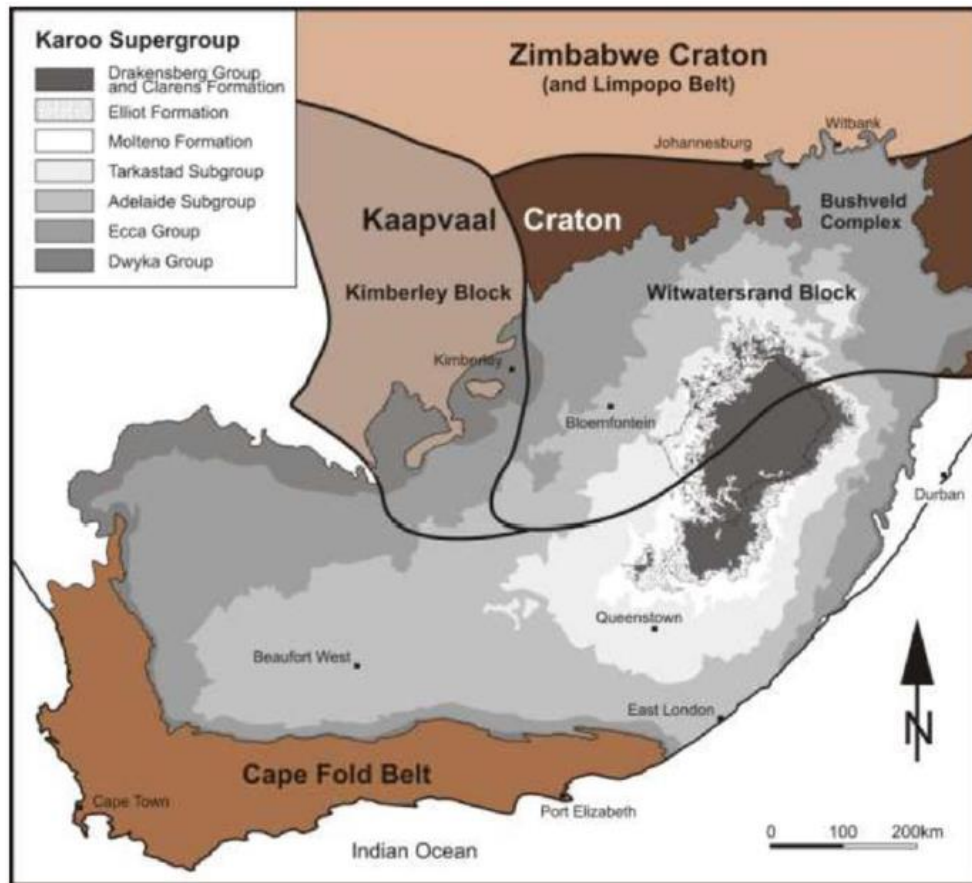
##### **8.1.1.1 Karoo Supergroup**

The main Karoo basin of South Africa covers more than half of the country's surface and it is a foreland basin that has developed in-between the Cargonian Highlands north of the basin and the Cape Fold Belt south of the basin (Wheeler and Götz, 2017). The basin is filled by sediments that make up the Karoo Supergroup which is divided into five groups, the Dwyka Group, the Ecca Group, the Beaufort Group, the Stormberg Group and the Drakensberg Group that indicate a change in depositional environment over time. The Dwyka Group represents glacial deposits while the Ecca Group represents shallow marine and coastal plain deposits. The Beaufort Group represents non-marine fluvial deposits, while the Stormberg and the Drakensberg Groups represent aeolian and volcanic deposits, respectively (Johnson et al., 2006).

#### **Ecca Group**

The Ecca Group is a sedimentary rock sequence that was deposited during the Permian Period and comprises of sandstone, siltstone, mudstone and significant coal seams deposited in a terrestrial basin on a gently subsiding shelf platform. In the 1970s several studies (Cadle, 1974; Hobday, 1973, 1978; Mathew, 1974; Van Vuuren and Cole, 1979) showed that the Ecca Group could be subdivided into several informal units

based on the cyclic nature of the sedimentary fills. In 1980 the South African Committee for Stratigraphy (SACS, 1980) introduced a formal lithostratigraphic nomenclature for the Ecca Group in the northern, distal sector of the MKB, which replaced the previously used informal Lower, Middle and Upper subdivisions with the Pietermaritzburg Shale Formation, the Vryheid Formation, and the Volksrust Shale Formation (Hancox and Gotz, 2014).



*Figure 16: General representation of the Karoo Supergroup(Hancox and Gotz, 2014).*

### Local Geology

The project area located within the Karoo Supergroup and is characterized by rocks of the Volksrust Formation, Emakwezini Formation, Ntabene Formation as well as the Karoo Dolerite Suite.

### **Volksrust Formation**

Mainly comprises silt-rich, grey to black shale containing thin, bioturbated siltstone or sandstone lenses. Deposits of this formation interfinger laterally with the underlying Vryheid Formation and overlying Beaufort Group rock deposits. The rock sediments are fine-grained overall, indicating that the rock sediments were deposited in both lacustrine to lagoonal and shallow coastal settings. A large pelecypod marine bivalve has been recovered from this formation.

### **Volksrust Group**

The Volksrust Formation, the uppermost component of the Eccca Group. This formation comprises some 150-250 m of dark siltstone or mudstone. The Volksrust beds are overlying other formations of the Eccca Group, the Pietermaritzburg Shale, and Vryheid Formations. The Volksrust Formation formed during a basinal transgression followed by regression, the magnitude of the former was less than formerly supposed. The coastline was clearly of non-barred type, allowing for a continuum from muddy offshore to muddy coastal conditions. There is little evidence of tractional currents, and the depositional environment was essentially quiet. The coastal hinterland was of low relief, since virtually no coarse clastic material was contributed to the basin. The upper part of the coal deposit, the Volksrust formation (approximately 60m thick), comprises intercalated mudstone or carbonaceous shale and bright coal layers. The Volksrust formation is classified as a thick interbedded seam deposit type (Taverner-Smith et al., 1988).

### **Emakwezini Formation**

The middle to upper Permian Emakwezini Formation is part of the of the Adelaide Subgroup of the lower Beaufort Group, Karoo Supergroup. The Emakwezini Formation crops out in a narrow strip just inland of the eastern coast of South Africa in northern KwaZulu-Natal. The formation is sporadically exposed in a narrow, coast-parallel and highly faulted outcrop and subcrop belt that runs from Empangeni, west of Richards Bay to north of Komatipoort in the Lebombo Basin in the eastern part of South Africa. The unit is highly significant both palaeobotanically and economically due to its plant rich carbonaceous mudstones and multiple semi-anthracite to anthracite seams that range in thickness from <1 m to up to 15 m, respectively. It is an actively mined coal-bearing succession characterised by fining-upward successions of coarse- to fine-grained sandstones together with mudstones containing a fossil assemblage of animal

traces, insects, molluscs, arthropods, fish and plants and it conformably overlies the Volksrust Formation and unconformably underlies the Ntabene Formation. The Emakwezini Formation was deposited rapidly in a fluvio-lacustrine setting under moist conditions capable of supporting an abundant and diverse biota (Bordy and Prevec, 2015).

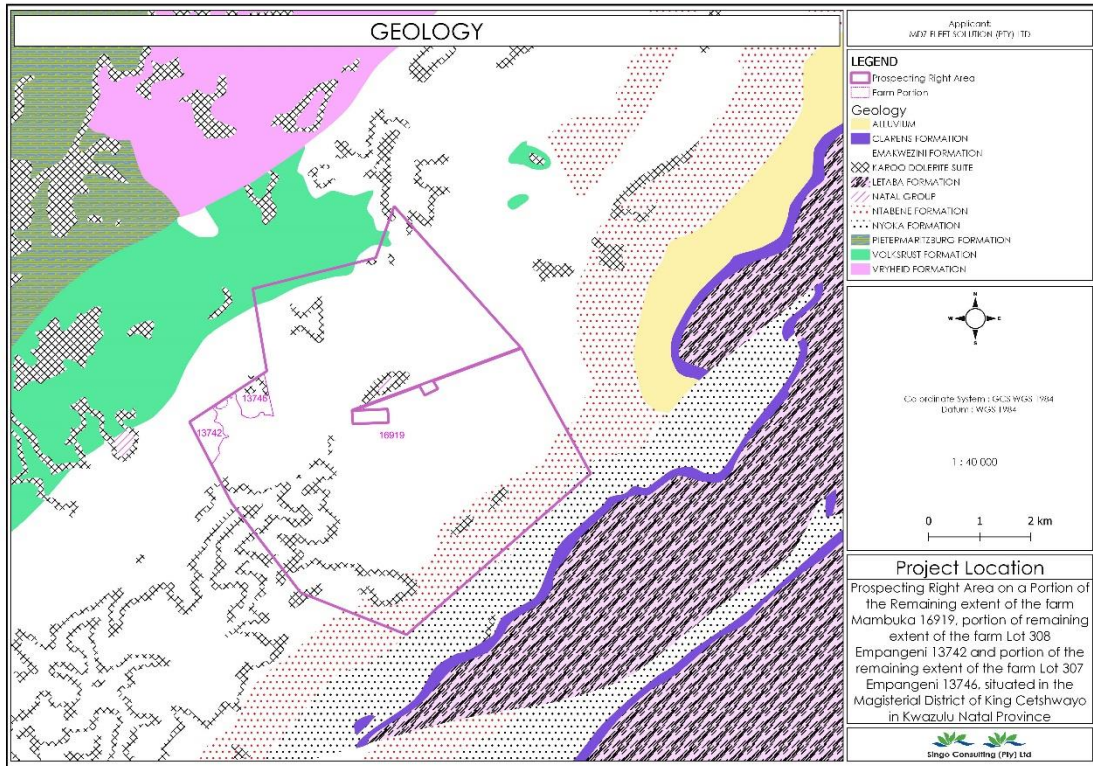
### **Ntabene Formation**

The Ntabene Formation of the Stormberg Group of the Karoo Supergroup contains Coarse-grained, glittering sandstone. Interbedded khaki coloured mudstone. The Emakwezini Formation conformably overlies the Volksrust Formation and unconformably underlies the Ntabene Formation. The Ntabene Formation overlies the Nyoka Formation which consists predominantly of red and purple mudstone with calcareous concretions, probably deposited on the floodplains of slow-flowing rivers under arid conditions (Johnson et al. 2006).

### **Karoo Dolerite Suite**

The Karoo Dolerite Suite is a large igneous province that is located in southern Africa, covering an area of about 2 million square kilometers (Erlank et al., 2017). It consists of interconnected networks of dykes and sills and is thought to have formed during the early Jurassic period, about 180 million years ago (Coffin and Eldholm, 1994). The intrusions are believed to have been formed when molten magma concurrently filled in the numerous fractures, and that the dolerite intrusive network probably behaved as a shallow stockwork-like reservoir or storage system where molten magma of different viscosities intruded the fractures.

The dolerite intrusions of the Karoo Dolerite Suite play a significant role in shaping the landscape of southern Africa as they are more resistant to weathering than the surrounding rocks, so it often forms large, flat-topped hills or "whalebacks" (Erlank et al., 2017). These whalebacks can be seen in many parts of southern Africa, including the Drakensberg Mountains and the Karoo region. These dolerite intrusions are associated with faulting which results in displacement of the coal seams (Greenshields, 1986).

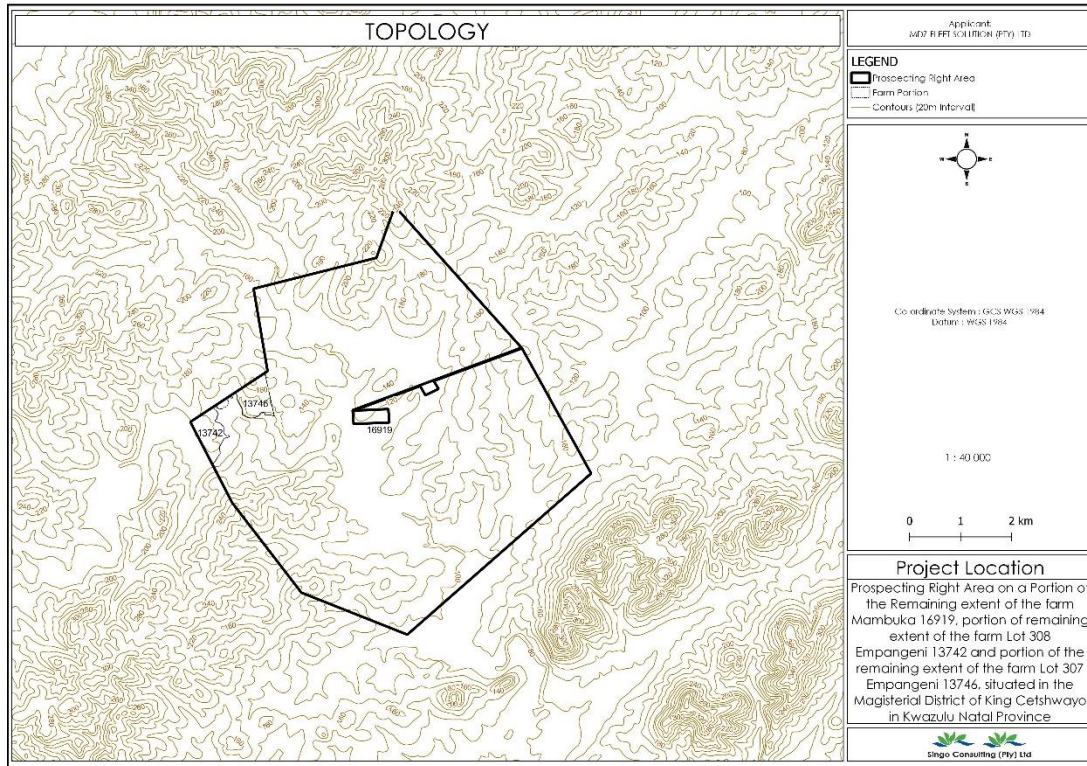


**Figure 17: Geological map of the proposed project area (Singo GIS, 2023)**

## 8.2 Topography and drainage

The region is generally characterized by very steep topography, depicted by the closely spaced contours as shown in **Figure 18**. The area has a natural vegetation with built up areas and cultivated land, with minor waterbodies within the area of interest. The surface altitudes vary from 100 to 240 meters above sea level.





**Figure 18: Topological map of the proposed project area (Singo GIS, 2023)**

Soil baseline study, Hydrological baseline study and some Hydrogeological baseline study were conducted, and some specialist studies will not be conducted based on the theme sensitivities from screening tool as some sensitivities were not confirmed during ground truthing. However, boreholes that are in high sensitivity area will be repositioned to less sensitivity areas and other studies such as Heritage study will be conducted upon the request from SAHRA.

### 8.3 Climate

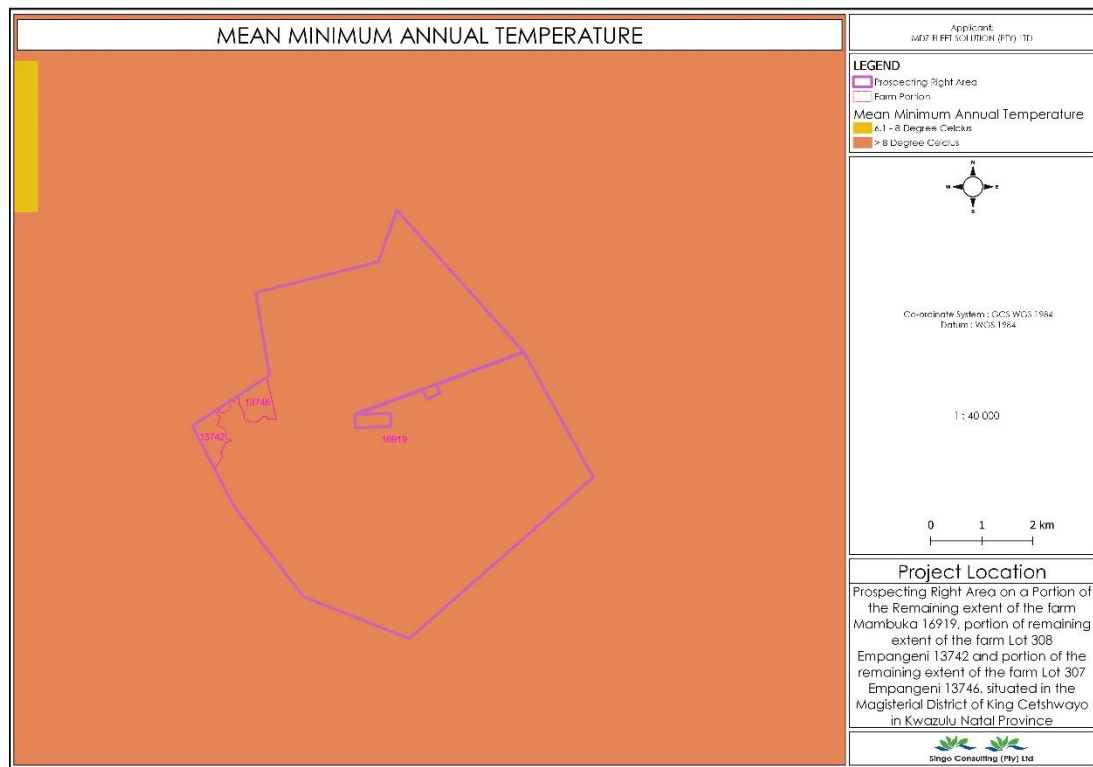
Climate, amongst other factors (Humidity), influences soil-water processes and water availability in open to air systems in a water balance. The most influential factors on soil and climate are Temperature and Precipitation. Temperature and precipitation influence how fast parent materials weather and, thus, soil properties such as mineral composition and organic matter content (University of Minnesota, 2018).

In Empangeni, the summers are warm and muggy; the winters are short, cool, and dry; and it is windy and mostly clear year-round. Over the course of the year, the temperature typically varies from 13°C to 29°C and is rarely below 10°C or above 33°C (<https://weatherspark.com/>).



## Temperature

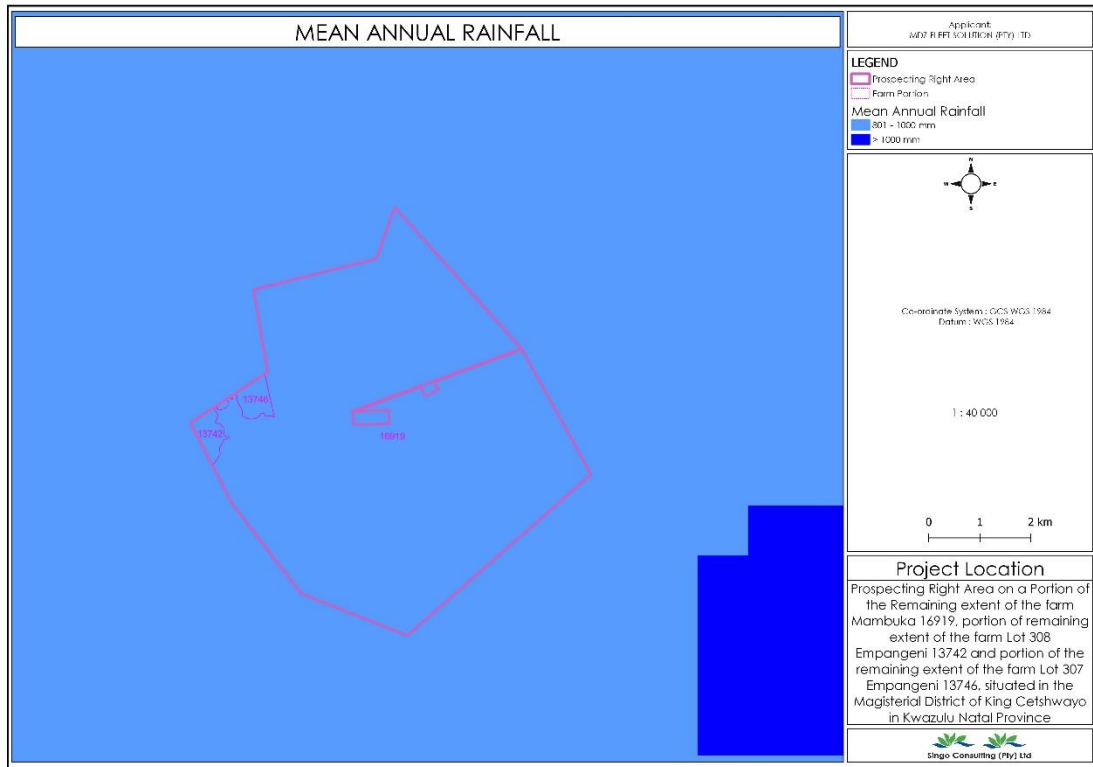
Temperature directly influences the speed of chemical reactions. The warmer the temperature, the faster reactions occur. Temperature fluctuations increase physical weathering of rocks (University of Minnesota, 2018). Figure 19 below shows that the project area mean annual temperature in the area is greater than 8°C. With the information obtained by the in-house, GIS Specialist and the weatherspark website it is safe to state that the project areas have hot temperature.



**Figure 19: Mean annual temperature in the project area** (Singo Consulting (Pty) Ltd, 2023)

Precipitation governs water movement in the soil. The amount of water the soil receives and the amount of evapotranspiration that occurs influence water movement. The month with the most wet days in Empangeni is January, with an average of 11 days with at least 1 millimeter of precipitation. The drier season lasts 5 months, from April 7 to October 4. The month with the fewest wet days in Empangeni is June, with an average of 2 days with at least 1 millimeter of precipitation (See figure 20 below). To show variation within the months and not just the monthly totals, we show the rainfall accumulated over a sliding 31-day period centered around each day of the year. Empangeni experiences significant seasonal variation in monthly rainfall. Rain falls throughout the year in Empangeni. The month with the most rain in Empangeni is February, with an average rainfall of 88 millimeters. The month with the least rain in Empangeni is June, with an average rainfall of 16 millimeters (<https://weatherspark.com/>). The proposed prospecting right application has the

mean annual rainfall that ranges from 801 mm to 1000 mm as shown on Figure 20 below, which shows that the project area consists of high rainfall.



**Figure 20: Map shows mean annual Rainfall within proposed project area.** (Singo Consulting (Pty) Ltd, 2023)

## 8.4 Baseline Hydrogeological Study

### Desktop Study

Desktop or literature review is defined as a task which involves review of existing research/ information which is relevant to the project needs. A literature review of all available relevant data was undertaken to provide more data as needed. The data from the literature review was correctly referenced and incorporated into the final research report. Data was compiled using science literature (journals, textbooks, papers, maps, and so on), GIS data from Singo Consulting (Pty) Ltd, DWS, SAWS weather station records, and other relevant scientific work conducted on the subject region. A comprehensive list of all the literature sources utilized in the study report can be found in the reference list.

## **Drilling and siting of boreholes.**

Exploration boreholes will be drilled one at a time at various locations throughout the proposed project area. Drill hole depths will average 100 meters and will be determined onsite as the drilling program advances, depending on past hole depths and dips. Between certain wetlands and waterways, a 100-meter buffer will be maintained. A 100-meter buffer must be maintained from public highways. After the drill site has been gated off, cleared drilling will begin. Following the drilling, immediate rehabilitation will take place. The site will be repaired after each hole is drilled before the drilling crew moves on to the next planned hole. This procedure will be repeated until all holes have been drilled.

## **Groundwater availability assessment**

The availability of groundwater as a water source depends largely upon surface and subsurface geology as well as climate. The porosity and permeability of a geologic formation control its ability to hold and transmit water. Porosity is measured as a ratio of voids to the total volume of rock material and is usually described as a percentage. Shallow, weathered and/or fractured rock and relatively low yielding aquifer systems are underlain over 80 percent of South Africa. By contrast, appreciable quantities of groundwater can be abstracted at relatively high rates from dolomitic and quartzitic aquifer systems located in the northern and southern parts of the country respectively, as well as from a number of primary aquifers situated along the coastline.

## **Groundwater systems**

### **Aquifer types**

The aquifer systems in South Africa can be divided into two major types: **primary** and **secondary** aquifers.

**Primary aquifers:** The primary aquifers are:

1. Coastal sand, gravel and unconsolidated material along the South African coast, such as areas along the west coast at Port Nolloth, Doringbaai, Lambertsbaai, Langebaan, Atlantis, Cape Flats, Gansbaai, Bredesdorp, Stilbaai, Alexandria, Boesmansriviermond, Kidds beach, Richards bay.

2. Sand and gravel along stream beds such as those along the Crocodile and Caledon rivers, at De Aar, De Doorns, Rawsonville, Pietersburg (Polokwane), Messina, and Makatini Flats (Kok, 1991).

**Characteristics of Primary Aquifers include but not limited to:**

- Usually shallow unconfined systems and groundwater surface in the aquifer is at atmospheric pressure (100 kPa).
- Mostly consist of unconsolidated material, usually less than 30 m thick.
- Contain 1 to 20 percent water by aquifer volume.
- Recharge rate is generally high. Some 15 to 30 percent of rainfall would infiltrate into aquifers.
- Geohydrological characteristics of aquifer do not vary greatly over short distances.
- The transportation of contaminants in the primary aquifers is slow because of high effective porosity.

**Secondary aquifers:** The degree of fracturing of rocks in South Africa is dependent upon the tectonic history of rocks as well as the rock composition. For example, competent rocks, such as dolerite and quartzite and sandstones, fracture more readily than incompetent or ductile rocks, such as dolomite and shale. The magnitude of fracturing does not necessarily determine how much water an aquifer can transmit. It is estimated that at depths greater than 60 m, about less than one percent of the fractures transmit significant amounts of water. However within quartzite rocks, significant yields are possible at greater depths.

**Typical characteristics of secondary or fracture flow aquifers are:**

- Fractured flow aquifers are either confined or unconfined aquifers. The confined aquifers are overlain by sediments or rock of confining nature, which limits direct recharge from rainfall.
- They belong to shallow systems, usually less than 60 m thick and in exceptional circumstances can be about 200 m thick.
- Characteristics of aquifers as well as borehole yields vary greatly over short distances. Groundwater accumulates in the fractures of the sandstone overlying the coal seams,

contact zones between different lithologies, contact zones between coal seams and lithologies

## 8.5 Baseline Hydrology Study

A baseline Hydrology study was conducted by Singo consulting for this project. The study area falls in Quaternary catchment W12G of the Pongola-Mtamvuna Water Management Area. The site lies in the lower Pongola sub-catchment, which forms part of the Mhlathuze River Catchment. The area in the east drains towards the Sabhuze River that feeds to Mvamanzi River whilst the area in the north and west drains towards south of the study area to the Jenga River which feeds to Nseleni River. Sustained flow of high-quality water to these River systems is important.

The identified water bodies within the prospecting right area and in the close proximity of the project include the Non-perennial River, Seep wetlands and Perennial River. For the project where prospecting right poses a risk on them, there should be, measures and guidelines put in place that will protect the water resources in this area to ensure optimal conservation of water. The perennial and non-perennial rivers will be buffered as a no-go area and approximately a 100m buffer should apply in close proximity to the proposed project area. (See figure 23)

**Table 8: Quaternary Information data**

Quaternary Catchment	Water Management Area	MAE (mm)	MAP (mm)	Catchment Area (km <sup>2</sup> )
W12G	Pongola-Mtamvuna water management	1350	835	326

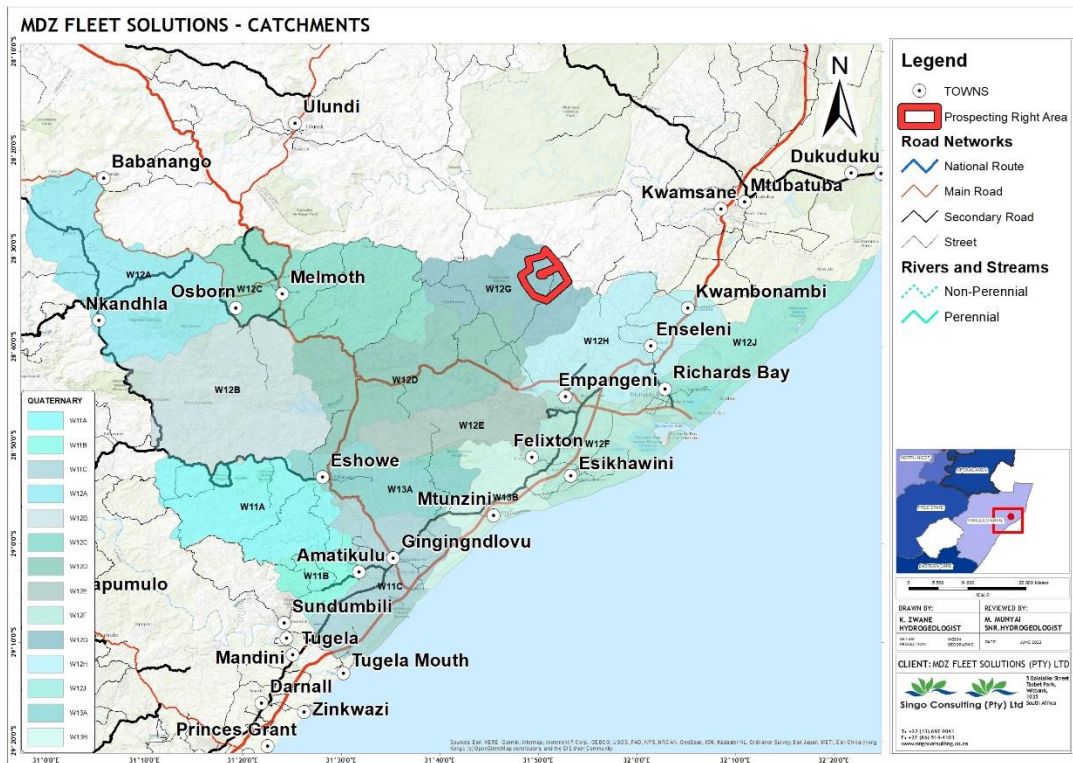


Figure 21: Catchment and Drainage map of the area (Singo Consulting (Pty) Ltd, 2023)

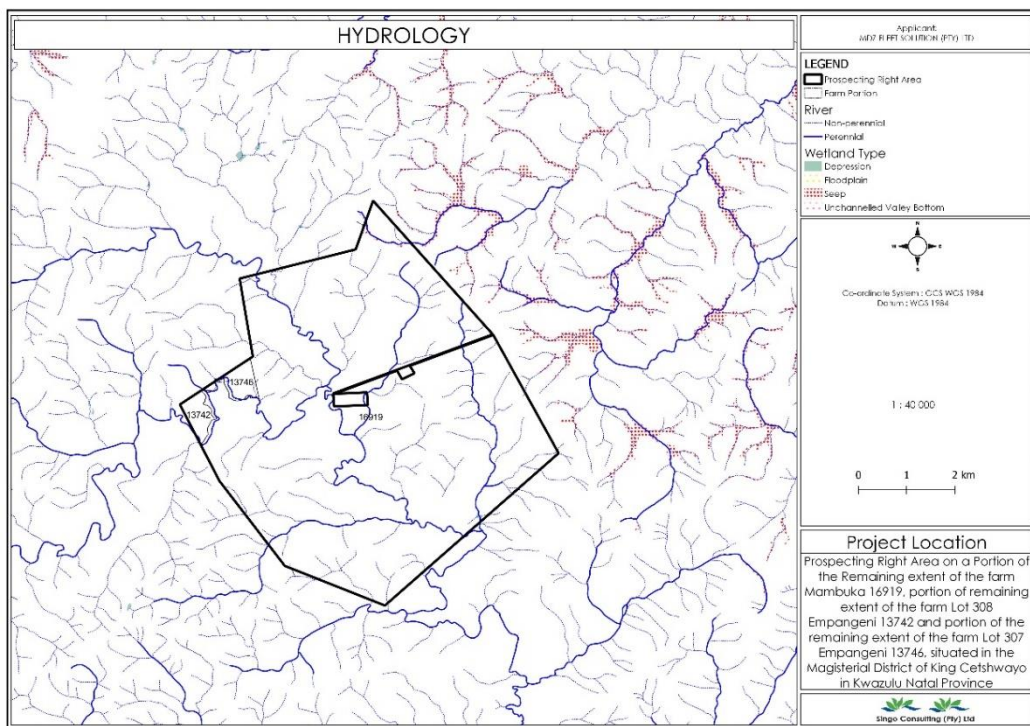
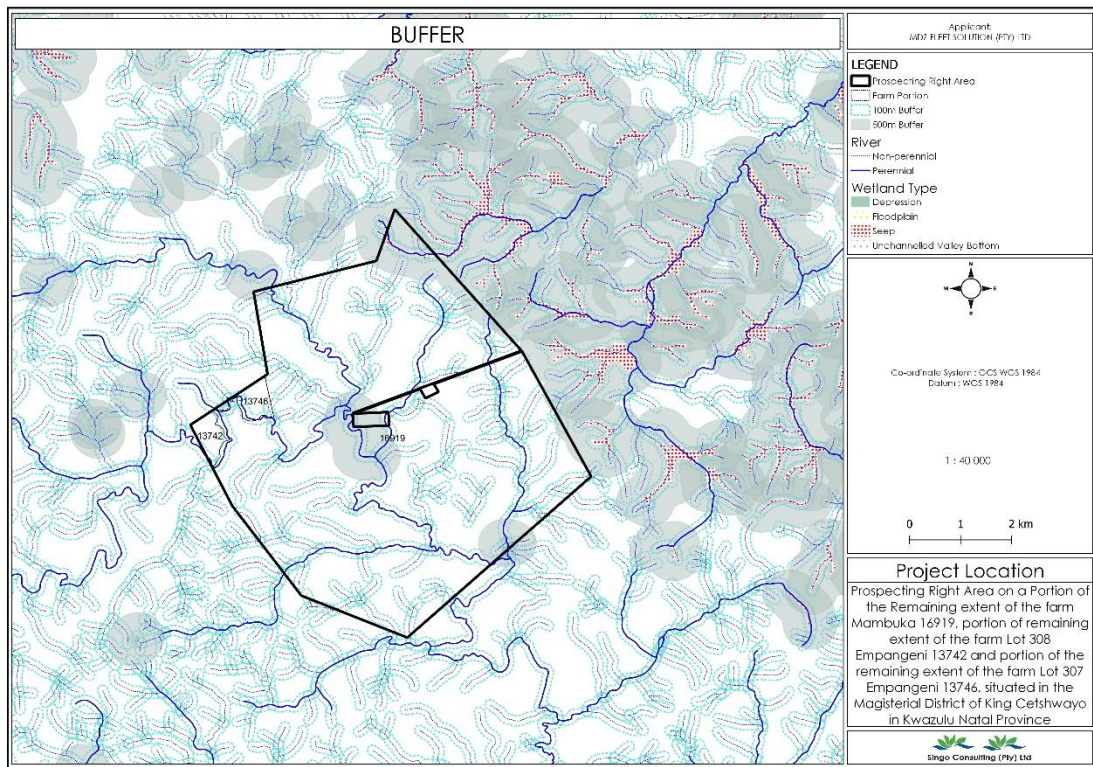


Figure 22: Hydrological map of the proposed project area. (Singo Consulting (Pty) Ltd, 2023)





**Figure 23: Buffer map of the proposed project area. (Singo Consulting (Pty) Ltd, 2023)**

## 8.6 Baseline Soil Study

Singo consulting for this project conducted a baseline Soil study. The soil classes map in Figure 25 below, the soils can be defined based on their soil depth, Soil Drainage, erodibility, and natural fertility.

