mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

ENVIRONMENTAL IMPACT 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).

NAME OF APPLICANT: **Electri City Mining (Pty) Ltd.**
TEL NO: **083 572 3025**
FAX NO: **-**
POSTAL ADDRESS: **Postnet Suite 205, Private Bag X507, Kathu 8446**
FILE REFERENCE NUMBER SAMRAD: **NC30/5/1/1/2/12680 PR**

1. IMPORTANT NOTICE

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

Unless an Environmental Authorisation 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 authorisation 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 Authorisation 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.

1. 2. OBJECTIVE OF THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

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

(a) determine the policy and legislative context within which the activity is located and document how the proposed activity complies with and responds to the policy and legislative context;

(b) describe the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;

(c) identify the location of the development footprint within the preferred site based on an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment;

(d) determine the—

  (i) nature, significance, consequence, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and

  (ii) degree to which these impacts—

    (aa) can be reversed;

    (bb) may cause irreplaceable loss of resources, and

    (cc) can be avoided, managed or mitigated;

(e) identify the most ideal location for the activity within the preferred site based on the lowest level of environmental sensitivity identified during the assessment;

(f) identify, assess, and rank the impacts the activity will impose on the preferred location through the life of the activity;

(g) identify suitable measures to manage, avoid or mitigate identified impacts; and

(h) identify residual risks that need to be managed and monitor

PART A

SCOPE OF ASSSSMENT AND ENVIRONMENTAL IMPACT ASSESSMENT REPORT

3. Contact Person and correspondence address

a) Details of

(i) **Details of the EAP**

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)(a)(iii)

Name of the Practitioner: DERA Environmental Consultants (Pty) Ltd.
Ms HM (Esna) Erasmus
Tel No.: 018-468 5355
Fax No. : 018-011 3760
E-mail address:dera.office@dera.co.za

(ii) **Expertise of the EAP**

(1) The qualifications of the EAP

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)(a)(iv)

The EAP, Ms HM (Esna) Erasmus has a National Diploma in Agriculture Resource Utilization and a Baccalaureus Technologiae degree in Agricultural Management. She also completed the subjects for her Master Degree in Environmental Analysis & Management at NWU. See **Figure 1** & **Figure 2** for copies of his qualifications and CV.

Figure 1 – Copy of Qualification

TECHNIKON PRETORIA

PROSPERITAS PER PERITIAM

NASIONALE NATIONAL DIPLOMA

LANDBOU: HULPBRONBENUTTING **AGRICULTURE: RESOURCE UTILISATION**

Toegeken aan Awarded to

HESTER MAGDALENA CLAASE

95057691 1975-04-03

met ingang van with effect from

1998-01-01

Registrateur (Akademies)
Registrar (Academic)

Rektor/Rector

No.
№ 30054

Uitgereik met die goedkeuring van die Sertifiseringsraad vir Technikononderwys (SERTEC) ingevolge artikel 9 van die Wet op die Sertifiseringsraad vir Technikononderwys, 1986 (Wet 88 van 1986)
Issued with the approval of the Certification Council for Technikon Education (SERTEC) in terms of section 9 of the Certification Council for Technikon Education Act, 1986 (Act 88 of 1986)

Figure 2

TECHNIKON PRETORIA

PROSPERITAS PER PERITIAM

BACCALAUREUS TECHNOLOGIAE

LANDBOUBESTUUR **AGRICULTURAL MANAGEMENT**

Toegeken aan Awarded to

HESTER MAGDALENA CLAASE

95057691 **1975-04-03**

met ingang van with effect from

2000-12-15

Registrateur (Akademies)
Registrar (Academic)

Rektor/Rector

E 6280

Uitgereik met die goedkeuring van die Sertifiseringsraad vir Technikononderwys (SERTUC) ingevolge artikel 9 van die Wet op die Sertifiseringsraad vir Technikononderwys, 1986 (Wet 88 van 1986)
Issued with the approval of the Certification Council for Technikon Education (SERTEC) in terms of section 9 of the Certification Council for Technikon Education Act, 1986 (Act 88 of 1986)

(2) Summary of the EAP's past experience.

HM (Esna) Erasmus (maiden name Claase) is an environmental practitioner with 24 years' experience in Agricultural and Mining Management and Science. Experience in the field of inspection and evaluation of Environmental Impact Assessment in North West. Since 1998 involvement in mining activities with Department of Minerals and Energy in the North West Province as representative for National Department of Agriculture Dir. LRM in the following: Evaluation of Environmental Management Reports Inspection and evaluation of all different mining entities in North West Province. A member of the Slimes Dam Core Committee of North West Province. Involved in the compiling of a strategy for rehabilitation of Gold slime Dams in NW. Give inputs and comments on the revision of EMPR for small scale diamond mining. Involve in setting a strategy to encounter the impact of small scale mining on the environment in North West. See **Figure 3** below Curriculum Vitae of H.M. Erasmus.

Figure 3 – Copy of Curriculum Vitae

HM (Esna) ERASMUS

ENVIRONMENTAL PRACTITIONER

CONTACTS

esnae@dera.co.za

+27 83 4525917

LinkedIn
http://za.linkedin.com/in/esna-erasmus-1881aba5/

Klerksdorp, North-west Province, South Africa

SKILLS

Report writing
Conduct auditing
Bilingual (English/Afrikaans)
Computer Proficient
Report generation and analysis
Verbal and written communication
Computer Literate
Project Management
Results-orientated
Conduct risk assessments

ABOUT ME

Environmental practitioner with 24 years' experience in Agricultural and Mining Management and Science.
Experience in the field of inspection and evaluation of Environmental Impact Assessment in North West.
Since 1998 involvement in mining activities with Department of Minerals and Energy in the North West Province as representative for National Department of Agriculture Dir. LRM in the following:
Evaluation of Environmental Management Reports
Inspection and evaluation of all different mining entities in North West Province.
A member of the Slimes Dam Core Committee of North West Province.
Involved in the compiling of a strategy for rehabilitation of Gold slime Dams in NW.
Give inputs and comments on the revision of EMPR for small scale diamond mining.
Involve in setting a strategy to encounter the impact of small scale mining on the environment in North West.

WORK EXPERIENCE

JAN 1998 – JUN 2002
SENIOR RESOURCE CONSERVATION INSPECTOR
National Department of Agriculture – Potchefstroom, SA

Manage Administration of Act 43 of 1983, Agricultural Resource Conservation act in North West Province.
Management of personnel and personnel related matters.
Management of budget for Potchefstroom office of Directorate Land Resource Management.

JUL 2002 – FEB 2004
SENIOR ENVIRONMENTAL OFFICER
Department of Minerals and Energy – Klerksdorp, SA

Administration of Act 50 of 1991, the Minerals Act in the North West province.
Evaluation of EMPR's and EIA's.
Audit and compliance inspections of mining operations.

MAR 2004 – PRESENT
ENVIRONMENTAL PRACTITIONER
DERA Environmental Consultants – Klerksdorp, SA

Compiling and submission of mining related applications; manage and compile legal environmental documents.
Monitoring work to evaluated compliance to environmental legislation; evaluating outstanding rehabilitation liabilities for mining companies.
Risk assessment and applications for closure certificates.
Compile EMPR/EIA for Mining Rights and compilation of EMPlan's for Prospecting and Mining Right applications.
Compile BAR & EMPR's in support of applications for listed activities under NEMA such as Chicken Broilers, Feed lots, Fuel Storage, ect.
Manages consultation between Departments and applicants.

Page 1

EDUCATION

1993 **HIGH SCHOOL DIPLOMA**

Middelburg High School – Middelburg, Mpumalanga, SA

English
Afrikaans
Biology
History
Geography
Accounting

1998 **NATIONAL DIPLOMA: AGRICULTURE: RESOURCE UTILISATION**

Tshwane University of Technology – Pretoria, Tshwane, SA

Animal Production I
Computer Application I
Pasture Science I
Physical Science I
Agricultural Marketing II I, II and III
Poultry Production II
Crop Production I, II
Agricultural Soil Science I
Agricultural Mechanization I
Agricultural Production Management III
Agricultural Extension II
Large Stock Production II
Horticulture III
Agricultural Anatomy & Physiology I
Farm Planning I
Soil Conservation II

2000 **BACCALAUREUS TECHNOLOGIAE: AGRICULTURAL MANAGMENT**

Tshwane University of Technology – Pretoria, Tshwane, SA

Financial Management IV
Strategic Management IV
Plant Production IV
Leadership Development II

2004 **MATERS OF ENVIRONMENTAL SCIENCES IN ENVIRONMENTAL SCIENCES AND MANAGEMENT**- uncompleted

North-West University – Potchefstroom, North West

Introduction to environmental management
Applied Environmental Management
Environmental Management
Theoretical Hydrology
Urban Ecology
Introduction to GIS
Applied GIS
Applied Hydrology
Environmental Analysis
Research Proposal – uncompleted
Final dissertation - uncompleted

SHORT COURSES

Computer training Dbase IV
Seminar in public speaking
Veld assessment course
Resource identification and utilization course – September 1998
Introduction to GIS – June 2001
Persuasion skills
Wetlands identification
Wetlands Rehabilitation – August 2001
Management skills
Environmental Risk Assessment and Management – August 2005
Mining and the Environment – October 2003

EIA- EXPERIENCE

The following list of EIA's was just some that was done by me:

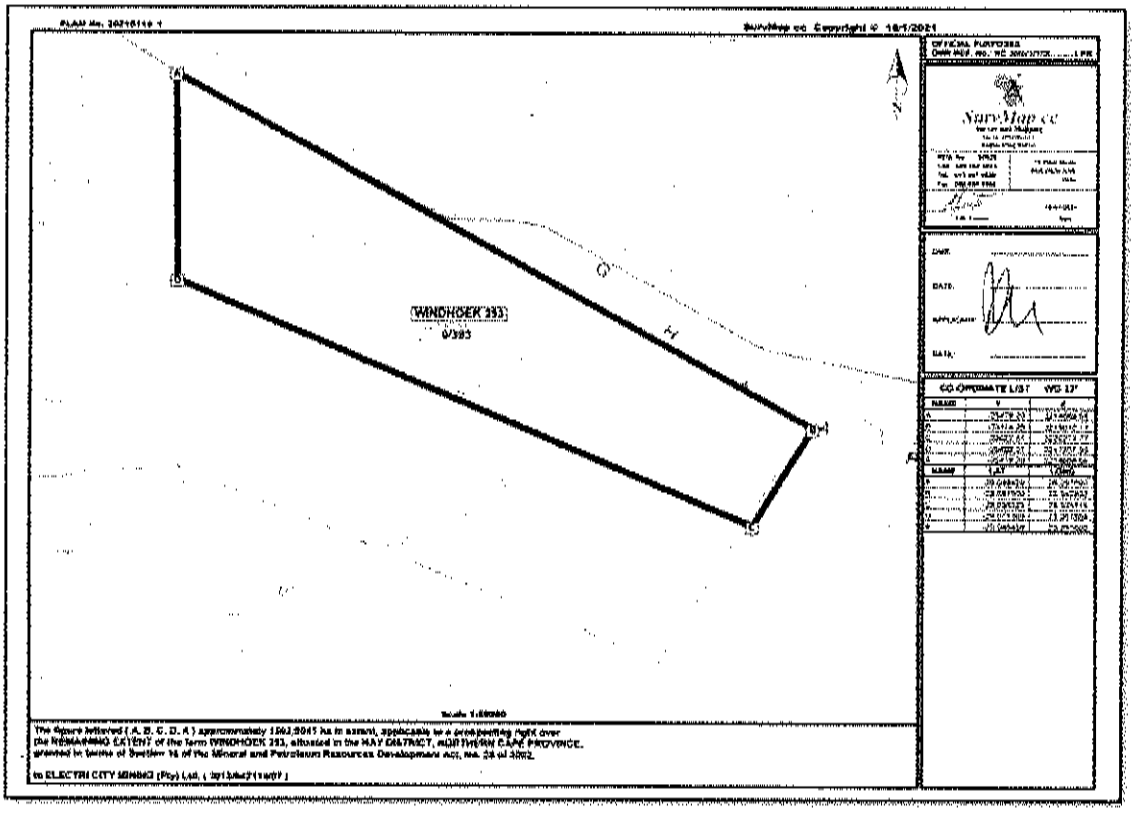
- FJ de Beer [Doornfontein] – was done as part of a Prospecting Right Application with Bulk Sampling, my role entailed: site visit, impact assessment and evaluation and compilation of report and handling of application process.
- Hartzer & Steyn Beleggers [Zwartplaat] - was done as part of Mining Right Application with Bulk Sampling, my role entailed: site visit, impact assessment and evaluation and compilation of report and handling of application process.
- Bethlehem Sand en Klip CC [Killarney] - was done as part of Mining Right Application, my role entailed: site visit, impact assessment and evaluation and compilation of report and handling of application process.
- KMF Agro Processing (Pty) Ltd [Rietfontein] - was done as part of an Environmental Authorization for a listed activity, for the construction of Chicken slaughter facility, my role entailed: site visit, impact assessment and evaluation and compilation of report and handling of application process.
- Summit Ridge [Graslaagte] - was done as part of an Environmental Authorization for a listed activity for feed mill for chicken feed, my role entailed: site visit, impact assessment and evaluation and compilation of report and handling of application process.

b) Location of the overall Activity

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)(c)(i),(ii)

(i) 21 digit Surveyor General Code for each farm portion	C03100000000039300000
(ii) Farm Name:	Windhoek 393 ✓ Remaining Extent.
(iii) Coordinates - Co-ordinates List WG 27°	CO-ORDINATE LIST WG 23° NAME / Y / X A -25478.20 3214668.66 B -33374.25 3219016.13 C -32622.81 3220213.77 D -25498.27 3217207.93 A -25478.20 3214668.66 NAME / LAT / LONG A -29.048459 23.261600 B -29.087500 23.342802 C -29.098325 23.335119 D -29.071369 23.261864 A -29.048459 23.261600
Application area (Ha)	1503,9041 ha
Magisterial district:	The area is situated in the *Hay District* of the *Northern Cape*. *Griekwastad* (Afrikaans for "Griqua city") is the nearest town to the application area and is situated 168 kilometres (104 mi) by road west from the city of Kimberley. *Douglas* is the biggest town and it's an agricultural and stock farming town situated near the confluence of the Orange and Vaal Rivers in the Northern Cape province of South Africa. The whole area
Distance and direction from nearest town	The distance to the nearest towns is: 25 km south of Griekwastad, 65.3 km east of Douglas and Niekerkhoop 65.8 km south-west. Douglas will be the biggest town of the three
Minerals applied for	Alluvial Diamonds (DA) & Diamonds in Kimberlite (DK).

Figure 4 – Sketch plan of application area



c) Locality map

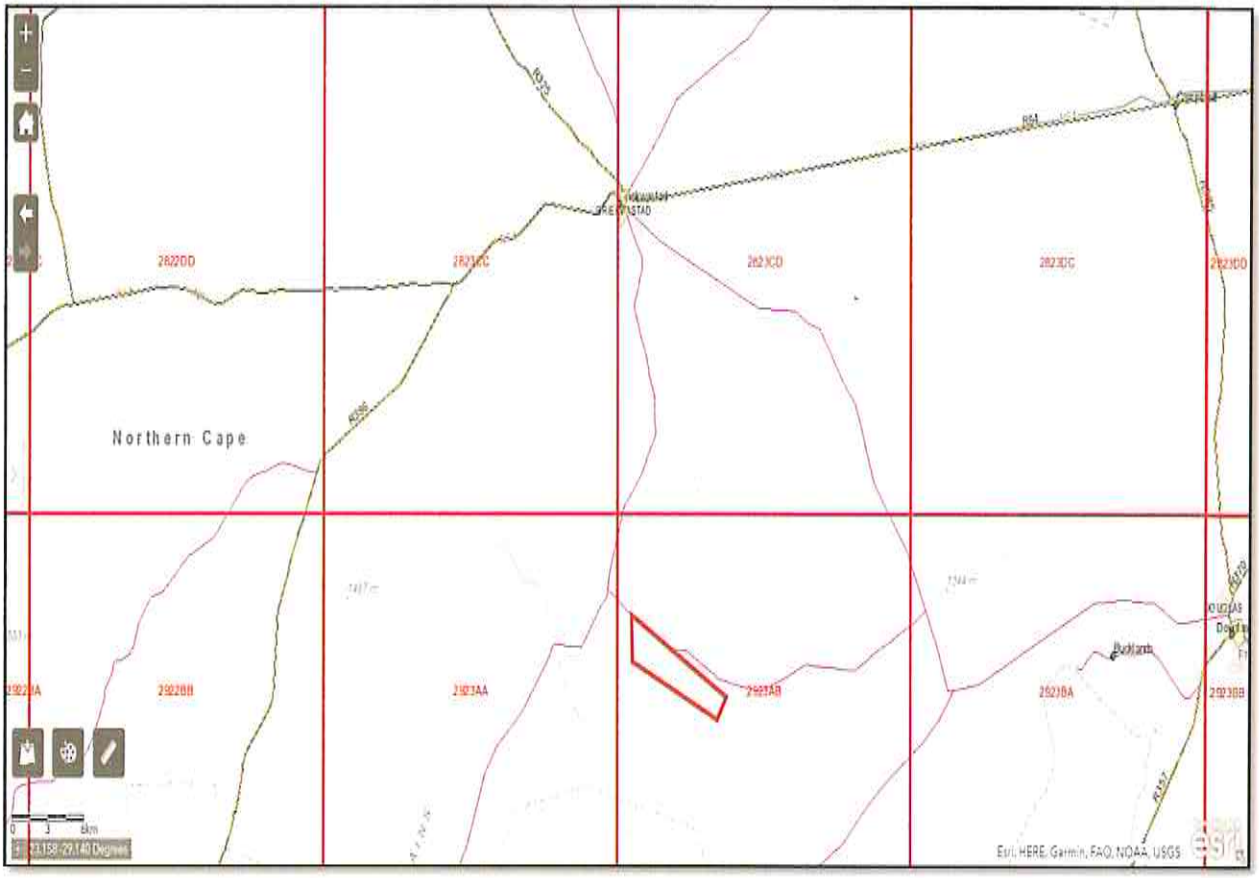
In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)(c)(i)(ii)

(i) & (ii)

See **Appendix 1(a)** - **Locality Map** indication where the applied area are situated within the district of Hay, Northern Cape and **Appendix 1(b) – Infrastructure and Activity Map** indication applied area with attached coordinates of the area.

Appendix 1(a) – Locality Map

Figure 5: Locality of application area



Appendix 1(b) – Infrastructure and Activity Map

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

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)(d)(i)(ii)

The applicant applied for a Prospecting Right over: the Remaining Extent of the farm Windhoek 393, the application area is situated over a rural area of the Northern Cape Province. The area are characterized as being rural area under natural vegetation and probably used for grazing. There are not a lot of infrastructure over the application area, entrance roads, fence lines, farm roads, cement dams and two farmsteads and other small farming sheds or structures. Beside for that there are further no other structures of infrastructure over this property. Access to the application area is gain via gravel roads out of Griekwastad. The scope of the prospecting activities will entail that the prospecting area will be identified through geological surveys and mapping. The extent of the prospecting area is 3007 hectares. Information from Geological surveys will be used in order to determine where the test pits will take place. This will in turn help to determine the boundaries of the proposed prospecting area for more detailed surveying. The prospecting phase will only be: *Phase 1* – *Geological desktop studies and surveys*, *Phase 2* – *Test pits* and *Phase 3* – *Bulk Samping*. See **Appendix 1(c)** for an indication of the proposed main listed activities and existing/proposed infrastructure and **Figure 6** – Google Earth Images for more detail of what the site looks like pre-prospecting. Access to the application area is gained via existing roads with the nearest town

being Griekwastad 25 km north of the site. All of the area is under natural veld. Only a small portion of the land will be impacted upon at any given time and land use on the rest of the area can proceed normally. The prospecting focus area will be clearly demarcated after Phase 1 is completed. The area applied for is over the entire portion. It is envisaged that all impacts on the environment can be properly managed and mitigated and no high negative long-term impacts will take place.

Appendix 1(c) - Indication of the proposed main listed activities

Figure 6 – Google Earth Images

(i) Listed and specified activities

The area is characterized as being in a rural area under natural vegetation and probably used for grazing. There is not a lot of infrastructure over the application area, only fence lines, farm roads, cement dams and two farmsteads and other small farming shed or structures over the central part of the application area. There are further no structures of infrastructure over this property, see **Appendix 1(c)** for an indication of the proposed main listed activities and **Appendix 1 (b)** for existing/proposed infrastructure and **Figure 6** – Google Earth Images for more detail of what the side looks like pre-prospecting. Access to the application area is gained via existing roads 25 km south out of Griekwastad. Only a small portion of the land will be impacted upon at any given time and land use on the rest of the area can proceed normally. The prospecting focus area will be clearly demarcated after Phase 2 is completed. See **Table 1** below as submitted as part of the prospecting works program indicating what the main listed prospecting activities will be. The area applied for is over the entire portions but the entire prospecting focus area will be over grazing land. Also see **Table 2** below for NEMA Listed Activities as applied for in the Environmental Authorization which form part of the application

Table 1: Main listed prospecting activities

Phase	Activity	Skill(s) required	Timeframe	Outcome	Timeframe for outcome	What technical expert will sign off on the outcome?
1.	Geological surveys	Geologist	1 - 12	Maps	From month 1 - 12	Geologist
2.	Test pits	Excavator operator & Manager(applicant)	13 - 24	Areas where alluvial diamond gravel is found will be identified	From month 13 - 24	Experienced applicant
3.	Bulk Sampling	Excavator operator; Frond end loader operator; Washing pan operators & Manager	25 - 46	Diamonds found from bulk sample will be evaluated in terms of carats/100ton and value in $/carat	From month 25 - 46	Manager and applicant

Table 2: Listed Activities

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)(d)(i)

NAME OFACTIVITY	Aerial extent of the Activity (Ha or m²)	LISTEDACTIVITY	APPLICABLELISTING NOTICE(GNR544,GNR 545 or GNR546)/NOT LISTED
Listing 1 – Activity 20: Any activity including the operation of that activity which requires a prospecting right in terms of section 16 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including— (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource; or (b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing; but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case activity 6 in Listing Notice 2 applies.	1503 ha	X	327
Listing 1 – Activity 27: The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for— i) the undertaking of a linear activity; or ii) maintenance purposes undertaken in accordance with a maintenance management plan.	2 ha	X	327

Listing 2 – Activity 19: The removal and disposal of minerals contemplated in terms of section 20 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including— (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource; or (b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing; but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case activity 6 in this Notice applies.	2 ha	X	325
Plant area where washings pans and stockpiles will be			
Stockpiles of topsoil next to the open excavation			
Roads within the prospecting area			
Ablution facilities, chemical and flush toilets			

(ii)Description of the associated structures and infrastructures

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)(d)(ii)

The prospecting area was identified through aerial photographs. The extent of the prospecting area will be 1503 hectares. Information from Geological surveys will be used in order to determine where the test pits will take place. This will in turn help to determine the boundaries of the proposed prospecting area for more detailed surveying.

PHASE 1

Geological desktop studies and surveys in order to try and identify the gravel run. Various geological maps and instruments will used to identify if alluvial gravel deposits and or kimberlite pipes might be present on the application area. **12 Months needed for phase 1.**

PHASE 2

The testing pits will concentrate on the areas where the outcrops anticipated gravel potential. A 30 ton excavator will be used to make test pits on a grid of 100 x 100m and where necessary 50 x 50m grid. The pits will be (2m x 2m x ± 5 deep) in order to determine the depth and boundaries of the gravel. These boundaries will be surveyed and mapped in order to determine where the bulk samples will be taken. It is envisaged that at least 150 test pits will be excavated. Each test pit will be examined and closed immediately before moving to the next one. **12 Months are needed for Phase 2.**

PHASE 3

A bulk sample to a total of 30 000m³ gravel will be taken, consisting of trenches 10 x 60 x ± 5m (deep). In one trench ± 3000m³ (4800 ton) gravel will be exposed and tested with a 16 feet washing pan at a rate of 15m³ (24 ton) an hour. With the envisaged average gravel depth of 5m, 10 trenches will be needed to get to 30 000m³. These trenches will be ±100 m apart from each other; the envisaged positions of the trenches will be indicated on a map at the end of Phase 2. The topsoil will be removed with an excavator and stored on a separate stockpile for rehabilitation purposes. The overburden will then be stripped and placed on the side of the excavation. The gravel is then removed with an excavator and transported with a frond end loader to the washing plant consisting of a 16 feet pan. The puddle is washed directly back into the excavation. The rough out of the pan will also be put directly back into the open excavations. The concentrate out of the pan will be sorted by hand where the diamonds will be recovered and the grade of the

prospecting area determined. The processing of 30 000m³ will take about **22 months for Phase 3** including the rehabilitation.

A. DESCRIPTION OF PLANNED NON-INVASIVE ACTIVITIES:

Table 3: Description of Activities to be followed

Activities	Description of phases	Associated structures and infrastructures
Phase 1	Geological desktop studies and surveys in order to try and identify the gravel run. Various geological maps and instruments will used to identify if alluvial gravel deposits and or kimberlite pipes might be present on the application area.	None

B. DESCRIPTION OF PLANNED INVASIVE ACTIVITIES:

TECHNICAL DETAIL REGARDING THE PROSPECTING METHODS

Table 4: Description of Activities to be followed

Activities	Description of phases	Associated structures and infrastructures
Phase 2	The testing pits will concentrate on the areas where the outcrops anticipated gravel potential. A 30 ton excavator will be used to make test pits on a grid of 100 x 100m and where necessary 50 x 50m grid. The pits will be (2m x 2m x ± 5 deep) in order to determine the depth and boundaries of the gravel. These boundaries will be surveyed and mapped in order to determine where the bulk samples will be taken. It is envisaged that at least 150 test pits will be excavated. Each test pit will be examined and closed immediately before moving to the next one.	The topsoil and grass will be cleaned on the small area of 2 m x 2 m x 5 m where the test pits will be excavated. After evaluation of the gravel the test pit will be closed. Rehabilitation of the test pits back to original land capability/use with topsoil and proper leveling. ✓ 1 x excavator
Phase 3	A bulk sample to a total of 30 000m³ gravel will be taken, consisting of trenches 10 x 60 x ± 5m (deep). With the envisaged average gravel depth of 5m, 10 trenches will be needed to get to 30 000m³. These trenches will be ±100 m apart from each other; the envisaged positions of the trenches will be indicated on a map at the end of Phase 2. The topsoil will be removed with an excavator and stored on a separate stockpile for rehabilitation purposes. The overburden will then be stripped and placed on the side of the excavation. The gravel is then removed with an excavator and transported with a frond end loader to the washing plant consisting of a 16 feet pan. The puddle is washed directly back into the excavation. The rough out of the pan will also be put directly back into the open excavations. The concentrate out of the pan will be sorted by hand where the diamonds will be recovered and the grade of the prospecting area determined.	The topsoil and grass will be cleaned on over the areas where trenches will be excavated. This will be stored next to the excavations for easy rehabilitation. Representative sample will be excavated and will be taken to the washing pans for processing. The washing pan will be on the plant area with stockpiles. ✓ 1 x excavator ✓ 1 x frond-end loaders ✓ 1 x Dumper ✓ 1 x 16 feet pan ✓ 1 x power plant ✓ Plastic pipes and water pumps

Table 5: Technical data detailing the prospecting method

Phase	Activity	Skill(s) required	Time frame	Outcome	Time frame for outcome	What technical expert will sign off on the outcome?
1	Geological surveys	Geologist	12	Maps	From month 1 – 12	Geologist
2	Test pits	Excavator operator & Manager (applicant)	12	Areas where diamond gravel is found will be identified.	From month 13 - 24	Experienced applicant
3	Bulk Sampling	Excavator operator; Frond end loader operator; Washing pan operators & Manager	22	Diamonds found from bulk sample will be evaluated in terms of carats/100ton and value in $/carat.	From month 25 - 46	Experienced manager and applicant.

e) Policy and Legislative Context

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)(e)

Table 6: Legislative and Guidelines used

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
National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) 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 has been triggered by applications in terms of the Minerals and Petroleum Resources Development Act, 2002 (As mentioned).	Activity 20, listing 1, Activity 27, Listing 1, Activity 19, Listing 2.	Prospecting Right application submitted and EA application with DMR
National Environmental Management Act, 1998 (Act 107 of 1998): Environmental Impact Assessment Regulations, 2014 (G38282 – R982-985) EA Authorization and EIA/EMP. Submit documents that will describe the impacts and sustainable mitigation thereof. Compliance to Act and Regulations during course of activities. Show impacts and mitigation thereof.	Regulation 21	Scoping Report in process following by EIA/EMP
National Water Act, 1998 (Act 36 of 1998) Application for Water abstraction for mining use	Section 21 (a)	Application for water use license with DWS, will follow.
Conservation of Agricultural Resources Act No 43 of 1983 Compliance to Act and Regulations during course of activities. Stabilization of soil after rehab to be sustainable with no erosion. Eradication of declared weeds	Section 29	Regulation will be applicable during construction and operational phases of mining.
National Heritages Resources Act, 1999 (Act 25 of 1999) Compliance to Act and Regulations during course of activities. Ensure that no graves or heritage site will be disturbed.	Section 36	SAHRA was notified process will be followed.

f) Need and desirability of the proposed activities.

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)(f)

The applicant believes that the applied area has prospects for: *Alluvial Diamonds and Diamonds in Kimberlite* as applied for. According to NEMA's Screening Tool/Report there are two sensitivity features that need to be taken into consideration when prospecting over this area. According to the screening report the *Aquatic biodiversity* & *Terrestrial biodiversity* was classified as being very high sensitive. Aquatic biodiversity cannot be classified as very high sensitive as the only visible water sources is the dry drainage lines. There are no standing water sources in the form of pans, streams of even dams over this application area. And as a result of this very arid area, if there do occur heavy rainfall events and there is a run-off generated, it will very rapidly seep into the dry weathers soil. With regards to the Terrestrial biodiversity, the animal and plant live associated with this area are very different and in some cases sensitive and must be handled in a sensitive and responsible manner. All of the above features need to be taken cognizance

off and management measures must be put in place to manage of prevent any impact on it. The desirability of this project can be motivated as the application area is not within or nearby a sensitive environmental area and the impact that will be caused by the activity can be properly mitigated and rehabilitated. The specific activities as listed will be on this 1503.9041 ha application area specific according to the sketch plan. There are other alluvial diamonds mining operations around Douglas and Schmidtsdrif. The possible employee positions that could emerge could also be a great opportunity for revenue generation in this rural area. The locality of the activities is over the entire farm portions. The specific activities as listed will be over the whole areas of the application area. Where the potential of a gravel run is found with the geological surveys of phase 1, test pits will be make during phase 2, and followed by bulk sampling of phase 3 and washing/sampling will take place. The duration of the activities will be 4 years.

g) Motivation for the preferred development footprint within the approved site including a full description of the process followed to reach the proposed development footprint within the approved site

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1) [(h)]((g)

The application area shows potential for the applied minerals: *Alluvial Diamonds (D), Diamonds in Kimberlite (DK)*, thus these specific areas need to be prospected. The area is characterized as being rural area under natural vegetation and probably used for grazing. There are not a lot of infrastructure over the application area, only fence lines, farm roads and there are cement dam and two small structures located near the southern fence. There are further no structures of infrastructure over this property. Access to the application area is gained via existing roads 25 km south out of Griekwastad. All of the area is under natural veld; see **Appendix 1 (b)** – Infrastructure Map for more detail on how the area looks pre-prospecting. Only a small portion of the land will be impacted upon at any given time and land use on the rest of the surrounding area can proceed normally. The area will be bulk sampled and rehabilitated. The prospecting focus area will be clearly demarcated. The area applied for is over the entire portions which are over natural veld.

h) Full description of process followed to reach the proposed development footprint

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)[(h)](g)

i. Details of the development footprint alternatives considered.

Alternative is not applicable. Since it is a rural area and the local grow and development in this area is very slowly. Prospecting operation like this contributes to local economic growth and work opportunities in such a rural area. As can be seen on **Figure 6**, the current land use is grazing. Thus the option to prospect the area will be an alternative land use over most of the areas. The applicant, ***Electri City Mining (Pty) Ltd.*** (is also the landowner), is not interested in any other alternative land use over this land aside for the prospecting for *Alluvial Diamonds (DA) & Diamonds (in Kimberlite) (DK)* or method use other than prospecting in the conventional way, which is the most cost effective.

(a) the property on which or location where it is proposed to undertake the activity

There are no alternative for the property as the application is for this area only. The prospecting focus area will only be determined after Phase 2 (Test Pits) is completed. And the whole of the application area will systematically be prospected eventually. There are no alternative sites as the whole of the application area was identified as being favourable to bear *Alluvial Diamonds (DA) & Diamonds (in Kimberlite) (DK)*.

(b) the type of activity to be undertaken

The type of activity is in line with the submitted Prospecting Work Programme (PWP). *Alluvial Diamonds (DA) & Diamonds (in Kimberlite) (DK)* prospecting normally uses the opencast prospecting method in order to access the mineral where after it is tested. Testing will be done on site by use of washing pans. There are no alternatives to the testing of the mineral as this is the conventional manner in which it is done. Better technology requires bigger volumes to be processed and this will not be possible under a prospecting right for *Diamonds*. As this is only prospecting operation it will be the basic opencast method with associated machinery.

(c) the design or layout of the activity

The layout of the activity will and can only be on the application area as per sketch plan, see **Figure 4** as submitted with the application. And the whole of the application area will systematically be prospected eventually. There are no preferred sites as the whole of the application area was identified as being favourable to be tested through test pits. Once phase 2 – test pits was completed, will there be determined where the trenched will be made. This prospecting operation will also not be a static operations as the whole of the application area will be tested via test pits on a grid basis in order to determine where the possible *Alluvial Diamonds (DA) & Diamonds (in Kimberlite) (DK)* run. They will have a temporary container that will serve as site office and the gravel to be tested will be done next to the open excavations. There will also be temporary chemical toilets on the site for ablution facilities. There will not be services to machinery done on site and in case of emergency it will be done over a PVC lining. This operation will be a basic small scale prospecting layout, with minimal temporary infrastructure and just the necessary equipment.

(d) the technology to be used in the activity

The technology used in the activity will be as described in the PWP and the best options will be determined by the applicant, which will be test pits and bulk sampling through trenching. The technology used with regards to the testing of the *Alluvial Diamonds (DA) & Diamonds (in Kimberlite) (DK)* is putting it through a washing plant. The washing plant will be set up next to the open excavation and will only be moved once the excavation is closed up. Phase 2 will be test pits and this will use an excavator to open pits which will only be visually inspected by the geologist, there are not much alternatives for this activity, Phase 3 will be excavation of a representative bulk sample and this will be done by conventional opencast excavations. The technology used in the activity will as described in the Prospecting Programme and the best options will be determined by the applicant. They will basically be using excavators to open the test pits and take out bulk samplings, as well as a front-end loader to move the material to be tested to the washing pan.

(e) the operational aspects of the activity, and

The technology used in the activity will be as described in the PWP and the best options will be determined by the applicant, which will be test pits and bulk sampling through trenching. The technology used with regards to the testing of the *Alluvial Diamonds (DA) & Diamonds (in Kimberlite) (DK)* is putting it through a washing plant. The washing plant will be set up next to the open excavation and will only be moved once the excavation is closed up. Phase 2 will be test pits and this will use an excavator to open pits which will only be visually inspected by the geologist, there are not much alternatives for this activity, Phase 3 will be excavation of a representative bulk sample and this will be done by conventional opencast excavations. The technology used in the activity will as described in the Prospecting Programme and the best options will be determined by the applicant. They will basically be using excavators to open the test pits and take out bulk samplings, as well as a front-end loader to move the material to be tested to the washing pan.

(f) the option of not implementing the activity

This option might only be possible if the applicant decide to abandon the project. If this application is not implemented the current landowners will just continue with existing agricultural activities which is grazing and cultivation. Thus not exploiting the mineral reserve and somebody else can apply.

ii. Details of the Public Participation Process Followed

The process as described by NEMA for Environmental Authorization was followed. See **Table 7** below for the identification of Interested and Affected Parties to be consulted with. The landowner (Louis Botha Eiendoms Trust), neighbours were consulted personally and through written letters which they have signed indicating that they do not have any objection. A site notice was placed at the entrance to the application area; see **Figure 7** & **Appendix 2**. With this site notice all passers-by are requested to submit any written comments to be forwarded to the consultant (still awaiting response), but no comments were received. A notice for the *Scoping Report* was published in the *DFA Newspaper of 11th December 2020* and for the *EMPr/EIA again on 11th February 2021*, no response was received. Copies of the Scoping Report and EMPr/EIA were sent to all Government Departments as listed in under **Table 6**. See proof of consultation already done under **Appendix 2**. The Public Participation process is still on going and the documents will be updated as more feedback is received back.

Appendix 2 – Proof of consultation.