### Soil depth

Depth of the soil profile is from the top to the parent material or bedrock. This type of soil can be classified as a restricted soil depth. A restricted soil depth is a nearly continuous layer that has one or more physical, chemical, or thermal properties.

### Soil Drainage

Soil drainage is a natural process by which water moves across, through, and out of the soil because of the force of gravity.

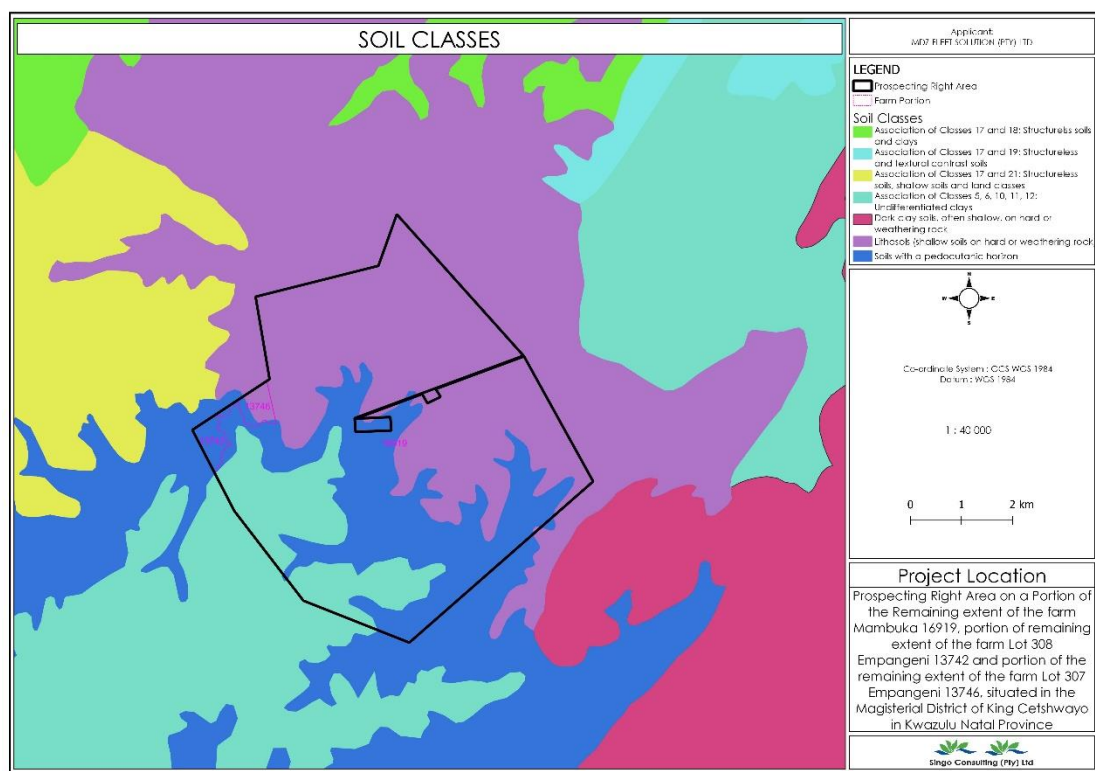
### Erodibility

Erodibility factor (K-factor) is the inherent yielding or non-resistance of soils and rocks to erosion by runoff and rainfall impact.

## Natural Fertility

Soil fertility refers to the ability of soil to sustain agricultural plant growth, i.e., to provide plant habitat and result in sustained and consistent yields of high quality. The soil, as a nature of them, contains some nutrients, which is known as 'inherent fertility'. Among the plant nutrients, nitrogen, phosphorus, and potassium is essential for the normal growth and yield of crop.

The soil classes map in Figure 24 below shows that the prospecting right area is largely covered with the Lithosols (shallow soils on hard or weathering rock) soils, then followed by Soils with a pedocutanic horizon and the other portion of Association of Classes 5, 6, 10, 11, 12: Undifferentiated clays soils.



**Figure 24: Soil Classes map of the proposed project area.** (Singo Consulting (Pty) Ltd, 2023)





**Figure 25: Soil type of the proposed project area** (Singo Consulting (Pty) Ltd, 2023)

## **8.7 Vegetation (Flora)**

Flora is the plant life occurring in a particular region or time, generally the naturally occurring or indigenous—native plant life.

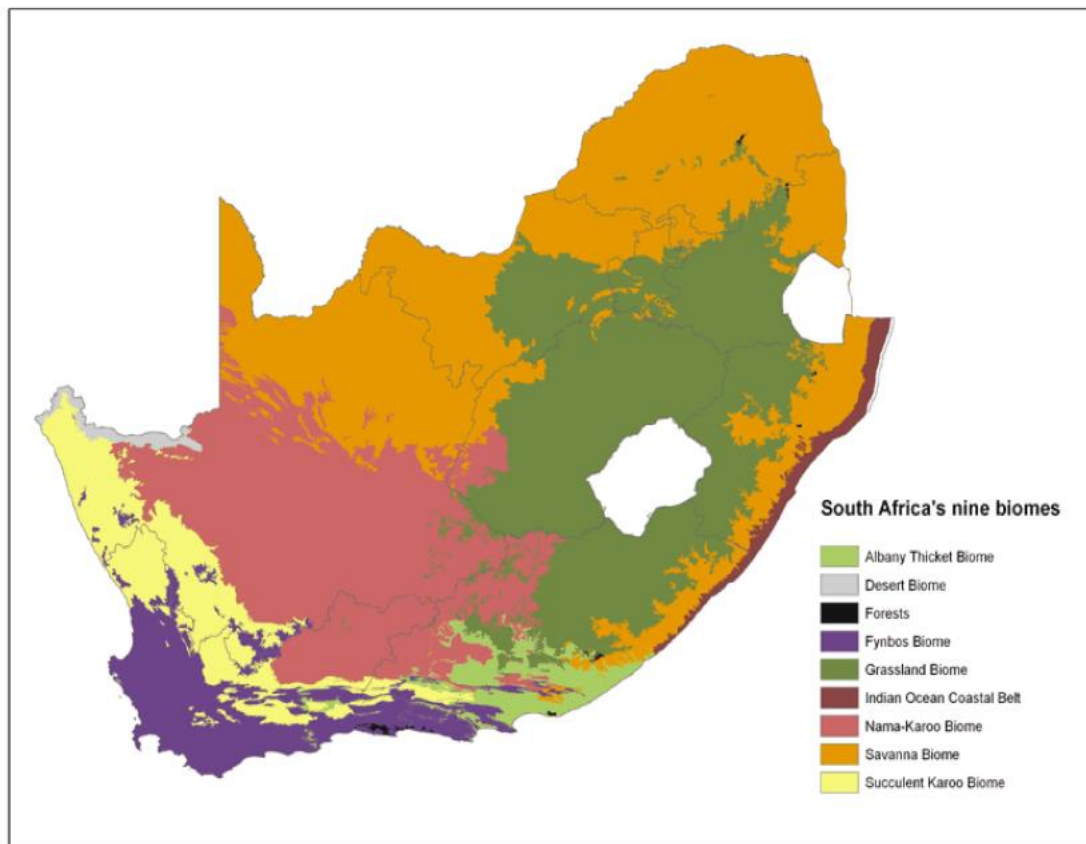
### **8.7.1 Natal Central Bushveld**

The area consists of the Natal Central Bushveld and Coast Hinterland Bushveld vegetation as seen in figure 28 below. Granger (1996) concluded that Natal Central Bushveld vegetation type is highly transformed and poorly conserved and because of intensive grazing and fire, it requires careful management.

#### **Coast Hinterland Bushveld vegetation**

Coast hinterland bushveld vegetation is an important ecosystem found in South Africa's coastal areas. It is distinguished by a combination of grasses, bushes, and trees and serves as a key habitat for a variety of animal species such as antelope, zebra, and giraffe. Important ecological services provided by plants include carbon sequestration, soil stability, and water management. Land-use change is a significant threat to the vegetation of the coast hinterland bushveld. As human populations increase, more land is converted for agricultural, urban, and industrial use (mine), resulting in habitat fragmentation and degradation. Climate change is also altering vegetation, with variations in temperature and precipitation patterns affecting plant growth and

survival. To guarantee the long-term survival of coast hinterland bushveld vegetation, conservation strategies that conserve and restore these ecosystems must be implemented.



**Figure 26: Map of South Africa's 9 Biomes**



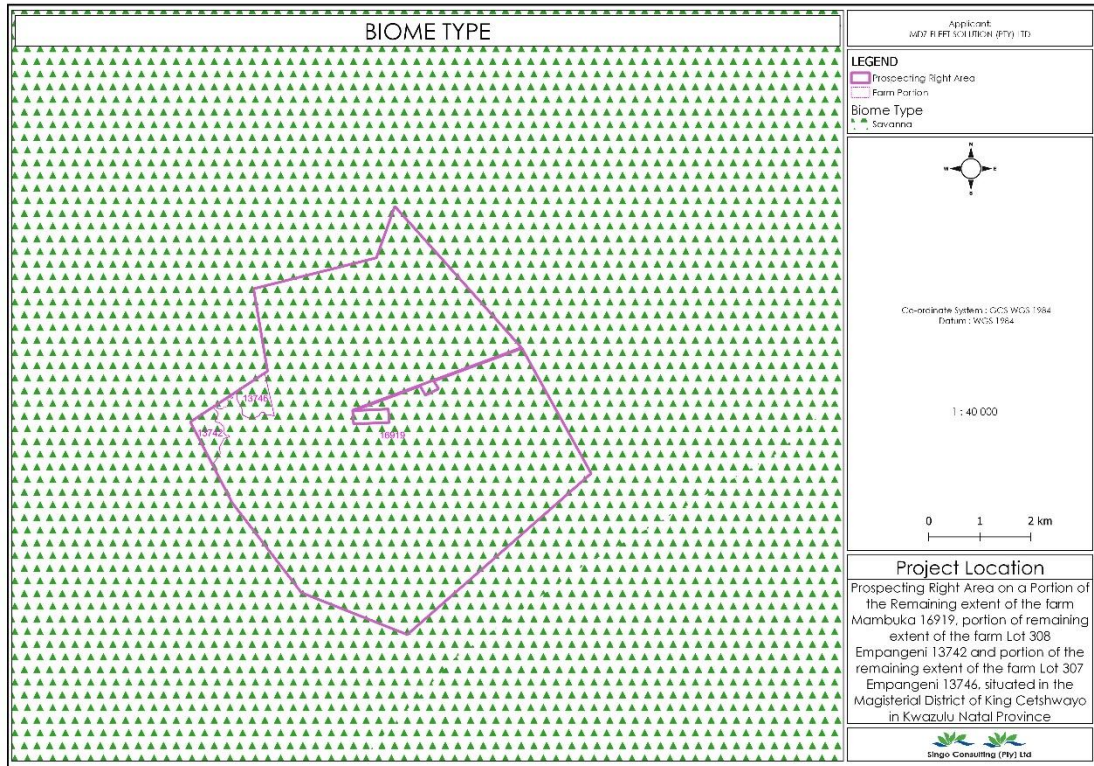


Figure 27: Biome type map of the proposed project area (Singo GIS, 2023)

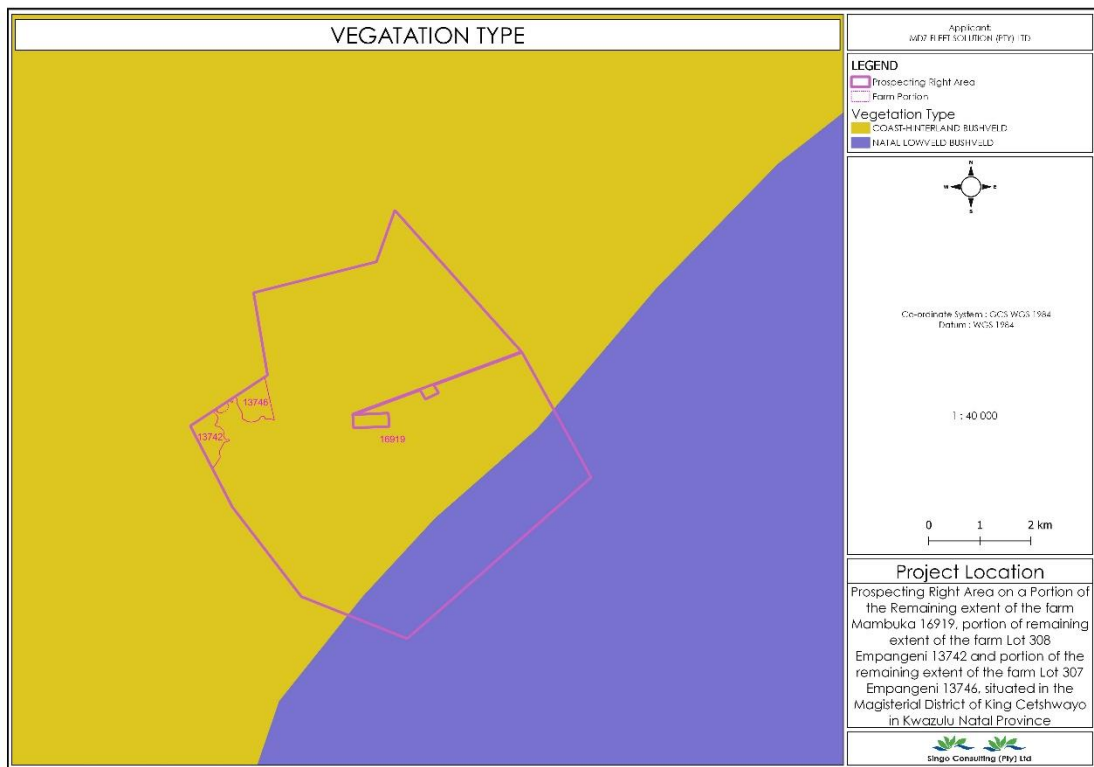
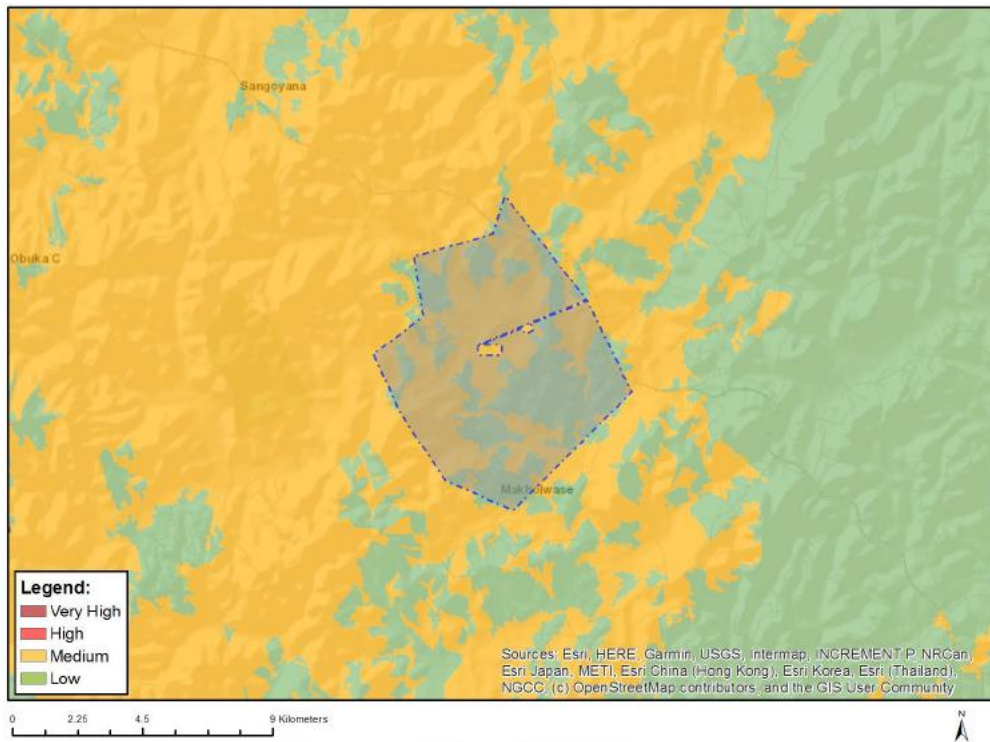


Figure 28: Vegetation type map of the proposed project area (Singo GIS, 2023)

## MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Salpinctium natalense
Medium	Sensitive species 1076
Medium	Oxygonum dregeanum subsp. streyi
Medium	Sensitive species 191

**Figure 29: Plant Species Theme Sensitivity Map** (Screening tool, 2023)



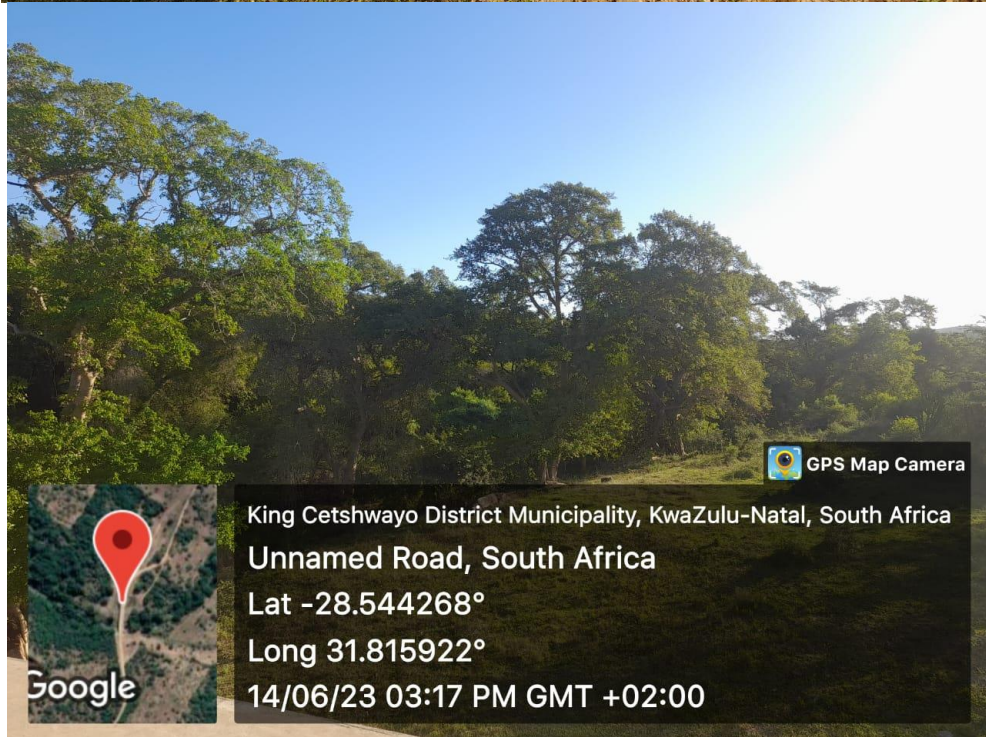
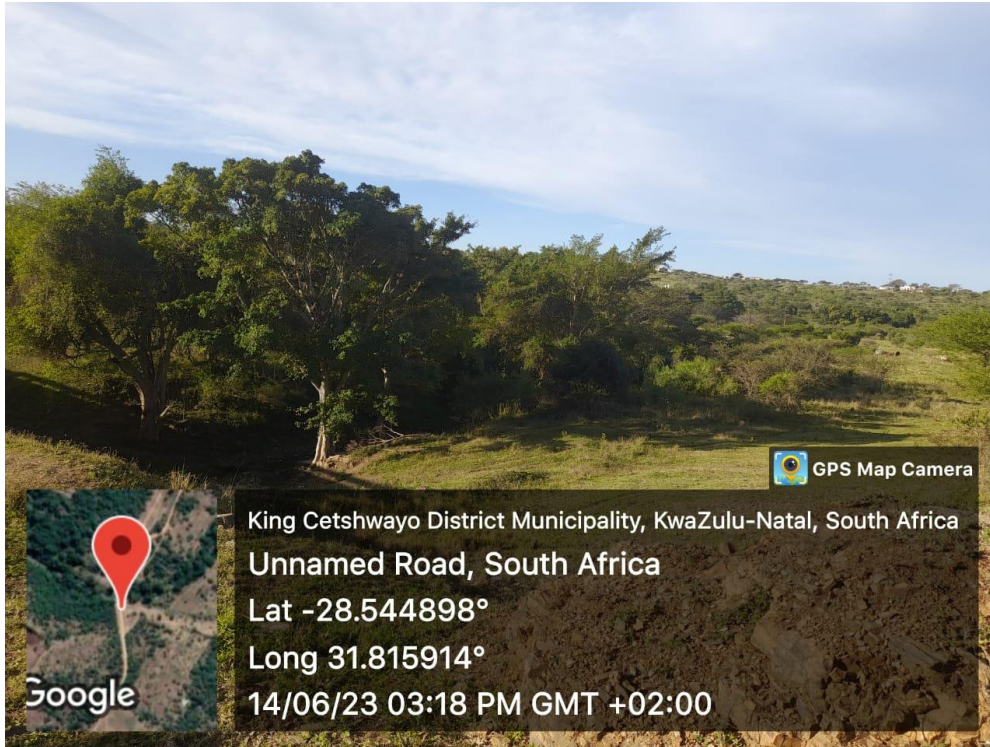




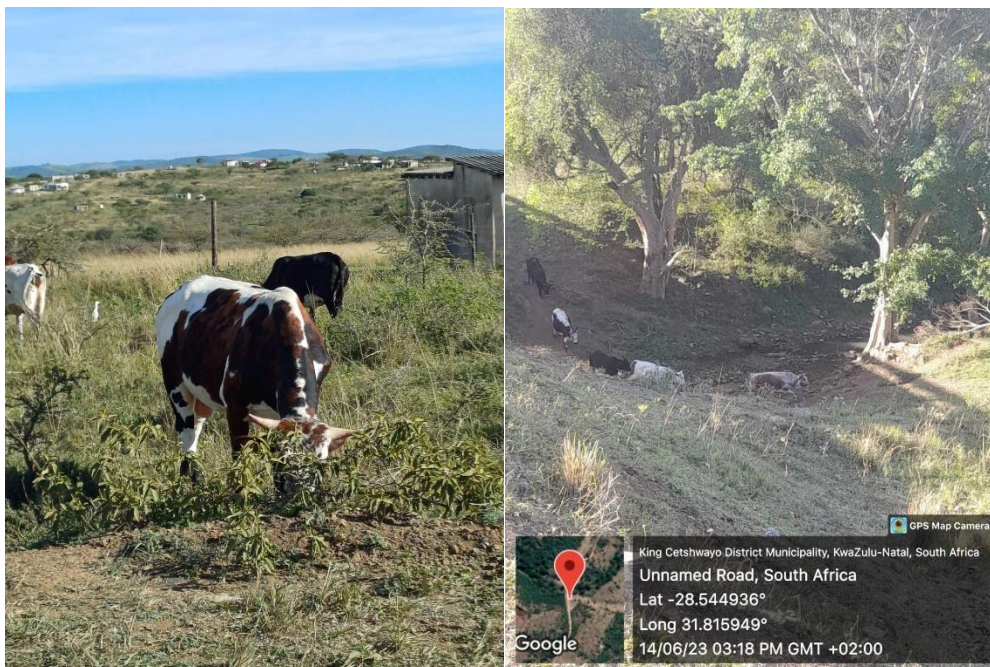


Figure 30: Vegetation type of the proposed project area.

## 8.8 Animal Life (Fauna)

Domestic fauna was observed during site assessment such as cattle, horses, dogs and goats although no wild fauna was observed at the time of the site inspection. Should any wild fauna enter the prospecting area there will be no impact on the proposed prospecting activity, as they will be able to move away or through the site, without being harmed.

The fauna at the site will not be impacted by the proposed processing activity, as they will be able to move away from or through the site unharmed. Workers must be educated and managed to ensure that no fauna at the site is harmed. Upon commencement of the proposed processing activities, the processing area will be fenced off to prevent livestock, such as cattle from wandering into the work areas.

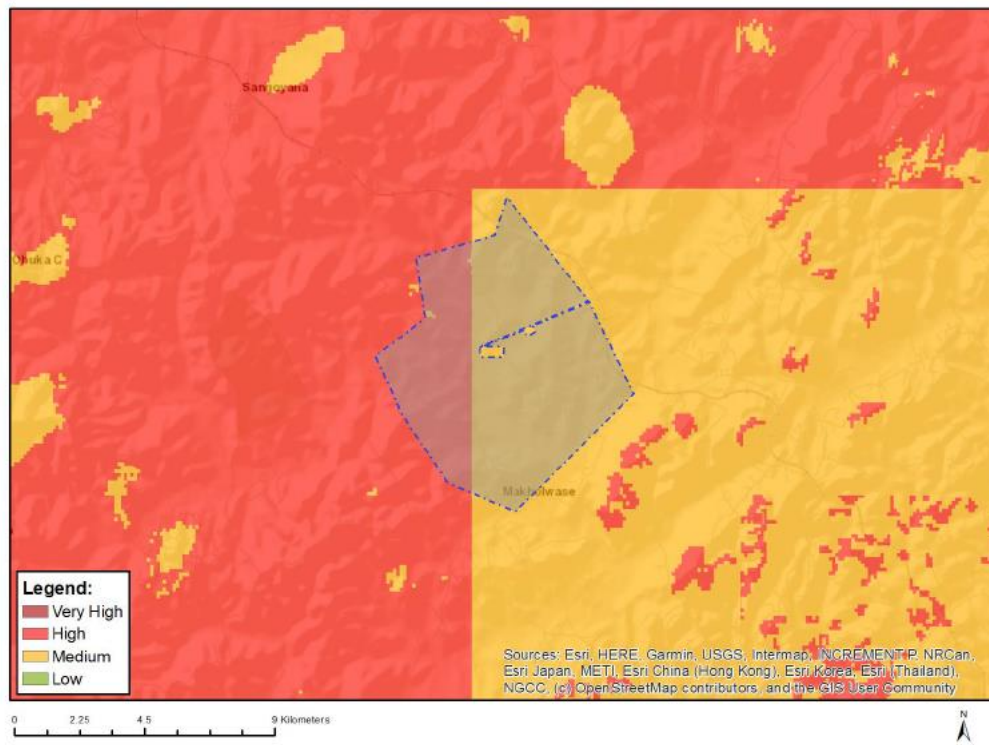


**Figure 31: Animals found within the proposed project area** (Singo Consulting (Pty) Ltd, 2023)

According to the screening report done for this project, the location of the proposed project lies in an area of high animal sensitivity. This is illustrated in figure 32 below.



## MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Figure 32: Animal Theme Sensitivity (Screening tool, 2023)



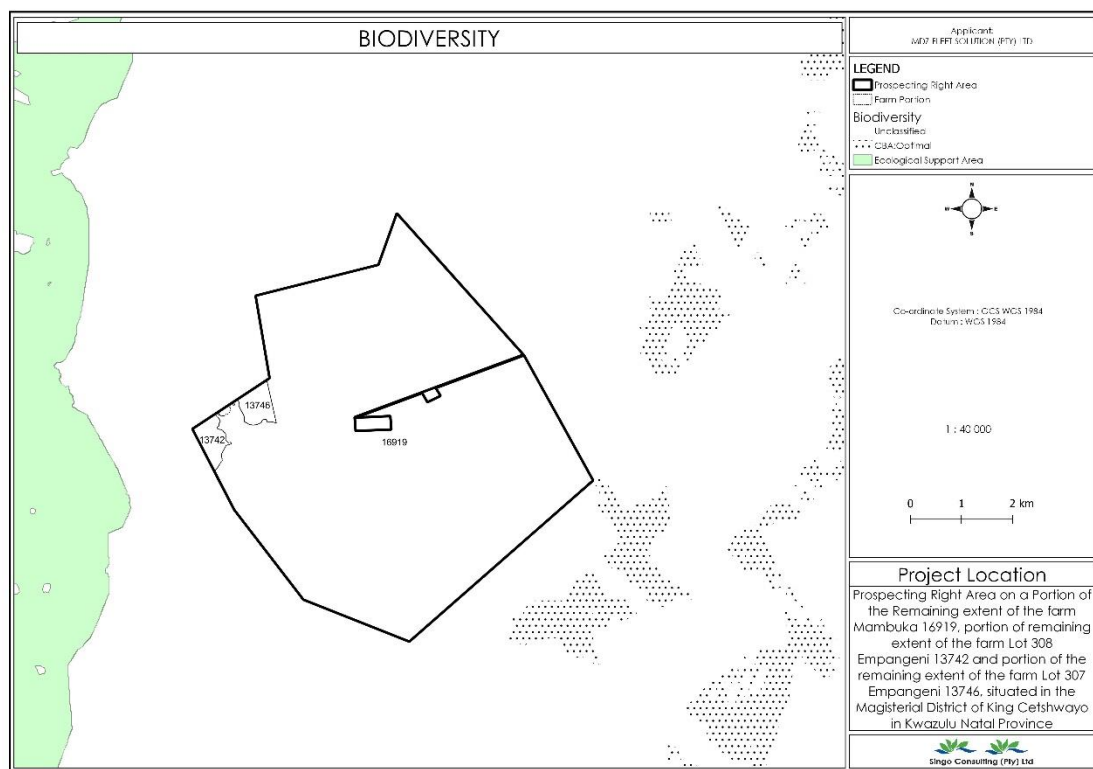
Figure 33: Typical example of Aves-Sagittarius Serpentarius

## 8.9 Biodiversity

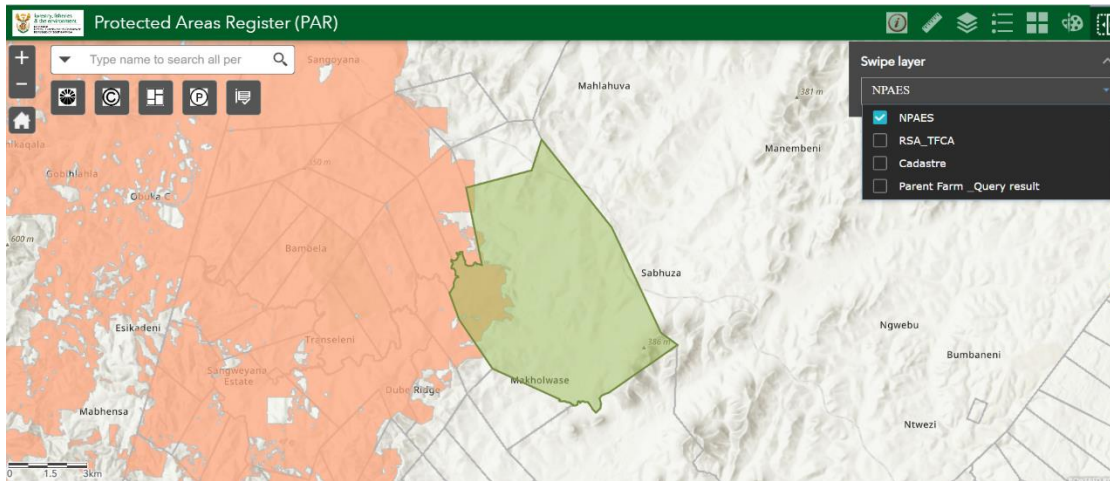
Biodiversity describes the variety of life in an area including the number of different species, the genetic wealth within each species, the interrelationships between them and the natural areas in which they occur.

Critical Biodiversity Areas are areas required to meet biodiversity targets for ecosystems, species and ecological processes, as identified in a systematic biodiversity plan. Ecological Support Areas are not essential for meeting biodiversity targets but play an important role in supporting the ecological functioning of Critical Biodiversity Areas and/or in delivering ecosystem services. Biodiversity information for the proposed site has been requested, and it will be of assistance in compiling an ecology study for the proposed area.

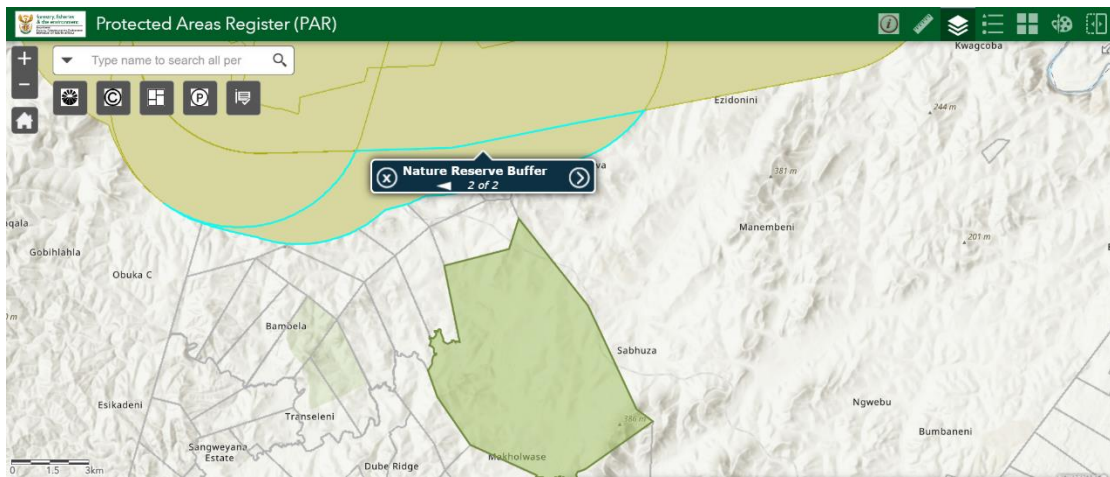
The proposed prospecting site falls within an unclassified biodiversity area. (Figure 34 below). A portion of the proposed prospecting area has been marked for NPAES (see Figure 35), prospecting will be conducted 500m away from any protected areas and such areas will be marked as 'No-go areas'.



**Figure 34: Critical Biodiversity map of the proposed project area. (Singo GIS, 2023)**



**Figure 35: Screenshot from DFFE Portal**  
([https://egis.environment.gov.za/protected\\_areas\\_register](https://egis.environment.gov.za/protected_areas_register))



**Figure 36: Screenshot from DFFE Portal**  
([https://egis.environment.gov.za/protected\\_areas\\_register](https://egis.environment.gov.za/protected_areas_register))



## 8.10 Graves, heritage, archaeological and cultural resources

A few graves were observed near the proposed mining permit area during site assessment. The South African Heritage Resources Agency (SAHRA) has been consulted via their online website. If more heritage resources of significance are exposed during the prospecting of the project, the South African Heritage Resources Agency (SAHRA) should be notified immediately, all development activities should be stopped, and an archaeologist accredited with the Association for Southern African Professional Archaeologists (ASAPA) should be notified to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorization from SAHRA to conduct the required mitigation measures.

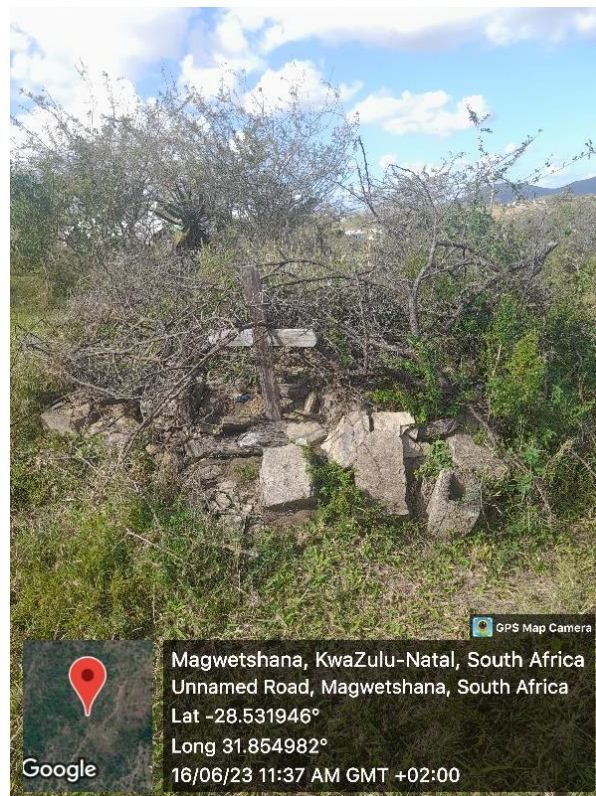
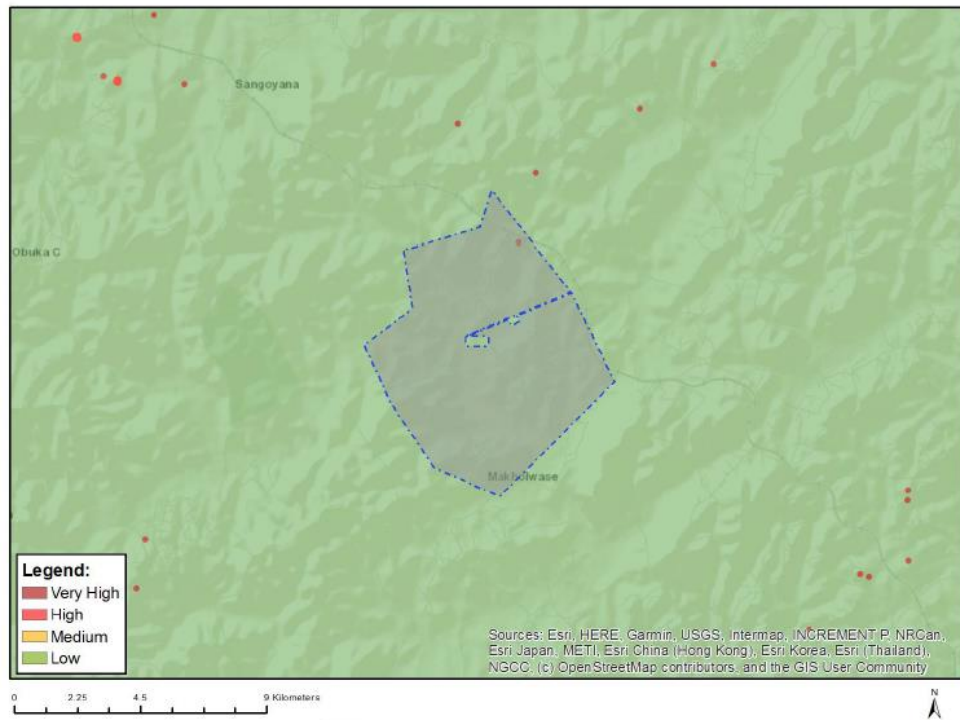


Figure 37: Graves observed near the proposed project area (Singo Consulting (Pty) Ltd, 2023)

According to the screening report, archaeological and cultural heritage theme sensitivity is very high.

**MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY**



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

**Figure 38: Map of Archaeological and Cultural Heritage theme sensitivity** (Screening tool, 2023)

### 8.10.1 Socio-Economic Environment



Figure 39: Map of King Cetshwayo District Municipality

### 8.10.2 Population

Mthonjaneni, uMlalazi, **Mfolozi**, **uMhlathuze**, and Nkandla are the five local municipalities that comprise the King Cetshwayo District. According to the most recent 2020 Global Insights figures, the District has a total population of 982 726, or 8.6% of the total population in KZN, a little increase from the 971 135 recorded by Stats SA in 2016. Females made up 52.6% of the population. The overall number of households fell somewhat, from 225 798 in 2016 to 222 000 in 2019. In 2016, women headed 49.8% of families, while children under the age of 18 headed 1,052 households. Approximately 80% of the KCD population and households are classified as rural. Some migration patterns from KZN are typically associated with greater prospects (jobs, education, infrastructure etc.)

#### Demographics – District Profile

The proposed prospecting area is primarily within the boundaries of the UMfolozi Local Municipality, while a smaller portion of the land also lies within those of the UMhlathuze Local Municipality. The UMfolozi Local Municipality is located in the KwaZulu-Natal province of South Africa. It is known for its rich biodiversity and natural resources, making it an attractive area for prospecting activities. Similarly, the UMhlathuze Local Municipality, which also shares a portion of the proposed prospecting area, is renowned for its strategic location near the coast and its potential for economic development.

The following table covers demographic data for each local municipality, including spatial size, population, wards, and traditional authorities.

MUNICIPALITY	CURRENT SPATIAL	DEMOGRAPHIC SIZE	NUMBER WARDS	NUMBER OF	NAMES TRIBAL AUTHORITIES
uMfolozi	1208 km <sup>2</sup>	144 363	17	5	<ul style="list-style-type: none"> <li>• Mthethwa</li> <li>• Mbonambi</li> <li>• Mambuka</li> <li>• Somopho</li> </ul> <ul style="list-style-type: none"> <li>• Sokhulu</li> </ul>
uMhlathuze	795 km <sup>2</sup>	410 465	34	32	<ul style="list-style-type: none"> <li>• Dube</li> <li>• Madlebe</li> <li>• Obuka (Small portion of land)</li> <li>• Mambuka (Small portion of land)</li> </ul> <ul style="list-style-type: none"> <li>• Mkwanzazi</li> <li>• Bhejane</li> <li>• Somopho</li> <li>• Obizo</li> </ul>
uMlalazi	2214 km <sup>2</sup>	213,601	27	14	<ul style="list-style-type: none"> <li>• T Biyela</li> <li>• ZM Biyela</li> <li>• Khoza</li> <li>• Zulu</li> <li>• F R Biyela</li> <li>• Zulu</li> <li>• S Zulu</li> </ul> <ul style="list-style-type: none"> <li>• Nzuza</li> <li>• Mpungose</li> <li>• Dube</li> <li>• Ntuli</li> <li>• Zulu</li> <li>• Mzimela</li> <li>• Shange</li> </ul>
Mthonjaneni	1086 km <sup>2</sup>	78 883	13	3	<ul style="list-style-type: none"> <li>• Ntembeni</li> <li>• Obuka</li> </ul> <ul style="list-style-type: none"> <li>• Yanguye</li> </ul>
Nkandla	1827 km <sup>2</sup>	114,284	14	17	<ul style="list-style-type: none"> <li>• Mahlayizeni</li> <li>• Khabela</li> <li>• Xulu</li> <li>• Zondi</li> <li>• Magwaza</li> <li>• Chube</li> <li>• Izindlozi</li> <li>• Izigqoza-Sub Clan</li> <li>• Amaphuthu</li> </ul> <ul style="list-style-type: none"> <li>• Chwezi</li> <li>• Nxamalala</li> <li>• Chunu</li> <li>• Godide</li> <li>• Mpungose</li> <li>• Mangidini</li> <li>• Ngono</li> <li>• Ekukhanyeni</li> </ul>
King Cetshwayo	8213 km <sup>2</sup>	971 135	105	45	

**Table 9: Municipal Demographics (Stats SA –Community Survey 2016 & KCDM Family of Municipalities)**

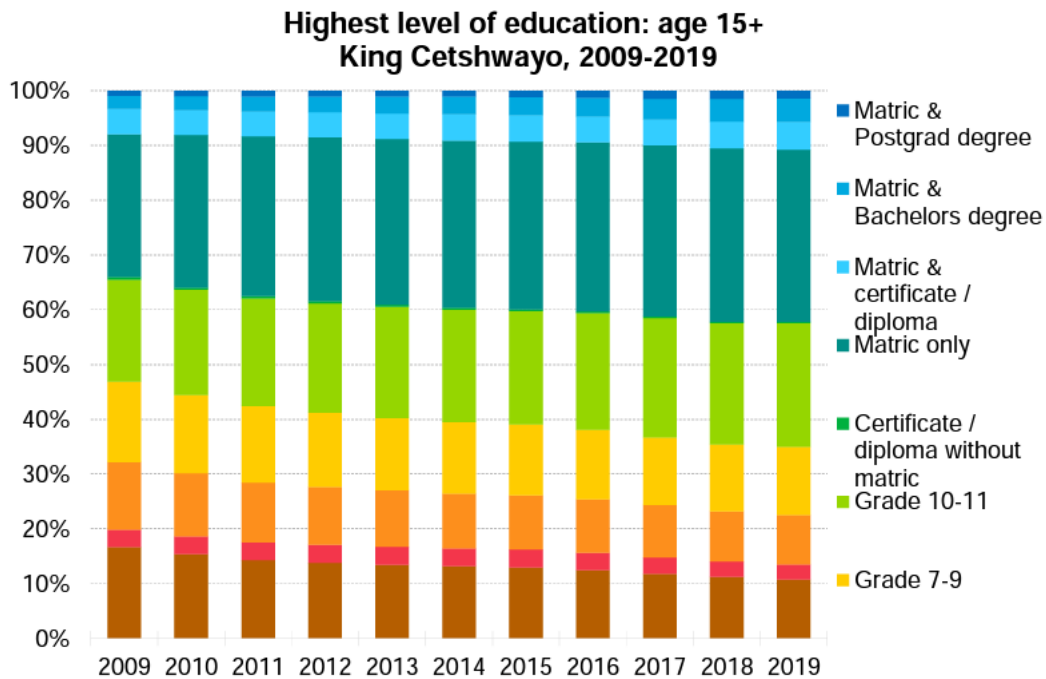
### 8.10.3 Education Profile

The King Cetshwayo District Municipality has played a critical role in developing the economy, which will meet the bulk of the population's demands. The majority of young people in this category live in rural areas, where education, skills, and opportunities are few. A continued of this pattern hinders the expansion of King Cetshwayo's economy by accumulating unskilled labor in the labor market. Efforts should be directed on raising the municipality's educational level.

From 2009 to 2019, the number individuals without any formal education dropped at a -2.82% annual pace, while the number of people with a matriculation merely climbed from 126,000 to 178,000. The number of individuals with a 'matric and a certificate/diploma' reached at an average annual rate of 2.33%, whereas the number of people with a 'matric and a Bachelor's' degree increased at an average



annual pace of 7.76%. The overall level of education is improving, as seen by an increase in the number of people with 'matric' or higher education.



**Table 10: Education levels in the district**

### 8.11 Heritage Resources

Graves were identified in the study area. To ensure that the graves are protected, a buffer will be set to indicate a no-go zone. Workers will be instructed and managed so that no effect occurs to the Graves during prospecting process.

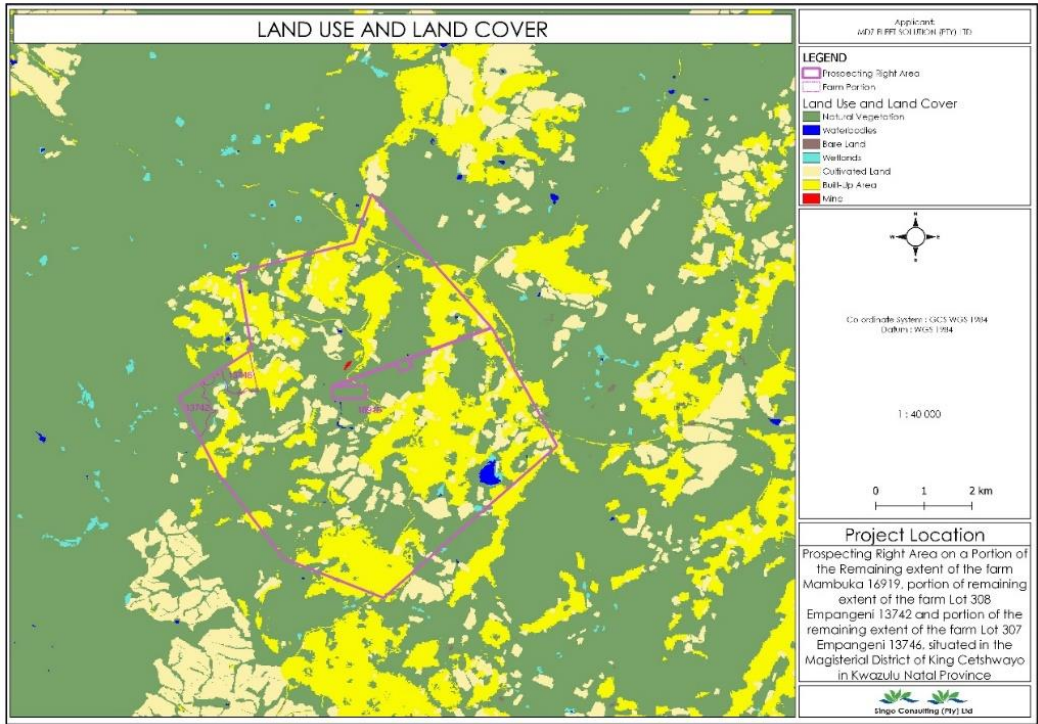
However, should any other heritage resources of significance be exposed during the operational phase of the project, the South African Heritage Resources Agency (SAHRA) should be notified immediately, all development activities should be stopped, and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notified to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation from SAHRA to conduct the required mitigation measures.



**Figure 40: Graves observed during site assesment (Singo Consulting (Pty) Ltd, 2023)**

## **8.12 Land Use**

According to the map from the GIS Specialist the land use in the proposed project area is mostly dominated by natural vegetation, build-up area, waterbodies and mines. During site assessment no mine was observed in any close proximity to the proposed site. Ecology study will be conducted and a 100m buffer will apply on the waterbodies and the area will be marked as 'No-Go zone'.



**Figure 41: Land use map of the proposed project area (Singo GIS, 2023)**

### **8.13 Description of specific environmental features and infrastructure on the site.**

#### **8.13.1 Environmental features**

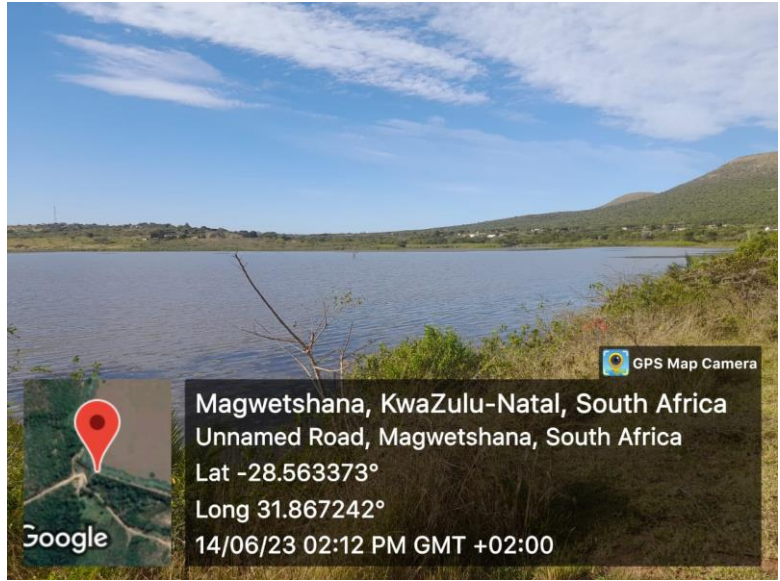
The proposed prospecting area consist of perennial and non-perennial river. The perennial and non-perennial rivers will be buffered as a no-go area and approximately a 100m buffer should apply.

#### **Wetlands and rivers**

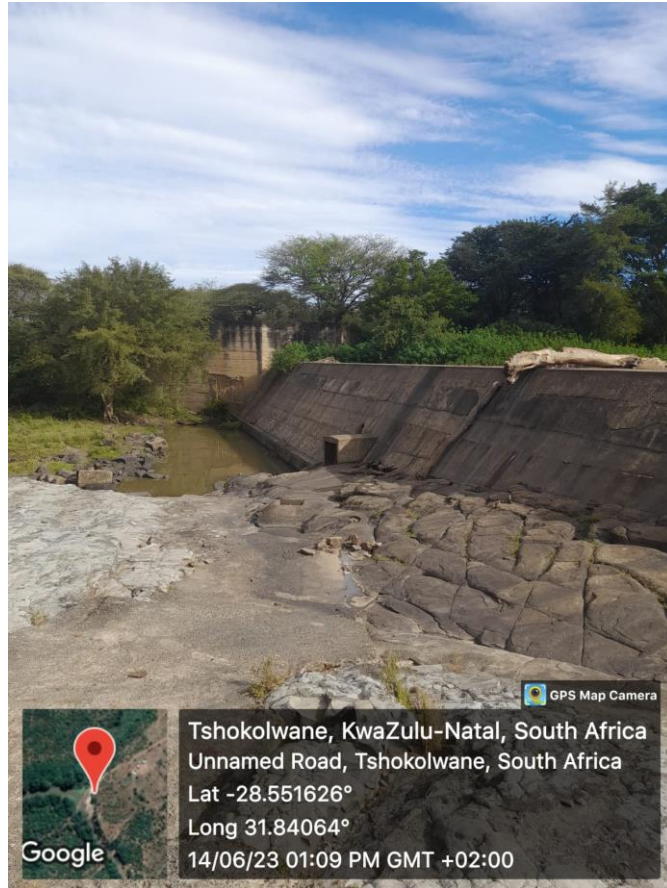
There are rivers (Perennial and Non-Perennial) and depression, floodplain and seep wetland within the proposed prospecting area. (See figure 42 and 43 below)





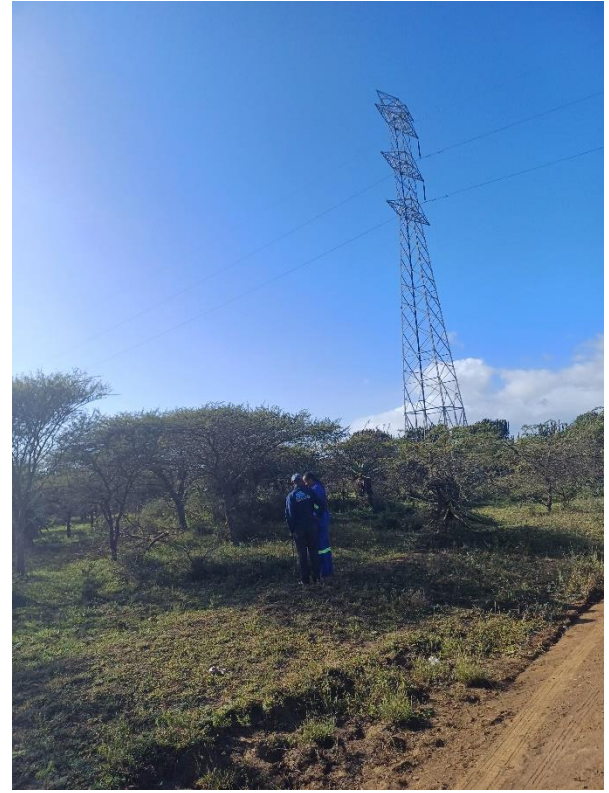






## Infrastructure

Infrastructure is the fundamental facilities and systems serving a country, city, or other area, including the services and facilities necessary for its economy to function. Infrastructure is composed of public and private physical improvements such as road, bridges, tunnel, water supply, sewage, electric grids, and telecommunications.



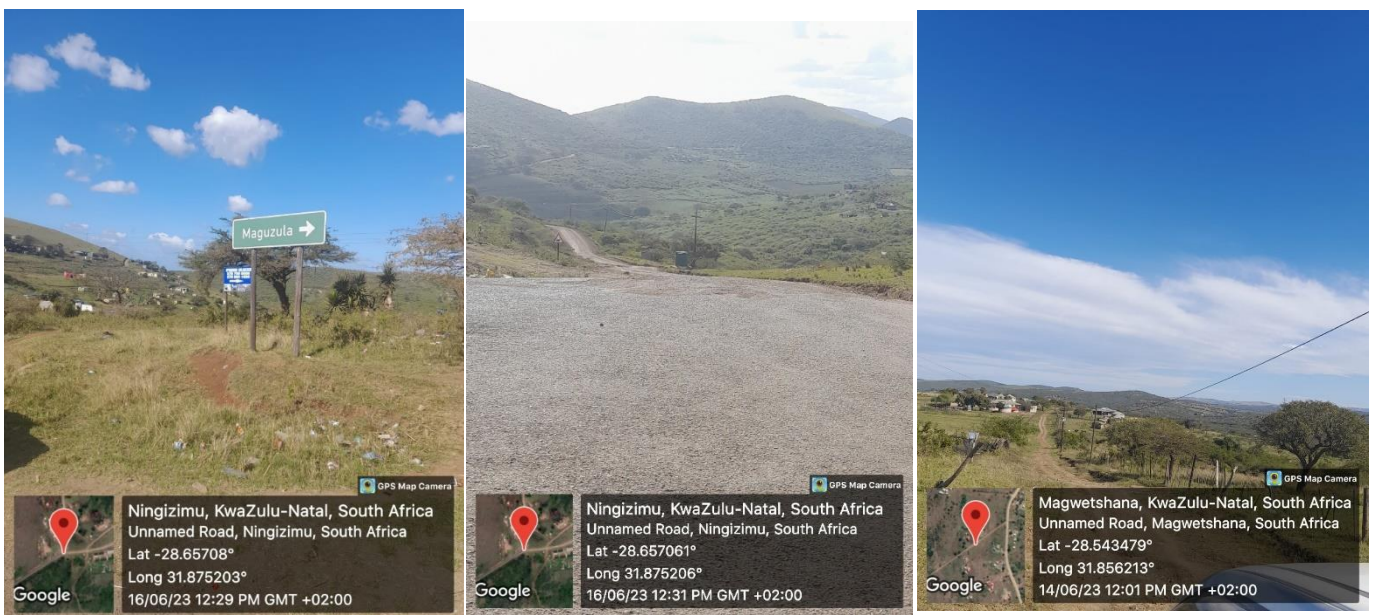




**Figure 44: Infrastructures observed on site (Singo Consulting (Pty) Ltd, 2023)**

### Roads

Accessibility to the site is convenient as it is located around residential areas. The area can be easily accessed through the use of R34 and multiple gravel roads that cuts through the prospecting right area.



**Figure 45: Access road to the proposed site (Singo Consulting (Pty) Ltd, 2023)**

## Electric power line

There are electric power lines within the proposed project area.



**Figure 46: Powerline identified within the proposed project area (Singo Consulting (Pty) Ltd, 2023)**

## 9 Impact Assessment

**Impacts and risks identified including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts**

(Provide a list of the potential impacts identified of the activities described in the initial site layout that will be undertaken, as informed by both the typical known impacts of such activities, and as informed by the consultations with affected parties together with the significance, probability, and duration of the impacts. Please indicate the extent to which they can be reversed, the extent to which they may cause irreplaceable loss of resources, and can be avoided, managed or mitigated).

## 9.1 Impact Assessment

The impact Assessment is presented in the table below.