Figure 7: Photos of site notice

iii Summary of issues raised by I & AP's

Table 7: Summary of I & AP's consultation

Interested and Affected Parties		Date sent and/or Comments Received	Issues raised	EAP's response to the applicant
AFFECTED PARTIES				
Landowner/s	X			
Louis Botha Trust - Landowner on the farm Windhoek 393 3 Van Riebeeck Street, Griekwastad, 8365 Cell: 082 443 0526, E-mail: lbotma@gmail.com		1 Dec 2020 21 Jan 2021	The landowner does not have any objection, see signed consultation letter	
Lawful occupier/s of the land	X			
Landowners or lawful occupiers on adjacent	X			
Jose Dhems - Neighbour Cell: 083 298 1908		1 Dec 2020	Awaiting written response	
Lieb Swiegers - Neighbour Cell: 084 491 2701		1 Dec 2020	Awaiting written response	
Municipal councilor				
Municipality	X			
Siyancuma Local Municipality Municipal Manager: Mr. M. Fillis (acting) Fax: 053 298 3141; Tel: 053 298 1810		1 Dec 2020	Consultation letter sent to Municipal Manager	
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom,				
Eskom				
Communities				
Dept. Land Affairs	X			
Ms. Ruwayda Baulackey Tel: 053 807 5700; E-mail: baulackey@drdlr.gov.za		1 Dec 2020	Request for verification of land claims sent to Ms Baulackey	
Traditional Leaders				
N/A				
Dept. Water and Sanitation	X			

Chief Director: Northern Cape Mrs. Lerato Mokhoantle 28 Central Road, Beaconsfield, Kimberley, 8300 Tel: 053-830 8800/083 655 8312 E-mail: MokhoantleL@dws.gov.za		11 Feb 2022	EMP/EIA sent via Courier Guy	
Dept. Agriculture, Forestry and Fisheries & Rural Development and Land Reform	X			
Attention: Thembisele Mabuza 02 Harrison Street, De Beers, Kimberley, 8300 Tel: 053-839 7800; Cell: 087 630 0387 E-mail: thembisileMA@daff.gov.za E-mail: MagdelineH@daff.gov.za		11 Feb 2022	EMP/EIA via Fastway for comments	
Department Agriculture, Land Reform and Rural Development				
Attention: Hannes Roux 162 George Street, Kimberlite Building, Kimberley, 8301 Tel: 071 860 7550 E-mail: hroux@gmail.com				
Other Competent Authorities				
SAHRA P.O. Box 4637, Cape Town, 8000 Tel: 021 462 4502 e-mail: info@sahra.org.za	X	14/02/2022		
OTHER AFFECTED PARTIES				
SAHRA P.O. Box 4637, Cape Town, 8000 Tel: 021 462 4502 e-mail: info@sahra.org.za	X	14/02/2022	Case ID: 17950	
INTERESTED PARTIES				

Notice published in the DFA Newspaper of 11th December 2020 for Scoping and 11th February 2021for EMP/EIA

iv) The Environmental attributes associated with the development footprint alternatives focusing on the geographical, physical, biological social economic, heritage and cultural aspects

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)[(h)](g)(iv)

(1) Baseline Environment

(a) Type of environment affected by the proposed activity.

Description of the baseline environment: The purpose of this section is to provide information on the environment in which the proposed prospecting activities will take place, with a view to identify sensitive issues/areas, which need to be considered when conducting the impact assessment. The application is over the: ***the Remaining Extent and Portion 1(Tevrede) of the farm Windhoek 393***. This area consists of 100 % natural vegetation.

Magisterial District: The area is situated in the *Hay District* of the *Northern Cape*. *Griekwastad* (Afrikaans for "Griqua city") is the nearest town to the application area and is situated 168 kilometres (104 mi) by road west from the city of Kimberley. *Douglas* is the biggest town and it's an agricultural and stock farming town situated near the confluence of the Orange and Vaal Rivers in the Northern Cape province of South Africa. The whole area falls under the *Siyancuma Local Municipality* in the *Pixley ka Seme District Municipality district* of the *Northern Cape province* of South Africa. Source: https://en.wikipedia.org/wiki/Douglas,_Northern_Cape

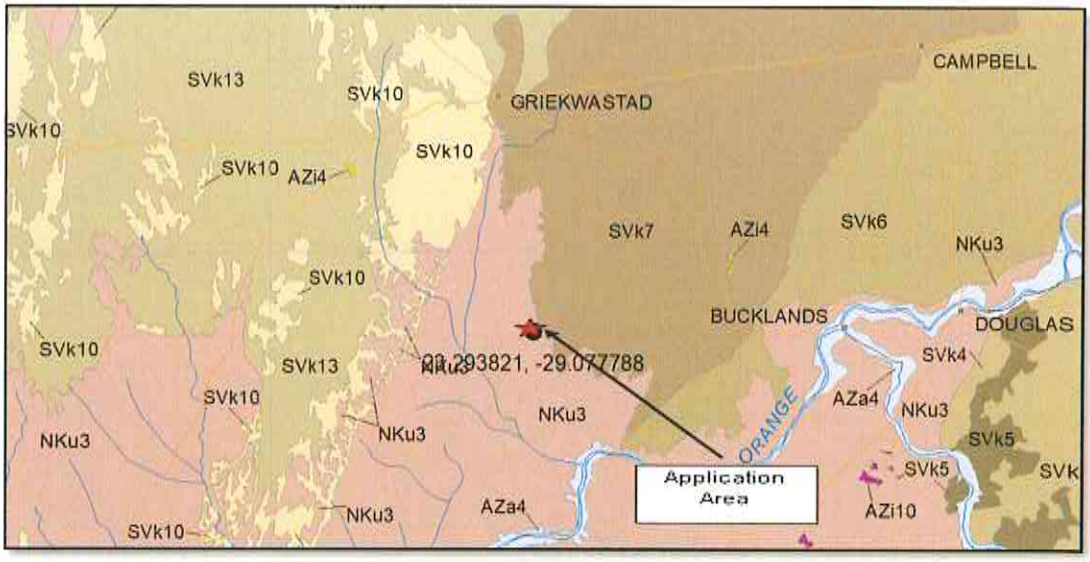
Direction from neighbouring town: The distance to the nearest towns is: 25 km south of Griekwastad, 65.3 km east of Douglas and Niekerkhoop 65.8 km south-west. Douglas will be the biggest town of the three and will most of the mining part and services be done there. The driving direction is as follows: 25 min via the town of Griekwastad. Head east for 550 m. Turn right drive 170 m. Turn right drive 21.9 km. Turn left continue for 5.0 km. Turn right and drive 4.4 km. Turn left the proposed site will be on the left after 4.3 km.

Longitude (approximate center of prospecting site): 23.293821° E
Latitude (approximate center of prospecting site): -29.077788° S

Existing Surface Infrastructure: The application area is situated over a very rural part of the Northern Cape Province. This area consists of 100 % natural vegetation. The infrastructures found over this area are only boundary fence lines and a gravel farm road that cuts through the middle of the application area. There seem to be a two farm shed located some in the center part of the application area, with a cement dam and other farm buildings. There are two known boreholes one on the western side and another near the farmstead. There are further no structures or infrastructure over this property. See **Appendix 1(b)** for existing infrastructures and environmental features for more detail of what the site looks like pre-prospecting. The surrounding farms are also used for extensive cattle farming. Access to the application area is gained via existing gravel roads south out of Griekwastad town.

Distribution: According to VEGMAP (2006) the area falls within the [NKu 3] Northern Upper Karoo. VT 35 False Arid Karoo (35%), VT 36 False Upper Karoo (27%) (Acocks 1953). LR 50 Upper Nama Karoo (44%), LR 52 Eastern Mixed Nama Karoo (24%) (Low & Rebelo 1996). See **Figure 8** below. Northern Cape and Free State Provinces: Northern regions of the Upper Karoo plateau from Prieska, Vosburg and Carnarvon in the west to Philipstown, Petrusville and Petrusburg in the east. Bordered in the north by Niekerkshoop, Douglas and Petrusburg and in the south by Carnarvon, Pampoenpoort and De Aar. A few patches occur in Griqualand West.

Figure 8: The VEGMAP classification: [NKu 3] Northern Upper Karoo

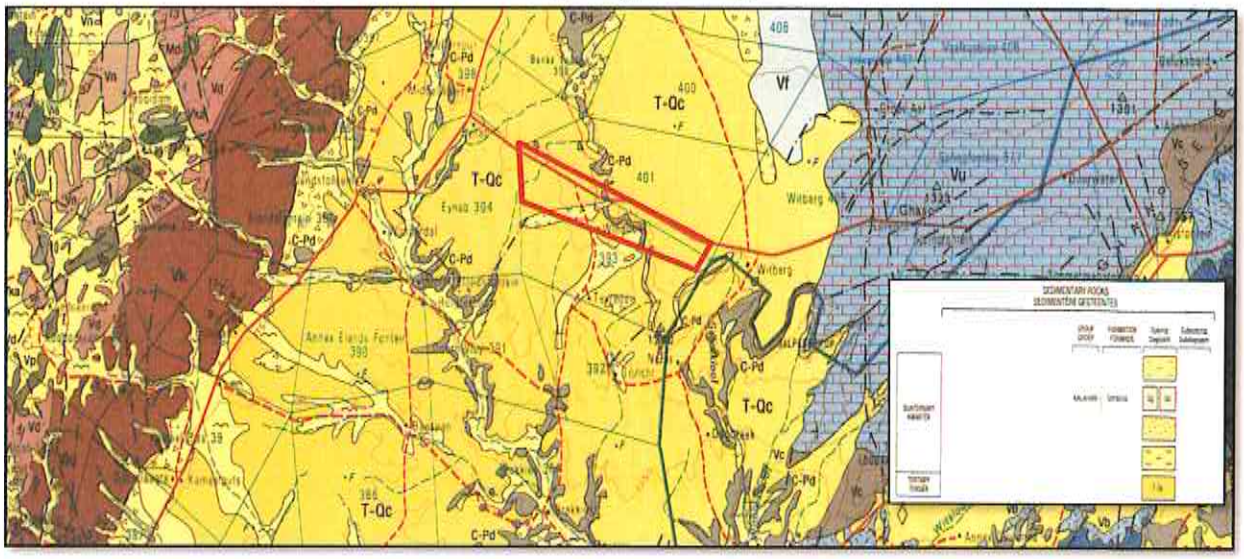


Climate: Rainfall peaks in autumn (March). MAP ranges from about 190 mm in the west to 400 mm in the northeast. Mean maximum and minimum monthly temperatures for Britstown are 37.9°C and —3.6°C for January and July, respectively. Corresponding values are 37.1°C and —4.8°C for De Aar and 39.0°C and —2.3°C for Kareekloof (northwest of Strydenburg).

Topography: The mine site is situated on a terrain that is characterized as flat to gently sloping, with isolated hills of Upper Karoo Hardeveld in the south and Vaalbos Rocky Shrubland in the northeast and with many interspersed pans. The slope varies around <0.1% to not more than 3%. Altitude varies mostly from 1 000-1 500 m.

Geology & Soil: Shales of the Volksrust Formation and to a lesser extent the Prince Albert Formation (both of the Ecca Group) as well as Dwyka Group diamictites form the underlying geology. Jurassic Karoo Dolerite sills and sheets support this vegetation complex in places. Wide stretches of land are covered by superficial deposits including calcretes of the Kalahari Group. Soils are variable from shallow to deep, red-yellow, apedal, and freely drained soils to very shallow Glenrosa and Mispah forms. Mainly Ae, Ag and Fc land types. See **Figure 9** for generalized geology of the application area.

Figure 9: *Generalized geology of the application area*



Vegetation [Flora] and Landscape Features: Shrubland dominated by dwarf karoo shrubs, grasses and Acacia meffifera subsp. deti-nens and some other low trees (especially on sandy soils in the northern parts and vicinity of the Orange River). Flat to gently sloping, with isolated hills of Upper Karoo Hardeveld in the south and Vaalbos Rocky Shrubland in the northeast and with many interspersed pans. The grazing capacity was set at between 24 ha/LSU. The whole of the application area is under natural vegetation. The land capability over all of the application area is classified as being low to very low. Furthermore according to the DEDACT's (Department of Economic Development, Environment, Conservation and Tourism's) screening tool the footprint of this application area, although only prospecting, are classified as per Table 8 below. The full report is attached as **Appendix 3.**

Table 8: DEDACT - Screening Report

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Animal Species Theme			X	
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme				X
Defence Theme				X
Palaeontology Theme		X		
Plant Species Theme				X
Terrestrial Biodiversity Theme	X			

According to the screening report the *Aquatic biodiversity* & *Terrestrial biodiversity* was classified as being *very high* sensitive. Aquatic biodiversity cannot be classified as very high sensitive as the only visible water sources is the dry drainage lines. There are no standing water sources in the form of pans, streams of even dams over this application area. And as a result of this very arid area, if there do occur heavy rainfall events and there is a run-off generated, it will very rapidly seep into the dry weathers soil. With regards to the *Terrestrial biodiversity*, the animal and plant live associated with this area are very different and in some cases sensitive and must be handled in a sensitive and responsible manner. All prospecting activities need to be done in a responsible manner and rehabilitation must be done concurrent with operation in order to restore the natural environment back to its original status as soon as possible. The *Palaeontology* theme was classified as *high* sensitive, but the landowner is not aware of and such siting or articles ever found over his land. There are no know site of archeological or cultural heritage sites over this area. The rest of the themes were rated as being moderate to low sensitivity.

According to VEGMAP (2006) the area falls within the [NKu 3] Northern Upper Karoo. Below is a summary of the plant species that may occur over the application areas within this biome, which in turn can be a source for regrowth of natural species once mining, have totally ceased over this area. ***Important Taxa*** - Small Trees: *Acacia mellifera* subsp. *detinens, Boscia albitrunca.* Tall Shrubs: *Lycium cinereum* (d), *L. horridum, L. oxycarpum, L. schizocalyx, Rhigozum trichotomum.* Low Shrubs: *Chrysocoma ciliata* (d), *Gnidia polycephala* (d), *Pentzia* calcarea (d), *P. globosa* (d), *P. incana* (d), *P. spinescens* (d), *Rosenia humilis* (d), *Amphiglossa triflora, Aptosimum marlothii, A. spinescens, Asparagus glaucus, Barleria rigida, Berkheya annectens, Eriocephalus ericoides* subsp. *ericoides, E. glandulosus, E. spinescens, Euryops asparagoides. Felicia muricata, Helichrysum lucilioides, Hermannia spinosa, Leucas capensis, Limeum aethiopicum, Melolobium candicans, Microloma armatum, Osteospermum leptolobum,O. spinescens, Pegolettia retrofracta, Pentzia lanata, Phyllanthus maderaspatensis, Plinthus karooicus, Pteronia glauca, P. sordida, Sebago geniculata, S. saxatilis, Tetragonia arbuscula, Zygophyllum lichtensteinianum.* Succulent Shrubs: *Hertia pallens, Salsola calluna, S. glabrescens, S. rabieana, S. tuberculata, Zygophyllum flexuosum.* Semi parasitic Shrub: *Thesium hystrix* (d), Herbs: *Chamaesyce inaequilatera, Convolvulus sagittatus, Dicoma capensis, Gazania krebsiana, Hermannia comosa, Indigofera alternans, Lessertia pauciflora, Radyera urens, Sesamum capense, Sutera pinnatifida, Tribulus terrestris, Dahlia capensis.* Succulent Herb: *Psilocaulon coriarium.* Geophytic Herb: *Moraea pallida.* Graminoids: *Aristida adscensionis* (d), *A. congesta* (d), *A. diffuse* (d), *Enneapogon desvauxii* (d), *Eragrostis lehmanniana* (d), *E. obtuse* (d), *E. truncata* (d), *Sporobolus fimbriatus* (d), *Stipagrostis obtusa*

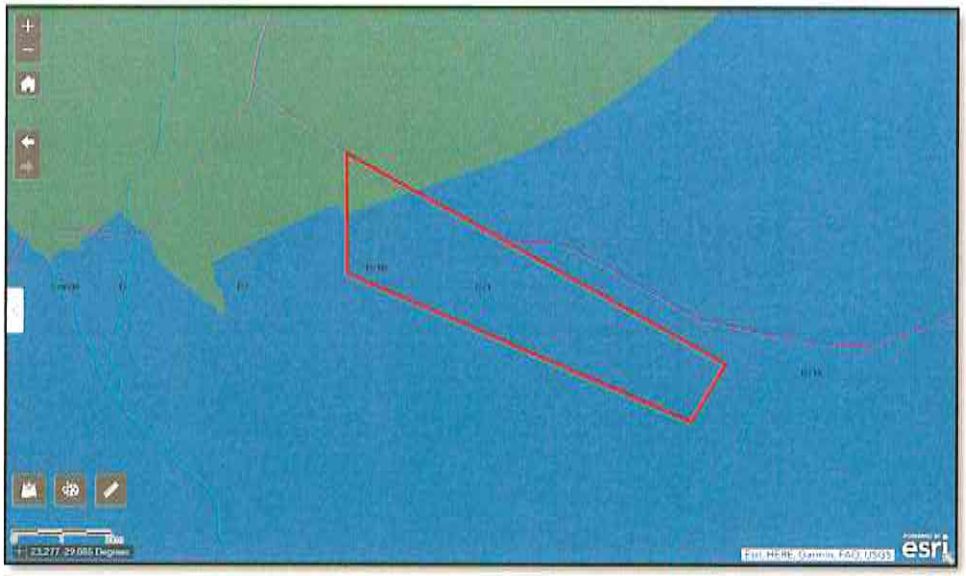
(d), *Eragrostis bicolor, E. porosa, Fingerhuthia africana, Heteropogon contortus, Stipagrostis ciliata, Themeda triandra, Tragus berteronianus, T. koelerioides, T. racemosus.* **Biogeographically Important Taxa** Herb (western distribution limit): *Convolvulus boedeckerianus.* Tall Shrub (southern limit of distribution): *Gyrnnosporia szyszylowiczii* subsp. *namibiensis.* **Endemic Taxa** Succulent Shrubs: *Lithops hookeri, Stomatium pluridens.* Low Shrubs: *Atriplex spongiosa, Galenia exigua.* Herb: *Manulea deserticola.* **Conservation** Least threatened. Target 21%. None conserved in statutory conservation areas. About 4% has been cleared for cultivation (the highest proportion of any type in the Nama-Karoo) or irreversibly transformed by building of dams (Houwater, Kalkfontein and Smart Syndicate Dams). Areas of human settlements are increasing in the northeastern part of this vegetation type (Hoffman et al. 1999). Erosion is moderate (46.2%), very low (32%) and low (20%). *Prosopis glandulosa,* regarded as one of the 12 agriculturally most important invasive alien plants in South Africa, is widely distributed in this vegetation type (Hoffman et al. 1999). *Prosopis* occurs in generally isolated patches, with densities ranging from very scattered to medium (associated with the lower Vaal River drainage system and the confluence with the Orange River) to localised closed woodland on the western border of the unit with Bushmanland Basin Shrubland. **Remark** This Karoo unit is found on floristic and ecological gradients between the Nama-Karoo, arid Kalahari savanna and arid highveld grasslands. **References Acocks (1953, 1988), Werger (1980), Palmer (1990).**

Animal Life [Fauna]: Not many species were directly observed but the presence of nesting sites in the area is an indication that this area is an acceptable habitat for shelter and food for avian species. The natural animal life occurring over the application area includes but is not restricted to, small animals common in this area. List of mammals which are likely to occur over the project area were derived based on distribution record from the Animal Demography Unit (ADU) web portal: http://vmus.adu.org.za. Animals that are likely to occur here are: *Sylvicapra grimmia* (Bush Duiker), *Raphicerus campestris* (Steenbok), *Phacochoerus africanus* (Common Warthog (Suidae), *Otocyon megalotis* (Bat-eared Fox), *Gerbilliscus sp.* (Gerbils (Muridae)), *Ictonyx striatus* (Striped Polecat), *Lepus* (Scrub Hare), *Genetta* (Common Large-spotted Genet), *Rodentia, Helogale parvula* (Common Dwarf Mongoose).