Table 11: Impact Assessment Table

ACTIVITIES	POTENTIAL IMPACT	Extent of impact	Duration of impact	Intensity of impact	Probability of occurrence of impact	SIGNIFICANCE if not mitigated
Vegetation clearance for establishment of drill sites	Removal of / damage to natural vegetation	2	2	1	4	16
Vegetation clearance for establishment of drill sites	Disturbance of riparian habitats, riverbanks or wetland	1	3	3	3	27
Vegetation clearance for establishment of drill sites	The stripping of soil, incorrect stockpiling, erosion and storm water run-off can lead to the loss of topsoil	1	3	3	2	18
Vegetation clearance for establishment of drill sites	Changes to the shape or form of the land	1	1	1	2	2
Vegetation clearance for establishment of drill sites	Impact on current land use	1	1	3	2	6
Vegetation clearance, Site establishment , Drilling activities & movement of people and equipment on site	Destruction of cultural heritage sites and artefacts	3	5	3	1	135
Vegetation clearance for establishment of drill sites	Dust pollution	2	1	3	4	24
Vegetation clearance for establishment of drill sites	Storm water run-off from cleared areas could lead to siltation of surface water	2	2	3	2	24
Workers & material on site	Contamination of soils through spills	1	1	2	4	8



ACTIVITIES	POTENTIAL IMPACT	Extent of impact	Duration of impact	Intensity of impact	Probability of occurrence of impact	SIGNIFICANCE if not mitigated
	from sanitation facilities & litter					
Workers & material on site	Fire Hazards	2	3	3	3	54
Workers & material on site	Collection of firewood, damage to property	2	2	3	2	24
Workers & material on site	Contribution to the economy through employment	2	1	3	4	POSITIVE
Workers & material on site	Spread of HIV/Aids to farm workers and local community	2	4	3	2	48
Use of heavy machinery & vehicles on site for drilling	Resource consumption (diesel - non-renewable resource)	2	3	2	2	24
Use of heavy machinery & vehicles on site for drilling	Contamination of soils through hydrocarbon leaks and spills from machinery & equipment	1	2	3	3	18
Use of heavy machinery & vehicles on site for drilling	Use of groundwater for drilling activities	2	1	3	3	18
Use of heavy machinery & vehicles on site for drilling	Contamination of surface water through hydrocarbon leaks and spills from machinery & equipment	2	3	3	2	36
Use of heavy machinery & vehicles on site for drilling	Contamination of groundwater through hydrocarbon leaks and spills from machinery & equipment	2	3	3	1	18
Use of heavy machinery &	Compaction of soils through	1	1	2	4	8

ACTIVITIES	POTENTIAL IMPACT	Extent of impact	Duration of impact	Intensity of impact	Probability of occurrence of impact	SIGNIFICANCE if not mitigated
vehicles on site for drilling	movement of heavy vehicles and machinery on site					
Use of heavy machinery & vehicles on site for drilling	Damage to vegetation	1	2	3	4	24
Use of heavy machinery & vehicles on site for drilling	Release of gaseous emissions	2	2	3	3	36
Use of heavy machinery & vehicles on site for drilling	Dust Fallout	2	1	3	4	24
Use of heavy machinery & vehicles on site for drilling	Increase in ambient noise levels	2	1	3	4	24
Use of heavy machinery & vehicles on site for drilling	Visual intrusion	1	1	2	4	8
Use of heavy machinery & vehicles on site for drilling	Disturbance of fauna species in the vicinity	2	2	3	4	48
Use of heavy machinery & vehicles on site for drilling	Release of methane gas from exploration boreholes	2	2	2	4	32
Use of heavy machinery & vehicles on site for drilling	Cross-contamination of aquifers due to borehole construction	3	3	4	2	72
Use of heavy machinery & vehicles on site for drilling	Proliferation of invasive plant species	1	3	3	4	36
<b>Closure</b>						
Concurrent rehabilitation	Reducing soil compaction of disturbed area and access roads to improve drainage and control erosion	1	4	1	4	POSITIVE

ACTIVITIES	POTENTIAL IMPACT	Extent of impact	Duration of impact	Intensity of impact	Probability of occurrence of impact	SIGNIFICANCE if not mitigated
Concurrent rehabilitation	Use stockpiled topsoil to close sumps	1	5	3	4	POSITIVE
Close drill hole	Restoration of land use and land capability	1	3	2	3	POSITIVE

## 9.2 Impact Assessment Methodology

### i. Methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks;

(Describe how the significance, probability, and duration of the aforesaid identified impacts that were identified through the consultation process was determined in order to decide the extent to which the initial site layout needs revision).

The potential impacts listed were assessed and determined for all activities associated with the different phases of the project (construction, operation and decommissioning).

In order to determine the significance of an activity each activity was rated. The following parameters were used:

#### 1. Extent of impact (E)

1 = Site specific - Extending only as far as the activity, or limited to the site and its immediate surroundings

2 = Regional - Will have an impact on the region. A development can often have a regional impact on Biodiversity. Example: if a feeding site for birds or mammals is destroyed, the population might leave the area or go extinct if they don't find other suitable areas.

3 = National - Will have an impact on a national scale - particularly if an ecosystem or species of national significance is affected

4 = International - Will have an impact across international borders or will impact on an ecosystem or species of international significance

#### 2. Duration of impact (D)

1 = Short term (0-5 years)

2 = Medium term (5-15 years)

3 = Long term (16-30 years) - Impact will cease after the operational or working life of the activity, either due to natural process or by human intervention

4 = Discontinuous or intermittent - Impact may only occur during specific climatic conditions or during a particular time of year

5 = Permanent - Impact will be where mitigation or moderation by natural process or by human intervention will not occur in such a way or in such a time span that the impact can be considered transient or temporary

**3. Intensity of impact (I)**

1 = Low Impact - Affects the environment in such a way that natural, cultural and soil functions and processes are not affected

2 = Medium Impact - Affected environment is altered by natural, cultural and soil functions and processes continue although in a modified way

3 = High Impact - Natural, cultural or social functions or processes are altered to the extent that they will temporarily or permanently cease

**4. Probability of impact occurring (P)**

1 = Improbable – Low likelihood

2 = Probable – Distinct possibility

3 = Highly probable – Most likely

4 = Definite - Impact will occur regardless of any prevention measures

**5. Criteria of assigning significance to potential impacts**

Significance is determined by means of the following calculation:

Extent of Impact X Duration of Impact X Intensity of Impact X Probability of Occurrence of Impact = **SIGNIFICANCE**

Significance determination criteria

**Extent of Impact**

**Duration of Impact**

Site Specific	1	Short term	1
Regional	2	Medium term	2
National	3	Discontinuous	3
International	4	Long term	4
		Permanent	5

**Intensity of Impact**

**Probability of Occurrence of Impact**

Low	1	Improbably (low likelihood)	1
Medium	2	Probable (Distinct possibility)	2
High	3	Highly probable (Most likely)	3
		Definite	4



## SIGNIFICANCE

High	73 - 240
Medium	36 - 72
Low	1 - 35

### ii. The positive and negative impacts that the proposed activity (in terms of the initial site layout) and alternatives will have on the environment and the community that may be affected.

(Provide a discussion in terms of advantages and disadvantages of the initial site layout compared to alternative layout options to accommodate concerns raised by affected parties)

#### 1. Positive Impact associated with the proposed Prospecting:

- Employment contributing to the economy
- Concurrent rehabilitation during prospecting

#### 2. Negative Impacts associated with the proposed prospecting:

- Destruction of cultural heritage sites and artefacts
- Loss of soil resources
- Change of current land use
- Removal / damage of natural vegetation
- Damage to sensitive biodiversity areas
- Disturbance of, riparian habitats & non-perennial river
- Contamination of surface water
- Impact on current land use
- Contamination of soils
- Air Quality Impact (Dust)
- Litter
- Disturbance of important bird species and fauna in the vicinity

## 9.3 Mitigation Measures

### iii. The possible mitigation measures that could be applied and the level of risk.

(With regard to the issues and concerns raised by affected parties provide a list of the issues raised and an assessment/ discussion of the mitigations or site layout alternatives available to accommodate or address their concerns, together with an assessment of the impacts or risks associated with the mitigation or alternatives considered).

Mitigation measures were identified for all possible impacts even though the destruction of heritage resources is considered a high impact, therefore heritage sites will not be drilled if they are found on site.

Table 12: Impact and Mitigation measures

ACTIVITIES	POTENTIAL IMPACT	MITIGATION MEASURES
Vegetation clearance for establishment of drill sites	Removal of / damage to natural vegetation	1) Boreholes and access tracks will be located in areas that will result in minimal ground disturbance. 2) Permission will be obtained from landowners before trees are felled. 3) Where an access road is needed, the relevant occupant and owner will be consulted prior to the development of that access to ensure that consensus is reached on the matter and the access will be rehabilitated at the end of the drilling programme. 4) Vegetation clearance will be limited to 0.06 ha per drill hole
Vegetation clearance for establishment of drill sites	Disturbance of riparian habitats or riverbanks	1) During the planning phase for each borehole, wetlands, rivers and/or streams will be identified. The prospecting programme will be designed to avoid to leave a buffer zone of 100 m from rivers & streams. 2) Rivers & Streams will not be crossed, accessed, drained, dredged or filled during prospecting. 3) Areas of ecological significance will be avoided and if disturbance is required, it will be undertaken in accordance with legislation.
Vegetation clearance for establishment of drill sites	The stripping of soil, incorrect stockpiling, erosion and storm water run-off can lead to the loss of topsoil	1) Topsoil will be stripped to a depth of 250 mm from all disturbed areas and stored outside the 1:50 year flood levels of rivers and streams, within the firebreak area. 2) Topsoil will be adequately protected from being blown away or being eroded. 3) Boreholes and access tracks will be located in areas that will result in minimal ground disturbance.
Vegetation clearance for establishment of drill sites	Changes to the shape or form of the land	1) During the planning phase for each borehole, specific controls will be identified and implemented, based on site conditions.
Vegetation clearance for establishment of drill sites	Impact on current land use	1) Land disturbed will be rehabilitated to a stable and permanent form suitable for subsequent land use. 2) Exact location of drill holes and new access routes will be determined through communication with landowner
Vegetation clearance, Site establishment, Drilling activities & movement of people and equipment on site	Destruction of cultural heritage sites and artefacts	1) Requirements of SAHRA will be adhered to 2) Potential heritage sites will be identified during the planning phase to ensure that such areas are avoided. Each prospecting site will be visited prior to any work starting to identify possible heritage sites. 3) Prospecting activities will be kept away from excluded and exempted areas. 4) Where boreholes are sited in proximity to heritage sites and depending on the proximity to the drilling site, appropriate measures such as flagging, pegging or installation of temporary fencing will be undertaken to ensure that the site is not impacted on during prospecting.

ACTIVITIES	POTENTIAL IMPACT	MITIGATION MEASURES
Vegetation clearance for establishment of drill sites	Dust pollution	1) Dust will be effectively controlled in all areas cleared from vegetation through water spraying.
Vegetation clearance for establishment of drill sites	Storm water run-off from cleared areas could lead to siltation of surface water	1) Controls will be aimed at minimizing erosion and sediment washing from drill pads, access roads and other disturbed areas. 2) Sediment and erosion controls will be designed to prevent runoff from the prospecting site into rivers & streams. 3) Sediment and erosion controls may include cut-off trenches and drains, culverts for tracks, silt fences, rock armoring or mulching.
Workers & material on site	Contamination of soils through spills from sanitation facilities & litter	1) A chemical toilet will be used on site during prospecting and will be used in such a way as to prevent water pollution. The use of a chemical toilet will be undertaken in consultation with the landowner. 2) Full or leaking toilets must be reported to the Supervisor for corrective action or replacement. 3) Prospecting areas will be maintained in a clean and tidy condition at all times. 4) All waste will be collected, separated and stored in properly constructed containers with lids and removed to an approved landfill or another site according to local municipal requirements. 5) Full waste bins must be reported to the Supervisor for collection and disposal at an approved landfill.
Workers & material on site	Fire	1) Vegetation around each exploration site within a 5m radius will be kept short to create a fire management zone. 2) Collection of firewood will not be allowed. 3) Open fires will be prohibited to people involved in prospecting. 4) No burning cigarettes or matches may be thrown down within the prospecting area. A bucket with sand will be provided for the disposal of cigarettes and matches. 5) No smoking will be allowed near gas, paints or fuel storage areas. 6) Suitable welding blankets are to be used when welding or operating grinders and this equipment is to be serviced regularly. 7) Rubbish or vegetation may under no circumstances be burnt. All waste will be removed off site and disposed of at an approved landfill.
Workers & material on site	Collection of firewood, damage to property	1) Collection of firewood will not be allowed. 2) Only one drill site at any given time. All employees present at the one drill site with appropriate supervision 3) Complaints and outcomes of subsequent investigations will be recorded in a Complaints Register in the format of a spreadsheet. 4) If damage to private property occurs as a result of prospecting activities, such damage will

ACTIVITIES	POTENTIAL IMPACT	MITIGATION MEASURES
		be repaired or owners will be compensated as appropriate.
Workers & material on site	Contribution to the economy through employment	1) Due to the nature of prospecting, employment opportunities will be minimal. The prospecting crew is small (10 people) with specialised skills. Were possible, local people will however be employed during the project. 2) Local people and businesses with appropriate skills will be identified and included in the project tender process. The applicant is committed to employ local people and businesses during the project, where possible.
Workers & material on site	Spread of HIV/Aids to farm workers and local community	1) Due to the nature of prospecting, employment opportunities will be minimal. The prospecting crew is small (10 people) with specialised skills. Were possible, local people will however be employed during the project. 2) No employees will be permitted to stay on site. 3) Aids awareness talks
Use of heavy machinery & vehicles on site for drilling	Resource consumption (diesel - non-renewable resource)	1) Vehicles and equipment to be serviced regularly and maintained in good working condition
Use of heavy machinery & vehicles on site for drilling	Contamination of soils through hydrocarbon leaks and spills from machinery & equipment	1) All chemicals, fuels and oils to be stored on site will be appropriately banded. 2) Precautions will be taken to prevent spills and soil contamination. 3) Material Safety Data Sheets for the item(s) spilled will be consulted for information concerning clean-up requirements to ensure correct clean-up procedure. 4) Any contaminated soil will be collected into non-permeable bags and disposed of to an approved landfill site.
Use of heavy machinery & vehicles on site for drilling	Use of groundwater for drilling activities	1) Existing water supply locations will be identified for use and agreements will be reached with landowners regarding on-site water use. The drilling rig will require approximately 2,000l/day. Where a suitable water supply is not available, water will be sourced from a commercial supplier and delivered to site by water tanker. 2) Water use license has been applied for to DWS for the abstraction of surface- and/or groundwater during prospecting. 3) Adequate provision will be made for storing drinking water on site in the form of 2500 litre plastic water tanks.
Use of heavy machinery & vehicles on site for drilling	Contamination of surface water through hydrocarbon leaks and spills from machinery & equipment	1) The drilling fluid that will be used during prospecting must be biodegradable and not pose a water pollution threat. 2) Drilling sumps and containment measures will be designed to contain all drilling fluid. 3) Material Safety Data Sheets for the item(s) spilled will be consulted for information concerning clean-up requirements to ensure correct clean-up procedure.

ACTIVITIES	POTENTIAL IMPACT	MITIGATION MEASURES
		4) Any contaminated soil will be collected into non-permeable bags and disposed of to an approved landfill site. 5) Drill sites to be located 500 m from rivers & stream
Use of heavy machinery & vehicles on site for drilling	Contamination of groundwater through hydrocarbon leaks and spills from machinery & equipment	1) Machinery and equipment will only be maintained over a drip tray, a thin concrete slab or a PVC lining to prevent soil and water contamination. 2) No vehicle will be extensively repaired on site. 3) Material Safety Data Sheets for the item(s) spilled will be consulted for information concerning clean-up requirements to ensure correct clean-up procedure. 4) Any contaminated soil will be collected into non-permeable bags and disposed of to an approved landfill site.
Use of heavy machinery & vehicles on site for drilling	Compaction of soils through movement of heavy vehicles and machinery on site	1) Stay on predefined areas and routes. 2) Scarify access roads and stockpile areas to a depth of 500 mm and restore topsoil cover. 3) Re-seed or plant vegetation indigenous to the area.
Use of heavy machinery & vehicles on site for drilling	Damage to vegetation	1) Vehicles will only stay on dedicated roads (turning circles). 2) No movement of heavy machinery outside dedicated routes. 3) All routes and turning circles will be scarified and re-seeded with seeds from vegetation indigenous to the area.
Use of heavy machinery & vehicles on site for drilling	Release of gaseous emissions	1) Vehicles and equipment will be maintained in a good working order.
Use of heavy machinery & vehicles on site for drilling	Dust Fallout	1) Speed limits on gravel roads will be 40km/hr to minimise dust and noise generation. 2) Dust will be effectively controlled in all disturbed areas through water spraying.
Use of heavy machinery & vehicles on site for drilling	Increase in ambient noise levels	1) Speed limits on gravel roads will be 40km/hr to minimise dust and noise generation. 2) Prospecting activities will be restricted today light hours.
Use of heavy machinery & vehicles on site for drilling	Visual intrusion	1) Only one site to be drilled at any one time 2) Concurrent rehabilitation
Use of heavy machinery & vehicles on site for drilling	Disturbance of fauna species in the vicinity	1) Prospecting activities will be kept away from excluded and exempted areas. 2) A field survey will be undertaken before drilling commences at each drilling site to confirm that no threatened species, ecologically sensitive areas or conservation areas are present in sections to be cleared. 4) One site to be drilled at a time. 5) Concurrent rehabilitation.
Use of heavy machinery &	Release of methane gas from	1) Exploration boreholes are to be capped when no drilling work is being undertaken. 2) Exploration boreholes which will not be used



ACTIVITIES	POTENTIAL IMPACT	MITIGATION MEASURES
vehicles on site for drilling	exploration boreholes	during production to be sealed with cement once exploration work has been completed.
Use of heavy machinery & vehicles on site for drilling	Cross-contamination of aquifers due to borehole construction	1) For the purpose of future monitoring programmes, impact assessments and concurrent rehabilitation, the depth of water strikes will be recorded during exploration drilling. 2) The static groundwater level will be monitored in prospecting boreholes that intersected water after completion and before concurrent rehabilitation for future monitoring, impact assessment and concurrent rehabilitation purposes. 3) Any completed hole that is not required for groundwater monitoring, will be sealed to prevent groundwater contamination.
Use of heavy machinery & vehicles on site for drilling	Proliferation of invasive plant species	1) Machinery will be cleared of dust/mud and seed prior to relocation to the next site to prevent the spread of alien invasive species.
<b>Closure</b>		
Concurrent rehabilitation	Reducing soil compaction of disturbed area and access roads to improve drainage and control erosion	1) Remaining refuse, chemicals, fuels and waste materials will be removed from the site following the completion of the prospecting programme. Such waste will be disposed of to an approved landfill. 2) Erosion and sediment controls as well as the disturbed area will be rehabilitated 3) An inspection on whether there is evidence of weeds or pest invasion as a result of prospecting activities will be undertaken and appropriate remediation actions will be implemented as required.
Concurrent rehabilitation	Use stockpiled topsoil to close sumps	1) Scarify access roads and stockpile storage areas to a depth of 500 mm. 2) Restore topsoil cover. 3) Re-seed or plant vegetation indigenous to the area.
Close drill hole	Restoration of land use and land capability	1) Exploration boreholes are to be capped when no drilling work is being undertaken. 2) Exploration boreholes which will not be used during production to be sealed with cement once exploration work has been completed.

**iv. Motivation where no alternative sites were considered.**

The location of the property is in an area where the geological formation that is known to host the desired mineralisation.

**v. Statement motivating the alternative development location within the overall site.**

(Provide a statement motivating the final site layout that is proposed)

This is an application for prospecting without bulk sampling where a total of 15 holes will be drilled at locations determined by the geology of the site. Drill holes will be

located at least 500 meters from any watercourse and 100m away from formal or informal dwelling or building structure.

**vi. Full description of the process undertaken to identify, assess and rank the impacts and risks the activity will impose on the preferred site (In respect of the final site layout plan) through the life of the activity.**

(Including (i) a description of all environmental issues and risks that are identified during the environmental impact assessment process and (ii) an assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures.)

Please refer to Tables 12.

**k) Assessment of each identified potentially significant impact and risk**

(This section of the report must consider all the known typical impacts of each of the activities (including those that could or should have been identified by knowledgeable persons) and not only those that were raised by registered interested and affected parties).

Table 13: Significant and Impact risk

NAME OF ACTIVITY  (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc  (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, etc...etc...etc.)	POTENTIAL IMPACT (Including the potential impacts for cumulative impacts)  (E.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc.... etc...)	ASPECTS AFFECTED	PHASE In which impact is anticipated  (E.g. Construction, commissioning, operational, Decommissioning, closure, post closure)	SIGNIFICANCE if not mitigated					MITIGATION TYPE (modify, remedy, control, or stop) Through  (E.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc)  (E.g. Modify through alternative method. Control through noise control. Control through management and monitoring through rehabilitation)	SIGNIFICANCE if mitigated
				EXTENT	INTENSITY	DURATION	PROBABILITY	RATING		

<b>Site establishment activities</b> _ Vegetation clearance _ Topsoil stripping & stockpiling _ Drill pad compaction _ Erection of office, toilets, fuel storage (if not by road tanker), water tanker, core storage _ Vehicle movements _ Waste management	Cultural and Heritage (-ve)	Destruction or loss of Cultural and Heritage Resources: No cultural/heritage artefacts have been identified on site	Construction / Set_up	1	1	1	Improbable	3 (Very Low)	<ul style="list-style-type: none"> <li>If concentrations of archaeological heritage material and human remains are uncovered during construction, all work must cease immediately.</li> <li>The find must be reported to a heritage specialist so that systematic and professional investigation/ excavation can be undertaken.</li> </ul>	Negligible
	Noise (-ve)	Noise Generation	Construction / Set_up	1	3	1	Definite	5 (Low)	<ul style="list-style-type: none"> <li>Construction/setup, operational and decommissioning activities will be limited to daylight hours on Mondays to Saturdays and no activities on Sundays and public holidays;</li> <li>Separation of distance of minimum 500m, but preferably 1000m to be maintained between drill sites and dwellings;</li> <li>Noise abatement equipment, such as mufflers on diesel engines, will be maintained in good condition; and</li> <li>If intrusive noise levels are experienced by any person at any point, the source of the noise will be</li> </ul>	3(Very Low)
<b>NAME OF ACTIVITY</b>	<b>POTENTIAL IMPACT</b>	<b>ASPECTS AFFECTED</b>	<b>PHASE</b>	<b>SIGNIFICANCE</b> if not mitigated				<b>MITIGATION TYPE</b> (modify, remedy, control, or stop)	<b>SIGNIFICANCE</b> if mitigated	

<p>(E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc</p> <p>(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, etc...etc...etc.)</p>	<p>(Including the potential impacts for cumulative impacts)</p> <p>(E.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc.... etc...)</p>		<p>In which impact is anticipated</p> <p>(E.g. Construction, commissioning, operational, Decommissioning, closure, post closure)</p>	EXTENT	INTENSITY	DURATION	PROBABILITY	RATING	<p>Through</p> <p>(E.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc)</p> <p>(E.g. Modify through alternative method. Control through noise control. Control through management and monitoring through rehabilitation)</p>	
									<p>moved if practical, or it will be placed in an acoustic enclosure, or an acoustic barrier will be erected between the source and the recipient.</p>	
Visual (-ve)	Visual intrusion		Construction / Set_up	1	3	1	Definite	5 (Low)	<ul style="list-style-type: none"> <li>The drilling rig and other visually prominent items on the site will be located in consultation with the landowner;</li> <li>Make use of existing vegetation as far as possible to screen the prospecting operations from view; and</li> <li>If necessary, the operations can be screened from view by erecting a shade cloth barrier.</li> </ul>	3 (Very Low)



	Traffic (-ve)	Increase in traffic volumes in the vicinity of the drilling site	Construction / Set_up	1	2	1	Probable	4 (Very Low)	<ul style="list-style-type: none"> <li>Traffic signs to be put around the site to notify motorist of the activities</li> <li>Construction vehicles to make trips on/off site only when necessary</li> <li>Construction vehicles to adhere to local speed limits as far as possible when driving in around site</li> </ul>	3 (Very Low)
	Dust fall (-ve)	Dust fall & nuisance from activities	Construction / Set_up	2	3	1	Definite	6(Medium)	<ul style="list-style-type: none"> <li>Wet suppression should be applied to ensure that no visible dust is raised by any of the prospecting operations;</li> <li>Separation of distance of minimum 500m, but preferably 1000m to be maintained between drill sites and dwellings; and</li> <li>Low vehicle speeds will be enforced on unpaved surfaces.</li> </ul>	3 (Very Low)
	Soil and	The potential	Construction /	1	3	2	Definite	6	The soil disturbance and clearance of vegetation at	5(Low)
<b>NAME OF ACTIVITY</b>	<b>POTENTIAL IMPACT</b>	<b>ASPECTS AFFECTED</b>	<b>PHASE</b>	<b>SIGNIFICANCE if not mitigated</b>				<b>MITIGATION TYPE</b> (modify, remedy, control, or stop)	<b>SIGNIFICANCE if mitigated</b>	

<p><b>(E.g. For prospecting</b> - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route <b>etc...etc...etc</b></p> <p><b>(E.g. For mining</b>,- 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, etc...etc...etc.)</p>	<p>(Including the potential impacts for cumulative impacts)</p> <p>(E.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc.... etc...)</p>		<p>In which impact is anticipated</p> <p>(E.g. Construction, commissioning, operational, Decommissioning, closure, post closure)</p>	EXTENT	INTENSITY	DURATION	PROBABILITY	RATING	<p>Through</p> <p>(E.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc)</p> <p>(E.g. Modify through alternative method. Control through noise control. Control through management and monitoring through rehabilitation)</p>	
	Vegetation (-ve)	impact of the proposed prospecting on the vegetation would occur at proposed drilling sites and the access routes used to get to these sites.	Set_up					(Medium)	<p>drill pad areas will be limited to the absolute minimum required;</p> <ul style="list-style-type: none"> <li>• No clear scraping (dozing) be carried out unless absolutely necessary to establish a level drill pad.</li> <li>• Rather that surface vegetation is cleared to make way for the drilling rig leaving the roots intact so that vegetation can coppice and regrow; and</li> <li>• Disturbed areas will be re-vegetated with locally indigenous species as soon as possible.</li> </ul>	

	Animal life (-ve)	Animal life will be affected in the immediate vicinity of the drilling rig. It is anticipated that the noise and general activity will keep the animal life away from the site while the prospecting is ongoing.	Construction/ Set_up	1	3	2	Definite	6 (Medium)	<ul style="list-style-type: none"> <li>Environmental awareness training sessions should be part of the workers' induction and site workshops; and</li> <li>If any animals are encountered, they must not be killed or injured, but should rather be removed or chased away from the site with the assistance of an animal specialist</li> </ul>	5 (Low)
	Social (-ve)	Friction between local residents/land	Construction / Set_up	1	2	2	Definite	5 (Low)	<ul style="list-style-type: none"> <li>All operations will be carried out under the guidance of a strong, experienced manager with proven skills in public consultation and conflict resolution;</li> <li>All prospecting personnel will be made aware of the</li> </ul>	4 (Very Low)

## **9.4 Specialist Studies**

### **ix) Summary of specialist reports.**

(This summary must be completed if any specialist reports informed the impact assessment and final site layout process and must be in the following tabular form): -

Table 14: Summary of specialist reports.

<p style="text-align: center;"><b>LIST OF STUDIES UNDERTAKEN</b></p>	<p style="text-align: center;"><b>RECOMMENDATIONS OF SPECIALIST REPORTS</b></p>	<p style="text-align: center;"><b>SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT</b> (Mark with an X where applicable)</p>	<p style="text-align: center;"><b>REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED.</b></p>
<p><b>Baseline Hydrogeology study</b></p>	<ul style="list-style-type: none"> <li>➤ On site there will be regular maintenance of the mobile toilets. <ul style="list-style-type: none"> <li>➤ Once drilling, the team will rehabilitate the area and ensure the core is out of site.</li> </ul> </li>   <li>➤ Drilling within 100 meters of water resources will be avoided</li> <li>➤ The drilling machine used will be of minimum vibrations to avoid creating fissures in underlying rocks which could influence groundwater migration and leads to water contamination</li>   <li>➤ Clearing of vast amount of vegetation will be avoided, this is to preserve infiltration.</li>   <li>➤ Constant availability of waste bins; Compliance of National Environmental Management: Waste Management Act 59 of</li> </ul>	<p style="text-align: center;">X</p>	<p>8.2 on Page 39</p>

	<p>2008.</p> <ul style="list-style-type: none"> <li>➤ Compliance of GN 704 4(b) and 7(a) and National Water Act 36 of 1998 (Chapter 3 – Part 4, Section 1 (a)(b).</li> <li>➤ No onsite vehicle or machinery repairs such as changing oil.</li> <li>➤ No onsite storage of oil, diesel, or petrol</li> <li>➤ Cores will be logged on an impervious surface and will be cleared from the site immediately after logging.</li> <li>➤ No washing of vehicles on site</li> <li>➤ The sump will not be allowed to overflow and will be lined with impervious layer.</li> </ul>		
<p><b>Baseline Hydrology study</b></p>	<ul style="list-style-type: none"> <li>• On site there will be regular maintenance of the mobile toilets. <ul style="list-style-type: none"> <li>➤ Once drilling, the team will rehabilitate the area and ensure the core is out of site.</li> <li>➤ Drilling within 100 meters of water resources will be avoided</li> <li>➤ Stormwater will be prioritised, and the management to prevent surface water contamination.</li> <li>➤ Clearing of vast amount of vegetation will be avoided, this is to preserve infiltration.</li> <li>➤ Stormwater measures which include the identified rivers, Dams and wetlands, will not</li> </ul> </li> </ul>	<p><b>X</b></p>	<p>8.2 on Page 38</p>



	<p>be disrupted as they manage surface run off in an area, Buffer zone will be adhered to.</p> <ul style="list-style-type: none"> <li>➤ The drilling activity will also take into consideration the fractured aquifers in the region.</li> <li>➤ No washing of vehicles on site should be allowed</li> <li>➤ The identified locations for sampling will be made available to the prospecting team.</li> <li>➤ During raining periods, drilling process will be paused, to avoid possible contamination of water leading to surface water bodies.</li> </ul>		
<b>Baseline Soil study</b>	<ul style="list-style-type: none"> <li>• ➤ It is recommended that the financial provision for closure and rehabilitation be annually updated as per the requirements of the MPRDA</li> <li>➤ Surface water monitoring of the pans and associated wetlands surrounding the project area is to be undertaken to determine the impacts associated with operations of the proposed prospecting project.</li> <li>➤ Regular audits should be undertaken to monitor the progress of areas that have been rehabilitated.</li> <li>➤ Long term management of the rehabilitated areas will be required via contractual agreements with landowners in the</li> </ul>	<b>X</b>	10.2 on Page 62

	<p>area and rehabilitation should also be undertaken to best practice.</p> <ul style="list-style-type: none"> <li>➤ An independent Environmental Assessment Practitioner (Singo Consulting Pty Ltd) shall be appointed to ensure compliance with requirements of the Final Rehabilitation, decommissioning and Closure Plan.</li> <li>➤ All the affected department must be invited during and after rehabilitation for their input.</li> </ul>		
<b>Rehabilitation Study</b>	<ul style="list-style-type: none"> <li>➤ It is recommended that the financial provision for closure and rehabilitation be annually updated as per the requirements of the MPRDA</li> <li>➤ Surface water monitoring of the pans and associated wetlands surrounding the project area is to be undertaken to determine the impacts associated with operations of the proposed prospecting project.</li> <li>➤ Regular audits should be undertaken to monitor the progress of areas that have been rehabilitated.</li> <li>➤ Long term management of the rehabilitated areas will be required via contractual agreements with landowners in the area and rehabilitation should also be undertaken to best practice.</li> </ul>		10.2 on Page 62

	<ul style="list-style-type: none"><li>➤ An independent Environmental Assessment Practitioner (Singo Consulting Pty Ltd) shall be appointed to ensure compliance with requirements of the Final Rehabilitation, decommissioning and Closure Plan.</li><li>➤ All the affected department must be invited during and after rehabilitation for their input</li></ul>		
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## 9.5 Additional studies to be conducted:

- Ecology study
- Waste Management Plan (Cradle to Grave)

## 9.6 Environmental Impact Statement

### x) Summary of the key findings of the environmental impact assessment;

The possible environmental impacts associated with the proposed prospecting are considered insignificant. A diamond core drill rig will be used for drilling. The drill team will not require site infrastructure and will not stay on site. The main impacts are associated with the heritage resources and river located onsite. During the planning phase for each borehole buffer zone will be designed to avoid negative impacts on heritage sites, rivers and/or streams that will be identified.

### xi) Final Site Map

Provide a map at an appropriate scale, which superimposes the proposed overall activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers.

### xii) Summary of the positive and negative impacts and risks of the proposed activity and identified alternatives;

Positive Impact associated with the proposed Prospecting:

- Employment contributing to the economy (about 10 people per drill site)
- Positive contribution to the South African Gross Domestic Product
- Concurrent rehabilitation during prospecting

Negative Impacts associated with the proposed prospecting

- Loss of soil resources
- Damage to sensitive biodiversity areas
- Disturbance of riparian habitats & non-perennial river
- Contamination of surface water
- Contamination of soils
- Litter

Proposed impact management objectives and the impact management outcomes for inclusion in the EMPr.

Based on the assessment and where applicable the recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr as well as for inclusion as conditions of authorization.

The objectives of the impact management process are as follows:

**Air Quality:**

To ensure that the prospecting activities has a minimal adverse impact on air quality, dust limitation and suppression to be applied.

**Groundwater:**

To ensure that the prospecting activities have minimal adverse impact on the surrounding groundwater water quality and prevents pollution of existing groundwater resources.