Ground Water: There are boreholes on the application area used for stock watering by the landowner. The applicant intends to use water from these current boreholes. The water uses will be 100m³ a day for the primary processing in the bulk sampling phase. See **Appendix 1 (b)** for position of bore holes over the application area

Surface Water: This application area fall within the water management area of the Lower Orange (14) and secondary catchment area D71 and tertiary drainage region D71B. See **Figure 10** for location of application area with RSA Water Management Area. There are various small drainages lines feeding the Orange River that cuts through the application area. There are no standing water sources in the form of pans, streams of even dams over this application area. And as a result of this very arid area, if there do occur heavy rainfall events and there is a run-off generated, it will very rapidly seep into the dry weathers soil. It however seems that these water bodies only seem to carry water during peak rainfall seasons. There is also cement dam used for cattle watering. River diversion is not applicable as all mining activities will be kept 100 meter horizontally away from any water body. According to NEMA's Screening Tool the *Aquatic biodiversity sensitivity* & *Terrestrial biodiversity sensitive* was classified as being very high sensitive. All prospecting activities need to be kept 100 m horizontally way from any surface water bodies, its banks and wetland area associated with it.

Figure 10: *Water management area of the Lower Orange (14)*



Air Quality: The impact on air quality will occur from test pits, trenches and movement on the roads. This impact will be low and will be monitored and mitigated trough wetting of the roads. This area fall in very rural area and the impact form windblown dust particles generated because of vehicles traveling on gravel roads, can also attribute to this impact. But because of the fastness of this area, windblown dust will only affect the landowner and prospecting operators. Area where testing are completed must be backfilled and re-vegetated so soon as possible to establish a vegetation layer in order to retain the loose soil fractions.

Noise: The impact of noise will be generated by the prospecting equipment. This operation will only be in day time working hours and will have a low impact on current surroundings. And because of the extent of this application area 1503 ha, the sound will get lost and no residence on neighboring farms will be adversely affected. The farmstead (of Mr. Louise Botha) is located within the central part of the application area and will they be the most affected by any noise of the prospecting activities. The neighbouring farmstead is also located in close proximity 2.5 km south of the application area and will not be affected. The impact may be greater with regards to wild animals, but they tend to move away toward areas less influenced by noise disturbance.

Sites of Archaeological and Cultural Interest: No graveyard was identified on the application area with the site visit, the applicant also confirmed that.

Sensitive Landscapes: The potential sensitive landscapes are the dry drainage lines that cut through the application area. These look to be dry runs, which probably only curry water during peak rainfall seasons. It is however recommended that all prospecting activities be kept 100 meter horizontally away from these water runs. Because if disturbed and the area do get a heavy rainfall event it can cause erosion and it the water is not contained in the natural watercourse it may cause damages to other landscape features.

Visual Aspects: These prospecting activities will only be visible to the landowner and neighbours. It is also not located near any main tourist route.

Social: The proposed activity will employ 9 people, of which a few are resident around the operation. Various social amenities are available close to the operation. These include schools, hospitals churches, recreation facilities as well as a Police Station at Griekwastad and Douglas, which is located approximate 25 km north of the operation.

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

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)[(h)](g)(v)

The proposed project is anticipated to impact on a range of biophysical and socio-economic aspects of the environment. The main purpose of the EMPr/EIA is to identify and evaluate the significance of these potential impacts and determine how they can be minimized or mitigated. It should be noted that a comprehensive Environmental Management Program (EMPr) will be developed and implemented to regulate and minimize the direct, indirect and cumulative impacts during the construction and operational phases. The potential environmental impacts identified during the Scoping Phase, which will be investigated further in the Impact Assessment Phase of the project are summarized in **Table 9** on the next page.

Table 9: Impact significance identification matrix for Windhoek 393

			A	B	C	D	E	F	E	F	G	H	I	J	K	L	M	N
	PHASE	Components	ABIOTIC									BIOTIC			VISUAL	SOCIO-ECONOMIC		
		Impacts	Geology	Topography	Soil	Land capability	Land use	Surface water	Ground water	Air quality	Noise	Vegetation	Wildlife	Sensitive landscapes	Visual impact	Archaeological & cultural sites	Socio-economic	Affected parties
		Activity, Product or Service																
1	Construction	Demarcation of mine lease area			L	M	L						M		M			
2		Establishment (site preparation, vegetation clearance, topsoil removal and stockpiling) of proper access roads (upgrade existing road), site workshop & storage area (temporary containers), mineral processing (fixed conveyor, mobile screen and 1 x 16 feed washing pans, generator, ect.) Initial vegetation clearance, topsoil removal & stockpiling next to first opencast/pit/trench within the mine lease area		M	H	H			M	H	H	H	H	L	M		L	M
3		Establishment of bunded diesel and oil/chemical storage facilities, chemical toilets		M	M	H		M	M			M			M			
4		Provision of storage tanks for potable (drinking water) and process water (dust suppression)		H	H	H	H	L	M	M	H	H	H	M	L	L		
5	Operational	Provision of waste handling/disposal facilities (domestic & industrial waste bins,			L			L	L					L				
6		Fencing – off active prospecting site/s as required in terms of the MHSA. Ensure access control (gate), ect				M							M		M			H+
7		Vegetation clearance, topsoil removal & stockpiling ref to opencast/pit/trench within the mine lease area @ 8 ha of surface area disturbed at any given time).		M	H	H	M	L		L		H	L		L		M	H
8		Mechanically excavating overburden with an excavator and stockpile separately from topsoil dump. Remove gravel with excavator and stockpile on side of trench/pit to load onto trucks	H	H+	H	H	H	L	M	L	L	H	L		L+		M	H
9		Transport with trucks to mineral processing plant (conveyor, screen, 1x 16 feed washing pans) for processing and sorting of concentrate at set intervals			H			L	H	L	L	H			M+		M	H
10		The wet waste tailings coming out of the pans will be pumped to open excavations & panel dam, from where excess water is re-cycled. Backfilling of excavations (as part of concurrent rehabilitation): the coarse gravel (tough) sited from the pans will be transported back by front-end-loaders towards all open pits for backfilling.	M	H	H	H	H	H	M	L	L						M	H

			A	B	C	D	E	F	E	F	G	H	I	J	K	L	M	N
	PHASE	Components	ABIOTIC									BIOTIC			VISUAL	SOCIO-ECONOMIC		
		Impacts	Geology	Topography	Soil	Land capability	Land use	Surface water	Ground water	Air quality	Noise	Vegetation	Wildlife	Sensitive landscapes	Visual impact	Archaeological & cultural sites	Socio-economic	Affected parties
		Activity, Product or Service																
11	Decommissioning and closure	Final backfilling of all trenches/voids and taping of overburden dumps (excess material as the result of swell factor).	H+	H+	H+	H+	H+	H+	H+	L	L				L		H+	H±
12		Compaction of backfilled sites		H+	H+	H+	H+	H+	H+		L						H+	H+
13		Replace and spread all topsoil evenly over backfilled sites.			H+	H+	H+	H+	H+	H+	L	H+	H+		H+		H+	H+
14		Establishment of vegetative cover.			H+	H+	H+	H+	H+	H+		H+	H+		H+		H+	H+
15		Removal of temporary & demolition of all permanent structures (Section 44 of the MPRDA).			H+	H+	H+	H+	H+	H+	L	H+	H+		H+		H+	H+
16		Rehabilitation of all access roads, compacted areas, etc			H+	H+	H+	H+	H+	H+	L	H+	H+		H+		H+	H+

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

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)[(h)](g)(vi)

I. Introduction:

Table 9 describes and evaluates the effects of the different prospecting projects and the associated activities on the natural and social environments. The different environmental components, on which the project (can/may) have an impact, are:

1. Geology
2. Topography
3. Soil
4. Land Capability
5. Land Use
6. Vegetation
7. Wildlife
8. Surface Water
9. Ground Water
10. Air Quality
11. Noise
12. Archaeological and Cultural sites
13. Sensitive Landscapes
14. Visual Aspects
15. Socio-economic Structure
16. Interested and Affected Parties

MPACT ASSESSMENT

Before the impact assessment could be done the different project activities were identified:

ACTIVITIES:

1. Access Roads (Existing farm roads to be upgraded)
2. Temporary office, workshops, ablution facility, water tanks, diesel tanks and other temporary buildings
3. Prospecting equipment (conveyor, drum screen, washing pans, generator)
4. Stockpiles
5. Overburden dumps
6. Opencast trenches (as part of bulk sampling)

II. Environmental Impact Assessment Summary:

- **Environment likely to be affected by the prospecting operation. (See Appendix 1(a) for location)**

Environmental aspect	Affected		Not affected
	Negligible	Substantial	
1. GEOLOGY		X	
2. TOPOGRAPHY	X		
3. SOIL		X	
4. LAND CAPABILITY		X	
5. LAND USE	X		
6. VEGETATION		X	
7. WILDLIFE	X		
8. SURFACE WATER			X
9. GROUND WATER	X		
10. AIR QUALITY	X		
11. NOISE	X		
12. SENSITIVE LANDSCAPES			X
13. VISUAL ASPECTS	X		
14. SOCIO ECONOMICS	X		
15. INTERESTED & AFFECTED	X		
16. ARCHAEOLOGICAL			X

- **Environment likely to be affected by the alternative land use**
  Prospecting will be a new land use over this area. The site that is earmarked for prospecting represents ± 1 % of the total area applied for. And it is further not foreseen that prospecting activities would disturbed an area of not more than 0.6 ha at any given time. The rest of the terrain would continue to be used for agriculture purposes by the landowner.

- **Assessment of the impacts created by the prospecting activity**
  Before any assessment can be made the following evaluation criteria need to be described:

*Explanation of **probability** of impact occurrence*

Probability of impact occurrence	Explanation of probability
Very low	<20% sure of particular fact or likelihood of impact occurring.
Low	20 to 39% sure of particular fact or likelihood of impact occurring.
Moderate	40 to 59% sure of particular fact or likelihood of impact occurring.
High	60 to 79% sure of particular fact or likelihood of impact occurring.
Very high	80 to 99% sure of particular fact or likelihood of impact occurring.
Definite	100% sure of particular fact or likelihood of impact occurring.

*Explanation of **extent** of impact*

Extend of impact	Explanation of extend
Site specific	Direct and indirect impacts limited to site of impact only.
Local	Direct and indirect impacts affecting environmental elements within the Hay area.
Regional	Direct and indirect impacts affecting environmental elements within Northern Cape Province.
National	Direct and indirect impacts affecting environmental elements on a national level.
Global	Direct and indirect impacts affecting environmental elements on a global level.

*Explanation of **duration** of impact*

Duration of impact	Explanation of duration
Very short	Less than 1 year
Short	1 to 5 years
Medium	6 to 12 years
Long	13 to 50 years
Very long	Longer than 50 years
Permanent	Permanent

*Explanation of impact **significance***

Impact	Explanation of significance
No impact	There would be no impact at all - not even a very low impact on the system or any of its parts.
Very low	Impact would be negligible. In the case of negative impacts, almost no mitigation and/or remedial activity would be needed, and any minor steps, which might be needed, would be easy, cheap and simple. In the case of positive impacts, alternative means would almost all likely to be better, in one or a number of ways, than this means of achieving the benefit.
Low	Impact would be of a low order and with little real effect. In the case of negative impacts, mitigation and/or remedial activity would be either easily achieved or little would be required, or both. In case of positive impacts, alternative means for achieving this benefit would likely be easier, cheaper, more effective, less time-consuming, or some combination of these.
Moderate significance	Impact would be real but not substantial within the bounds of those which could occur. In the case of negative impacts, mitigation and/or remedial activity would be both feasible and fairly easily possible. In the case of positive impacts, other means of achieving these benefits would be about equal in time, cost and effort.
High significance	Impacts of a substantial order. In the case of negative impacts, mitigation and/or remedial activity would be feasible but difficult, expensive, time-consuming or some combination of these. In the case of positive impacts, other means of achieving this benefit would be feasible, but these would be more difficult, expensive, time-consuming or some combination of these.
Very high significance	Of the highest order possible within the bounds of impacts which could occur. In the case of negative impacts, there would be no possible mitigation and/or remedial activity to offset the impact at the spatial or time scale for which it was predicted. In the case of positive impacts, there is no real alternative to achieving the benefit.

Table 10 Describes and evaluates the effects of the different prospecting projects and the associated activities

ASPECT 1. GEOLOGY	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact - *destruction of geology layer up to ±5 m*	The geology will be destroyed during the opencast prospecting operation. During operation which will be for the next 4 years, the mineral resource *(Diamonds (Alluvial Diamonds & Diamonds in Kimberlite)* will be extracted. Waste rock material/overburden material is disposed off/backfilled in existing excavations as part of the prospecting process.				
Extent	Site				Activity causing the impact
Duration	Permanent				An opencast prospecting method will be used to extract bulk samples. Therefore the original geology will be totally destroyed.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure	

ASPECT 2. TOPOGRAPHY	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *change in landform and disturbance of surface drainage*	* **Change in landform** : * The prospecting site is situated on: level plains some relief. * **Disturbance of the surface drainage:** The prospecting of the (*Alluvial Diamonds & Diamonds in Kimberlite*) deposits will result in the creation of trenches (10 m x 60 m x ±5 m or less), that act as depressions in the environment that captures run-off. Prospecting activities will be concentrated as indicated on **Appendix 1(c)** on the application area (approximately 5 m depth). The surface drainage is already disturbed. Normal surface drainage will be disturbed at a given point. Run-off if any will be diverted away from the specific site.				
Extent	Site				Activity causing the impact
Duration	Very long to Permanent				Bulk sampling trough trenches, etc.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

3. SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *impact on soil structure*	Soils are variable from shallow to deep. Any construction of infrastructure should be preceded by the removal of all available topsoil and organic matter. Stored topsoil should be reused as soon as possible to retain seeds and organic matter. The establishment, construction, operation and eventually rehabilitation (demolition) of listed structures such as the access roads, stockpiles /tailings dumps, cause compaction of soil.				
Extent	Site				Activity causing the impact
Duration	Long				In the process of removing topsoil the soil layers are mixed and the structure may be disturbed
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

3. SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *impact on soil use*	All prospecting activities will be concentrated on the identified prospecting focus area where (*Alluvial Diamonds & Diamonds in Kimberlite*) deposits could be found. In the same time a certain surface area is therefore alienated for agriculture. The active prospecting surface area (alienated) would be restricted within the ±0.6 ha at any given time (in relation to area of application of the prospecting right of 1503 hectares) for the next 4 years. Excavations/test pits should be closed up and rehabilitated as mining progress and re-vegetated in order to return it to agriculture as soon as possible.				
Extent	Site				Activity causing the impact
Duration	Long				Site preparation for additional prospecting sites and the construction, operation of listed infrastructure.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
	X	X	X	X	

ASPECT 3. SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *potential for soil erosion*	Some areas already disturbed thus no topsoil. Area characterized by scares vegetation and bear patches, which all contribute to erosion if disturbed. Due to the fact that certain surface areas would become compacted and this would lead to lesser infiltration of rainwater and more run-off that could cause erosion on bare disturbed surfaces. Erosion would always be possible until such time as a vegetation cover is provided during rehabilitation phase.				
Extent	Site				Activity causing the impact
Duration	Very short				When removing topsoil during site preparation, little storm water control structures are in place. If a severe storm hits the area, it may lead to erosion on site. Topsoil stockpiles may be prone to erosion due to lack of vegetation cover. Water control structures may fail or severe rainstorms may cause excessive run-off. Surface compaction due to activities taking place.
Probability	Very low				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
	X	X	X	X	

ASPECT 3. SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *soil contamination*	Potential of soil contamination as a result of spillages caused by petrochemicals or spillages of porrel because of pipe failure. There is no chemical used in the mineral processing only water that dilute soil into suspended solids and settle out again when pumped back				None.
Extent	Site				Activity causing the impact
Duration	Long				Vehicle/equipment breakages and oil/lubricant /diesel spills may contaminate soil.
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
	X	X	X	X	

ASPECT 3. SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *soil structure is destroyed*	Loss of soil structure over areas where test pits and excavation are going to be made in order to get representative samples of underlying geology and mineral reserve. Although backfilling will be done the structure will never be the same over these areas because soils are broken up and mixing of soil layers occurs.				None
Extent	Site				Activity causing the impact
Duration	Long				In the process of removing topsoil the soil layers are mixed and the structure may be disturbed.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure	

ASPECT 3.SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *loss of soil fertility*	Loss of soil fertility as a result of either pollution by petrochemical of irresponsible handling of waste disposal. The rehabilitation of pits and excavation will also affect the soil fertility over disturbed areas because of the mixture of soil layers.				None
Extent	Site				Activity causing the impact
Duration	Short				The mixing of soil during site preparation, compaction and potential pollution (spillages form oil etc.) all may cause this situation.
Probability	Definite				
Significance	Low				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure	

ASPECT 4.LAND	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *loss of land capability*	**Temporary loss of land capability to support grazing.** The small area (0.6 ha) where the active prospecting activities occur (pits/excavations, stock piles, prospecting equipment) etc. will be temporary alienated, until the area is rehabilitated. All pits/excavations would be rehabilitated as part of the prospecting process during which excavations are back-filled. The rest of the application area will still be used by the landowner as agricultural land.				
Extent	Site				Activity causing the impact
Duration	Long				Site preparation for additional prospecting sites and the construction, operation of listed infrastructure, the land capability of the active prospecting area will be totally destroyed.
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

ASPECT 5. LAND USE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *change in land use*	This is a new prospecting operation and therefore will lose its land use to support grazing on a certain portion of the 1503 hectares during the next 4 years. Only a small portions of land (0.6 ha at a time) would be affected by the prospecting operation relation to the total prospecting right application area of 1503 hectares. All pits/excavations would be rehabilitated as part of the prospecting process during which excavations are back-filled.				
Extent	Site				Activity causing the impact
Duration	Long to permanent				Site preparation for prospecting and the construction, operation of listed infrastructure
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

ASPECT 6.VEGETATION	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *clearing of vegetation cover*	Vegetation clearance, disturbance and trampling by mining vehicles. Destruction of habitats for vegetation because areas will be stripped of vegetation in order to make pits/excavations. Due to a disturbed ecosystem, bare ground and spreading of exotics can follow.				
Extent	Site				Activity causing the impact The site preparation for new sites, construction of listed infrastructure will cause destruction of habitats for vegetation. Due to a disturbed ecosystem, bare ground and invasion of exotics could further
Duration	Long				
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure	

ASPECT 6.VEGETATION	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *loss of changed of habitats*	Habitat change, loss of species, spread of alien and invasive species.				
Extent	Site				Activity causing the impact The change in the current habitat will be mitigated during final rehabilitation.
Duration	Permanent				
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure	