**Surface Water**

To ensure that the prospecting activities effectively utilize the consumption of freshwater, have minimal adverse impacts on the surrounding surface water quality and prevent pollution of surrounding surface water resources. A buffer of 500m to be observed from the water course.

**Soils**

To ensure that the prospecting activities have a positive impact on land and soils by mitigating potential erosion, preventing contamination and pollution.

**Biodiversity**

To ensure that the prospecting activities do not have an adverse impact on the current biodiversity.

**Socio-Economic**

To aid in the improvement of the current local economy and improve the social environment of communities affected by the prospecting activities.

**Visual**

To limit the visual impact of the prospecting activities. Only one drill rig to be used and concurrent rehabilitation to be implemented.

**Noise**

To control noise pollution stemming from the prospecting activities through the restriction of operational hours.

**Heritage**

To ensure that the prospecting activities avoid adverse impacts on the heritage resources of significance. Interaction with SAHRA and local residents to identify and confirm heritage sites. Marking and avoidance of sites if identified.

## **Waste**

To ensure that the proposed prospecting operation adopts and implements waste management principles that are environmentally responsible.

### **l) Aspects for inclusion as conditions of Authorisation.**

Any aspects which must be made conditions of the Environmental Authorisation

- A field survey must be undertaken before drilling commences at each drilling site to confirm that no cultural heritage site is present in sections to be cleared.
- Prospecting should not occur within 500m from any watercourse.
- Boreholes and access tracks will be located in areas that will result in minimal ground disturbance.
- During the planning phase for each borehole, specific controls must be identified and implemented, based on site conditions.
- No employees will be permitted to stay on the site.
- Collection of firewood will not be allowed.
- Where an access road is needed, the relevant occupant and owner will be consulted prior to the development of that access to ensure that consensus is reached on the matter and the access will be rehabilitated at the end of the drilling programme.

### **m) Description of any assumptions, uncertainties, and gaps in knowledge.**

(Which relate to the assessment and mitigation measures proposed)

The location of the final planned boreholes designed were identified through the approach of the prospecting work programme. This assessment is therefore based on a desktop approach at a broad scale and assuming that drilling could occur anywhere within the proposed prospecting license area except on Critical Biodiversity Area 1. Once drill sites have been identified, then it is recommended that focus should be given to these sites in order to identify any cultural or heritage resources of significance, any ecologically significant areas that may occur as well as re-engaging landowners regarding the intention to access and conduct drilling activities on their property.



**n) Reasoned opinion as to whether the proposed activity should or should not be authorised**

**a. Reasons why the activity should be authorized or not.**

According to the impact assessment undertaken for the proposed project, the key impacts of the project are on soils, natural vegetation and landowners/occupiers. The project will also have positive impacts due to the employment to be created although for a short term.

The public will also be requested for their comments. All comments to be received during Public Participation Process will be included in this BAR and EMPr. These comments will be addressed as far as possible to the satisfaction of the interested and affected parties.

The management of the impacts identified in the impact assessment for all phases of the proposed project will be undertaken through a range of programmes and plans contained in the EMPr. In consideration of the programmes and plans contained within the EMPr, layouts and method statements compiled for the project, which is assumed will be effectively implemented, there will be significant reduction in the significance of potential impacts.

Based on the above, it is therefore the opinion of the EAP that the activity should be authorized.

**b. Conditions that must be included in the authorisation**

- A field survey must be undertaken before any drilling may commence at each proposed drilling site to confirm that no cultural heritage sites are present in sections demarcated to be cleared.
- No prospecting should occur within 500m from any watercourse
- The positioning of boreholes and access tracks should be in areas that will result in minimal ground disturbance
- During the planning phase for each borehole, specific controls must be identified and implemented, based on site conditions
- No employees will be permitted to stay on the site.
- Collection of firewood will not be allowed.
- Where an access road is needed, the relevant occupant and owner will be consulted prior to the development of that access to ensure that consensus is

reached on the matter and the access will be rehabilitated at the end of the drilling programme.

**o) Period for which the Environmental Authorisation is required**

The authorization is required for the duration of the prospecting right which is 5 years.

**p) Undertaking**

Confirm that the undertaking required to meet the requirements of this section is provided at the end of the EMPr and is applicable to both the Basic assessment report and the Environmental Management Programme report.

An undertaking is provided at the end of this report.

**9.7 Financial Provision**

A financial provision of approximately R 66 288.00 has been budgeted for the prospecting programme over 5 years as PWP, which includes rehabilitation activities.

**Explain how the aforesaid amount was derived.**

The drilling contractor will be responsible for rehabilitating the drill pad once the drilling activities have been completed at each exploration hole. This is typically a contractual arrangement between MDZ Fleet Solutions (Pty) Ltd, and the drilling contractor employed to implement drilling activities which include construction / set-up of drill pad, operational drilling activities and the rehabilitation of the drill site after drilling has ceased. The financial guarantee was calculated using the DMRE official financial quantum calculator below.

**Table 15: Financial Quantum**

**CALCULATION OF THE QUANTUM**

Applicant: MDZ Fleet Solutions (Pty) Ltd  
 Evaluator: Mazithi Mangcu

DMRE REF: KZN 30/5/1/1/2/11413 PR  
 Date 14/07/2023

No.	Description	Unit	A	B	C	D	E=A*B*C*D
			Quantity	Master Rate	Multiplication factor	Weighting factor 1	Amount (Rands)
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	0	19	1	1	0
2 (A)	Demolition of steel buildings and structures	m2	0	271	1	1	0
2(B)	Demolition of reinforced concrete buildings and structures	m2	0	400	1	1	0
30 576,70	Rehabilitation of access roads	m2	30 576,70	49	0,01	1	14982,583
4 (A)	Demolition and rehabilitation of electrified railway lines	m	0	471	1	1	0
4 (A)	Demolition and rehabilitation of non-electrified railway lines	m	0	257	1	1	0
5	Demolition of housing and/or administration facilities	m2	0	542	1	1	0
6	Opencast rehabilitation including final voids and ramps	ha		284292	1	1	0
7	Sealing of shafts adits and inclines	m3	0	146	1	1	0
8 (A)	Rehabilitation of overburden and spoils	ha		189528	1	1	0
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	0	236054	1	1	0
8 ( C )	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha		685612	1	1	0
9	Rehabilitation of subsided areas	ha	0,9	158701	0,1	1	14283,09
10	General surface rehabilitation	ha		150138	0,001	1	0
11	River diversions	ha	0	150138	1	1	0
12	Fencing	m	0	171	1	1	0
13	Water management	ha		57087	1	1	0
14	2 to 3 years of maintenance and aftercare	ha	0,9	19980	1	1	17982
15 (A)	Specialist study	Sum	0			1	0
15 (B)	Specialist study	Sum				1	0
Sub Total 1							47247,673

1	Preliminary and General	5669,72076	weighting factor 2	5669,72076
			1	
2	Contingencies	4724,7673		4724,7673
Subtotal 2				57642,16
VAT (15%)				8646,32
Grand Total				66288

Sign  
Date

Mazithi Mangcu  
14/07/2023

**Confirm that this amount can be provided for from operating expenditure.**

The financial support provided by MDZ Fleet Solutions (Pty) Ltd submitted their financial support demonstrates the availability of funds to undertake prospecting of the desired mineral.

**q) Specific Information required by the competent Authority**

**i) Compliance with the provisions of sections 24(4)(a) and (b) read with section 24 (3) (a) and (7) of the National Environmental Management Act (Act 107 of 1998). the EIA report must include the: -**

**ix) Impact on the socio-economic conditions of any directly affected person**

(Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any directly affected person including the landowner, lawful occupier, or, where applicable, potential beneficiaries of any land restitution claim, attach the investigation report as an Appendix) .

There are no anticipated direct impacts on the socio-economic conditions of the landowners. Private owners of portions that are used for agricultural purposes will be compensated fairly for any loss due to the drilling programme. Drill holes will be immediately closed to avoid any contamination to the groundwater.

As the final positioning of the drill sites cannot be confirmed without completion of phase 1 of the prospecting programme, a recommendation has been made to ensure that the directly affected landowners are re-consulted a minimum of 1 month prior to implementing invasive activities (drilling). The purpose of the re-consultation is to ensure that socio-economic impacts on directly affected persons can be raised and where possible addressed.

**x) Impact on any national estate referred to in section 3(2) of the National Heritage Resources Act.**

(Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) with the exception of the national estate contemplated in section 3(2) (i) (vi) and (vii) of that Act, attach the investigation report as **Appendix 2.19.2** and confirm that the applicable mitigation is reflected in 2.5.3; 2.11.6.and 2.12.herein).

Since the positioning of the drill sites will only be determined after phase 1 of the prospecting works programme, and in order to ensure that there is no impact on unknown heritage sites, a recommendation has been made to undertake a heritage survey of the drill sites once these are known in order to identify any cultural or heritage resources of significance.

Mitigation measures proposed in this report include that no drill site will be located within 500m of any identified heritage site (which may occur during the prospecting programme). Furthermore, few graves were observed within the proposed prospecting area during site assessment. The South African Heritage Resources Agency (SAHRA) has been consulted via their online website. If more heritage resources of significance are exposed during the operational phase of the project, the South African Heritage Resources Agency (SAHRA) should be notified immediately, all development activities should be stopped, and an archaeologist accredited with the Association for Southern African Professional Archaeologists (ASAPA) should be notified to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorization from SAHRA to conduct the required mitigation measures.

**Other matters required in terms of sections 24(4)(a) and (b) of the Act.**

(The EAP managing the application must provide the competent authority with detailed, written proof of an investigation as required by section 24(4)(b)(i) of the Act and motivation if no reasonable or feasible alternatives, as contemplated in sub-regulation 22(2)(h), exist. The EAP must attach such motivation as Appendix 4).

The proposed prospecting activities (including the drilling) requested as part of this authorization is the only current viable way a mineral resource can be identified and used to generate a resource which is a minimum requirement to determine whether it is viable to invest in a future mine.

## PART B

### ENVIRONMENTAL MANAGEMENT PROGRAMME

#### 10 Environmental management programme.

##### a) Details of the EAP

(Confirm that the requirement for the provision of the details and expertise of the EAP are already included in PART A, section 1(a) herein as required).

Please refer to the Details of the EAP included in Part A, section 1(a)

##### b) Description of the Aspects of the Activity

(Confirm that the requirement to describe the aspects of the activity that are covered by the draft environmental management programme is already included in PART A, section (1)(h) herein as required).

The aspects of the activity are described in Part A Section 1(h).

##### c) Composite Map

(Provide a map (**Attached as an Appendix**) at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that any areas that should be avoided, including buffers)

Please refer to Appendix A.

##### d) Description of Impact management objectives including management statements.

###### i) Determination of closure objectives.

(Ensure that the closure objectives are informed by the type of environment described)

The overall goal for closure of the prospecting site is to re-instate the predetermined land-use of the landowners, neighbors, and community, ensuring that the land is stable and safe in the long-term.

The closure objectives apply to the prospecting area in its final closed state and not whilst the site is in transformation towards this state. They nevertheless provide guidance during the operational phase. Closure objectives relate to the following:

**Physical stability:** To back-fill boreholes and pits on the prospecting site to ensure continuation of the land use after completion of prospecting activities.

**Environmental quality:** To ensure that local environmental quality is not adversely affected by possible physical effects and chemical contaminants arising from the prospecting site after completion of prospecting activities.

**Health and safety:** To limit the possible health and safety threats to humans and animals using the rehabilitated prospecting area after completion of prospecting activities.



**Land capability/land-use:** To ensure continuation or to the re-instate a suitable land capability over as large as possible area affected during prospecting.

**Aesthetic quality:** To leave behind a rehabilitated prospecting site that is neat and tidy, giving an acceptable overall aesthetic appearance.

**Biodiversity:** To encourage the re-establishment of indigenous and/ or appropriate vegetation on the rehabilitated prospecting site such that the biodiversity is largely re-instated over time, as well as protect the undisturbed areas to maintain/enhance the biodiversity of these areas. Prospecting area rehabilitated to limit impact on current land use.

### **ii) Volumes and rate of water use required for the operation.**

After careful consideration of the scale of operation it has been deduced that approximately 40 L will be used as potable water. It is anticipated that water will be purchased from a private water filter dealer and brought onto the site.

### **iii) Has a water use license been applied for?**

Yes, water use license is being applied for in terms of Chapter 4 of the National Water Act, 1998 (Act 36 of 1998). The project is for a coal prospecting right, exploration boreholes will be located 100m from the non-perennial and perennial rivers within and around the project area.

The proposed project will trigger the following sections:

Section 21(c): Impeding or diverting the flow of water in a watercourse.

Section 21(i): Altering the bed, banks, course, or characteristics of a watercourse.

### **iv) Impacts to be mitigated in their respective phases**

Measures to rehabilitate the environment affected by the undertaking of any listed activities.

Table 16: Impact mitigation and rehabilitation

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Implementation period
<p>E.g. for prospecting: Drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route, etc. E.g. for mining: Excavations, blasting, stockpiles, discard dumps/dams, loading, hauling, transport, water supply dams, boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.</p>	<p>In which impact is anticipated, e.g. construction, commissioning, operational, decommissioning, closure and post-closure.</p>	<p>Volumes, tonnages and ha/m<sup>2</sup></p>	<p>Describe how each of the recommendations herein will remedy the cause of pollution or degradation and migration of pollutants.</p>	<p>A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities.</p>	<p>Describe the period when the measures in the environmental management program must be implemented. Measures must be implemented when required. Rehabilitation must take place at the earliest opportunity. With regard to rehabilitation, state whether it will take place upon cessation of the individual activity or cessation of mining, bulk sampling or alluvial diamond prospecting.</p>
<p>Site establishment activities Vegetation clearance Topsoil stripping and stockpiling Drill pad compaction Placement of temporary portable toilets and resting place Vehicle movements</p>	<p>Construction/setup and operational phase</p>	<p>600m<sup>2</sup> diamond drill holes</p>	<p>Any buried artifacts that may be uncovered during site activities will require such activities to stop and a qualified archaeologist will be commissioned to assess their significance and determine appropriate mitigation measures.</p>	<p>Heritage Act</p>	<p>Before and during drilling activities</p>

<b>Activities</b>	<b>Phase</b>	<b>Size and scale of disturbance</b>	<b>Mitigation measures</b>	<b>Compliance with standards</b>	<b>Implementation period</b>
Waste management	Construction/setup and operational phase	600m <sup>2</sup> diamond drill holes	Control noise generation by maintaining equipment. Limited to daylight hours on Mondays to Saturdays and no activities on Sundays and public holidays. Maintain a buffer of 500m between drill sites and dwellings. The resting place shall be located outside of the 82dB Zone of the drill site.	SANS 10103 guideline	Before and during drilling activities
Exploration drilling: Drilling Drill maintenance and re-fueling Core sample collection and storage Vehicle movements Waste generation and management	Construction/setup and operational phase	600m <sup>2</sup> diamond drill holes	The drilling rig and other visually prominent items on the site will be located in consultation with the landowner; Make use of existing vegetation as far as possible to screen the prospecting operations from view; and If necessary, the operations can be	N/A	Before and during drilling activities

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Implementation period
			screened from view by erecting a shade cloth barrier		
	Construction/setup and operational phase	600m <sup>2</sup> diamond drill holes	Control dust emission by ensuring drill rig employs dust suppression system. Low vehicle speeds will be enforced on unpaved surfaces. Maintain a buffer of 500m between drill sites and dwellings	GN R. 827 (NEMAQA)	Before and during drilling activities
	Construction/setup and operational phase	600m <sup>2</sup> diamond drill holes	The soil disturbance and clearance of vegetation at drill pad areas will be limited to the absolute minimum required and will not be dozed or scraped with vegetation roots left intact for later re growth; and Disturbed areas will be vegetated with locally indigenous species as soon as possible.	N/A	Before and during drilling activities

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Implementation period
	Construction/setup and operational phase	0.06 Ha per drill site	All operations will be carried out under the guidance of a strong, experienced manager with proven skills in public consultation and conflict resolution, including environmental coordinator where applicable; All prospecting personnel will be made aware of the local conditions and sensitivities in the prospecting area and the fact that some of the local residents may not welcome the prospecting activities in the area.	NEMA	Before and during drilling activities

## r) Impact Management Outcomes

(A description of impact management outcomes, identifying the standard of impact management required for the aspects contemplated in paragraph);

### 2.1 Impact Management Outcomes

A description of impact management outcomes, identifying the standard of impact management required for the aspects contemplated in paragraph.

Table 17: Impact management

Activities	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
E.g. for prospecting: Drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route, etc. E.g. for mining: Excavations, blasting, stockpiles, discard dumps/dams, loading, hauling, transport, water supply dams, boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.	Including the potential impacts for cumulative impacts. E.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc.		In which impact is anticipated, e.g. construction, commissioning, operational, decommissioning, closure and post-closure.		
Site establishment activities (-ve) Vegetation clearance Topsoil stripping and stockpiling	Cultural and heritage	Destruction or loss of Cultural and Heritage Resources: No cultural/ heritage artefacts have	Construction/ set-up	If concentrations of archaeological heritage material and human remains are uncovered during construction, all work must cease	Heritage Act



Activities	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
Drill pad compaction Erection of office, toilets, fuel storage (if not by road tanker), water tanker, core storage		been identified on site.		immediately. The find must be reported to a heritage specialist so that systematic and professional investigation/ excavation can be undertaken.	
Vehicle movements Waste management	Noise	Noise generation	Construction/ set-up	<p>Construction/setup, operational and decommissioning activities will be limited to daylight hours on Mondays to Saturdays and no activities on Sundays and public holidays.</p> <p>Separation of distance of minimum 500m, but preferably 1 000m to be maintained between drill sites and dwellings.</p> <p>Noise abatement equipment, such as mufflers on diesel engines, will be maintained in good condition.</p> <p>If intrusive noise levels are experienced by any person at any point, the source of the noise will be moved if practical, or it will be placed in an acoustic enclosure, or an acoustic barrier will be erected between the source and the</p>	SANS 10103

Activities	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
				recipient.	
	Visual	Visual intrusion	Construction/ set-up	<p>The drilling rig and other visually prominent items on the site will be located in consultation with the landowner.</p> <p>Make use of existing vegetation as far as possible to screen the prospecting operations from view.</p> <p>If necessary, the operations can be screened from view by erecting a shade cloth barrier.</p>	N/A
	Traffic	Increase in traffic volumes in drilling site vicinity	Construction/ set-up	<p>Traffic signs to be put around the site to notify motorist of the activities.</p> <p>Construction vehicles to make trips on/off site only when necessary.</p> <p>Construction vehicles to adhere to local speed limits as far as possible when driving in around site.</p>	National Traffic Act Regulations
	Dust fall	Dust fall and nuisance from activities	Construction/ set-up	<p>Wet suppression should be applied to ensure that no visible dust is raised by any of the prospecting operations.</p> <p>Separation of distance of minimum</p>	GN R. 827 (NEMAQA)

Activities	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
				<p>500m, but preferably 1 000m to be maintained between drill sites and dwelling.</p> <p>Low vehicle speeds will be enforced on unpaved surfaces.</p>	
	Soil and vegetation	The potential impact of the proposed prospecting on the vegetation would occur at proposed drilling sites and the access routes used to get to these sites.	Construction/ set-up	<p>The soil disturbance and clearance of vegetation at drill pad areas will be limited to the absolute minimum required; No clear scraping (dozing) be carried out unless necessary to establish a level drill pad.</p> <p>Rather that surface vegetation is cleared to make way for the drilling rig leaving the roots intact so that vegetation can coppice and regrow.</p> <p>Disturbed areas will be re-vegetated with locally indigenous species as soon as possible.</p>	NEMBA
	Animal life	Animal life will be affected in the immediate vicinity of the drilling rig. It is anticipated that the noise and	Construction/ set-up	<p>Environmental awareness training sessions should be part of the workers' induction and site workshops.</p> <p>If any animals are met, they must</p>	NEMBA

Activities	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
		general activity will keep the animal life away from the site while the prospecting is ongoing.		not be killed or injured, but should rather be removed or chased away from the site with the assistance of an animal specialist.	
	Social	Friction between residents/landowners and construction personnel.	Construction/ set-up	<p>All operations will be carried out under the guidance of a strong, experienced manager with proven skills in public consultation and conflict resolution.</p> <p>All prospecting personnel will be made aware of the local conditions and sensitivities in the prospecting area and the fact that some of the residents may not welcome the prospecting activities in the area.</p> <p>There will be a strict requirement to treat residents with respect and courtesy at all times.</p>	NEMA
	Job creation	Employment will be created for the clearing of the land and establishing the drilling site.	Construction/ set-up	No mitigation measures required.	NEMA

Activities	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
Exploration drilling (ve) Drilling Drill maintenance and refuelling Core sample collection and storage Vehicle movements Waste generation and management	Noise	Noise generation	Operations	<p>Activities will be limited to daylight hours on Mondays to Saturdays and no activities on Sundays and public holidays.</p> <p>Separation of distance of minimum 500m, but preferably 1 000m to be maintained between drill sites and dwellings; Noise abatement equipment, such as mufflers on diesel engines, will be maintained in good condition.</p> <p>If intrusive noise levels are experienced by any person at any point, the source of the noise will be moved if practical, or it will be placed in an acoustic enclosure, or an acoustic barrier will be erected between the source and the recipient.</p>	Heritage Act
	Visual	Visual intrusion	Operations	<p>The drilling rig and other visually prominent items on the site will be located in consultation with the landowner.</p> <p>Make use of existing vegetation as</p>	SANS 10103

Activities	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
				<p>far as possible to screen the prospecting operations from view.</p> <p>If necessary, the operations can be screened from view by erecting a shade cloth barrier.</p>	
	Traffic	Increase in traffic volumes in the drilling site vicinity	Operations	<p>Traffic signs to be put around the site to notify motorist of the activities.</p> <p>Construction vehicles to make trips on/off site only when necessary.</p> <p>Construction vehicles to adhere to local speed limits as far as possible when driving in around site.</p>	N/A
	Dust fall	Dust fall and nuisance from activities	Operations	<p>Wet suppression will be applied to ensure that no visible dust is raised by any of the prospecting operations.</p> <p>Separation of distance of minimum 500m, but preferably 1000m to be maintained between drill sites and dwellings.</p> <p>Low vehicle speeds will be enforced on unpaved surfaces.</p>	National Traffic Act regulations
	Soil and	Soil and vegetation	Operations	The soil disturbance and clearance	GN R. 827



Activities	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
	vegetation	disturbance from drill pad preparation		<p>of vegetation at drill pad areas will be limited to the absolute minimum required.</p> <p>No clear scraping (dozing) be carried out unless necessary to establish a level drill pad. Rather that surface vegetation be cleared to make way for the drilling rig leaving the roots intact so that vegetation can coppice and regrow.</p> <p>Disturbed areas will be re vegetated with locally indigenous species as soon as possible.</p>	(NEMAQA)
	Animal life	Animal life will be affected in the immediate vicinity of the drilling rig. It is anticipated that the noise and general activity will keep the animal life away from the site while the prospecting is ongoing.	Operations	Measures implemented during site establishment should apply in this phase as well.	NEMBA
	Social	Friction between residents/landowners and construction personnel	Operations	All operations will be carried out under the guidance of a strong, experienced manager with	NEMBA

Activities	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
				<p>proven skills in public consultation and conflict resolution.</p> <p>All prospecting personnel will be made aware of the local conditions and sensitivities in the prospecting area and the fact that some of the residents may not welcome the prospecting activities in the area.</p> <p>There will be a strict requirement to treat residents with respect and courtesy at all times.</p>	
	Job creation	Employment will be created for the clearing of the land and establishing the drilling site.	Operations	No mitigation measures required.	NEMA

### s) Impact Management Actions

(A description of impact management actions, identifying the way the impact management objectives and outcomes contemplated in paragraphs (c) and (d) will be achieved).

Table 18: Impact management actions

Activities	Potential impact	Mitigation type	Implementation period	Compliance with standards
Whether listed or not. E.g. excavations, blasting, stockpiles, discard dumps/dams, loading, hauling and transport, water supply dams/boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.	E.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, ground water contamination, air pollution, etc.	Modify, remedy, control or stop through, e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity, etc. E.g., modify through alternative method, control through noise control, control through management and monitoring, and remedy through rehabilitation.	State when the environmental management programme measures must be implemented. Measures must be implemented when required. This must take place as soon as possible. Regarding rehabilitation, state upon cessation of the individual activity or mining, bulk sampling or alluvial diamond prospecting.	A description of how each of the recommendations in 2.11.6 read with 2.12 and 2.15.2 herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities.
Site establishment activities Vegetation clearance Topsoil stripping and stockpiling Drill pad compaction Erection of office, toilets, fuel storage (if not by road tanker), water	Cultural and heritage	Undertake heritage survey prior to site activities to identify cultural/heritage features and cordon these off with Chevron tape. Avoid cultural/heritage impacts by maintaining 100m buffer from any identified heritage feature. Any buried artifacts that may be uncovered during site activities will require such activities to stop and a qualified archaeologist will be commissioned to assess their significance	Before and after drilling activities.	Heritage Act

Activities	Potential impact	Mitigation type	Implementation period	Compliance with standards
tanker, core storage Vehicle movements Waste management		and determine appropriate mitigation measures.		
Exploration drilling Drilling Drill maintenance and refueling Core sample collection and storage Vehicle movements Waste generation and management	Noise	Control noise generation by maintaining equipment and limiting operation hours to daylight hours from Mondays to Saturdays (no activities on Sundays and public holidays). Maintain a buffer of 500m-100m between drill sites and dwellings. If intrusive noise levels are experienced by any person at any point, the source will be moved if practical, or placed in an acoustic enclosure, or an acoustic barrier will be erected between the source and the recipient.	Before and after drilling activities.	SANS 10103
	Visual	The drilling rig and other visually prominent items on site will be placed in consultation with the landowner. Existing vegetation will be used as far as possible to screen the prospecting operations from view. Operations can be hidden from view by erecting a shade cloth barrier.	Before and after drilling activities.	N/A
	Dust fall	Control dust emission by ensuring drill rig employs dust suppression system. Low vehicle speeds will be enforced on unpaved surfaces.	Before and after drilling activities.	GN R. 827 (NEMAQA)
	Soil and vegetation	Soil disturbance and vegetation clearance at drill pads will be kept to the minimum required and not be dozed/scraped; vegetation roots will be left intact for regrowth. Disturbed areas will be re-	Before and during drilling activities; disturbed areas to re-vegetated as soon as possible.	N/A

Activities	Potential impact	Mitigation type	Implementation period	Compliance with standards
		vegetated with indigenous species as soon as possible.		
	Social	Operations will be carried out under the guidance of an experienced manager with public consultation and conflict resolution skills. All prospecting personnel will be made aware of conditions and sensitivities in the prospecting area and of the fact that some residents may not welcome the prospecting activities. Residents will be treated with respect and courtesy at all times.	Before and after drilling activities.	NEMA

## i) Financial Provision

### 1. Determination of the amount of Financial Provision.

#### a. Describe the closure objectives and the extent to which they have been aligned to the baseline environment described under the Regulation.

The following closure objectives will be applicable for concurrent rehabilitation:

- Land disturbed will be rehabilitated to a stable and permanent form suitable for subsequent land use e.g. crop farming and cattle grazing.
- The final land use will be like surrounding land-use i.e. crop farming & cattle grazing
- There will be no adverse environmental effect outside the small disturbed areas (0.6ha) and the affected area will be shaped to ensure effective drainage.

The closure objectives are to minimize disturbance wherever possible so that normal land use can continue after closure.

#### b. Confirm specifically that the environmental objectives in relation to closure have been consulted with landowner and interested and affected parties.

Minimise the area to be disturbed and to ensure that the areas disturbed during the prospecting activities are rehabilitated and stable, as per the commitments made in the EMP. Sustain the pre-prospecting land use and return the site to its near natural state as far as possible.

#### c. Provide a rehabilitation plan that describes and shows the scale and aerial extent of the main prospecting activities, including the anticipated mining area at the time of closure.

After drilling has been completed in one area, the drilling team will ensure the site is

- (a) Reverted to its original state by implementing the measures listed in Table 16 below.

Table 19: Rehabilitation measures

Aspect/Impact	Rehabilitation Measure	Monitoring Frequency and Responsibility
Removal of construction structures	<ul style="list-style-type: none"> <li>• Clear and completely remove from site all construction plant equipment, storage containers, signage, temporary fencing, temporary services, fixtures and any other temporary works; and</li> <li>• Ensure that all access roads utilised during construction (which are not earmarked for closure</li> </ul>	Once-off, MDZ Fleet Solutions (Pty) Ltd

	and rehabilitation) are returned (as far as possible) to their state prior to construction.	
<b>Vegetation clearing/Replanting</b>	<ul style="list-style-type: none"> <li>Remove any emerging alien and invasive vegetation to prevent further establishment;</li> <li>All planting work is to be undertaken by suitably qualified personnel making use of the appropriate equipment;</li> <li>Transplant during the winter (between April and September); and</li> <li>Plant indigenous plants to minimise the spread of alien and invasive vegetation.</li> </ul>	When revegetation is done and in blooming season,
<b>Topsoil replacement</b>	<ul style="list-style-type: none"> <li>Replace and redistribute stockpiled topsoil together with herbaceous vegetation, overlying grass and other fine organic matter in all disturbed areas of the prospecting site, including temporary access routes and roads. Replace topsoil to the original depth (i.e. as much as was removed prior to construction).</li> <li>Prohibiting the use of topsoil suspected to be contaminated with the seed of alien vegetation. Alternatively, the soil is to be sprayed with specified herbicides.</li> <li>Backfill planting holes with excavated material / approved topsoil, thoroughly mixed with weed free manure or compost (per volume about one quarter of the plant hole), one cup of 2:3:2 fertiliser and an approved ant and termite poison.</li> </ul>	Once-off, MDZ Fleet Solutions (Pty) Ltd

**d. Explain why it can be confirmed that the rehabilitation plan is compatible with the closure objectives.**

The Company is required to make the prescribed financial provision for the rehabilitation or management of negative environmental impacts. If the Company fails to rehabilitate or manage any negative impact on the environment, the DMRE may, upon written notice to the Company, use all or part of the financial provision to rehabilitate or manage the negative environmental impact in question. The Company will specify that the drilling contractor is required to comply with all the environmental measures specified in the EMP. This will include avoiding unnecessary disturbance of natural vegetation and the rehabilitation of each drill site, immediately after drilling has been completed. All tracks to the drill sites must be rehabilitated at the end of the prospecting programme. The financial provision provides for the final checking of all sites before site clearance.

Safety after the completion of the prospecting activities will be done by concurrent rehabilitation of drill holes. Overburden will be recorded, and the holes filled back simultaneously.



**e. Calculate and state the quantum of the financial provision required to manage and rehabilitate the environment in accordance with the applicable guideline.**

The quantum of the financial provision required is R 45 865,00. The Company must annually update and review the quantum of the financial provision (as per Regulation 54 (2) of the MPRDA). The financial Quantum Calculation is found under Appendix I.

**f. Confirm that the financial provision will be provided as determined.**

MDZ Fleet Solutions (Pty) Ltd herewith confirms both its capacity and willingness to make the financial provision required should the prospecting right be granted.