ASPECT 6.VEGETATION	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *impact of dust*	Dust coverage of plants because of vehicle traveling on farm roads and mining roads. Excavation of soil/overburden to access underlying reserve.				None
Extent	Site				Activity causing the impact Heavy trucks and other vehicles on dirt roads, stockpiling, dumping of tailings are mainly responsible for this impact.
Duration	Long				
Probability	High				
Significance	Low				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

ASPECT 7. WILDLIFE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *loss of wildlife habitats*	Wildlife or wildlife habitat destruction /change / disturbance because of prospecting equipment moving over application area. Excavation of material for pits/excavations in order to access minerals.				None
Extent	Site				Activity causing the impact The flora which normally serves as habitat for animals would be destroyed during site preparation. The increase in activity will temporarily scare other animals. The area will serve as a new habitat after rehabilitation.
Duration	Permanent				
Probability	Very High				
Significance	Moderate				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

ASPECT 7. WILDLIFE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *impact on wildlife*	Injury and death to wildlife as a result of prospecting equipment and workers activities.				None
Extent	Site				Activity causing the impact
Duration	Short				The movement of vehicles may kill certain insects, rodents and possible birds. Most of the remaining animal life will however move away due to noise.
Probability	Very low				
Significance	Low				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure	

ASPECT 7. WILDLIFE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	Restoration of habitat				None
Extent	Site				Activity causing the impact
Duration	Short				As rehabilitation progresses the habitat of certain species will be restored/created (Closure objective) Animals will probably only move back when human movement is limited.
Probability	Low				
Significance	Low				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

ASPECT 8. SURFACE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *impact on surface water quality*	Increased silt load. Clearing topsoil for footprint areas can increase infiltration rates of water to the groundwater system and decrease buffering capacity of soils to absorb contaminants from spills on surface. This can increase the risk of contamination of the groundwater system (increases aquifer vulnerability. The testing of the mineral is water waster based process and this cause (tailing to be pumped back into open excavations) suspended solids. These however quickly settle.				
Extent	Local				Activity causing the impact
Duration	Short				The clearance of vegetation and the traffic on access roads will all contribute to an increase in the silt load on the prospecting area.
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

ASPECT 8. SURFACE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *impact on surface water quality*	Change in surface water quality. Potential of surface water contamination as a result of spillages caused by petrochemicals from vehicles – dirty water. And spillages of porrel because of pipe failure and end up in surface water run – dirty water. Natural run-off that is not adequately diverted away from the active prospecting excavations could end-up in the open excavations creating problems regarding water quality and hindering the prospecting process – clean water. Surface run-off from active prospecting sites (overburden dumps & porrel dam/dump) if not adequately contained on site could end-up in the adjacent undisturbed natural veld – dirty water. If the natural surface run-off is not adequately diverted in the case of the dry-water course area, prospecting sections it could become silted-up.				
Extent	Local				Activity causing the impact
Duration	Short				"Dirty / Clean" water systems at facilities like the overburden dumps, roads, trenches, etc. may impact on the quality of the surface water. The water should be contained in the surface runoff control
Probability	Moderate				
Significance	High				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure	

ASPECT 8. SURFACE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *impact on surface water quantity*	Change in surface water quantity: **Water management area (14) : Lower Orange** **The mine falls under the primary drainage region D71 and in quaternary sub-catchment D71B.** There are smaller that cuts through the application area. It however seems that these water bodies only seem to carry water during peak rainfall seasons. Notwithstanding the above mentioned, it is not expected that prospecting operations will have any effect on the boundaries or the general water flow of the catchment. Standing water in trenches could as the result of rain/ surface run-off ending up in shallow depressions.				
Extent	Site				Activity causing the impact
Duration	Long				It is an operational objective to contain or divert all surface run-offs from the active prospecting trenches area mainly due to pollution (sediment) potential. This will reduce the run-off quantity, although small in comparison with the drainage area in total.
Probability	High				
Significance	High				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure	

ASPECT 9. GROUND WATER	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *impact on ground water quality*	Reduction of groundwater quality Prospecting activities are not likely to impact on local ground-water quality. No chemicals area used during the prospecting process, only water for washing. Handling of waste and transport of building material can cause various types of spills (domestic waste, pit latrines, hydrocarbons) which can infiltrate and contaminate of the groundwater system. No vehicles will be serviced on site.				
Extent	Site				Activity causing the impact
Duration	Long				
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

9. GROUND WATER					
Nature of the impact – *impact on ground water quantity*	Even though abstraction is likely to have a minimal effect on the surrounding groundwater users, this is a new use, and groundwater levels are expected to continue current trends. Groundwater will be abstracted for potable water supply and prospecting processes. The volume of water needed is small (10 000 Lit/hr) in comparison to other water use and will have a small impact on the surrounding aquifer.				
Extent	Site				Activity causing the impact
Duration	Long				Opencast prospecting operation.
Probability	Low				
Significance	High				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

ASPECT 10. AIR QUALITY	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *dust impact*	Dust will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen & washing pans) and on gravel/dirt/farm roads. The processing of the gravel is a wet process and therefore minimum dust is generated.				
Extent	Site				Activity causing the impact Initial construction work with regard to infrastructure (roads) that involves earth moving equipment. During the phase 2 & 3, dust could be generated as indicated during prospecting.
Duration	Long				
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

ASPECT 11. NOISE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact - *impact on noise levels*	Noise will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen &washing pans). The mine will be located in rural landscape. The impact would be of more importance regarding the direct worker environment that should adhere to the requirements in terms of the Mine Health and Safety Act.				
Extent	Local				Activity causing the impact Earth moving equipment and vehicles (trucks).
Duration	Long				
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure X	

ASPECT 12. ARCHAEOLOGICAL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *potential sites of archaeological and cultural interest*	The terrain is not archaeologically vulnerable. It is unlikely that the proposed development will result in any significant archaeological impact at the site. No graves were identified on the site.				
Extent	Site				Activity causing the impact
Duration	Permanent				
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1 X	Phase 2 X	Phase 3 X	Closure	

ASPECT 13. SENSITIVE LANDSCAPE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *impact on sensitive landscapes*	The potential sensitive landscapes are two smaller tributary feeding the Orange River that cuts through the application area. It is however recommended that all prospecting activities be kept 100 meter horizontally away from these water runs. Because if disturbed and the area do get a heavy rainfall event it can cause erosion and it the water is not contained in the natural watercourse it may cause damages to other landscape features.				
Extent	Site				Activity causing the impact
Duration	Short				
Probability	Moderate				
Significance	M0darate				
Phase responsible for the impact	Phase 1	Phase 2 X	Phase 3 X	Closure	

ASPECT 14.VISUAL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *visual impact*	Prospecting will only be visible to the landowners because of the extent of the application area. Neighbours living there will only be affected if prospecting comes within visual distance from the boundary fence lines. The operation is not visible to from any tourist road.				
Extent	Site				Activity causing the impact
Duration	Long				Diamond prospecting operation.
Probability	Definite				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
	X	X	X	X	

ASPECT 15. SOCIO	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *increase in socio-economic activities*	Increase in Socio – economic activity at local level. The project in itself would ensure that approximately 9 workers would be assured of a job for some time. Job creation plays a major role in increasing the economic wellbeing of employees and their dependants in the Hay district. It may lead to unwelcome visitors in the vicinity of the prospecting activities. Strict access control must be kept and adhere to. Once all prospecting operations have ceased it would definitely have a negative impact.				The increase in socio-economic activity will add to the current growth and development in Hay already created by industry and prospecting.
Extent	Local				Activity causing the impact
Duration	Long				Additional employment opportunities created.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
	X	X	X	X	

ASPECT 15. SOCIO	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact – *impact on landowner*	The main impact on the landowners is visual impact and the small area of 0.6 ha that will not be available for agricultural activities at any given time for 4 years. Ground water levels may be impacted and must be measured and monitored.				The economic benefits in terms of investment and the delivery of services in the Northern Cape province will get an additional benefit from the project.
Extent	Regional				Activity causing the impact
Duration	Very Long				
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
	X	X		X	

ASPECT 16. INTERESTED &	IMPACTS	CUMULATIVE IMPACTS
Nature of the impact – *impact on I&AP's*	Impact of activities on I&AP's Temporary loss of utilization of the prospecting focus areas for agricultural purposes. The long-term benefits far out-weight the current benefits from the current use. Loss of cattle due to falling of animals in mine workings if not fenced. No negative impact is expected that could be appropriately mitigated, such as the eventual rehabilitation of the excavations.	
Extent	Local	Activity causing the impact
Duration	Long	
Probability	High	

Significance	High			
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure
	X	X		X

vii) **The positive and negative impacts that the proposed activity and alternatives will have on the environment and the community that may be affected**

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)[(h)](g)(vii)

In terms of the EIA regulations, consideration must be given to alternatives. Alternatives are different approaches and ways of meeting the need, purpose and objectives of a proposed activity. Alternatives may include a location site alternative, activity alternatives, processes or technology alternatives, temporal alternatives etc. the no-go alternative or option is also considered, as it provides the baseline against which the impacts or other alternatives may be compared.

There is not an alternative with regards to the position of the test pits. It will not be a static operation, the test pits will be made on a grid basis of 100m x 100m over the whole of the application area and where necessary 50m x 50m where the gravel outcrops. There is not an alternative for the location as this is the specific area where the applicant believes minerals can be found. The test pits will be made with a 30 ton excavator in order to demine if any diamond bearing gravel does occur. These wholes will be closed up immediately before the excavator move on to the next one.

After the test pits phase (phase 2) are completed can the applicant determine where more comprehensive testing of the gravel need to be done. Thus trenching will be used over specific area as identified during phase 2. In order to determine if the gravel does have diamonds the gravel needs to be taken out and tested, by putting it through the washing process. Trenching will be used to open the gravel in order to get a representative sample for testing. The trenches will be 10m x 60m x ± 5m (deep). In one trench ± 3000m³ (4800 ton) gravel will be exposed and tested with a 16 feet washing pan at a rate of 15m³ (24 ton) an hour. The total prospecting area is 1503hectares, thus it is anticipated that a total of 30 000m³ (48 000ton) will be tested by making trenches on different locations over the whole prospecting area, where the possibility of diamond bearing gravel were identified with the test pits (phase 2). The only alternative will be whether what method of processing to be used, wet puddle out of the pans, into open excavations (wet method) or puddle dam (dry tailings method).

The applicant, Electri City Mining (Pty) Ltd have opted for the wet puddle method as this ensure that excavations are backfilled with wet puddle and overburden concurrent with operations. Thus no separate processing area is needed. And no open voids that are left open. The washing pan is positioned next to the open trench and wet puddle flow back directly into the open excavation. Where after overburden is also pushed back and after the wet puddle has dried out sufficiently to make it safe to drive over the trenches will be leveled and topsoil will be replaced. This method ensures that concurrent rehabilitation is done and the applicant does not have to drive over long distances with overburden. It also ensure that there will be no long terns residual impact to the environment with a slimes dam that is left and which in turn becomes part of the environment.

The footprint of the actual disturbance on site does have the alternative where the puddle can be deposited onto a puddle dam or back into the excavations whereby the latter will have a

smaller footprint. The puddle dam method however can lead to quicker rehabilitation and re-use of the land for grazing as the excavations are backfilled with dry material and immediately rehabilitated. The usage of a puddle dam (Dry method) can have a positive impact on the environment as the excavations can be rehabilitated and grassed on a concurrent immediate basis. The usage of wet method will have a smaller footprint but it will take longer to fully rehabilitate and go back to grazing.

On geographical the dry method, it will be a little bit more negative as there will be a sloped area of 2 -3m high with closure. With wet method it will be flat. On heritage and cultural aspects there will be no effect of either of the methods. On biological the both the methods will be equal with very limited effects. On economical the dry tailings will have a bigger capital expense but as the rehabilitation can be finished quicker it will be financially better. On social aspect both these methods will have similar impacts as the same amount of workers will be used.

However, for this specific project, no alternatives have been investigated, with the exception of the no-go alternative. The reason for this being that the prospecting right is being applied for the sole purpose of prospecting *(Alluvial Diamonds & Diamonds in Kimberlite,)*. The no-go option entails the continuation of the current land use (mainly natural grazing) on the study site. The project will contribute towards providing jobs for current staff. Should the proposed project therefore not be authorized to proceed, it is anticipated that current employment opportunities will be terminated. The no-go option is therefore not a feasible option in this case, as it suggests that the mineral reserves should not be exploited and current employment opportunities should not materialize or be prolonged.

It is further foreseen that with responsible rehabilitation the agricultural land can again be utilized as grazing as it was pre-prospecting.

viii) The possible mitigation measures that could be applied and the level of risk

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)[(h)](g)(viii)

Refer to the results of consultation contained as **Appendix 2** for the issues that were raised by I&AP's and stakeholders during the review period of the Consultation phase, as well as the response to those issues made by the Environmental Assessment Practitioner.

The mitigation measures and technical management action plans which address potential impacts are discussed below.

Environmental Component	Geology
Environmental Management/Mitigation Measures/Action Plans/Commitments	
• No mitigation exists except to backfill the excavations with the rock waste material and fine tailings (puddle). • As prospecting progressed and the excavation has been back-filled, a certain amount of overburden material and topsoil would be placed on these areas. This will not restore the geology, but will mitigate the impact. • Planned, systematic and thorough prospecting of the mineral resource (Alluvial Diamonds & Diamonds in Kimberlite) should take place. • Optimal utilization of the mineral resource should take place within the boundaries of the prospecting terrain. • Strip, remove and store soil and overburden as far as practical in an orderly fashion and replace as far as possible on back-filled areas, in the reverse order once decision have been taken that no further prospecting would take place in a particular section or which might still be traversed by vehicles and disturbed in the process. Cognizance should be taken of the fact that bulk sampling would take place by means of an opencast prospecting method until such level is reach / cut-off point is reach where rehabilitation could begin. • Care must be taken that the removal of (Alluvial Diamonds & Diamonds in Kimberlite) deposits by means of earthmoving equipment is restricted to what is really necessary to achieve the objective.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Optimal exploration of the mineral resource in order to ensure to facilitate better rehabilitation planning. The overburden and topsoil (where available) must be replaced in a responsible and planned manner in order to achieve some conformity with the surrounding undisturbed area.	

Environmental Component	Topography
Environmental Management/Mitigation Measures/Action Plans/Commitments	
• All trenches should be back-filled with waste tailings (puddle) material and eventually overburden material, covered with a shallow layer of topsoil (if available). • Access to all active bulk sampling excavation areas should be controlled. The active bulk sampling area should be fenced off. The necessary warning signs should be put in place. All prospecting activities should be restricted to the fenced-off area. • Surface run-off control should be put in place at active trenches (preventing water from entering) and also overburden dumps in order to prevent the loss of growth medium on top of the dumps. Prospecting would be done according to a definite PWP (only disturbing an area that is really necessary). As part of the PWP the handling of tailings material (puddle), overburden material, construction of dumps and back-filling of trenches should also form part of it. Rehabilitation of the new topographical landscape in such a way that it would blend in with the surrounding landscape and allow normal surface drainage to continue. As soon as a section of the prospecting site would not be explored anymore it should be rehabilitated (planned and phased manner).	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Rehabilitation of the new disturbances topographical landscape in such a way that it would blend in with the surrounding landscape and allow normal surface drainage to continue. Rehabilitation in such a way that the new landscape features would be stable and would not pose any safety hazard to human and animal anymore.	

Environmental Component	Soil (topsoil & access roads)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Handling of topsoil as a natural resource: Any future expansion of the trenches or construction of infrastructure should be preceded by the removal of all available topsoil. The surface of any new areas to be disturbed must be kept to a minimum. All available topsoil/overburden material should be removed and stockpiled for rehabilitation purposes. **Access roads, etc:** The clearing of soil surface areas would be restricted to what is really necessary for the construction of infrastructure. Wherever possible all topsoil should be removed and stockpiled for rehabilitation purposes. Overburden material should also be stockpiled separately if practically possible. Topsoil and overburden material should be kept next to open excavations for easy backfilling and rehabilitation.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The topsoil removed in the site preparation process should be replaced during the rehabilitation exercise.	

Environmental Component	Soil (soil compaction)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Soil compaction: The prospecting operation should only be restricted to what is really required (demarcated area of exploitation) within the fenced-off area. **Access roads** towards the sites would be restricted only to the roads (exiting farm roads & roads established in consultation with the surface owner). No land would be disturbed unnecessarily. Prospecting & rehabilitation should be done in a well-planned manner (according to a PWP) and in the process ensuring that activities are only restricted to surface areas really required. Compaction of soil surface areas would be alleviated once rehabilitation of certain area starts. Certain roads would probably remain for access (in consultation with the surface owner). Those that would not be required would be ripped and rehabilitated.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Alleviation of compaction of soils would be done during rehabilitation of the prospecting terrain, including roads.	

Environmental Component	Soil (Soil erosion)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Soil Erosion: To take preventive steps against land disturbance like erosion. Implement and maintain cut-off trenches/berms to prevent erosion. **Re-vegetation of exposed soil surfaces** (man-made surfaces such as tamps overburden dumps, disturb surfaces in excavated sites, roads, etc) should happen as soon as a particular activity has ceased in order to act as a sufficient erosion prevention measure.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No soil erosion must be visible and no potential for soil erosion must be present at closure.	

Environmental Component	Soil (Soil contamination)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Potential for soil contamination: Vehicles to be inspected to ensure no oil and hydraulic fluid leaks occur. All oil spills on soil to be removed and bio-remediate immediately (certain commercial products are available such as Terrasorb or it could be rehabilitated by means of the application of fertilizer and turn with a spade from time to time in order to enhance the natural occurring soil microbial activity). No servicing of vehicles must occur except on a concrete floor or over PVC lined area in an area allocated for that. Training w.r.t pollution hazards and their impact on the environment must be given as part of induction training. An incidence register for this purpose must be kept. Drip trays must be available and used where emergency repairs is done.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No soil contamination must be visible or known before closure can be given.	

Environmental Component	Soil (Soil structure)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Change in Soil structure: Ensure that all available (if any) topsoil is carefully removed in different areas. The soil must also be compacted as backfilling is done. No unnecessary driving outside the active prospecting area is allowed due to soil compaction that may occur. Use organic material e.g. manure to restore the soil structure during rehabilitation (if available). Ensure that the rehabilitation plan makes provision for ripping of roads and spreading of organic material and that this is used during rehabilitation.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No compaction of any roads or any other area must be present during closure. If the soil structure is disturbed mitigation measures e.g. the use of organic material, lime and fertilizers must be implemented to restore the soil structure.	

Environmental Component	Soil (Soil fertility)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Soil fertility: Little can be done to preserve the moisture status of the soil once it is exposed. The soil must be used for rehabilitation as quickly as possible. The soil on the rehabilitated area must be analysed to determine the deficiencies and fertilizer and lime must be ploughed into the soil to restore its fertility, if necessary. Ensure that stockpiled soil is kept clean and where possible ensure that the topsoil is treated with organic material and fertilized. Do not use stockpiled soil for any other purpose but for rehabilitation. Do not use topsoil to construct roads. Ensure the rehabilitation plan makes provision for fertiliser. Make sure rehabilitated topsoil is analyzed in a laboratory. The type of fertilizer would depend on a soil analyses and fertilizer recommendation.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The soil must be fertile enough to sustain vegetation.	