Mechanisms for monitoring compliance with and performance assessment against the environmental management programme and reporting thereon, including

**g. Monitoring of Impact Management Actions**

**h. Monitoring and reporting frequency**

**i. Responsible persons**

**j. Time period for implementing impact management actions**

**k. Mechanism for monitoring compliance**

Table 20: Mechanism for monitoring

SOURCE ACTIVITY	IMPACTS REQUIRING MONITORING PROGRAMMES	FUNCTIONAL REQUIREMENTS FOR MONITORING	ROLES AND RESPONSIBILITIES (FOR THE EXECUTION OF THE MONITORING PROGRAMMES)	MONITORING AND REPORTING FREQUENCY and TIME PERIODS FOR IMPLEMENTING IMPACT MANAGEMENT ACTIONS
All Prospecting Activities	N/A	Ensure that the prospecting programme is being implemented in line with the approved prospecting works programme.	MDZ Fleet Solutions (Pty) Ltd Geologist	Submit an annual prospecting progress report to DMRE
	All commitments contained in the BA Report and accompanying EMPr	Ensure commitments made within the approved BAR and EMPr are being adhered to.	Internal environmental control officer and independent EAP	Undertake and submit an environmental performance audit every two years to DMRE
Drilling Activities	Noise	Weekly inspections will cover the following: _ Implementation of effective waste management _ Establish and implement a stakeholder compliant register on site and ensure that all complaints are responded to promptly. _ Ensure that an oil spill kit is readily available.	Appointed drilling contractor	Weekly inspection and reporting
	Dust fall			
	Visual			
	Soil & vegetation			
	Social			
	Housekeeping & maintenance			
	Waste management			

**I. Indicate the frequency of the submission of the performance assessment/ environmental audit report.**

The result of environmental monitoring and compliance to the approved EMPR will be undertaken every second year and submitted to the DMRE in the form of an environmental performance assessment. Included in the report will be the following relevant information:

- The period when the performance assessment was conducted.
- The scope of the assessment.
- The procedures used for conducting the assessment.
- Interpreted information gained from monitoring the EMPR.
- Evaluation criteria used during the assessment.
- Results of the assessment are to be discussed and mention must be made of any gaps in the EMPR and how it can be rectified.
- Yearly updated layout plans.

Any emergency or unforeseen impacts will be reported immediately to the DMRE and other relevant government departments.

## **11 ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM**

Management of operational risk is a key consideration for drill operating within the social and economic context of South Africa. Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Operational risks and impacts are usually managed through the implementation of the Environmental and Social Management System (ESMS) and Safety, Health and Environmental (SHE) system. A formal, effective ESMS is an important requirement for establishing and maintaining effective environmental management and should be undertaken during the planning phase of the Project. As such the Applicant shall be required to appoint a suitably qualified specialist to develop the ESMS to be implemented on the mine. Adequate resources (people, financial and technical) need to be made available to ensure effective establishment, implementation, maintenance and continual improvements of the ESMS. The roles and responsibilities for these key environmental personnel should be clearly defined and communicated throughout the organisation. The ESMS should include the requirement to constantly monitor environmental performance and assess the adequacy of environmental resources provided for the Mine. If required, the Mine would need to procure further environmental resources to ensure the successful implementation of the ESMS and EMPR. The development and implementation of an ESMS is a requirement in terms of compliance with international standards of best practise such as the IFC Performance Standards and Equator principles

## 11.1 Stakeholder Engagement

Social impacts occur immediately in the planning phase of a project and as such it is imperative to start with stakeholder engagement as early in the process as possible. Stakeholder engagement is required on an ongoing basis throughout the operation of the mine. As such, the mine will need to develop and implement a detailed Stakeholder Engagement Plan, designed to work as a living document for implementation over the entire duration of the project.

The following stakeholder engagement framework outlines the principles and objectives for stakeholder engagement during all phases of the prospecting operation.

- To identify and assess the processes and/or mechanisms that will improve the communication between local communities, the wider community and the small-scale mine.
- To improve relations between mine staff and the people living in the local communities.
- To provide a guideline for the dissemination of information crucial to the local communities in a timely, respectful and efficient manner.
- To provide a format for the timely recollection of information from the local communities in such a way that the communities are included in the decision making process.

This stakeholder engagement plan will assist the mine to outline their approach towards communicating in the most efficient way possible with stakeholders throughout the life of the project. Such a plan cannot be considered a once off activity and should be updated on a yearly basis to ensure that it stays relevant and to capture new information. The Stakeholder Engagement Plan should be compiled in line with IFC Guidelines (IFC) and should consist of the following components:

- Stakeholder Identification and Analysis – time should be invested in identifying and prioritising stakeholders and assessing their interests and concerns. Information Disclosure – information must be communicated to stakeholders early in the decision-making process in ways that are meaningful and accessible, and this communication should be continued throughout the life of the project.
- Stakeholder Consultation – each consultation process should be planned out, consultation should be inclusive, the process should be documented and follow-up should be communicated.
- Negotiation and Partnerships – add value to mitigation or project benefits by forming strategic partnerships and for controversial and complex issues, enter into good faith negotiations that satisfy the interest of all parties.
- Grievance Management – accessible and responsive means for stakeholders to raise

concerns and grievances about the project must be established throughout the life of the project.

- Stakeholder Involvement in Project Monitoring – directly affected stakeholders must be involved in monitoring project impacts, mitigation and benefits. External monitors must be involved where they can enhance transparency and credibility.
- Reporting to Stakeholders – report back to stakeholders on environmental, social and economic performance, both those consulted and those with more general interests in the project and parent company.
- Management Functions – sufficient capacity within the company must be built and maintained to manage processes of stakeholder engagement, track commitments and report on progress.

It is of critical importance that stakeholder engagement takes place in each phase of the project cycle and it must be noted that the approach will differ according to each phase

## **11.2 Grievance Mechanism**

In accordance with international good practice the mine shall establish a specific mechanism for dealing with grievances. A grievance is a complaint or concern raised by an individual or organisation that judges that they have been adversely affected by the project during any stage of its development. Grievances may take the form of specific complaints for actual damages or injury, general concerns about project activities, incidents and impacts, or perceived impacts. The IFC standards require Grievance Mechanisms to provide a structured way of receiving and resolving grievances. Complaints should be addressed promptly using an understandable and transparent process that is culturally appropriate and readily acceptable to all segments of affected communities, and is at no cost and without retribution. The mechanism should be appropriate to the scale of impacts and risks presented by a project and beneficial for both the company and stakeholders. The mechanism must not impede access to other judicial or administrative remedies.

The proposed grievance mechanism shall be based on the following principles:

- Transparency and fairness.
- Accessibility and cultural appropriateness.
- Openness and communication regularity.
- Written records.
- Dialogue and site visits.
- Timely resolution.

Based on the principles described above, the grievance mechanism process involves four stages:

- Receiving and recording the grievance.
- Acknowledgement and registration.
- Site inspection and investigation.
- Response.

### **11.3 Internal Grievance Procedure**

The mine shall develop a detailed internal grievance mechanism designed to receive and facilitate resolution of workplace concerns and grievances raised by employees (and their organizations, where they exist). Employees must be informed of the grievance mechanism at the time of recruitment and it must be made easily accessible to them. The mechanism should involve an appropriate level of management and address concerns promptly, using an understandable and transparent process that provides timely feedback to those concerned, without any retribution. The mechanism should also allow for anonymous complaints to be raised and addressed. The mechanism should not impede access to other judicial or administrative remedies that might be available under the law or through existing arbitration procedures, or substitute for grievance mechanisms provided through collective agreements.

#### **Document Control**

A formal document control system should be established during the development of the ESMS. The document control system must provide for the following requirements:

- Documents are approved for adequacy prior to use.
- Review and update documents as necessary and re-approve documents.
- Ensure that changes and the current version status of documents are identified.
- Ensure that relevant versions of applicable documents are available at points of use.
- Ensure that documents remain legible and readily identifiable.
- Ensure that documents of external origin necessary for the ESMS are identified and their distribution controlled.
- Prevent unintended use of obsolete documents and apply suitable identification to them if they are retained for any purpose.

### **11.4 Record Keeping**

It is essential that an official procedure for control of records be developed to ensure records required to demonstrate conformity to environmental and social standards are maintained. This project is therefore required to develop and maintain a procedure for the identification, storage, protection, retrieval, retention and disposal of records as part of the ESMS. Records must be legible, identifiable and traceable.

### **11.5 Auditing and Reporting Procedures**

The Prospecting right holder shall develop and auditing and reporting procedure, for conveying information from the compliance monitoring activities and to ensure that management is able to take rapid corrective action should certain thresholds be exceeded. The sections below present a framework for the development of the necessary procedures. Different reporting mechanisms may include:

- Inspections
- Accidents and emergencies
- Measuring performance indicators and interpreting and acting on the indicators
- Records of monitoring activities to test the effectiveness of mitigation measures and impact controls, as well as for compliance auditing purposes
- Training programmes and evidence of appropriate levels/amount of skills/capacities created
- All monitoring and auditing must be accompanied by applicable records and evidence (e.g. delivery slips, photographic records, etc.). All reports must be retained and made available for inspection by the ECO, the Applicant and /or the Relevant Competent Authorities. All reports shall be signed by the relevant parties to ensure accountability. The Prospecting right holder must use the audit report findings to continually ensure that environmental protection measures are working effectively on site through a system of self-checking. The EMPR should be viewed as a dynamic document aimed at continual environmental performance improvement.

The following auditing and reporting shall be required throughout the operation phase:

- Weekly Compliance Reports: These reports must be prepared by the designated DrillEO and must aim to monitor and report on-site environmental performance
- Quarterly Compliance Audit Reports: The ECO must compile quarterly compliance audit reports which are to be submitted to the Prospecting right holder for his review and correction of non-compliance issues. It is the responsibility of the ECO to report any non-compliance, which is not correctly rectified.

### **11.6 Responding to Non-Compliances**



Non-compliance will be identified and managed through the following four key activities including:

- Inspections of the site and activities across the site
- Monitoring of selected environmental quality variables
- Audits of the site and relevant documentation as well as specific activities
- Reporting on a monthly basis

An environmental non-conformance and incident register must be prepared and maintained by the ECO throughout the lifespan of the small-scale mine in order to monitor environmental concerns, incidents, and non-conformances. The register must include details of date, location, description of the NC or Incident, applicable environmental commitment/standard, corrective action taken, adequacy of corrective action, date rectified, etc.

Non-compliance with the EMPR or any other environmental legislation, specifications or standards shall be recorded by the ECO in the non-conformance register. This register shall be maintained by the ECO and will be sent to the Prospecting right holder and Contractor on a regular basis (quarterly), and the Prospecting right holder shall ensure that the responsible party takes the necessary corrective actions. Non-conformances may only be closed out in the register by the ECO upon confirmation that adequate corrective action has been taken. The register should be utilised to measure overall environmental performance.

## 11.7 Environmental Incidents

For the purposes of this project, an environmental incident can be divided into three levels, i.e. major, medium and minor. All major and medium environmental incidents shall be recorded in the incident register. Minor incidents do not need to be reported but require immediate rectification on site. Definitions and examples of environmental incidents are provided in Table 21.

**Table 21: Description of incidents and non-conformances for the purpose of the project.**

NON-CONFORMANCE	Any deviation from work standards, practices, procedures, regulations, management system performance etc. That could either directly or indirectly lead to injury or illness, property damage, damage to the workplace  Environment, or a combination of these.
MAJOR ENVIRONMENTAL INCIDENT	An incident or sequel of incidents, whether immediate or delayed, that results or has the potential to result in

	<p>widespread, long-term, irreversible significant negative impact on the environment and/or has a high risk of legal liability.</p>
	<p>A major environmental incident usually results in a significant pollution and may entail risk of public danger. Major environmental incidents usually remain an irreversible impact even with the involvement of long-term external intervention i.e. Expertise, best available technology, remedial actions, excessive financial cost etc. Major environmental incidents may be required to be reported to the authorities. The eco shall make the final decision as to whether a particular incident should be classified as a major incident.</p> <p>An example of a major environmental incident would be a significant spillage (e.g. 500 litres) of fuel into a watercourse.</p>
<p>MEDIUM ENVIRONMENTAL INCIDENT</p>	<p>An incident or sequel of incidents, whether immediate or delayed, that results or has the potential to result in widespread or localised, short term, reversible significant negative impact on the environment and/or has a risk of legal liability.</p> <p>A medium environmental incident may be reported to the authorities, can result in significant pollution or may entail risk of public danger. The impact of medium environmental incidents should be reversible within a short to medium term with or without intervention. The eco shall make the final decision as to whether a particular incident should be classified as a medium incident.</p> <p>An example of a medium environmental incident would be a large spill of fuel (e.g. 20 – 50 litres) onto land.</p>
<p>MINOR ENVIRONMENTAL INCIDENT</p>	<p>An incident or sequel of incidents, whether immediate or delayed, where the environmental impact is negligible immediately after occurrence and/or once-off intervention on the day of occurrence.</p> <p>An incident where there is unnecessary wastage of a natural resource is also classified as a minor environmental incident. An</p>

	<p>example would be leaking water pipes that result in the wastage of water.</p> <p>A minor environmental incident is not reportable to authorities. An example of a minor incident is day to day spills of fuel or oil onto the ground where the spill is less than one or two litres.</p>
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The following incident reporting procedures shall apply to this project:

- All environmental incidents shall be reported to Contractor's EO and Drill EO who shall ensure that the appropriate rectification is undertaken.
- The Drill EO shall record all medium and major incidents in the incident register and advise on the appropriate measures and timeframes for corrective action.
- An incident report shall be completed by party responsible for the incident for all medium and major incidents and the report shall be submitted to the Drill Manager and Drill EO within 5 calendar days of the incident.
- The Drill EO shall investigate all medium and minor incidents and identify any required actions to prevent a recurrence of such incidents.

In the event of an emergency incident (unexpected sudden occurrence), including a major emission, fire or explosion leading to serious danger to the public or potentially serious pollution of or detriment to the environment, whether immediate or delayed, the Applicant shall notify the relevant authorities in accordance with legal requirements (e.g. Section 30 of NEMA and Section 20 of the NWA). In the event of a dispute in terms of the classification of a such an incident, the Applicant shall engage the ECO to advise on the potential reporting requirements in terms of the above.

## **12 ENVIRONMENTAL AWARENESS PLAN AND TRAINING**

No Training and environmental awareness is an integral part of a complete EMPR. The overall aim of the training will be to ensure that all site staff is informed of their relevant requirements and obligations pertaining to the relevant authorisations, licences, permits and the approved EMPR and protection of the environment.

The applicant and contractor must ensure that all relevant employees are trained and capable of carrying out their duties in an environmentally responsible and compliant manner, and are capable of complying with the relevant environmental requirements.

To obtain buy-in from staff, individual employees need to be involved in:

- Identifying the relevant risks.
- Understanding the nature of risks.
- Devising risk controls.
- Given incentive to implement the controls in terms of legal obligations.

The applicant shall ensure that adequate environmental training takes place. All employees shall have been given an induction presentation on environmental awareness. Where possible, the presentation needs to be conducted in the language of the employees. All training must be formally recorded and attendance registers retained. The environmental training should, as a minimum, include the following:

- General background and definition to the environment.
- The environmental impacts, actual or potential, of their work activities.
- Compliance with mitigation measures proposed for sensitive areas.
- The environmental benefits of improved personal performance.
- Their roles and responsibilities in achieving compliance with the environmental policy and procedures and with the requirement of the applicant's environmental management systems, including emergency preparedness and response requirements.
- The potential consequences (legal and/or other) of departure from specified operating procedures.
- The mitigation measures required to be implemented when carrying out their work activities.
- All operational risks must be identified and processes established to mitigate such risk, proactively. Thus, the applicant needs to inform the employees of any environmental risks that may result from their work, and how these risks must be dealt with in order to avoid pollution and/or degradation of the environment.
- In the case of new staff (including contract labour) the contractor / applicant shall keep a record of adequate environmental induction training. The importance of compliance with all environmental policies.

#### Manner in Which Employees will be Informed of Environmental Risks

Environmental awareness could be fostered by induction course for all personnel on site, before commencing site visits. Personnel should also be alerted to particular environmental concerns associated with their tasks for the area in which they are working. Courses must be given by

suitably qualified personnel and in a language and medium understood by personnel. The environmental awareness training programme will include the following:

- Occupational Health and Safety Training (OHS).
- Environmental Awareness Training EMPR management actions.

Environmental awareness training will focus on the following specific aspects and be undertaken in "Tool box talk "topics prior to site access:

- Waste collection and disposal.
- EMPR management options and application.

### **12.1 Manner in which Risks will be Dealt with to Avoid Pollution or Degradation**

The broad measures to control or remedy any causes of pollution or environmental degradation as a result of the proposed prospecting activities taking place are provided below:

- Contain potential pollutants and contaminants (where possible) at source.
- Handling of potential pollutants and contaminants (where possible) must be conducted in bunded areas and on impermeable substrates.
- Ensure the timeous clean-up of any spills.
- Implement a waste management system for all waste present on site.
- Investigate any I&AP claims of pollution or contamination as a result of prospecting activities.
- Implement the impact management objectives, outcomes and actions, as described in Section 12 above.

It is of critical importance that the broad measures to control or remedy any causes of pollution or environmental degradation are applied during onsite prospecting activities.

## **13 SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY**

No additional information was requested or is deemed necessary.

## **14 ENVIRONMENTAL MONITORING**

### **14.1 Functional Requirements of Monitoring Programmes**

The purpose of monitoring is not merely to collect data, but to provide information necessary to make informed decisions on managing and mitigating potential impacts. Monitoring therefore serves the following functions:

- Serve as early warning system to detect any potential negative impacts.
- To provide information to feedback into management controls to avoid, prevent or minimise potential negative impacts.
- Provide quantitative data that can serve as evidence for the presence of negative impacts or the lack thereof.
- Allows for trending, modelling and prediction of future conditions or potential impacts

Based on the above, the small-scale mine must ensure that monitoring programmes comprise of the following (at a minimum) in order to obtain valuable environmental data:

- Environmental aspect monitoring must be a formalised procedure.
- All equipment used in monitoring must be correctly calibrated and serviced regularly.
- Samples required for analysis will be sent to an independent and accredited laboratory.
- Monitoring data must be stored.
- Data must be checked and interpreted and trending undertaken on a quarterly basis.
- Both the data and reports on environmental monitoring must be kept on record for the life of mine and where relevant provided to I&APs.
- The general and site specific parameters to be monitored must be identified by an independent specialist, the authorities and where relevant I&APs.

## **14.2 List of Aspects that Require Monitoring Plans**

The list of aspects that require on-going environmental monitoring includes the following:

- Surface water.
- Groundwater.
- Rehabilitation.

As drills and the environment are both dynamic it is likely that future scenarios may require the monitoring of additional or unforeseen impacts. As such, the list provided is by no means conclusive and must instead be used as a guideline for the impacts that require monitoring.



### **14.3 Monitoring Plans for Environmental Aspects**

The monitoring of various environmental aspects and the impact on them as a result of the proposed project shall take place by means of both quantitative and qualitative techniques in order to determine whether or not the requirements of the Environmental Management Programme are being complied with. The importance and value of detailed environmental monitoring networks cannot be overstated.

Environmental monitoring serves as a tool to track compliance, assist with potential liability identification, and mitigation throughout the life of the proposed project. This is achieved through the provision of actual evidence based monitoring and reporting thereof. In essence, monitoring is a continuous data-gathering, data interpreting, and control procedure that ranges from visual inspection to in-depth investigative monitoring and reporting. These monitoring plans need to be drawn into standalone plans that can be updated and amended as per authority requirements and additional data requirements identified during the prospecting activities. These plans need to include the site specific roles and responsibilities for actions.

#### 14.4 UNDERTAKING

The EAP herewith confirms

- a) The correctness of the information provided in the reports
- b) The inclusion of comments and inputs from stakeholders and I&APs;
- c) The inclusion of inputs and recommendations from the specialist reports where relevant; and
- d) That the information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected. Parties are correctly reflected herein.

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Signature of the environmental assessment practitioner:

**Singo Consulting (Pty) Ltd**

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Name of company:

**2023**

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Date:

**-END-**

# APPENDICES

## Appendix 1: Acceptance letter



mineral resources  
& energy

Department  
Minerals Resources and Energy  
REPUBLIC OF SOUTH AFRICA

Private Bag X 54307, Durban, 4000, 333 Anton Lembede Street, 3<sup>rd</sup> Floor Durban Bay House, Durban, Tel: (031) 305 9600, Fax: (031) 305 9801  
Reference: KZN 30/5/1/12/ 11413 PR Enquiries: Mrs Nonobeko Ntseme Email address: [nonobeko.ntseme@dme.gov.za](mailto:nonobeko.ntseme@dme.gov.za).

REGISTERED MAIL

THE MANAGER

MDZ FLEET SOLUTIONS (PTY) LTD

PRIVATE BAG X1035

WITBANK

1035

Email: [sonwabo@tomowize.co.za](mailto:sonwabo@tomowize.co.za)

Dear Sir/Madam

### ACCEPTANCE OF AN APPLICATION FOR PROSPECTING RIGHT IN TERMS OF SECTION 16(4) OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002)

1. Please be informed that your application for Prospecting for Coal on a Portion of the Remaining extent of the Farm Mambuka 16919, Portion of Remaining extent of the farm Lot 308 Empangeni 13742 and Portion of the Remaining extent of the Farm Lot 307 Empangeni 13746 situated in the Magisterial District of King Cetshwayo, is hereby accepted on the above- mentioned properties, in terms of section 16 (2) of the Act.
2. Take note that in light of the minimum requirements as stipulated on regulation 16 (1) and 16 (2) of the EIA Regulations, your application for an Environmental Authorisation was deemed incomplete as it was not accompanied by this acceptance letter as per Su Regulation 16 (1) (ix) and considering that it is now completed by this acceptance letter, you are hereby required to submit the documents as stipulated on Regulation 19 (1) to 19 (8) of the EIA Regulation (only in cases where Basic Assessment Report is applicable or Regulation 21 (Scoping Report and Regulation 23 (Environmental Impact Report) (only in cases where applicable). All submission timeframes are effective from the dates of this acceptance letter.

Acceptance Of An Application For Prospecting Right In Terms Of Section 16 Of The Mineral And Petroleum Resources Development Act, (Act 28 Of 2002) To Prospect For Coal on a Portion of the Remaining extent of the Farm Mambuka 16919, Portion of Remaining extent of the Farm Lot 308 Empangeni 13742 and Portion of the Remaining extent of the Farm Lot 307 Empangeni 13746 Situated In The Magisterial District Of King Cetshwayo: MDZ Fleet Solutions (Pty) Ltd NN

3. Please take further note that in terms of section 16 (4) of the Act, you are required to:-

3.1 Upload unto the SAMRAD system one copy and submit three (03) hard copies of the requisite environmental reports as required by section 16 of the MPRDA within **ninety (90) days** from the date of this letter.

3.2 to consult in the prescribed manner with the landowner, lawful occupier and any interested and affected party including the Land Restitution Commission and include the result of such consultation in the relevant environmental reports to be submitted and uploaded on the SAMRAD system on or before **07<sup>th</sup> July 2023 (within 30 days from the date of this letter)**

*Please note that the consultation process referred to in paragraph 2.2 above does not imply issuing letters and requesting the affected parties to indicate whether they support your proposed project or not.*

*It includes among others an extensive process of giving and discussing the specific details of the proposed project, giving the I & A Parties an opportunity to table their comments, objection and support, it also involves **your written responses and specific commitments made** in dealing with the issues raised during the consultation.*

*Note that it is important to ensure that your consultation process is comprehensive so that your Environmental Impact Assessment and Environmental Management Plan can be informed by all potential impacts that your project may have.*

4. Should the land be owned by the communities or a Trust on behalf of the community, a proper and thorough consultation process must be engaged upon and a legitimate Tribal Resolution or consent must be obtained from the Traditional Authority / Council or Trust and be submitted with the results of consultation. *Should you need any assistance or guidance relating to the required consultation process & procedure in traditional institutions, please contact the District office of the Department of Cooperative Governance and Traditional Affairs in **King Cetshwayo District Municipality.***

5. Further note that the acceptance of your application does not grant you the right to commence with **prospecting activities**. It only signifies that your application

~~will be processed and evaluated. The Minister or his delegate will make a decision~~  
Acceptance Of An Application For Prospecting Right In Terms Of Section 16 Of The Mineral And Petroleum Resources Development Act, (Act 28 Of 2002) To Prospect For Coal on a Portion of the Remaining extent of the Farm Numbula 16519, Portion of Remaining extent of the Farm Lc; 306 Empangeni 13742 and Portion of the Remaining extent of the Farm Lc; 307 Empangeni 13748 Situated In The Magisterial District Of King Cetshwayo MDZ Plets, Sakheliso (Pty) Ltd (N)

once the process of the evaluation and appeal on the Environmental Authorization application has been finalized.

6. You are in terms of Section 17(1) of the Act required to give effect to the objects referred to in Section 2 (d) of the Act. Therefore please submit on or before **19<sup>th</sup> August 2023 (within 60 days from the date of this letter)** to this office for the attention of Regional Manager any documentation proving such including but not limited to:-
  - 6.1 Duly signed shareholders agreements with your empowerment partner in which provision **shall** be made for entrepreneurs, local community and employees,
  - 6.2 Share certificates,
  - 6.3 Details relating to the equity by the BEE shareholders, Any other agreement relating to the BEE shareholding including the voting pool agreement where applicable,
  - 6.4 Articles and memorandum of association of the company.
  - 6.5 Any other information that may be necessary to explain and serve as evidence that the applicant meets the appropriate HDSA ownership and/or compliance requirements of the aforesaid Act and Mining Charter.
7. Please submit within 60 days (19<sup>th</sup> August 2023) from date of this letter for the attention of Regional Manager a complete prospecting work programme prepared in terms of Regulation 7 of the Mineral and Petroleum Resources Development Act, 2002 (Act no 28 of 2002): Mineral and Petroleum Development Regulation.
8. You are also required to adhere with the requirements of Mine Health and Safety Inspectorate and upload on system the required information and details on **07<sup>th</sup> July 2023 (within 30 days from the date of this letter)**.
9. Please be advised that your application might be processed in terms of section 9 (1) (b) of the Act. If this office discovers that there is an existing or pending application on the same properties and for the same mineral, this application shall discontinue.
10. Please take note that failure to adhere to the timeframe stipulated above and to submit any documentation required in terms of this notice will result into non-compliance with the provision of the Act and the Amendment Act and will result in the refusal of your application.

Acceptance Of An Application For Prospecting Right In Terms Of Section 16 Of The Mineral And Petroleum Resources Development Act, (Act 28 Of 2002) To Prospect For Coal on a Portion of the Remaining extent of the Farm Mantlaka 10819, Portion of Remaining extent of the Farm Lot 306 Empangeni 13742 and Portion of the Remaining extent of the Farm Lot 307 Empangeni 13748 Situated In The Magisterial District Of King Cetshwayo MDZ Fleet Solutions (Pty) Ltd NV

Yours faithfully

  
REGIONAL MANAGER

KWAZULU NATAL REGION

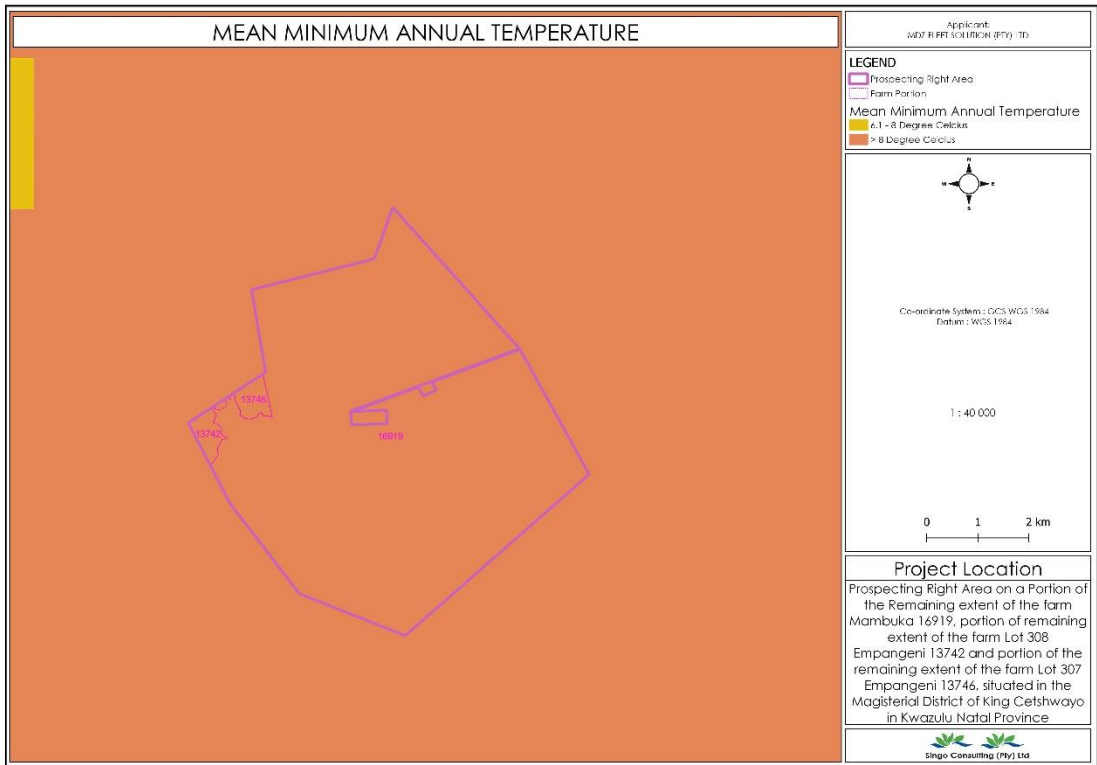
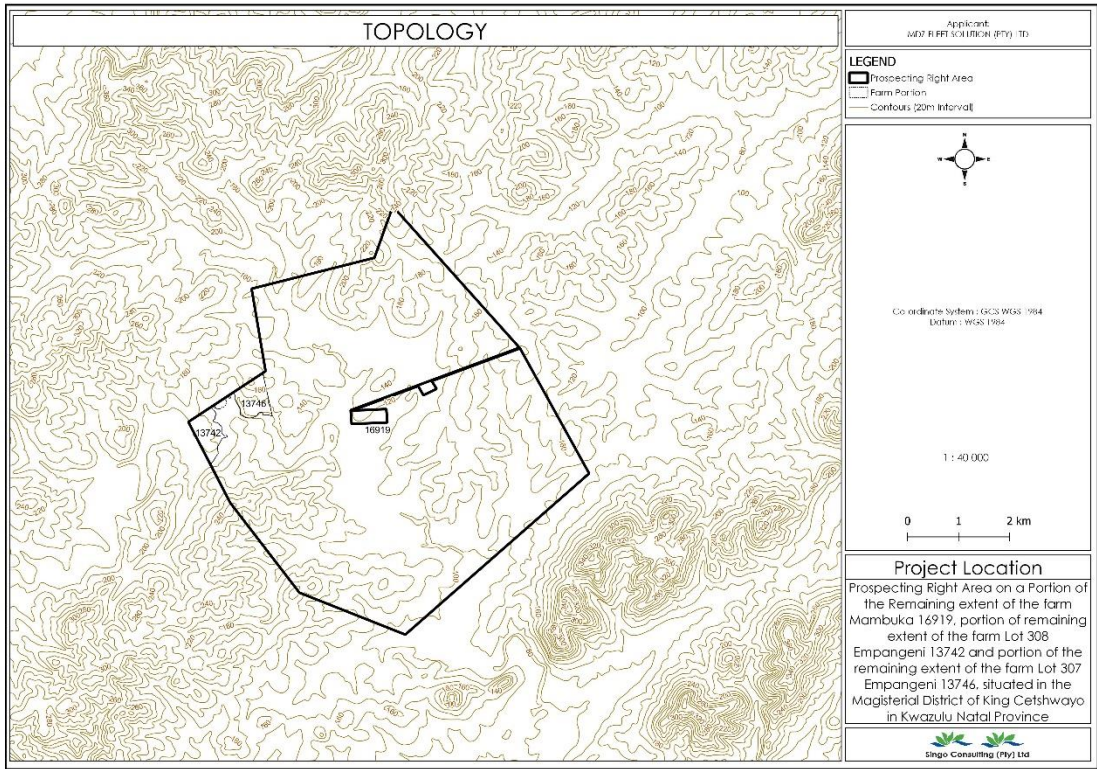
DATE: 29/05/2023