Environmental Component	Land Capability
Environmental Management/Mitigation Measures/Action Plans/Commitments	
The disturbance of land must be restricted (kept to a minimum) to the planned fenced-off, active prospecting site only. Remove topsoil where it is available. Take care that roads needed are restricted to one entry to the area for prospecting purposes. If new land is used for roads to enter the area it must be done in consultation with the surface owner. All rehabilitation will be done according to the final rehabilitation plans after approval by the Department of Mineral Resources (DMR). Topsoil will be placed in areas where it was removed and the areas will be re-vegetated accordingly. Ensure that the rehabilitation plan is implemented.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Rehabilitated to the state that it is suitable for the predetermined and agreed land capability.	

Environmental Component	Land Use
Environmental Management/Mitigation Measures/Action Plans/Commitments	
The disturbance of land must be restricted (kept to a minimum) to the planned active, fenced-off prospecting site only. Remove topsoil where it is available. Take care that roads are the only areas used to enter the area for prospecting purposes. If new land is used for roads to enter the area it must be done in consultation with surface owner. All rehabilitation will be done according to the final rehabilitation plans after approval by the Department of Mineral Resources (DMR). Topsoil will be placed in areas where it was removed and the areas will be re-vegetated accordingly. Ensure that the rehabilitation plan is implemented.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The opencast section requires the land to be totally disturbed. The replacement of tailings material, overburden and topsoil would ensure that the land is able to support some grazing.	

Environmental Component	Vegetation
Environmental Management/Mitigation Measures/Action Plans/Commitments	
No mitigation exists except to replace the vegetation by reseeding of grasses and natural growth. Prospecting should be done in a well-planned manner (according to a PWP) and in the process ensuring that activities are only restricted to surface areas really required.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
During rehabilitation indigenous vegetation cover comprising of local plant species should be established in order to ensure a well-adapted sustainable plant cover that would be able to prevent erosion of the replaced topsoil on the disturbed prospecting site exposed surfaces, tailings dumps, etc.).	

Environmental Component	Vegetation
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Habitat change, loss of species, spread of alien and invasive species: No mitigation exists except to replace the vegetation by reseeding of grasses. Prospecting should be done in a well-planned manner (according to a PWP) and in the process ensuring that activities are only restricted to surface areas really required. ***Develop and implement an invasive and alien control programme to control the spread of weeds and other invasive species.*** Eradicate exotic weeds and invader species if it invades the terrain. All illegal invader plants and weeds shall be eradicated as required in terms of Regulation 15 & 16 of the Act on Conservation of Agricultural Resources, 1983 (Act no. 43 of 1983) which list the plants. An invasive and alien control programme must be implemented by the mine.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No invasive and alien species must be present after closure. A post-closure control program must also be implemented.	

Environmental Component	Vegetation
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Ensure that all roads on the prospecting site (utilized by prospecting vehicles) are daily sprayed with water to control dust. Site inspections to ensure the spraying are done.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No excessive dust must be present during the normal growth season after closure.	

Environmental Component	Wildlife (habitat)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Wildlife or wildlife habitat destruction /change / disturbance : To take care that no new or unnecessary destruction of habitats, other than the demarcated prospecting site should take place. **Restoration of habitat:** Ensure the rehabilitation plan is implemented.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The animal life habitat must be restored after decommissioning. Success will be measured against the extent to which the animals return to the area.	

Environmental Component	Wildlife (injury and death)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Injury and death to wildlife: Re-establish trees and grass cover as soon as possible during and after prospecting. Fence area off to ensure that no person can enter without permission. Ensure that the rehabilitation plan is compiled and executed. Keep incidence register on killings and disturbances.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The animal life habitat must be restored after decommissioning. Success will be measured against the extent to which the animals return to the area.	

Environmental Component	Wildlife
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Make game catching, traps, snares, poaching and any other unnecessary disturbance of animals a disciplinary offence. All staff must undergo basic environmental awareness lecture during induction training. Machine operators and drivers to undergo appropriate level of environmental impact training to ensure they understand their impact on the environment. Ensure all staff working on the opencast section undergo basic lecture during induction phase. Introduce the actions as listed above into disciplinary code as offence.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The post-closure phase must be suitable for further restoration of the newly man-made animal habitat. The area must be stable and acceptable for the return of animal- and plant life.	

Environmental Component	Surface Water (quality)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Change in surface water quality: Storm water control measures must be implemented to divert clean water away from the active prospecting site and keep contaminated water contained. Water control structures must be well designed and constructed to ensure a minimum down wash of topsoil. Vegetation disturbance must be as little as possible. All domestic waste must be collected in bins and taken off site to Griekwastad's license waste disposal site. All used oils and filters must be collected and responsibly recycled. The PWP must be strictly adhered to. Re-vegetation to be done as quickly as possible. Final re-vegetation to be done as per rehabilitation plan.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The post closure water run-off may in no circumstance impact negatively on the water quality.	

Environmental Component	Surface Water (quantity)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Change in surface water quantity: Once the area is rehabilitated the surface run-off will be restored and normal clean water run-off will end-up in the drainage system. Once the area is rehabilitated the normal surface run-off drainage will be restored according to rehabilitation plan. The disturbed surface area must be rehabilitated to ensure some normal drainage. Minimal run-off should end-up in trenches. Final rehabilitation will be done according to the final rehabilitation plans after approval by the Department of Mineral Resources.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Ultimately rehabilitation of the disturbed prospecting site and the construction of run-off control structures in a planned and phased manner would ensure normal drainage and stability of rehabilitated site.	

Environmental Component	Ground Water (quality)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Reduction of groundwater quality: Storm water control measures must be implemented to divert clean water away from the site and keep (silt) contaminated water contained. Vehicles to be inspected to ensure no oil and hydraulic fluid leaks occur. All oil spills on soil to be removed and bio-remediate immediately. No servicing of vehicles must occur except at the workshops. Training w.r.t pollution hazards and their impact on the environment must be given as part of induction training. Storage of fuel and oil should be done according to best practices, within a bunded area and in containers of which the integrity is sound. The prospecting processes will not introduce any harmful or toxic substances and the most likely sources of pollution to the groundwater system would be associated with the infrastructure and / or workshop area. The most likely contaminants is therefore nitrate and bacteria (from sewage / pit latrines), as well as hydrocarbons (from vehicle accidents, diesel storage and the workshop area). An incidence register for this purpose must be kept. Drip trays must be available and used where emergency repairs is done. All waste must be stored according to best practices and disposed at an authorized waste disposal facility.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Post water quality need to indicate a positive trend/improvement.	

Environmental Component	Ground Water (quantity)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Reduction of groundwater quantity, lowering of groundwater level: Water levels in the boreholes that are used for prospecting activities should be recorded monthly. Water volumes should be recorded continuously to ensure compliance with the water use authorization for abstraction.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Post water quality need to indicate a positive trend/improvement.	

Environmental Component	Air Quality
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Dust: The prospecting method will serve as mitigation measure because prospecting will limit dust to the active prospecting area (area where the excavator and the trucks are operating). Daily spraying of roads with water. Inspection should be done on a daily basis. If new roads are constructed, in coordination with surface owner, dust pollution must be mitigated by means of spraying the roads with water.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Dust count must be the same as before prospecting. Rehabilitation of the bulk sampling site would ensure that no dust is generated from exposed surfaces.	

Environmental Component	Noise
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Ensure the required silencers are placed on all engines and compressors. No mitigation to reverse hooters is allowed due to safety standards. Inspection of vehicles and machinery to ensure silencers are fitted. Ensure that a complaints register is created, managed and maintained. Vehicles and earthmoving equipment should be equipped with the necessary silencers and regularly maintained in a good working condition.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No noise attributed to prospecting will be generated from the site after closure anymore. During decommissioning and closure phase some earth moving equipment and trucks would be utilized for rehabilitation.	

Environmental Component	Archaeological and Cultural Sites
Environmental Management/Mitigation Measures/Action Plans/Commitments	
No graves on site. However, the potential occurrence of unmarked graves or subsurface finds not recorded during this survey can never be excluded, so it is advised that SAHRA and a qualified archaeologist are informed immediately if archaeological objects are uncovered.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No site of archaeological importance should be disturbed or damaged until the necessary permit from SAHRA has been issued.	

Environmental Component	Sensitive Landscapes
Environmental Management/Mitigation Measures/Action Plans/Commitments	
The two dry surface water runs must be excluded from any prospecting activities, whereas it may be for prospecting, water abstraction or traveling through or near it. All prospecting activities must be kept 100 m horizontally away from these two streams and its banks.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No surface water bodies, its flow or stream areas must be disturbed during the prospecting activities.	

Environmental Component	Visual Aspects
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Visual impact would be addressed by means of; * re-vegetation of disturbed areas with grasses; * removal of any temporary building, scrap, domestic waste, etc. that would otherwise contribute to a negative visual impact. Concurrent rehabilitation should be done simultaneously as prospecting activities progress.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No residual visual impacts will remain after closure. The terrain should blend in with the surrounding landscape.	

Environmental Component	Socio-Economics
Environmental Management/Mitigation Measures/Action Plans/Commitments	
There will be a very small increase in Socio – economic activity at local level, because of the size of this prospecting activity.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The economic development must deliver a multiplier effect that will contribute to the local economy long after closure.	

Environmental Component	Interested and Affected Parties
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Access control should always be a priority. Active prospecting site should be fenced off and also any deep water holes. If any problem should arise, meetings will be held with the landowners and affected parties to consult them on certain matters like permission to prospect and pollution. No prospecting should be conducted under or near Eskom power line (10 m distance should be kept) *(Permission of Inspector of Mines should be obtained.)*	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Not to be an economic, social or environmental liability to the local community or the state now or in the future. The company will ensure that the interest of all interested and affected parties will be considered.	

ix) The outcome of the site selection Matrix. Final Site Layout Plan

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(h)] (g)(ix)

As this is a prospecting application there will never be a final site layout as this will not be a static operation. The excavator will be moving over the application area on a grid basis in order to survey the entire prospecting area. Once phase 2 is completed and more in-depth investigation is necessary the trenches will be made, samples tested, backfilled and washing plant will be moved to the next position. Please see **Appendix 1(c)** for more detail.

x) Motivation where no alternative sites were considered

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)[(h)](g)(x)

Alternative is not applicable. There is not an alternative for the location as this is the specific area where the applicant believes minerals can be found. The only alternative will be whether what method of processing to be used, puddle into the pans (wet method) or puddle dam (dry tailings method). The footprint of the actual disturbance on site does have the alternative where the puddle can be deposited onto a puddle dam or back into the excavations whereby the latter will have a smaller footprint. The puddle dam method however can lead to quicker rehabilitation and re-use of the land for grazing as the excavations are backfilled with dry material and immediately rehabilitated.

The applied area is the specific area need for prospecting thus no alternative. The whole of the application will be prospected, but on a grid basis, thus it will only be a small area that will be affected ant any given time. The current land use can thus continue on the rest of the unaffected areas. The current land use is natural grazing. The option to explore the possibility for prospecting is already in itself an alternative land use. The applicant **Electri City Mining (Pty) Ltd.** is not interested in any other alternative land use over this land aside for the exploration of the said minerals, or any other activity, or method use other than prospecting for the said minerals in the conversional way, which is the most cost effective.

xi) Statement motivating the preferred site

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 2 – 2. (1)[(h)](g)(xi)

The prospecting operation will not be a static operation, the mobile plant will move as prospecting progress, thus the whole application is to determine a potential site for when the mining phase is reached. The feasibility of prospecting the diamond material from an environmental, social and economic perspective also plays a role.

(i) Plan of study for the Environmental Impact Assessment process

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(i)](h)(a)

i. Description of alternatives to be considered including the option of not going ahead with the activity

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(i)](h)(a)(i)

Alternative is not applicable. For this specific project, no alternatives have been investigated. The activities included in this application are determined by the location of the mineral reserves in the study area, and the proposed prospecting method to be employed as was assessed. The current land use is agricultural and is being utilized as grazing at present by the landowner.

The option to explore the possibility for prospecting is already in itself an alternative land use. The applicant, **Electri City Mining (Pty) Ltd.**, is not interested in any other alternative land use over this land aside of diamonds exploration, or any other activity, or method use other than prospecting for diamonds in the conversional way, which is the most cost effective.

The No-Go option entails the continuation the current land use (grazing) on the application area without exploiting the mineral reserves. The prospecting activities will contribute towards the achievement of providing employment opportunities for members of the surrounding communities, thus aiding socio-economic development. Should the project therefore not be authorized to proceed, the current employment opportunities will be terminated. Therefore, the No-Go alternative is not a feasible option in this case, as it suggests that the mineral reserves should not be exploited and current employment opportunities should not be prolonged. Alternative is not applicable for the application area. The

current land use is agricultural and is being utilized as mainly cultivation with small fallout areas of natural grazing by the landowner.

ii. Description of the aspects to be assessed as part of the environmental impact assessment process

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(i)](h)(a)(ii)

The aspects that will be assessed as part of the proposed project and its area include:

- Geology
- Soil Erosion
- Rehabilitation of previously disturbed areas
- Fauna [Wildlife/Wildlife habitat destruction]
- Changes is surface water quality
- Dust
- Noise
- Archaeological/Cultural Sites

Geology:

(*Alluvial Diamonds, Diamonds in Kimberlite*) deposits will be destroyed during the opencast prospecting operation.

During operation which will be for the next 4 years, the mineral resource (Alluvial Diamonds, Diamonds in Kimberlite) will be extracted from deposits. Waste rock material/overburden material is disposed off/backfilled in excavations as part of the backfilling process.

Soil erosion:

Due to the fact that certain surface areas would become compacted and this would lead to lesser infiltration of rainwater and more run-off that could cause erosion on bare disturbed surfaces. Erosion would always be possible until such time a vegetation cover is provided during rehabilitation phase.

Temporary loss of land capability to support grazing. The small area (0.6 ha) where the active prospecting activities occur (trenches, tailings dumps, stock piles, prospecting equipment) etc. will thus be temporary alienated, until the area is rehabilitated.

All trenches would be rehabilitated as part of the prospecting process during which trenches are back-filled. The rest of the application area will still be used by the landowner as agricultural land.

Rehabilitation:

This is a new prospecting operation and therefore will lose its land use to support grazing on a certain portion of the 1503 hectares during the next 4 years. Only a small portions of land (0.6 ha at a time) would be affected by the prospecting operation relation to the total prospecting right application area of 1503 hectares. All trenches would be rehabilitated as part of the prospecting process during which excavations are back-filled.

Wildlife or wildlife habitat destruction/change / disturbance:

Increase silt load. Clearing topsoil for footprint areas can increase infiltration rates of water to the groundwater system and decrease buffering capacity of soils to absorb contaminants from spills on surface. This can increase the risk of contamination of the groundwater system (increases aquifer vulnerability).

Change in surface water quality:

Spillages from vehicles and also surface water run-off that is not adequately diverted away from the active prospecting excavations could end-up in the excavations creating problems regarding water quality and hindering the prospecting process.

Surface run-off from active prospecting sites (overburden dumps & tailings dam/dump) if not adequately contained on site could end-up in the adjacent undisturbed natural veld.

If the natural surface run-off is not adequately diverted in the case of the dry-water course area, prospecting sections it could become silted-up.

The law requires the responsible storage; collection and recycling of used oil within the strict compliance requirements of the Waste Act. Used oil is generated by a wide variety of sources including: machinery, motor vehicles, mining equipment and ect. It is important that all used oil is collected and responsibly recycled.

Dust:

Dust will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen & washing pans) and on gravel/dirt/farm roads. The processing of the gravel is a wet process and therefore minimum dust is generated.

Noise:

Dust will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen & washing pans). The mine itself is located in rural landscape. The impact would be of more importance regarding the direct worker environment that should adhere to the requirements in terms of the Mine Health and Safety Act.

Archaeological/Cultural Sites:

The terrain is not archaeologically vulnerable. It is unlikely that the proposed development will result in any significant archaeological impact at the site. No graves were identified on site.

iii. Description of aspects to be assessed by specialists

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(i)](h)(a)(iii)

As this is only a prospecting application and no sensitive areas or heritage areas of significance were noted on the application area there will be no specialist studies. All impacts noted will be mitigated.

iv. Proposed method of assessing the environmental aspects including the proposed method of assessing alternatives

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(i)](h)(a)(iv)

A thorough foot survey and site inspection was done by the EAP and further visit will be done before compiling the EIA. Each aspect was then assessed individually with the 24 year experience of the EAP.

v. The proposed method of assessing duration significance

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(i)](h)(a)(v)

The assessing of the duration is done on hand of the different phases as described in the Prospecting Works Program (PWP) which is also descried under ***Point ii) h)***. The significance is assessed form experience and from the actual situation on the specific site. Please see ***Point vi)*** for detail.

vi. The stages at which the competent authority will be consulted

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(i)](h)(a)(vi)

Consultation with all competent authorities will be done. The Scoping Report was send to them from the office of the EAP. This will also be done for the EIAr/EMP, whereby a copy of the document will be circulated to all competent authorities and their comment or concerns will be forwarded to DMRE for further attention.

vii. Particulars of the public participation process with regard to the Impact Assessment process that will be conducted

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(i)](h)(a)(vii)

1. Steps to be taken to notify interested and affected parties.
   - ✓ The landowner and neighbours was consulted personally and through a letter that was given to them by hand.
   - ✓ A site notice was put up at the entrance to the application area.
   - ✓ A notice for the both the Scoping and EMP report was published in the local DFA newspaper to inform the general public.
   - ✓ Copies of the Scoping Report (was) and the EMPr/EIA will be circulated to all the competent authorities for comments.

   Please see **Table 9** for more detail on public participation process.

2. Details of the engagement process to be followed.
   The process as described by NEMA for Environmental Authorization was followed. See **Table 9** for the identification of Interested and Affected Parties to be consulted with. The landowners (Louis Botma Eiendomstrust) and the direct neighbours was consulted personally and through written letters that will be given to them. A site notice was placed at the entrance to the application area. With this site notice all passers-by are requested to submit any written comments to be forwarded to the consultant (still awaiting response). A notice was published in the DFA Newspaper of 26th November 2019 for the Scoping Report and again on the 11th February 2022 for The EMP/EIA, response is also awaited. See proof of consultation under **Appendix 2**. The Public Participation process is still on going and the documents will be updated as more feedback is received back. The EIAr/EMP was send to all relevant State Departments for evaluation. No comments were received.

3. Description of the information to be provided to Interested and Affected Parties.
   A copy of the map, and Prospecting Works Programme and draft EIAr/EMP was handed to the neighbours and landowners. A copy of the Scoping Report was send to the State Departments and a copy of the EMP/EIA will also be circulated to their offices.

viii. Description of the tasks that will be undertaken during the environmental impact assessment process

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(i)](h)(a)(viii)

Site inspection by foot survey, discussions with applicant and landowner as well as discussions with competent authorities where necessary. Completion of the EIA template.

ix. Measures to avoid, reverse, mitigate, or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored.

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix2 – 2. (1)[(i)](h)(a)(ix)

This will be kept in mind with the site inspection where each impact will again be evaluated and the mitigation and management thereof will be confirmed on site. The risk of each impact will be evaluated and if any residual risks the management thereof.

i) Description of process undertaken to identify, assess and rank the impacts, the activities and associated structures and infrastructure will impose on the development footprint

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(i)

(i) & (ii) Description of all environmental issues and risk and assessment of significance of each issue

NAME OF ACTIVITY	POTENTIAL	ASPECTS AFFECTED	PHASE	SIGNIFICANCE	MITIGATION TYPE	SIGNIFICANCE if mitigated
Prospecting for diamonds	1.1 Removal of the alluvial gravel up to 5m. Disturbance of 0.6 hectare at any given time.	Geology & soil	Operational	High -	The impact will be mitigated by backfilling and sloping the sides and stabilizing the soil to prevent erosion	Low +
	1.2 Change in landform. The entire prospecting area will be lowered by 5m and normal surface drainage will be disturbed at this specific point. The pit will be backfilled	Topography	Operational and closure	Moderate -	The pit will be backfilled. The sides will be sloped and top soiled and vegetated. A surface water cut-off trench should be put in place around the active prospecting site in order to prevent surface run-off water on the prospecting site. Rehabilitation of the new sloped landscape in such a way that it would blend in with the surrounding landscape.	Moderate +
	1.3 Stripping of all available topsoil and stockpiled. Stockpile and plant area of 0.6 hectare at any given time.	Soil	Construction and Operational	Low -	Any area on the prospecting area where disturbance will take place the top soil must be removed and stockpiled for rehabilitation purposes in a demarcated area.	Low +
	1.4 Soil erosion: Due to the fact that certain surface areas would become devoid of any vegetation cover and compacted this would lead to lesser infiltration of rain water and more run-off	Soil	Construction	Low-	To take preventive steps against erosion. Implement and maintain cut-off trenches and or berms around the prospecting area to prevent water entering that can cause erosion. Concurrent rehabilitation and re-vegetation of mined areas must happen as soon as the particular area	Low +

	1.5 Land capability and land use. Loss of land to support grazing.	Land capability & Land use	Operational and closure	Low-	As this is only a very small area of 0.6 hectare, the impact is not so big. As the excavation will be backfilled and vegetated the rehabilitated area must be treated as sensitive when grazed as overgrazing can trigger erosion and infiltration of declares weeds.	
	1.6 Generation of dust by excavating and vehicle movement	Air quality	Operational	Low -	The prospecting method will serve as mitigation measure because it will limit dust to the active prospecting area, where the excavator and trucks operating. Daily spraying of the roads with water.	
	1.7 Waste handling, which includes but are not limited to overburden from excavations, domestic waste and hazardous waste	Water & Soil	Construction, Operational & Closure	Low – to Medium-	All overburden generated by the opening up of pits and trenches must be backfilled back into the places it was taken out and in the reverse order it was taken out. Domestic waste must be collected on site and taken off site on a weekly basis. All bid services to vehicles must be done off site. Minor services must be done over PVS sheeting it order to prevent any hazardous fluids ending up in adjacent soils or water ways. Hazardous was must be collected on site and taken to license hazardous waste disposal sites.	

j) An assessment of each identified potentially significant impact and risk

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(j)

NAME OF ACTIVITY	POTENTIAL IMPACT	(i) CUMULATIVE IMPACTS	(ii) SIGNIFICANCE	(iii) EXTEND AND DURATION	(iv) PROBABILITY OF THE IMPACT OCCURRING	(v) DEGREE TO WHICH IMPACT/RISK CAN	(vi) DEGREE TO WHICH IRREPLACEABLE	(vii) DEGREE TOWHICH IMPACT/RISK CAN
Prospecting for diamonds	1.1 Removal of the alluvial gravel up to 5m. Disturbance of 0.6 hectare at any given time.	None	High -	At open excavations 4 years	High	Impossible	Not reversible at all	Not mitigated
	1.2 Change in landform. The entire prospecting area will be lowered by 5m and normal surface drainage will be disturbed at this specific point. The pit will be backfilled	Topography on adjacent farms if prospecting is also practised	Moderate -	4 years	Moderate	Possible	Partly reversible	Fully Mitigated
	1.3 Stripping of all available topsoil and stockpiled. Stockpile and plant area of 0.6 hectare at any given time.	Localized	Low -	4 years	High	Impossible	Partly reversible	Fully Mitigated
	1.4 Soil erosion: Due to the fact that certain surface areas would become devoid of any vegetation cover and compacted this would lead to lesser infiltration of rain water and more run-off that could cause erosion on bare disturbed areas and side slopes.	Localized	Low-	4 years	Low	Possible	Reversible	Fully mitigated
	1.5 Land capability and land use. Loss of land to support grazing.	If old disturbances not rehabilitated.	Low-	4 years	Low	Possible	Reversible	Full mitigated
	1.6 Generation of dust by excavating and vehicle movement	Air quality	Low -	4 years	Low	Possible	Reversible	Fully mitigated.

	1.7 Waste handling, which includes but are not limited to overburden from excavations, domestic waste and hazardous waste.	Water & Soil	Low – to Medium-	4 years	Low	Possible	Reversible	Fully mitigated

k) Summary of findings and recommendations of any specialist reports

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(k)

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THATHAVEBEEN INCLUDED IN THE EIA REPORT	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED.
None			

The bulk sampling will not be deeper than 5m thus groundwater table will not be intersected. With the site visit there were no environmental sensitive area identified. All the impacts identified can be mitigated and will not be significant. This will only be a prospecting for short period.

l) Environmental impact statement

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(l)(i)(ii)(iii)

(i) **Summary of the key findings of the environmental impact assessment;**

The prospecting operation is definitely going to have an impact on the environment. The main impact relates to topography, geology, soil, vegetation, and land use and land capability. The (*Alluvial Diamonds & Diamonds in Kimberlite*) resource will be prospected over a period of 4 years. The existing land-use is utilized mainly as natural grazing. This is a small operation and for the next 4 years only a small portion of the farm will be temporarily alienated.

The conservation of topsoil is of utmost importance and therefore in order to ensure a sustainable land use again on the 0.6 ha, the top at least 30 cm topsoil need to be removed prior to prospecting of the underlying alluvial gravel (up to 5 m depth). This will be used again as growth medium during the rehabilitation phase of the excavations. Topsoil will be stored in berm walls on the border of the excavation in order to divert any surface run-off during a rainfall event. Other environmental impacts relates to the day to day operation that could easily be managed, such as dust and noise.

(ii) **Final Site Map**

As this is a prospecting application there will never be a final site layout as this will not be a static operation. The excavator will be moving over the application area on a grid basis in order to survey the entire prospecting area. Once phase 2 is completed and more in-depth investigation is necessary the trenches will be made, samples tested, backfilled and washing plant will be moved to the next position. Attach **as Appendix 1 (c) –** Mine Infrastructure and Activity Map.

(iii) **Summary of the positive and negative impacts and risks of the proposed activity and identified alternatives**

The site is selected in such a way that farming will still be possible on the rest of the farm. The loss of land use and land capability will be temporary as the site will be rehabilitated in such a way that it allows the establishment of a grass cover again. The rest of the farm will still be continued to be used for grazing for cattle. Although this is small (*Alluvial Diamonds & Diamonds in Kimberlite*) prospecting operation it would also add to the increased economic activity within the farming and exiting mining community around Hay. Jobs for 9 permanent laborers will be created. Negative impacts on the area are expected to be temporary and can be mitigated to a large extent if the recommendations of the EMP are adhered to e.g. rehabilitation. No concerns have been raised as yet by any I & AP. The specific occurrence of the *Alluvial Diamonds & Diamonds in Kimberlite* deposit dictates the selection of the specific prospecting site.

m) Based on the assessment and where applicable, recommendations from specialist reports, proposed impact management objectives and the impact management outcomes for inclusion in the EMPr;

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(m)

The main closure objective of **Electri City Mining (Pty) Ltd.** is to rehabilitate the entire prospecting site in such a way to ensure that the new man-made topographical landscape would blend in with the surrounding landscape, not pose a safety hazard to humans and animals, while at the same time allow for alternative land uses. Establish a self-sustaining and stable vegetation cover in order to mitigate the visual impact, to control erosion and to create some habitat for animals. The rehabilitated environment also needs to be aesthetically acceptable according to the principle of BPEO. The applicant will ensure that the Operation/Sites are:

- Neither a danger to public health and safety nor to animal health and safety;
- Not a source of any pollution;
- Stable (ecological and geophysical);
- Rehabilitated to the state that is suitable for the predetermined and agreed land use (grazing);
- Compatible with the surrounding biophysical environment;
- A sustainable environment;
- Aesthetically acceptable;
- Not an economic, social or environmental liability to the local community or the state now or in the future.

n) Final proposed alternatives

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(n)

As mentioned before the only alternatives will be the no go option as the application is not interested in any alternative over this property beside for the prospecting for Diamonds. Where is also no a preferred of alternative site selection as this will be a prospecting operation thus the whole of the application area will eventually be prospected.

o) Aspects for inclusion as conditions of Authorisation

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(o)

None

p) Description of any assumptions, uncertainties and gaps in knowledge

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(p)

None

q) Reasoned opinion as to whether the proposed activity should or should not be authorized

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(q)

Reasons why the activity should be authorized or not

This activity will have only low and very low impacts and no significant impacts were identified. No concerns were raised by the interested parties. These prospecting activities will have no significant impacts on them or their surrounding environment.

Conditions that must be included in the authorization

None

r) Period for which the Environmental Authorization is required

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(r)

4 years

s) Undertaking

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(s)

The Environmental Management Programme will, should it comply with the provisions of section 39 (4) (a) of the Act and the right be granted, be approved and become an obligation in terms of the right issued. As part of the proposed Environmental Management Programme, the applicant is required to provide an undertaking that it will be executed as approved and that the provisions of the Act and regulations thereto will be complied with.

UNDERTAKING BY EAP TO THE CORRECTNESS OF THE INFORMATION

UNDERTAKING

I, H.M. Erasmus, the undersigned and duly authorised thereto by DERA Omgewingskonsultante (PTY) Ltd hereby confirm the inclusion of comments from stakeholders, inclusion of specialist recommendations where applicable and all information provided to the interested and affected parties a true reflection of this document.

Signed at Klerksdorp on this day 11th February 2022.

.....

Signature of EAP

t) Financial Provision

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(t)

In total there will be 10 trenches (0.6ha) where it is taken on worst case scenario that 10 trenches of 0.6ha will be open at any given time and 0.4 ha will be used for the plant area. According to the DME Quantum Calculator (2020) the rehabilitation was calculated to be R 218'403.51.00. See quantum calculation attached as **Appendix 4**.

u) Indicate any deviation from the approved Scoping Report

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(u)

(i) The same methodology was used for determining the significance of the potential environmental impacts and risks with no deviation.

(ii) No deviation.

v) Any specific information required by the competent Authority

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(v)

No specific information by Authority.

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

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 3 – 3. (1)(w)

There are no alternatives, as the application area applied for is the area where the applicant believes is potential for alluvial gravel deposits.

PART B

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

1) Environmental management programme

a) Details of the EAP

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(a)

Name of the Practitioner: DERA Environmental Consultants (Pty) Ltd.
Ms HM (Esna) Erasmus
Tel No.: 018-468 5355
Fax No. : 018 011 3760
E-mail address:dera.office@dera.co.za

The EAP Ms HM (Esna) Erasmus (maiden name Claase) has a National Diploma in Agriculture Resource Utilization and a Baccalaureus Technologiae degree in Agricultural Management. She also completed the subjects for her Master Degree in Environmental Analysis & Management at NWU.

See **Figure 1** & **Figure 2** for copies of his qualifications and CV.

b) Description of the Aspects of the Activity

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(b)

Phase	Activities	Biophysical environment to be impacted upon
1 – Geological surveys	Noninvasive - no physician impact on the environment	None
2 – Test pits	Clearing of area to be investigated. Stripping of topsoil and vegetation layer. Excavation of overburden. Excavation of underlying mineral and investigation of underlying gravel layer.	Geology – disturbed as a result of the excavation of test pits. Excavation of the mineral sample in order to investigate for presence of mineral applied for. Topography – creation of small heaps, but will be closed up before the excavator move on to the position of the next pit. Topsoil and plant cover to be stripped and stored for rehabilitation. Mixture of soil layers and placing it on side of pit. Air quality - dust accumulation because of earth moving equipment will only be around site. Noise – caused by excavator movement but because of extent of application area this will fade away. Surface water source – will not be affected as long as prospecting activities stay away from these water bodies. Ground water – no impact is anticipated. Wildlife – animal life will move away as a result of the noise associated with excavation of gravel. Small rodents/animals may be affected if their nesting habitats are over the areas to be excavated.
3 – Trenching	Clearing of area to be investigated. Stripping of topsoil and vegetation layer. Excavation of overburden. Excavation of underlying mineral and investigation of underlying gravel layer.	Geology – disturbed as a result of the excavation of trenches. Excavation of the mineral sample in order to investigate for presence of mineral applied for. Topography – creation of overburdens heaps, but will be closed up before the excavator move on to the position of the next trench. Topsoil and plant cover to be stripped and stored for rehabilitation. Mixture of soil layers and placing it on

		side of pit. This layer must be used as final layer after backfilling because it terrain the seed mixture that will help with re-establishment of vegetation layer. Air quality - dust accumulation because of earth moving equipment will only be around site. Cause by excavation of topsoil and subsoil layers. Movement of prospecting vehicle and equipment. Noise – caused by excavator movement but because of extent of application area this will fade away. Surface water source – will not be affected as long as prospecting activities stay away from these water bodies. Possible pollution by domestic and hazardous waste if it is not collected/stored responsibly and removed for site on a regular basis. Ground water – water will be required for dust suppression on prospecting roads and are required as part of the washing process to test the mineral. Water will be pump back into open trenches as part of the wet tailings (puddle). There will be no chemical used as part of the washing process. The water that will be used will result in the fine being suspended solids, but this will be pumped back into the excavations as part of backfilling. It will settle and together with the water will actually promote re-vegetation in these dry arid areas. Possible pollution by domestic and hazardous waste if it is not collected/stored responsibly and removed for site on a regular basis. Wildlife – animal life will move away as a result of the noise associated with excavation of gravel. Small rodents/animals may be affected if their nesting habitats are over the areas to be excavated. Prospecting machine operators need to be sensitizing to habitats and move position of trenches in order to accommodate and safe nesting habitats of animals. Land- use /capability – will be affected over the areas where trenches area made and will be unavailable for agricultural practices till such time as the area have been rehabilitated and vegetation cover has re-establish. This will represent about ...% of application area at any given time. Visual impact – prospecting activities will only really be visible to the landowner and perhaps to neighbours if prospecting activities come with sight of the boundary fences.

c) Composite Map

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(c)

As this is a prospecting application there will never be a final site layout as this will not be a static operation. The excavator will be moving over the application area on a grid basis in order to survey the entire prospecting area. Once phase 2 is completed and more in-depth investigation is necessary the trenches will be made, samples tested, backfilled and washing plant will be moved to the next position. Attach as **Appendix 1 (c)** – Mine Infrastructure and Activity Map.

d) Description of Impact management objectives including management statements

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(d)

i) Planning and design

The main closure objective of **Electri City Mining (Pty) Ltd.** is to rehabilitate the entire prospecting site in such a way to ensure that the new man-made topographical landscape would blend in with the surrounding landscape, not pose a safety hazard to humans and animals, while at the same time allow for alternative land uses. Establish a self-sustaining and stable vegetation cover in order to mitigate the visual impact, to control erosion and to create some habitat for animals. The rehabilitated environment also needs to be aesthetically acceptable according to the principle of BPEO. Another main objective is to manage the surface water in such way that an acceptable water standard is achieved when a closure certificate is issued. As this area was disturbed before there is not top soil available on all the areas but on the non-disturbed area all available top soil will be stripped and stockpiled.

Electri City Mining (Pty) Ltd. will ensure that the Operation/Sites are:

- ✓ Neither a danger to public health and safety nor to animal health and safety;
- ✓ Not a source of any pollution;
- ✓ Stable (ecological and geophysical);
- ✓ Rehabilitated to the state that is suitable for the predetermined and agreed land use;
- ✓ Compatible with the surrounding biophysical environment;
- ✓ A sustainable environment;
- ✓ Aesthetically acceptable;
- ✓ Not an economic, social or environmental liability to the local community or the state now or in the future.

Electri City Mining (Pty) Ltd. will furthermore:

- ✓ Ensure that the physical and chemical stability of the rehabilitated site will be such that risk to the environment is not increased by naturally occurring forces to the extent that such increased risk cannot be contended with by the installed measures;
- ✓ Subscribe to the optimal exploitation and utilization of South Africa's mineral resources (*Diamonds (Diamonds Alluvial & Diamonds in Kimberlite*;
- ✓ Ensure that the prospecting site is closed efficiently and cost effectively.
- ✓ Ensure that the operation is not abandoned but closed in accordance with the relevant requirements;
- ✓ Ensure that the interest of all interested and affected parties will be considered;
- ✓ Ensure that the all-relevant legislation regarding mine closure will be adhered to, and all relevant application procedures followed.

ii) Pre-construction activities

Clearing of vegetation and stockpiling of top soil

Iii) Construction activities

Electri City Mining (Pty) Ltd. will ensure that the Operation/Sites are:

- ✓ Neither a danger to public health and safety nor to animal health and safety;
- ✓ Not a source of any pollution;
- ✓ Stable (ecological and geophysical);
- ✓ Rehabilitated to the state that is suitable for the predetermined and agreed land use;
- ✓ Compatible with the surrounding biophysical environment;

- ✓ A sustainable environment;
- ✓ Aesthetically acceptable;
- ✓ Not an economic, social or environmental liability to the local community or the state now or in the future.

iv) **Rehabilitation of environment after construction and post closure**

The main closure objective of **Electri City Mining (Pty) Ltd.** is to rehabilitate the entire prospecting site in such a way to ensure that the new man-made topographical landscape would blend in with the surrounding landscape, not pose a safety hazard to humans and animals, while at the same time allow for alternative land uses. Establish a self-sustaining and stable vegetation cover in order to mitigate the visual impact, to control erosion and to create some habitat for animals. The rehabilitated environment also needs to be aesthetically acceptable according to the principle of BPEO. Another main objective is to manage the surface water in such way that an acceptable water standard is achieved when a closure certificate is issued.