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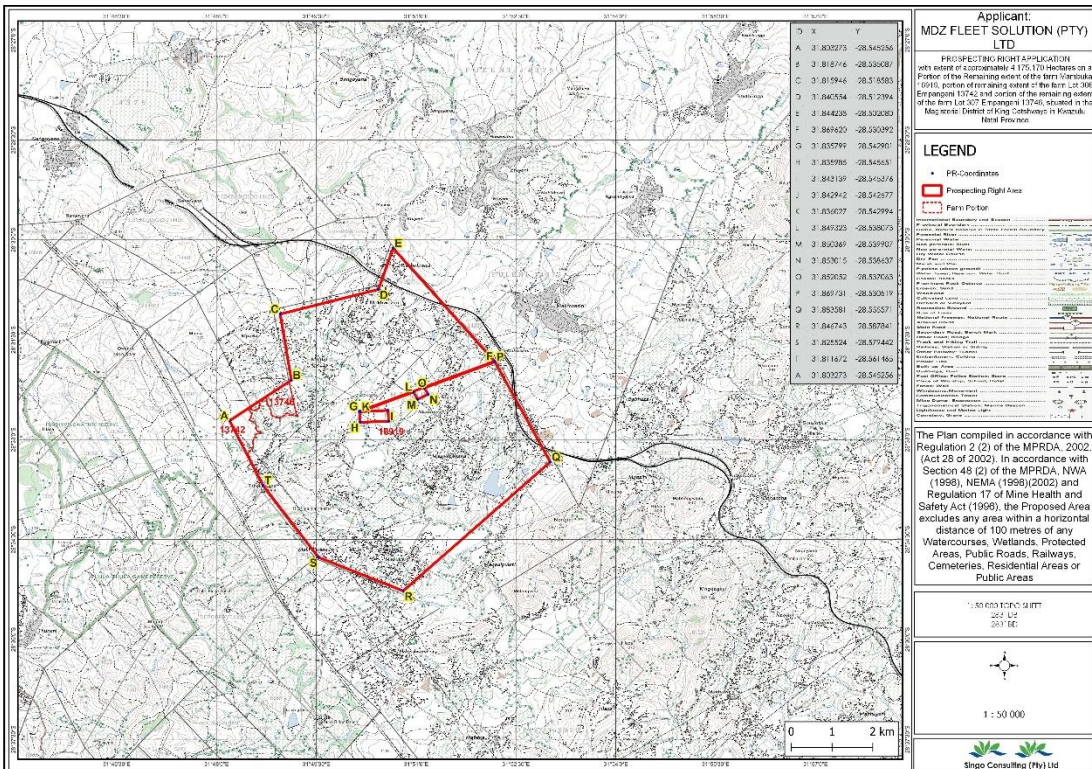
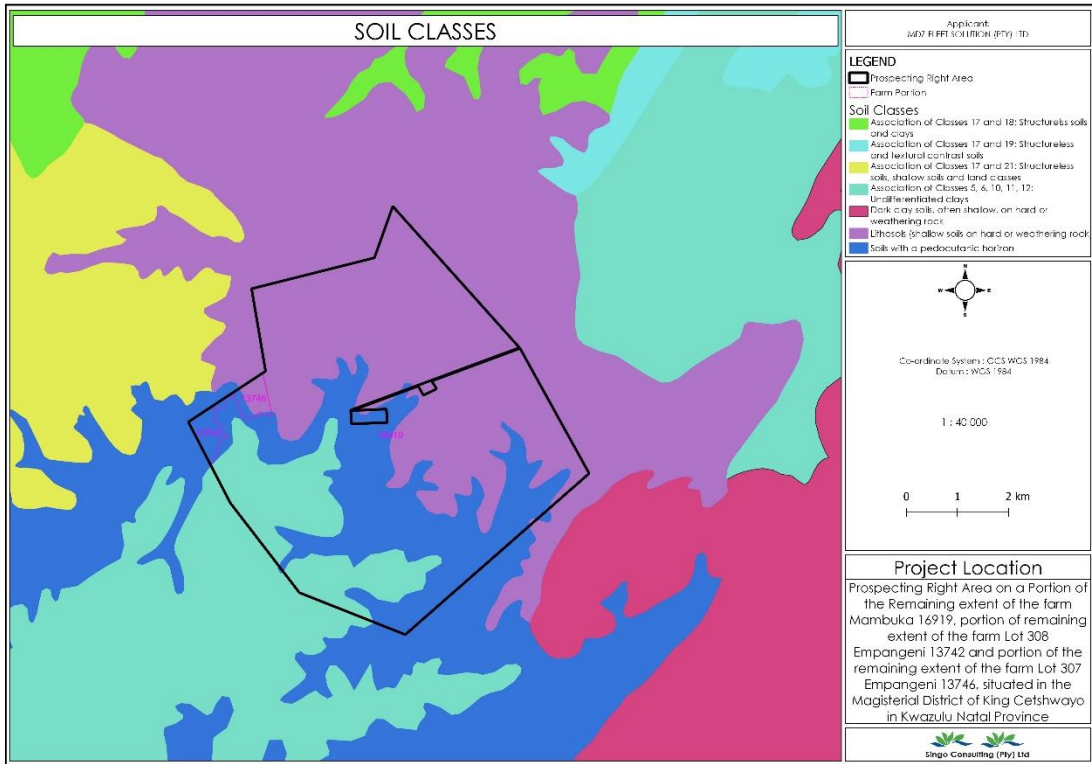
Acceptance Of An Application For Prospecting Right In Terms Of Section 16 Of The Mineral And Petroleum Resources Development Act, (Act 28 Of 2002) To Prospect For Coal on a Portion of the Remaining extent of the Farm Mambuka 1891B, Portion of Remaining extent of the Farm Lot 308 Empangeni 15742 and Portion of the Remaining extent of the Farm Lot 507 Empangeni 13746 Situated in The Magisterial District Of King Cetshwayo: MD2 First Solutions (Pty) Ltd NN

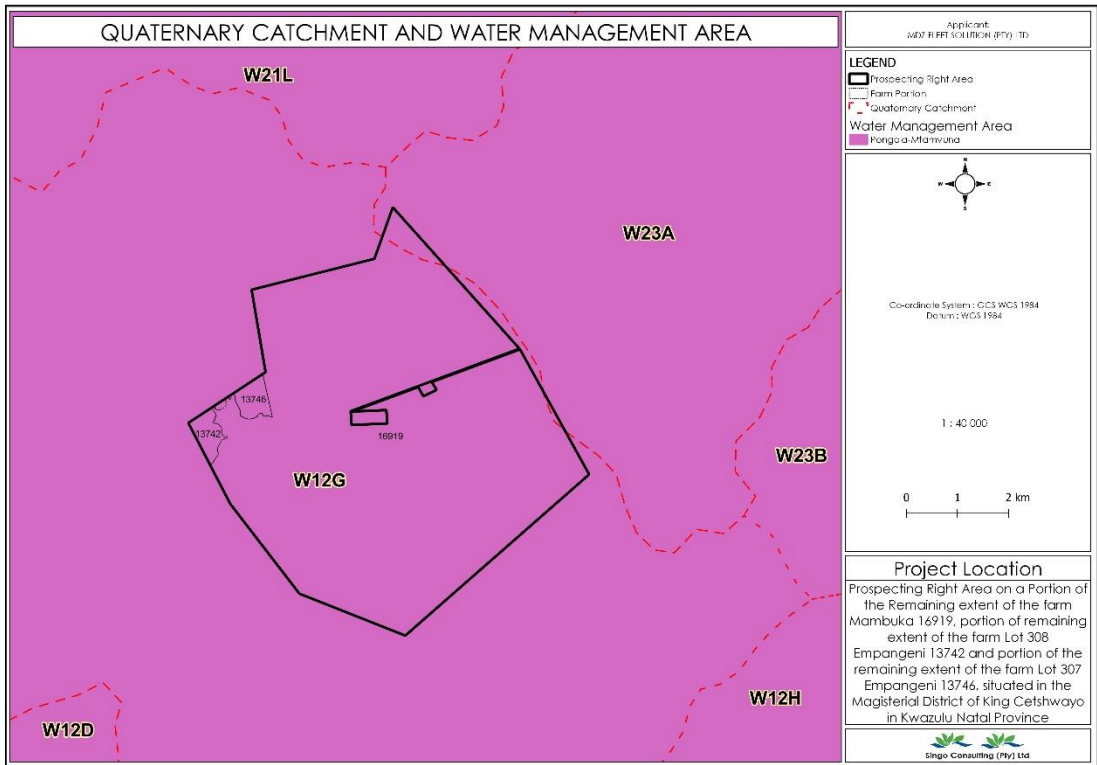
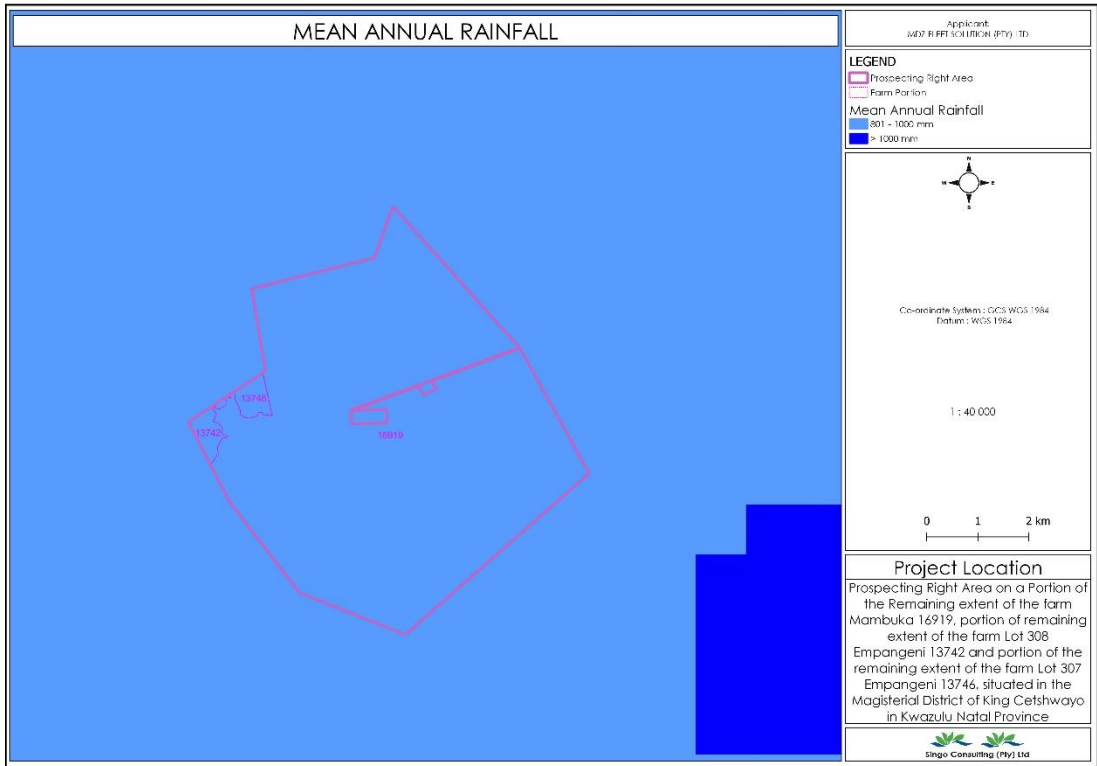




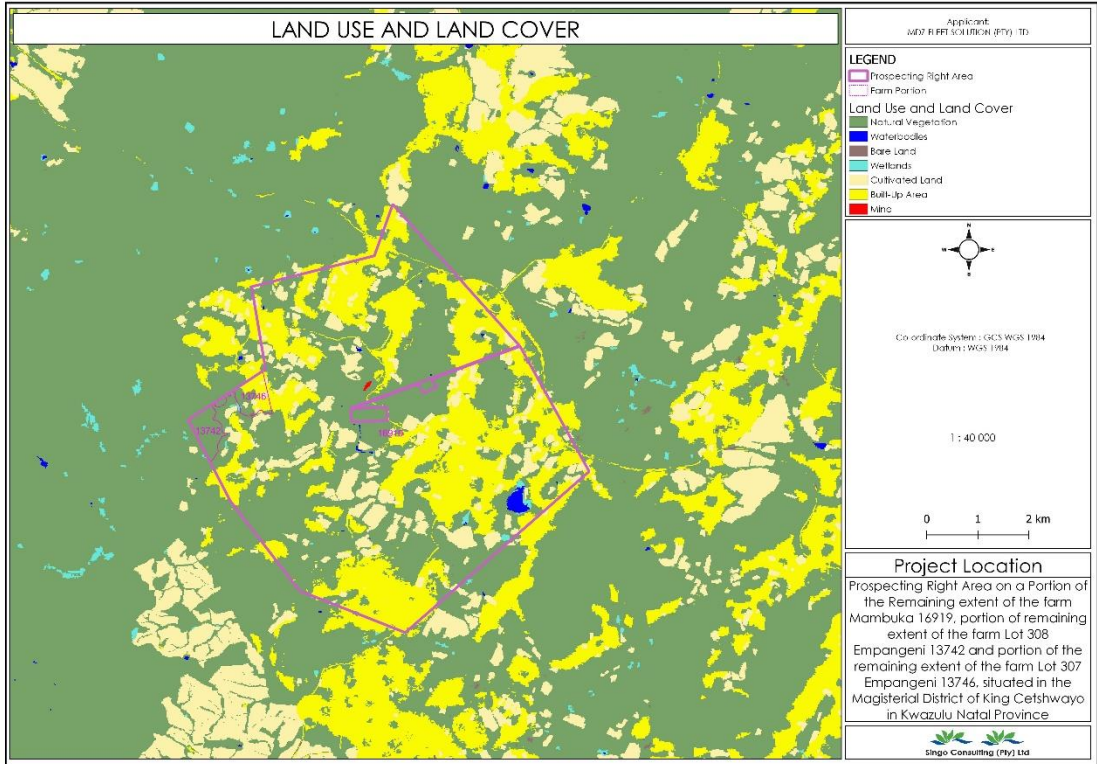
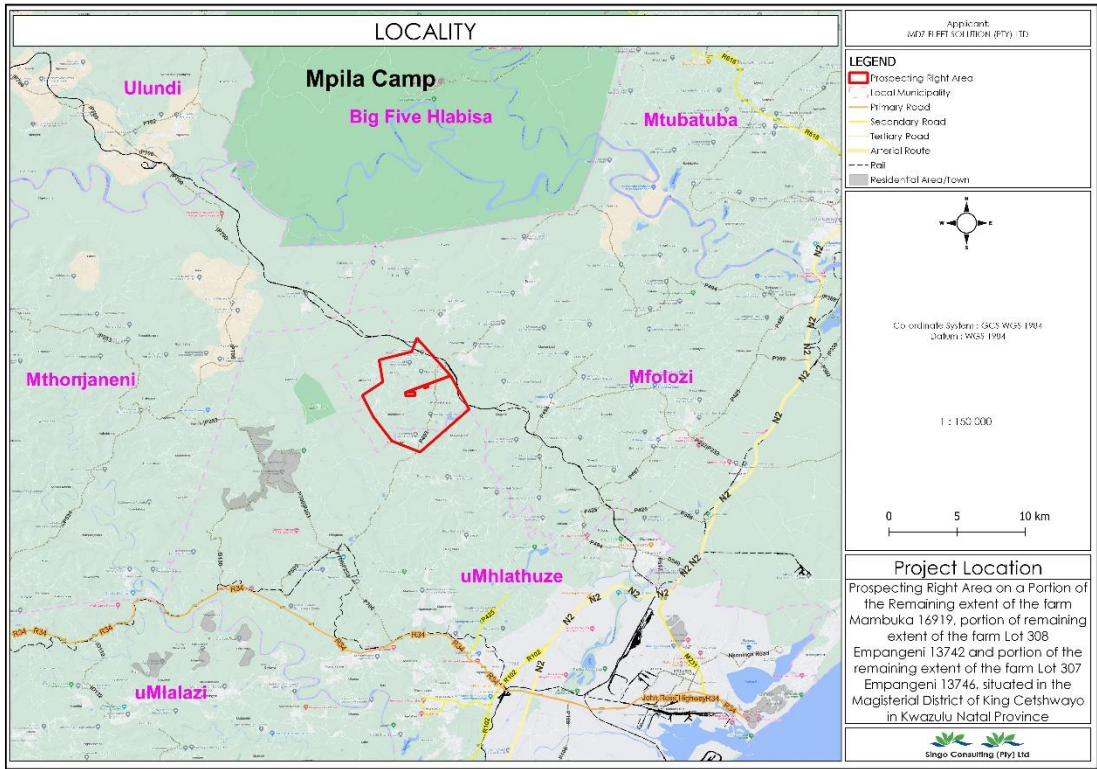


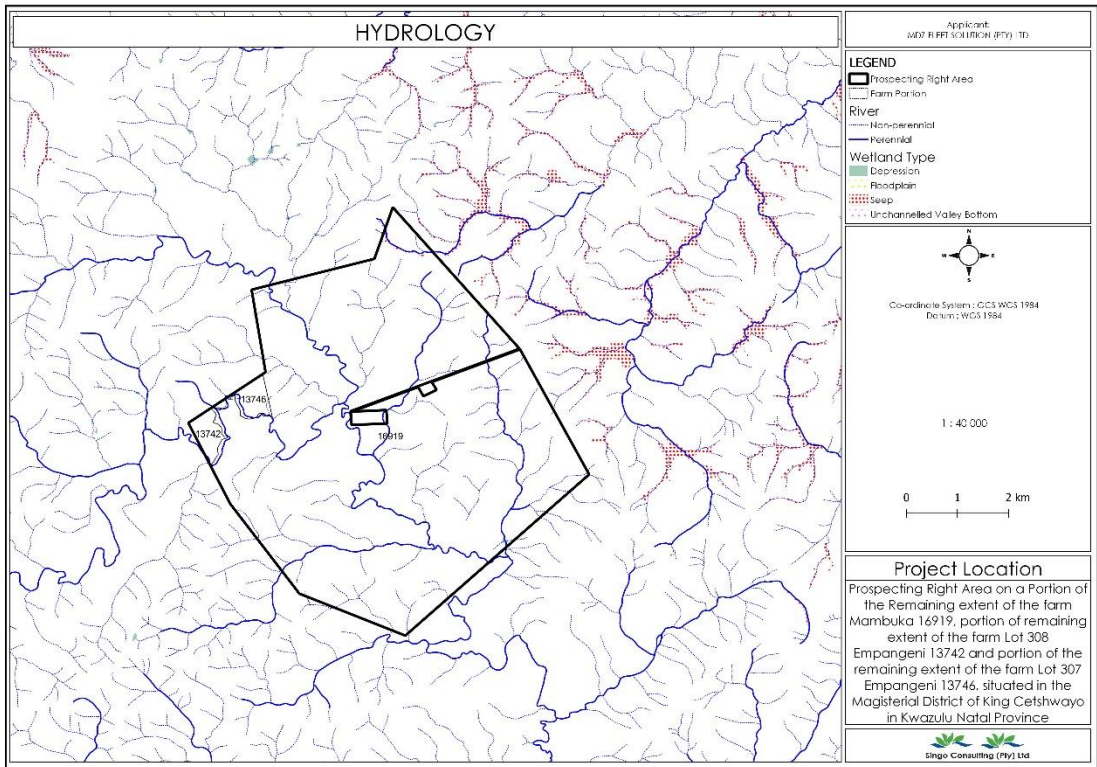
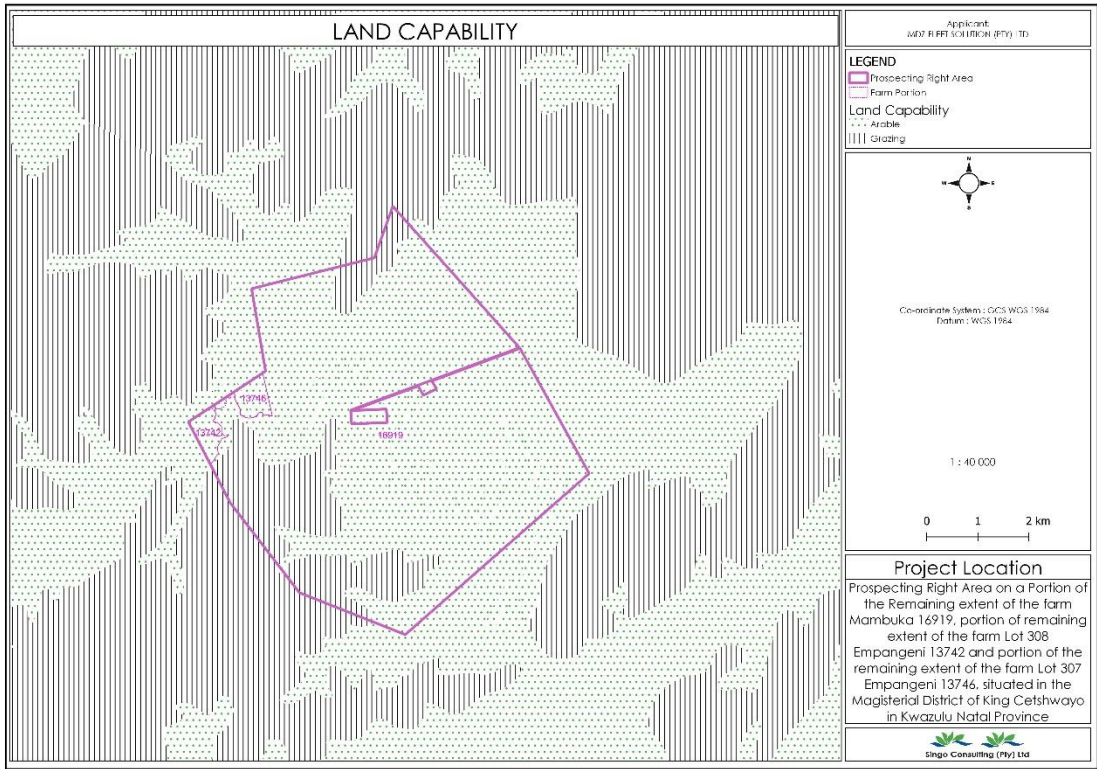




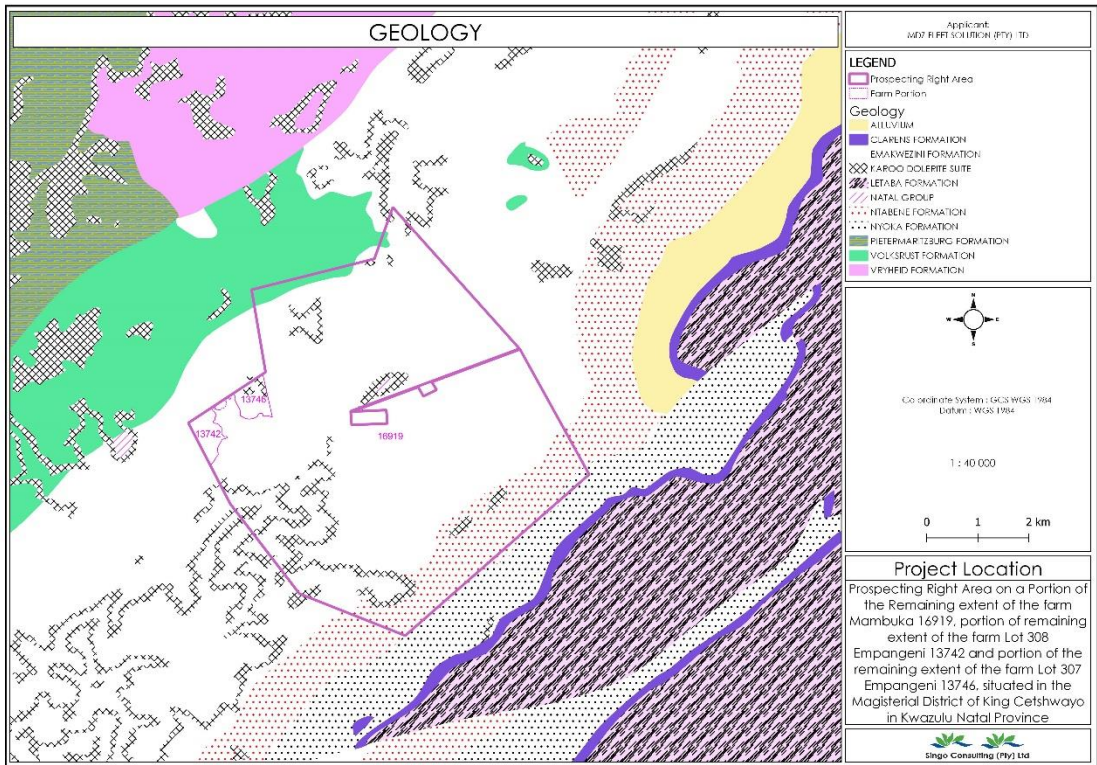
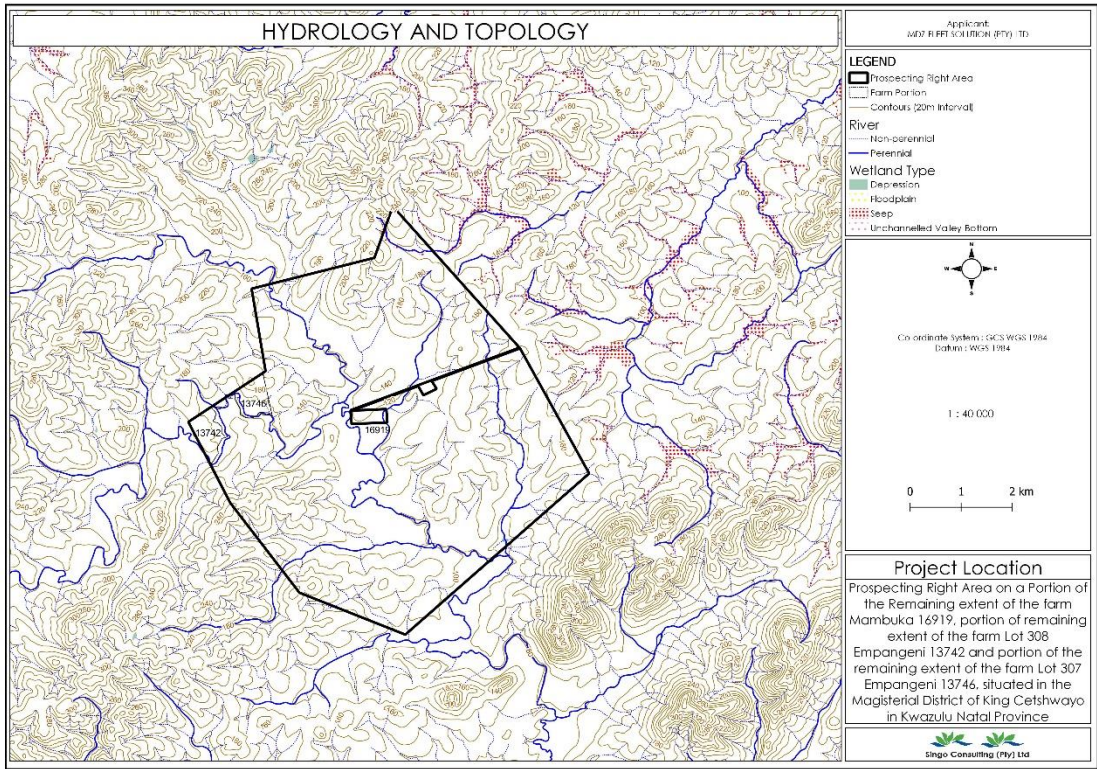




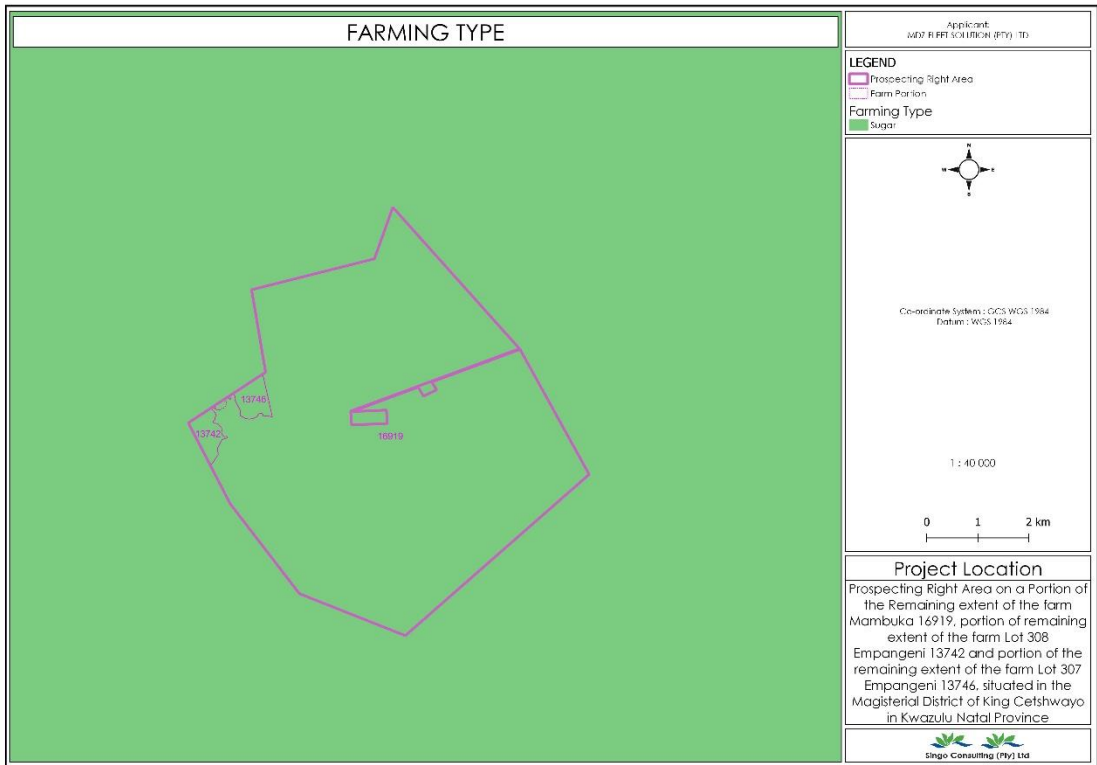
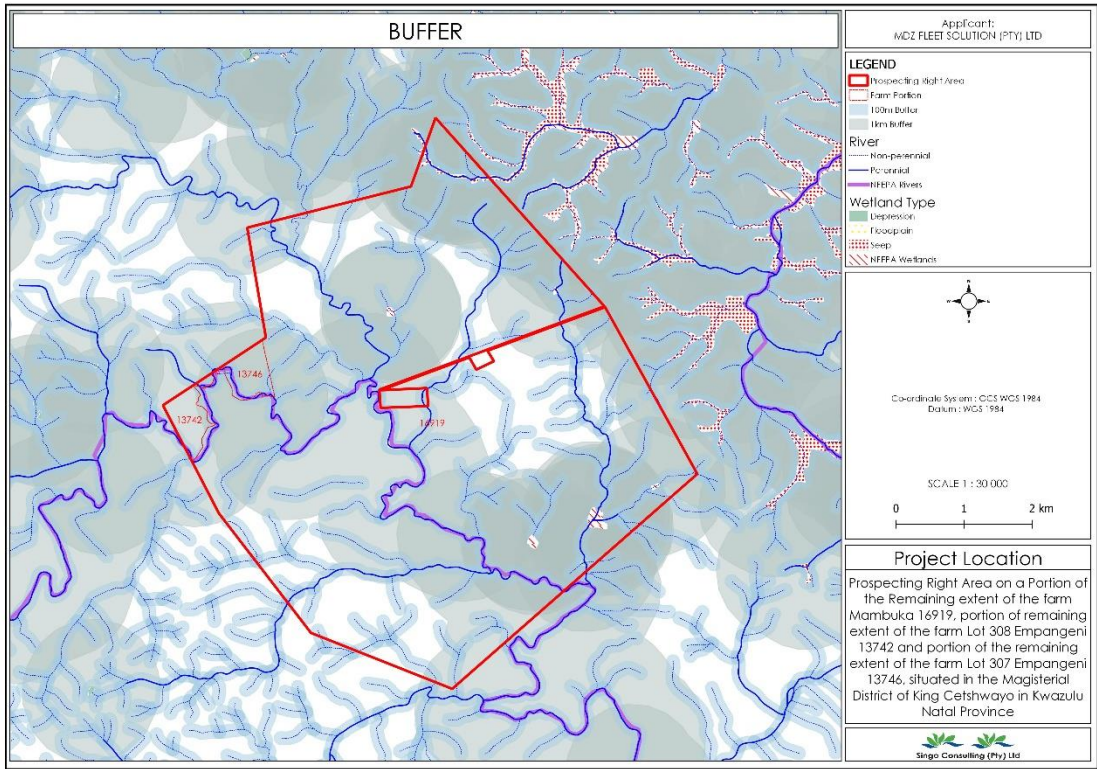












## Appendix 3: Background Information Document (BID)



### BACKGROUND INFORMATION DOCUMENT

For prospecting right application on Portion of the Remaining Extent of the farm Mambuka 16919, Portion of the Remaining Extent of the farm Lot 308 Empangeni 13742 and Portion of the Remaining Extent of the farm Lot 307 Empangeni 13746, situated in the Magisterial District of King Cetshwayo in KwaZulu-Natal Province.

DMRE Ref: KZN 30/5/1/1/2/11413 PR

#### PREPARED FOR:

##### MDZ Fleet Solutions (PTY) LTD

Physical Address: Unit 147, Fernridge

Estate, 1944 Fourways Ext 34,

Fourways, 2191

Contact person: Mr. Ramabulana

Aluwani Percy

Cell No.: +27 79 487 7347 / +27 79

402 3625

Tel No.: +27 10 487 7347

Email: [aluwani@mdzholdings.co.za](mailto:aluwani@mdzholdings.co.za)

#### PREPARED BY:



Singo Consulting (Pty) Ltd

Office 870, 5 Balalaika Street,

Tasbet Park Ext. 2, eMalaheni

(Witbank), 1040

EAP.: Mr. Khodani Mathako

PPP Officer.: Miss. Mazithi Mangcu

Cell No.: +27 74 884 1000

Tel No.: +27 13 6920 041

Fax No.: +27 86 5144 103

Email:

[mazithi@singoconsulting.co.za](mailto:mazithi@singoconsulting.co.za)

2023

## INTRODUCTION AND THE PURPOSE OF THIS DOCUMENT

**Singo Consulting (Pty) Ltd** has been appointed as an independent Environmental Consultant by **MDZ Fleet Solutions (Pty) Ltd** to conduct Environmental Impact Assessment (EIA), compile a Basic Assessment Report (BAR), compile an Environmental Management Programme report (EMPr), and undertake Public Participation Process (PPP). This is done for the process of acquiring Environmental Authorization for the proposed Prospecting Right Application on **Portion of the Remaining Extent of the farm Mambuka 16919, Portion of the Remaining Extent of the farm Lot 308 Empangeni 13742 and Portion of the Remaining Extent of the farm Lot 307 Empangeni 13746, situated within the Magisterial District of King Cetshwayo, KwaZulu-Natal Province. (DMRE Ref: KZN 30/5/1/1/2/11413 PR).**

The Purpose of this Background Information Document (BID) is to provide a perfunctory description of the project and outline EIA processes to be followed and contributions from Interested and Affected Parties (I&APs) on the issues related to the project in question, allowing comments and concerns to be raised.

Results of the EIA, both negative and positive will be submitted and made available to the relevant Departments such as the Department of Mineral Resources and if requested, Environmental Affairs, Water and Sanitation, Landowner and other interested stakeholders.

This Background Information Document therefore requests and invites I&APs to comment on the environmental, physical, social and economic impacts associated with the proposed Prospecting Activities. Be assured that your comments are of great value as they ensure that relevant issues are taken into consideration. Attached at the end of this document is a registration form, kindly complete it and send it back to **Ms Mazithi Mangcu** through given means of communication also attached there.

## PROJECT DESCRIPTION

Prospecting right Application has been submitted for the searching (drilling) of coal resource on the properties mentioned above. This proposed prospecting Area, as seen in Figure 2 and Figure 3, is situated approximately 19.05 km North of Empangeni and 1 km from Magwetshana and Mningi communities. It is also 20 km away from Richards bay port.

Prospecting activities will be undertaken over a period of five (5) years and are designed in phases, each phase conditional on the success of the previous phase. Both invasive and non-invasive methods will be implemented. Invasive are those activities which have footprint or cause harm (if not mitigated or managed properly) or those that have a physical impact on the environment, while non-invasive do not cause any harm or effects on the environment. See **Figure 1** for drilling setting and equipments example.

**Non-invasive:** Desktop study of the area has commenced, and this incorporates desktop geographical and geological mapping. This will be followed by detailed geochemical and geotechnical surveys. In turn, this is followed by detailed geophysical studies.

**Invasive:** A detailed drilling, sampling, assaying and mineralogical study will be carried out. Diamond method will be utilized to prospect Coal. To ensure or minimize impacts on the receiving environment, All the activities will be guided by the project's BAR & EMPr.





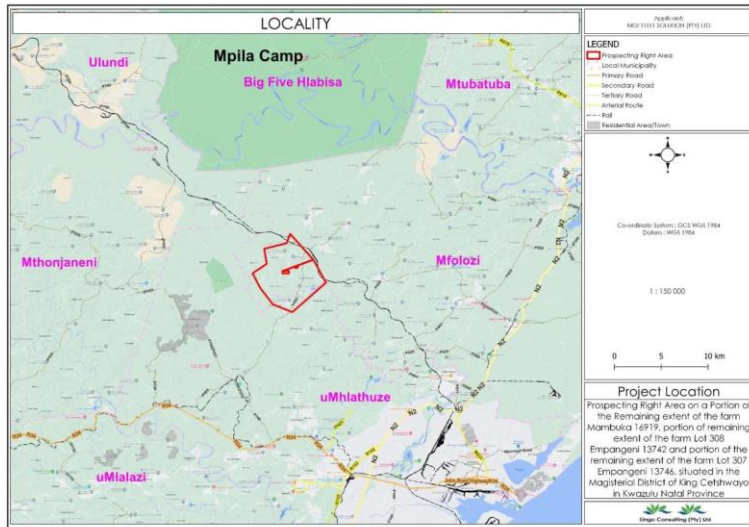


Figure 2: Locality map for Proposed Prospecting Right Area.

4

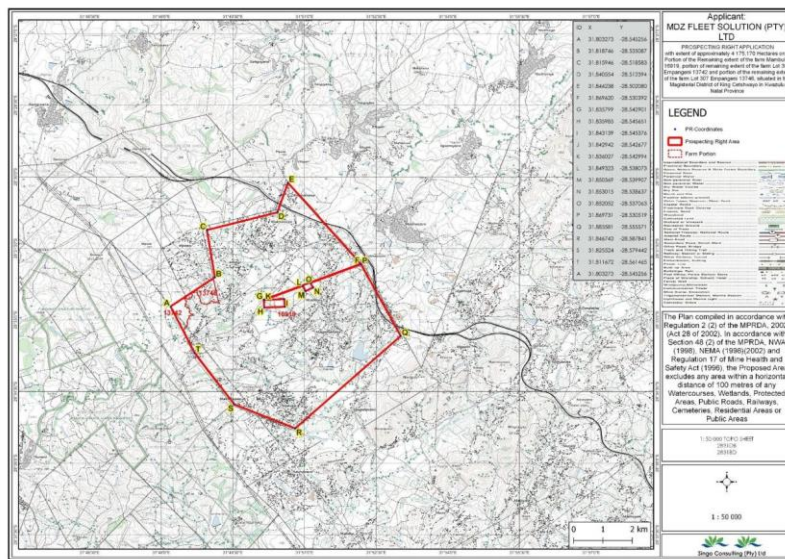


Figure 3: Regulation 2.2 Map for the proposed Area. (A -28. 545256, 31.803273)

5

## **BASIC AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESSES**

These are planning and decision-making tools used in identifying potential environmental, economic and social consequences of a proposed activity prior the commencement of the activity.

These together with the public issues and concerns are to be identified sufficiently early so that they can be assessed and incorporated into the final reports when/if necessary.

These tools are regarded as crucial because they are utilized to demonstrate to the relevant stakeholders about the potential impacts, which in turn leads to the prospecting application process being a success or declined.

### **REGULATORY FRAMEWORK**

Therefore, EIA through BAR & EMPr to be undertaken will be conducted in accordance with the National Environmental Management Act (Act 107 of 1998) and Environmental Impact Assessment regulations as amended (April 2017) and by GN 517 on 11 June 2021.

The activity is to prospect the existence and occurrence of coal therefore, this will be conducted in accordance with Mineral and Petroleum Resources Development Act, (Act 28 of 2002). Other regulatory guidelines to be followed include National Water Act, 1998 (Act 36 of 1998), National Air Quality Standards (GN 1210: 2009) and National Dust Control Regulations (GN 827 of GG NO. 36974).

### **PUBLIC PARTICIPATION PROCESS**

Public Participation remains a cornerstone of the Environmental Impact Assessment process. It ensures provision of relevant and enough information with openness and transparency. Public Participation process presents to I&APs, an opportunity to understand what the project is about, and affords them an opportunity to make valuable contributions towards the EIA process.

I&APs can be any person, group of persons or organization interested in or affected by the proposed activity, and any organ of state that may have jurisdiction over any aspect of the activity.

The key objective of PPP is to afford the I&APs with an opportunity to comment and provide valuable inputs during the planning phase of the project.

For this specific proposed project, I&APs will be given a period of 30 days to comment and raise issues/concerns with regards to the BAR and EMPr which will be available at the **KwaMbonambi Public Library (KwaMbonambi, 3915), Ntambanana Umtapo Wolwazi Public Library (-28.694023, 31.8482327), UMfolozi Local Municipality (25 Bredelia Street, kwaMbonambi) and uMhlatuze Local Municipality (Civic Centre Central Business District, 5 March Strasse, Richards Bay, 3900)**. A soft copy is available from **Singo Consulting (Pty) Ltd** upon request, using the contact details of the Environmental Assessment Practitioner (EAP) and **Public Participation Process Officer (PPP Officer) Miss Mazithi Mangcu**.

Kindly note the following dates:

- ❖ Announcement of the Prospecting Right Application: **02<sup>nd</sup> of June 2023**.
- ❖ Review of Draft BAR & EMPr: **Monday the 3<sup>rd</sup> of July 2023 to Wednesday the 1<sup>st</sup> of August 2023**.



**Office No:** Office B70  
 5 Balalaika Street, Tasbet park, Ext 2  
 Witbank, 1035.  
**Cell:** +27 74 884 1000  
**Tel:** +27 13 692 0041  
**Fax:** +27 86 5144 103  
**Email:** [mazithi@singoconsulting.co.za](mailto:mazithi@singoconsulting.co.za)  
[admin@singoconsulting.co.za](mailto:admin@singoconsulting.co.za)

**REGISTRATION & COMMENT SHEET**

**Proposed Prospecting Right Application for Coal on Portion of the Remaining Extent of the farm Mambuka 16919, Portion of the Remaining Extent of the farm Lot 308 Empangeni 13742 and Portion of the Remaining Extent of the farm Lot 307 Empangeni 13746, (DMRE Ref: KZN 30/5/1/1/2/11413 PR)**

Attention: **Mazithi Mangcu**

Email: [mazithi@singoconsulting.co.za](mailto:mazithi@singoconsulting.co.za)

Date			
Title	Name	Surname	
Company			
Designation			
Address			
Tel No.		Fax No.	
E-mail		Cell No.	
I would like to receive my notifications be (mark with "X"):		Post <input type="checkbox"/>	E-mail: <input type="checkbox"/>
		Fax: <input type="checkbox"/>	
<b>Please indicate why you would have an interest in the above-mentioned project.</b>			
<b>Please provide your comments and questions here:</b>			
<i>Please feel free to attach a separate document</i>			
<b>Please add any person you think may be interested and affected parties:</b>			
Full name		Company	
Address			
E-mail		Contact No.	



## Appendix 4: Site Notice

### NOTICE OF PUBLIC PARTICIPATION FOR PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORIZATION APPLICATION

Notice of Prospecting Right Application Process as per the Mineral and Petroleum Resources Development Act (Act 28 of 2002) for the proposed prospecting project of **Coal on portion of the remaining extent of the farm Mambuka 16919, portion of the remaining extent of the farm Lot 308 Empangeni 13742 and portion remaining extent of the farm Lot 307 Empangeni 13746**, situated in the Magisterial District of **King Cetshwayo in Kwa-Zulu Natal Province** with **DMRE Ref: KZN 30/5/1/1/2/ 11413 PR**.

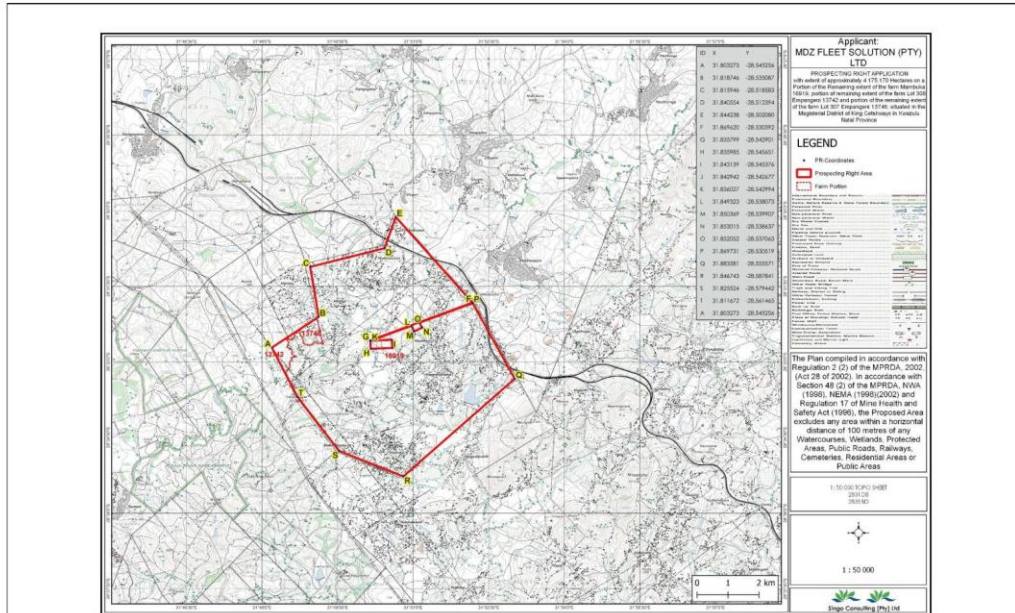


Figure 1: Proposed prospecting right area. (A: -28.545256, 31.803273)

### INVITATION TO REGISTER & COMMENT

Notice is given in terms of the Mineral and Petroleum Resources Development Act (MPRDA) (Act 28 of 2002) and EIA regulations 2014, published under Government Notice No.982 in Gazette No. 3822 of 4 December 2014, amended on 7 April 2017 and by GN 517 on 11 June 2021, that **MDZ Fleet Solutions (Pty) Ltd** has applied for the purpose of prospecting coal.

As part of the EIA process, more especially the Public Participation Process (PPP) for this proposed prospecting project, Interested and Affected Parties (I&APs) are invited to register and kindly submit any comments or concerns to reach the **Public Participation Officer: Miss Mazithi Mangcu** using the contact details provided below. The public is also invited to review and comment on the Draft Basic Assessment Report (DBAR) and Environmental Management Programme report (EMPr). The DBAR & EMPr will be available for review for 30 days' calendar period from **Monday the 3<sup>rd</sup> of July 2023 to Tuesday the 1<sup>st</sup> of August 2023, (excluding public holiday)**. This report will be available at the **KwaMbonambi Public Library** (KwaMbonambi, 3915), **Ntambanana Umtapo Wolwazi Public Library** (-28.694023, 31.8482327), **UMhathuze Local Municipality** (6 Mark Strasse, Richards Bay Central,3900) and **UMfolozi Local Municipality (25 Bredelia Street, kwaMbonambi)**. Furthermore, electronic copies will be made available (via email; Dropbox link; Google drive; We Transfer, etc.) upon request from Singo Consulting (Pty) Ltd, using the contact details of the Environmental Assessment Practitioner (EAP). Comments on the DBAR & EMPr must be submitted no later than the **1<sup>st</sup> of August 2023**.

### EAP, PPP.OFFICER & APPLICANT DETAILS



Office 870, 5 Balaolaka Street,  
Tasbet Park Ext. 2, eMalahleni (Witbank), 1040  
**EAP:** Mr. Khodan Mathakha  
**PPP Officer:** Miss Mazithi Mangcu  
**Email:** [mazithi@singoconsulting.co.za](mailto:mazithi@singoconsulting.co.za)  
**Cell No.:** +27 74 684 1000  
**Tel No.:** +27 13 6920 041  
**Fax No.:** +27 86 5144 103

### MDZ Fleet Solutions (Pty) Ltd

Unit 147, Fernage Estate, 1944 Fourways Ext 34, Fourways,2191  
**Contact person:** Mr Ramabulana Aluwan Percy  
**Email:** [aluwan@mdzholdings.co.za](mailto:aluwan@mdzholdings.co.za)  
**Cell No.:** +27 79 487 7347 / +27 79 402 3625  
**Tel No.:** +27 10 487 7347

## Appendix 5: Stakeholder consultation

### Mazithi, Mangcu

---

**From:** Mazithi, Mangcu <mazithi@singoconsulting.co.za>  
**Sent:** Monday, 05 June 2023 11:32  
**To:**  
**Cc:**  
**Subject:** INVITATION TO COMMENT ON THE PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORIZATION APPLICATION ON A PORTION OF THE REMAINING EXTENT OF THE FARM MAMBUKA 16919 WITH DMRE REF: KZN 30/5/1/1/2/11413 PR.  
**Attachments:** BID.pdf; REG 2.2.pdf; Prospecting Right Area.kml

Good day,

Receive warm greetings from Singo Consulting (Pty) Ltd.

**Singo Consulting (Pty) Ltd** on behalf of **MDZ Fleet Solutions (Pty) Ltd** hereby wishes to inform you that it has applied for a Prospecting right together with an Environmental Authorization to KwaZulu-Natal Department of Mineral Resources & Energy (DMRE) to explore the existence and viability of **Coal on a portion of the remaining extent of the farm Mambuka 16919, portion of the remaining extent of the farm Lot 308 Empangeni 13742 and portion of the remaining extent of the farm Lot 307 Empangeni 13746**, situated in the Magisterial District of **King Cetshwayo** in **KwaZulu-Natal Province**. **DMRE Ref: KZN 30/5/1/1/2/11413 PR.**

This Notification is being given in compliance with the terms of; Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA), National Environmental Management Act, 1998 (Act No. 107 of 1998), and EIA Regulations (as amended, 07 April 2017 and by GN 517 on 11 June 2021) where one of the requirements is that all stakeholders must be notified of MDZ Fleet Solutions (Pty) Ltd.'s intentions to obtain a Prospecting right for the above-mentioned commodity. This invitation is extended to you as the department you serve may somehow enforce any of the laws of the Republic of South Africa that ensure pollution & environmental degradation prevention, encourage sustainable development & socio-economic development, or might be affected by activities to be taking place during prospecting. Considering the above, you are being offered an opportunity to:

- ✓ Register as an Interested and Affected Party (I&AP) and to respond to the environmental compliance process;
- ✓ Raise issues of concern and provide suggestions for enhanced benefits;
- ✓ Contribute to local knowledge;
- ✓ Comment on the Basic Assessment Report (BAR) & Environmental Management Programme report (EMPr)

Singo Consulting (Pty) Ltd has been appointed as an independent Environmental Assessment Practitioner (EAP) to manage the environmental authorisation process by conducting an Environmental Impact Assessment, Public Participation Process (PPP) for the proposed project and compile a Basic Assessment Report & Environmental Management Programme (BAR & EMPr). A Basic Assessment process has commenced, for your participation kindly fill the registration and comment form at the end of the Background Information Document attached and register your comments, issues, and/or questions that you may have about the proposed project. Should you need any clarity on the attached document or have any queries with regards to the project, please do not hesitate to contact me on the details below.

**Please find the attached Background Information Document for a brief description of the proposed project and timelines, KML and Reg 2.2 Map for the visuals of the application area.**





## Appendix 6: Stakeholder consultation

### Mazithi, Mangcu

---

**From:** Mazithi, Mangcu <mazithi@singoconsulting.co.za>  
**Sent:** Monday, 05 June 2023 11:32  
**To:**  
**Cc:**  
**Subject:** INVITATION TO COMMENT ON THE PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORIZATION APPLICATION ON A PORTION OF THE REMAINING EXTENT OF THE FARM MAMBUKA 16919 WITH DMRE REF: KZN 30/5/1/1/2/11413 PR.  
**Attachments:** BID.PDF; REG 2.2.pdf; Prospecting Right Area.kml

Good day,

Receive warm greetings from Singo Consulting (Pty) Ltd.

**Singo Consulting (Pty) Ltd** on behalf of **MDZ Fleet Solutions (Pty) Ltd** hereby wishes to inform you that it has applied for a Prospecting right together with an Environmental Authorization to KwaZulu-Natal Department of Mineral Resources & Energy (DMRE) to explore the existence and viability of **Coal on a portion of the remaining extent of the farm Mambuka 16919, portion of the remaining extent of the farm Lot 308 Empangeni 13742 and portion of the remaining extent of the farm Lot 307 Empangeni 13746**, situated in the Magisterial District of **King Cetshwayo** in **KwaZulu-Natal Province**. **DMRE Ref: KZN 30/5/1/1/2/11413 PR.**

This Notification is being given in compliance with the terms of; Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA), National Environmental Management Act, 1998 (Act No. 107 of 1998), and EIA Regulations (as amended, 07 April 2017 and by GN 517 on 11 June 2021) where one of the requirements is that all stakeholders must be notified of MDZ Fleet Solutions (Pty) Ltd.'s intentions to obtain a Prospecting right for the above-mentioned commodity. This invitation is extended to you as the department you serve may somehow enforce any of the laws of the Republic of South Africa that ensure pollution & environmental degradation prevention, encourage sustainable development & socio-economic development, or might be affected by activities to be taking place during prospecting. Considering the above, you are being offered an opportunity to:

- ✓ Register as an Interested and Affected Party (I&AP) and to respond to the environmental compliance process;
- ✓ Raise issues of concern and provide suggestions for enhanced benefits;
- ✓ Contribute to local knowledge;
- ✓ Comment on the Basic Assessment Report (BAR) & Environmental Management Programme report (EMPr)

Singo Consulting (Pty) Ltd has been appointed as an independent Environmental Assessment Practitioner (EAP) to manage the environmental authorisation process by conducting an Environmental Impact Assessment, Public Participation Process (PPP) for the proposed project and compile a Basic Assessment Report & Environmental Management Programme (BAR & EMPr). A Basic Assessment process has commenced, for your participation kindly fill the registration and comment form at the end of the Background Information Document attached and register your comments, issues, and/or questions that you may have about the proposed project. Should you need any clarity on the attached document or have any queries with regards to the project, please do not hesitate to contact me on the details below.

**Please find the attached Background Information Document for a brief description of the proposed project and timelines, KML and Reg 2.2 Map for the visuals of the application area.**

Should you know anyone who might be interested in this project, kindly forward this email to them.

**Singo Consulting (Pty) Ltd**  
Singo Consulting (Pty) Ltd  
Singo Consulting (Pty) Ltd  
Singo Consulting (Pty) Ltd

Operation: Hi Teka Hinkwaswo

**Mazithi, Mangcu**  
Public Participation Officer  
Dip. Environmental Management

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mazithi@singoconsulting.co.za

+27 13 692 0041 +27 86 514 4103 www.singoconsulting.co.za

**Singo Consulting (Pty) Ltd**  
Singo Consulting (Pty) Ltd  
Singo Consulting (Pty) Ltd  
Singo Consulting (Pty) Ltd

Office 870, 5 Balalaika Street,  
Tasbet Park Ext 2, Witbank, J040

## Appendix 7: Enquiring on Land Claims

### Mazithi, Mangcu

---

**From:** Mazithi, Mangcu <mazithi@singoconsulting.co.za>  
**Sent:** Tuesday, 06 June 2023 09:57  
**To:**  
**Cc:**  
**Subject:** ENQUIRY ON LAND CLAIMS  
**Attachments:** REG 2.2.pdf; Prospecting Right Area.kml

Good day,

I hope this email finds you well.

You are receiving this email as an inquiry for any possible land claim/s on **portion of the remaining extent of the farm Mambuka 16919, portion of the remaining extent of the farm Lot 308 Empangeni 13742 and portion of the remaining extent of the farm Lot 307 Empangeni 13746, situated in King Cetshwayo Magisterial District.**

Kindly find attached Regulation map 2.2 and Kml for visuals of the area/ farm. This is to ensure that all claimants are properly consulted regarding the prospecting right application lodged on the above mentioned farms and are given the opportunity to:

- Register as an I&APs and to respond to the environmental compliance process;
- Raise issues of concern and provide suggestions for enhanced benefits;
- Contribute to local knowledge;
- Comment on the Basic Assessment Report & Environmental Management Programme report (EMPr); and
- Inform any other person / organization that they may feel should be informed about the project.

Your response will be highly appreciated as they will assist us in developing well-informed Basic Assessment Reports and EMPr.



Operation Hi Teka Hinkwaswo

**Mazithi, Mangcu**  
Public Participation Officer  
Dip. Environmental Management

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+27 13 692 0041 | +27 86 514 4103 | www.singoconsulting.co.za

**Singo Consulting (Pty) Ltd**  
Protect & manage the best remaining environment

100% SOUTH AFRICAN OWNED AND OPERATED  
Singo Consulting (Pty) Ltd is a 100% South African owned and operated company. We are a member of the Environmental Consulting & Management Association of South Africa (ECMA) and the South African Council for Environmental Management (SACEM). We are also a member of the Environmental Consulting & Management Association of South Africa (ECMA) and the South African Council for Environmental Management (SACEM).

100% SOUTH AFRICAN OWNED AND OPERATED  
Singo Consulting (Pty) Ltd is a 100% South African owned and operated company. We are a member of the Environmental Consulting & Management Association of South Africa (ECMA) and the South African Council for Environmental Management (SACEM). We are also a member of the Environmental Consulting & Management Association of South Africa (ECMA) and the South African Council for Environmental Management (SACEM).

Office 870, 5 Balalala Street,  
Tasbet Park Ext 2, Witbank, 1040

## Appendix 8: Stakeholder consultation

### Mazithi, Mangcu

---

**From:** Mazithi, Mangcu <mazithi@singoconsulting.co.za>  
**Sent:** Monday, 19 June 2023 09:33  
**To:**  
**Cc:**

**Subject:** INVITATION TO COMMENT ON THE PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORIZATION APPLICATION ON A PORTION OF THE REMAINING EXTENT OF THE FARM MAMBUKA 16919 WITH DMRE REF: KZN 30/5/1/1/2/11413 PR  
**Attachments:** BID.pdf; REG 2.2.pdf; Prospecting Right Area.km; Prospecting Right Project.pdf

Good day,

Receive warm greetings from Singo Consulting (Pty) Ltd.

**Singo Consulting (Pty) Ltd** on behalf of **MDZ Fleet Solutions (Pty) Ltd** hereby wishes to inform you that it has applied for a Prospecting right together with an Environmental Authorization to KwaZulu-Natal Department of Mineral Resources & Energy (DMRE) to explore the existence and viability of **Coal on a portion of the remaining extent of the farm Mambuka 16919, portion of the remaining extent of the farm Lot 308 Empangeni 13742 and portion of the remaining extent of the farm Lot 307 Empangeni 13746**, situated in the Magisterial District of **King Cetshwayo** in **KwaZulu-Natal Province**. **DMRE Ref: KZN 30/5/1/1/2/11413 PR**.

This Notification is being given in compliance with the terms of: Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA), National Environmental Management Act, 1998 (Act No. 107 of 1998), and EIA Regulations (as amended, 07 April 2017 and by GN 517 on 11 June 2021) where one of the requirements is that all stakeholders must be notified of MDZ Fleet Solutions (Pty) Ltd.'s intentions to obtain a Prospecting right for the above-mentioned commodity. This invitation is extended to you as the department you serve may somehow enforce any of the laws of the Republic of South Africa that ensure pollution & environmental degradation prevention, encourage sustainable development & socio-economic development, or might be affected by activities to be taking place during prospecting. Considering the above, you are being offered an opportunity to:

- ✓ Register as an Interested and Affected Party (I&AP) and to respond to the environmental compliance process;
- ✓ Raise issues of concern and provide suggestions for enhanced benefits;
- ✓ Contribute to local knowledge;
- ✓ Comment on the Basic Assessment Report (BAR) & Environmental Management Programme report (EMPr)

Singo Consulting (Pty) Ltd has been appointed as an independent Environmental Assessment Practitioner (EAP) to manage the environmental authorisation process by conducting an Environmental Impact Assessment, Public Participation Process (PPP) for the proposed project and compile a Basic Assessment Report & Environmental Management Programme (BAR & EMPr). A Basic Assessment process has commenced, for your participation kindly fill the registration and comment form at the end of the Background Information Document attached and register your comments, issues, and/or questions that you may have about the proposed project. Should you need any clarity on the attached document or have any queries with regards to the project, please do not hesitate to contact me on the details below.



Please find the attached Background Information Document for a brief description of the proposed project and timelines, KML and Reg 2.2 Map for the visuals of the application area.

Should you know anyone who might be interested in this project, kindly forward this email to them.

Operation Hi Telo Hinkwaswo

**Mazithi, Mangcu**  
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Dip. Environmental Management

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+27 13 692 0041 | +27 86 514 4103 | www.singoconsulting.co.za

**Singo Consulting (Pty) Ltd**  
Protect & manage the best remaining environment

Office 870, 5 Balalaka Street,  
Tasbet Park Ext 2, Witbank, 1040

## Appendix 9: Stakeholder consultation

### Mazithi, Mangcu

---

**From:** Mazithi, Mangcu <mazithi@singoconsulting.co.za>  
**Sent:** Wednesday, 14 June 2023 22:08  
**To:**  
**Cc:**  
**Subject:** INVITATION TO COMMENT ON THE PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORIZATION APPLICATION ON A PORTION OF THE REMAINING EXTENT OF THE FARM MAMBUKA 16919 WITH DMRE REF: KZN 30/5/1/1/2/11413 PR.  
**Attachments:** Prospecting Right Area.kml; REG 2.2.pdf; BID.PDF

Good day,

Receive warm greetings from Singo Consulting (Pty) Ltd.

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- ✓ Raise issues of concern and provide suggestions for enhanced benefits;
- ✓ Contribute to local knowledge;
- ✓ Comment on the Basic Assessment Report (BAR) & Environmental Management Programme report (EMPr) once available.

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Operation Hi Teka Hinkwaswo

**Mazithi, Mangcu**  
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Private & Company Environmental Management

Office 870, 5 Balalaika Street,  
Tasbet Park Ext 2, Witbank, 1040

## Appendix 10: Stakeholder consultation

**Mazithi, Mangcu**

---

**From:** Mazithi, Mangcu <mazithi@singoconsulting.co.za>  
**Sent:** Monday, 05 June 2023 11:33  
**To:**  
**Cc:**  
**Subject:** INVITATION TO COMMENT ON THE PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORIZATION APPLICATION ON A PORTION OF THE REMAINING EXTENT OF THE FARM MAMBUKA 16919 WITH DMRE REF: KZN 30/5/1/1/2/11413 PR.  
**Attachments:** BID.PDF; REG 2.2.pdf; Prospecting Right Area.kml

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Taabet Park Ext 2, Witbank, 1040



## Appendix 11: Stakeholder consultation

### Mazithi, Mangcu

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## Appendix 12: Stakeholder consultation

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## Appendix 13: Specialist studies

## Appendix 14: Consultation Report