As this area was disturbed before there is not top soil available on all the areas but on the non-disturbed area all available top soil will be stripped and stockpiled.

v) **If relevant, operation activities**

Not relevant

e) Impact Management Outcomes

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(f)(e)

ACTIVITY	POTENTIAL IMPACT	ASPECTS AFFECTED	PHASE	MITIGATION TYPE	STANDARD TO BE ACHIEVED
1.Excavations for alluvial gravel	1.1 Removal of the gravel up to 5 m	Geology & soil	Operational	The impact will be mitigated by backfilling and sloping the sides of the excavation and stabilizing the soil to prevent soil erosion.	Stable slopes that can sustain erosion without excessive erosion.
	1.2 Change in landform. The entire prospecting area will be lowered by 5m and normal surface drainage will be disturbed at this specific point. The pit will be backfilled	Topography	Operational and closure	The side of pit will be sloped and the soil stabilized to prevent erosion. A surface water cut-off trench should be put in place around the active prospecting site i order to prevent surface water on the prospecting site. Rehabilitation of the new sloped landscape in such a way that it would blend in with the surrounding landscape.	Gentle stable slopes.
	1.3 Stripping of all available topsoil and stockpiled	Soil	Construction and operational	The top soil must be removed before any disturbance take place. The top soil must be removed and stockpile in a demarcated area for rehabilitation purposes.	Enough topsoil for rehabilitation to ensure sustainable vegetation.
	1.4 Soil erosion due to the fact that certain surface areas would become devoid of any vegetation cover and compacted. This would lead to lesser infiltration of rain water and more run-off that could cause erosion on bare disturbed areas and side slopes.	Soil	Construction and operational	To take preventive steps against erosion. Implement and maintain cut-off trenches and or berms around the prospecting area to prevent water entering that can cause excessive erosion.	No excessive erosion that cannot be stabilized.
	1.5. Loss of Land capability & land use.	Land capability & land use	Operational and closure	As this is only a very small area of 0.6 hectare, the impact is low. As the sides will be sloped and vegetated, the rehabilitated area	Sustainable rehabilitated area.

				must be treated as sensitive when grazed as overgrazing can trigger erosion and infiltration of declared weeds.	
	1.6 Generation of dust by excavating and vehicle movement	Air quality	Operational	The generation of dust will only be localized at the prospecting site. Daily spraying of roads with water	No excessive dust that can be harmful to the environment and humans.

f) Description of Proposed Impact Management Actions

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(f)

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
Excavations for alluvial gravel	1.1 Removal of the gravel up to 5 m	The bulk of the material removed will be washed and the puddle back to the excavation. The impact will be mitigated by backfilling the excavation and stabilizing the soil to prevent soil erosion.		
	1.2 Change in landform. The entire prospecting area will be lowered by 5 m and normal surface drainage will be disturbed at this specific point. The pit will be backfilled	The pit will be backfilled and the soil stabilized to prevent erosion. A surface water cut-off trench should be put in place around the active prospecting site in order to prevent surface water on the prospecting site. Rehabilitation of the new rehabilitated landscape in such a way that it would blend in with the surrounding landscape.		
	1.3 Stripping of all available topsoil and stockpiled	The top soil must be removed before any disturbance take place. The top soil must be removed and stockpile in a demarcated area for rehabilitation purposes		
	1.4 Soil erosion due to the fact	To take preventive steps against		

	that certain surface areas would become devoid of any vegetation cover and compacted. This would lead to lesser infiltration of rain water and more run-off that could cause erosion on bare disturbed areas and side slopes.	erosion. Implement and maintain cut-off trenches and or berms around the prospecting area to prevent water entering that can cause excessive erosion.		
	1.5 Loss of Land capability & land use	As this is only a very small area of 0.6 ha, the impact is low. As the sides will be sloped and vegetated, the rehabilitated area must be treated as sensitive when grazed as overgrazing can trigger erosion and infiltration of declared weeds.		
	1.6 Generation of dust by excavating and vehicle movement	The generation of dust will only be localized at the prospecting site. Daily spraying of roads with water		

g) Method of monitoring the implementation of impact management actions

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(g)

Monitoring by daily checks by manager.

h) Frequency of monitoring the implementation of impact management actions

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(h)

Report Monitoring will be done continuously and annual Audit

i) Indication of person responsible for implementation of the impact management actions

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(i)

The applicant

j) Time periods within which actions must be implemented

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(j)

The rehabilitation liability will be reviewed annually and a Performance Assessment report will be submitted annually.

k) Mechanisms for monitoring compliance with the impact management actions

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(k)

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
Prospecting site/Soil	Possible spillages of petrochemicals. Stripping of topsoil	Checking for spillages on daily basis. Checking correct stripping and stockpiling of topsoil	Manager and Applicant	Daily checking and reporting with Performance Assessment
Prospecting site/Topography	Concurrent backfilling of excavations.	Checking stability of slope and erosion preventive measures	Manager and applicant	Quarterly
Prospecting site/Air quality	Dust pollution from prospecting activities.	Regular wetting of roads and stockpile area where loading take place.	Manager and applicant	Daily
Prospecting site	Chemical toilet	Make sure that it is used and hygienic.	Manager and Applicant	Weekly.

l) Program for reporting on compliance

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(l)

An EMP Performance Assessment will be submitted to the Management and the DMR on an annual basis.

m) Environmental Awareness Plan

(i) Manner in which the applicant intends to inform his or her employees of any environmental risk which may result from their work

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(m)

Electri City Mining (Pty) Ltd. will contract DERA Environmental Consultants to inform the employees after the EMP was approved.

The following guidelines will be used:

- ✓ Communication
- ✓ Urge
- ✓ Leadership
- ✓ Teamwork
- ✓ Understanding
- ✓ Recognition
- ✓ Empowerment (CULTURE)

(ii) Manner in which risks will be dealt with in order to avoid pollution or the degradation of the environment.

The biggest risks will be the degradation of soil/ land capability if the top soil is not handled correctly. The risks of soil pollution by spillages of fuel and oil will be managed on a daily basis checking for leaks on equipment and proper storage of oil and fuel. Concurrent proper rehabilitation of the excavations will ensure that pre-mining land capability can be restored.

The main closure objective of **Electri City Mining (Pty) Ltd.** is to rehabilitate the entire prospecting site in such a way to ensure that the new man-made topographical landscape would blend in with the surrounding landscape, not pose a safety hazard to humans and animals, while at the same time allow for alternative land uses. Establish a self-sustaining and stable vegetation cover in order to mitigate the visual impact, to control erosion and to create some habitat for animals. The rehabilitated environment also needs to be aesthetically acceptable according to the principle of BPEO. Another main objective is to manage the surface water in such way that an acceptable water standard is achieved when a closure certificate is issued. As this area was disturbed before there is not top soil available on all the areas but on the non-disturbed area all available top soil will be stripped and stockpiled. The risks will be dealt with by proper management actions as described in 1d

n) Specific information required by the Competent Authority

In term of NEMA – EIA Regulations No. 326 of 7 April 2017 – Reg. 21, Appendix 4 – 1. (1)(n)

The quantum for rehabilitation liability will be reviewed with the performance assessment on annual basis.

Table 11: Monitoring Plan

Action	Frequency	Method	Period
1.Monitoring of perimeter fence	Monthly and following any heavy rainfall.	Foot or vehicle patrol. Record	Until closure
2.Monitoring of re-vegetation Mined out and rehabilitated areas Leveled and Rehabilitated Dumps Mine residue dam walls Old roads Covered over waste pits Rehabilitation plots	Every 6 months	Foot inspection Initiate set up of test plots Photograph. Transect / Quadrant Get consultants in if necessary.	Until closure
3.Monitoring of erosion Roads Mine residue dam walls Rehabilitated mined out areas Dumps Pumps and pipelines Any other areas	Every 6 months and following any heavy rainfall	Visual inspection Walk over rehab. Areas Drive along roads. Check pipelines and pumps: mine residue dams, dumps. Photographic records.	Until closure
4. Monitoring of alien plants over the whole site.	On-going until under control - then every 6 months.	Visual inspection on foot patrol. Map presence of invasive plants. Plan removal, remove and document area covered on monthly basis. Verify Photograph.	On-going until closure
5. Monitoring of Water Quality from selected points	Every 6 months	Build up database and graph the results. Compare with limits and take action on non-conformances.	Until closure.
6. Monitoring of all Rehabilitation Areas. Check compliance with gradients and variation in topography	Every 6 months.	Survey- map new rehabilitated areas. Plot on map and calculate area treated, Get rehab consultants in if necessary.	Until closure.
7. Monitoring of stability of mine Residue dams and water Storage facilities.	Monthly and summarize every 6 months	Follow specifications in mandatory code of practice for puddle dams	Until closure
8.Monitoring of disposal of metal scrap, old oil, oil filters, old oil drums, oily cloths, batteries, fluorescent tubes, tires and contaminated soil (Hazardous waste)	Monthly and summarize every 6 months.	Record each load sent off the site. Give used oils to Oilkol Ensure safe disposal certificates are obtained from suppliers if the material is given back to them.	Until closure.
9.Monitoring of maintenance of general waste disposal	All loads of waste to be recorded and quantity extrapolated. Covering of waste pit - Monthly.	Running total of loads of waste taken Record of waste taken to Bloemhof waste disposal site Keeping record of waste taken to disposal site	Until closure

10.Monitoring of condition of septic tanks	Every six months	Visual inspection. Record condition.	Until closure
11. Monitoring of condition of bunded Areas around diesel fuel tanks, Refueling area, old oil tank; and underground petrol tank.	Every six months.	Visual inspection	Until closure
12. Monitoring of water use.	Monthly	Record total water use and water use at different plants by recording flow meters. Ensure compliance with license.	Until closure

2) UNDERTAKING

The Environmental Assessment Practitioner

I, **H.M. Erasmus** declare that –

General declaration:

- I act as the independent environmental practitioner in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favorable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realize that a false declaration is an offence in terms of regulation 71 and is punishable in terms of section 24F of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2010;
- I have a vested interest in the proposed activity proceeding, such vested interest being:

_____

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. ☐

Signature of the environmental assessment practitioner

DERA Omgewingskonsultante (Pty) Ltd
Name of company

-END-

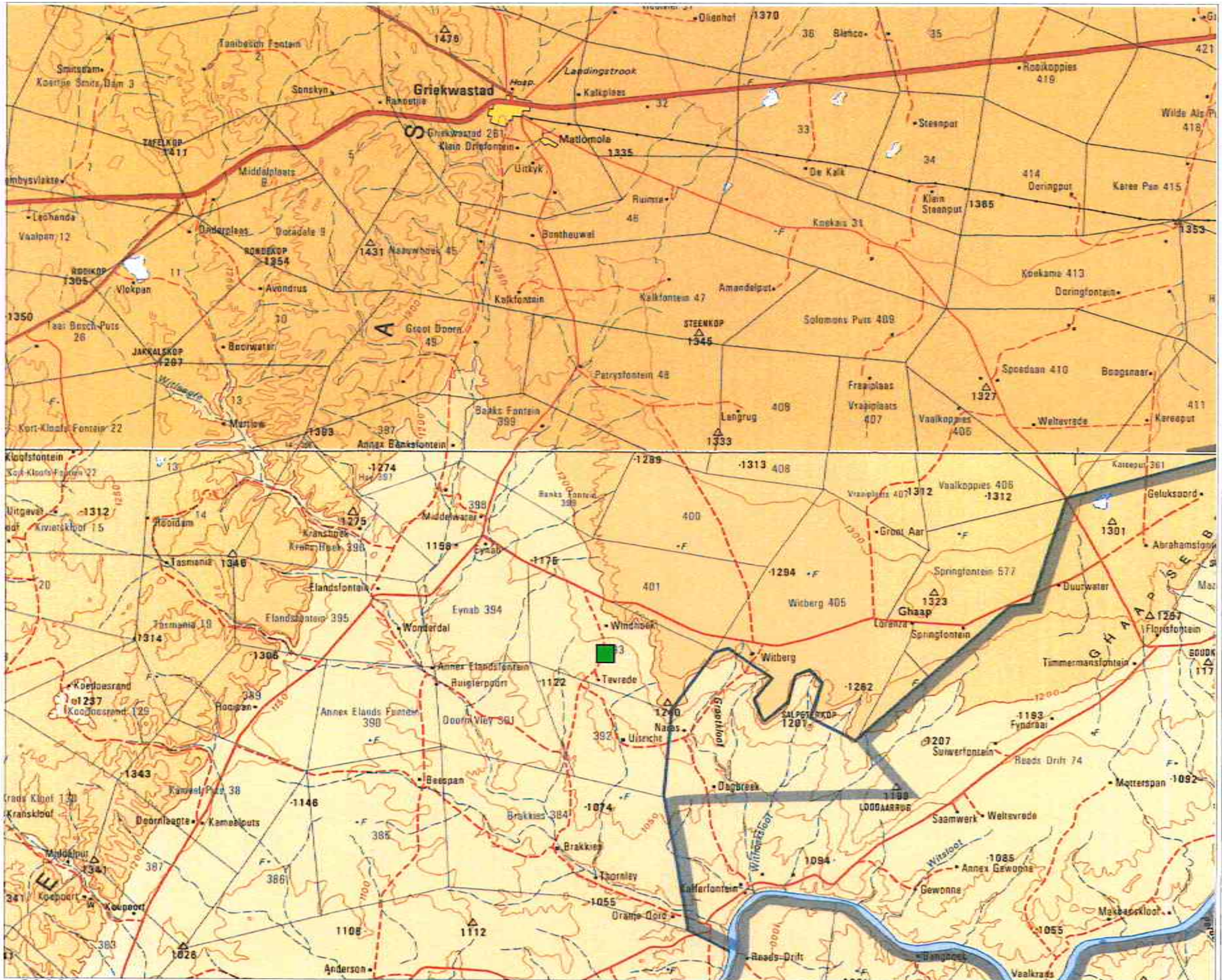
JERRY DEAN MENIN
OFFICE MANAGER / AUDITOR
COMMISSIONER OF OATHS / KOMMISSARIS VAN EDE
Appointed in terms of Section 5(1) of Act 16 of 1963
Aangestel in terme van Artikel 5(1) van Wet 16 van 1963
Centraltaan 32 Central Avenue, Flamwood, Klerksdorp
Appointed/Aangestel: 23 Oktober 2012
Reference/Verwysing: 9/1/8/2 Klerksdorp

APPENDIX 1A

LOCALITY MAP

Co-ordinates:

WGS 84/WGS 84



Scale 1:250000

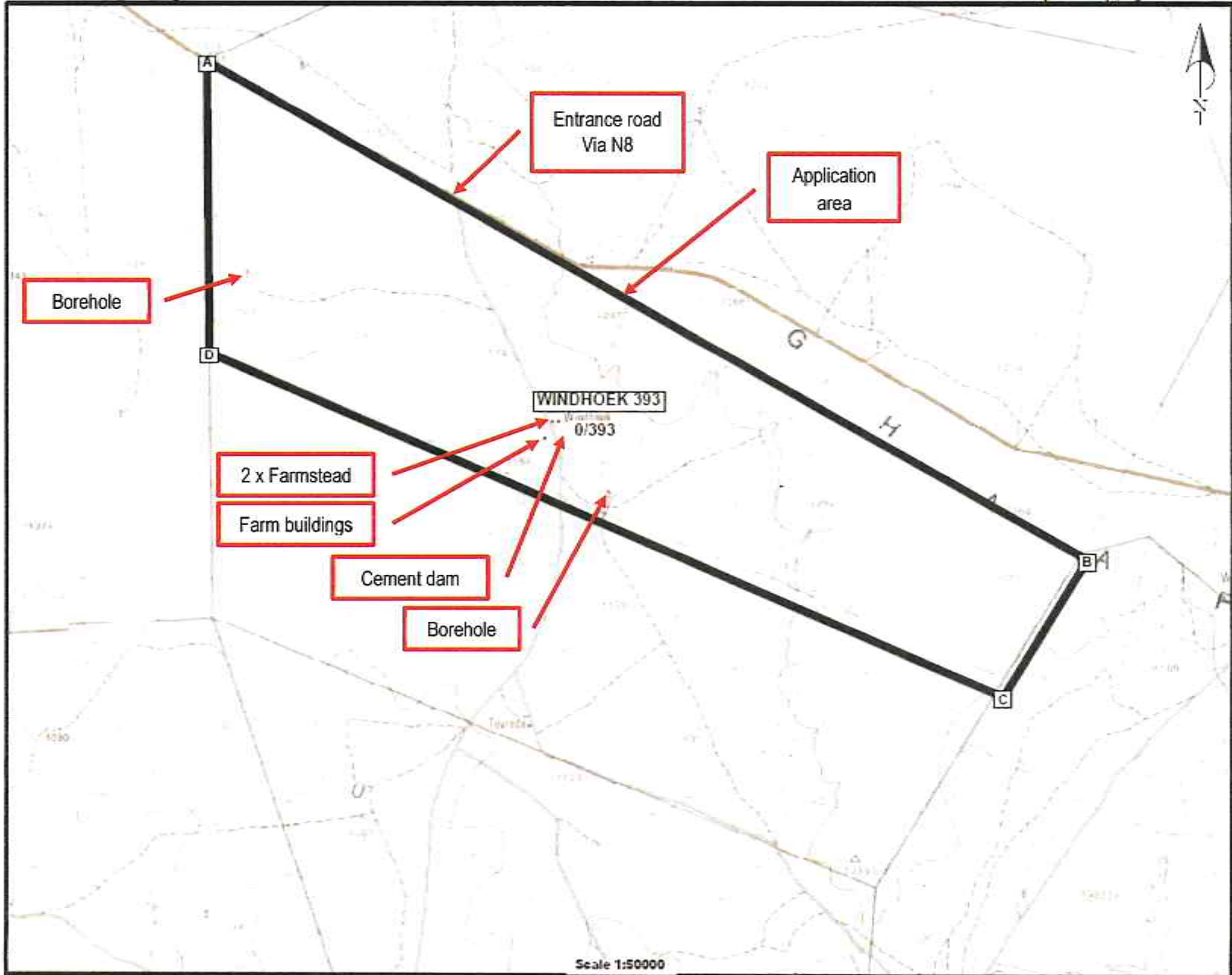
Legent:

- Proposed Prospecting Area
- Tar Roads
- Canal
- Secondary roads
- Houses/Farm yars/ Small holdings
- Mining areas

20000 0 20000 40000 Meters

PLAN No. 20210118_1

SurvMap cc Copyright © 18/1/2021



The figure lettered (A, B, C, D, A) approximately 1503,9041 ha in extent, applicable to a prospecting right over the REMAINING EXTENT of the farm WINDHOEK 393, situated in the HAY DISTRICT, NORTHERN CAPE PROVINCE, granted in terms of Section 16 of the Mineral and Petroleum Resources Development Act, No. 28 of 2002,

to ELECTRI CITY MINING (Pty) Ltd, (2012/042114/07)

OFFICIAL PURPOSES
DMR REF. No.: NC 30/5/1/1/2(..........) PR

SurvMap cc
Survey and Mapping
Engineering Survey

REG. No.: 50828
Cell : 082 803 3225
Tel. : 015 297 6860
Fax : 086 668 4182

79 Plein Street
POLOKWANE
0699

J.H. Vorster — 18-01-2021
Date

DMR: ....

DATE: ....

APPLICANT: ....

DATE: ....

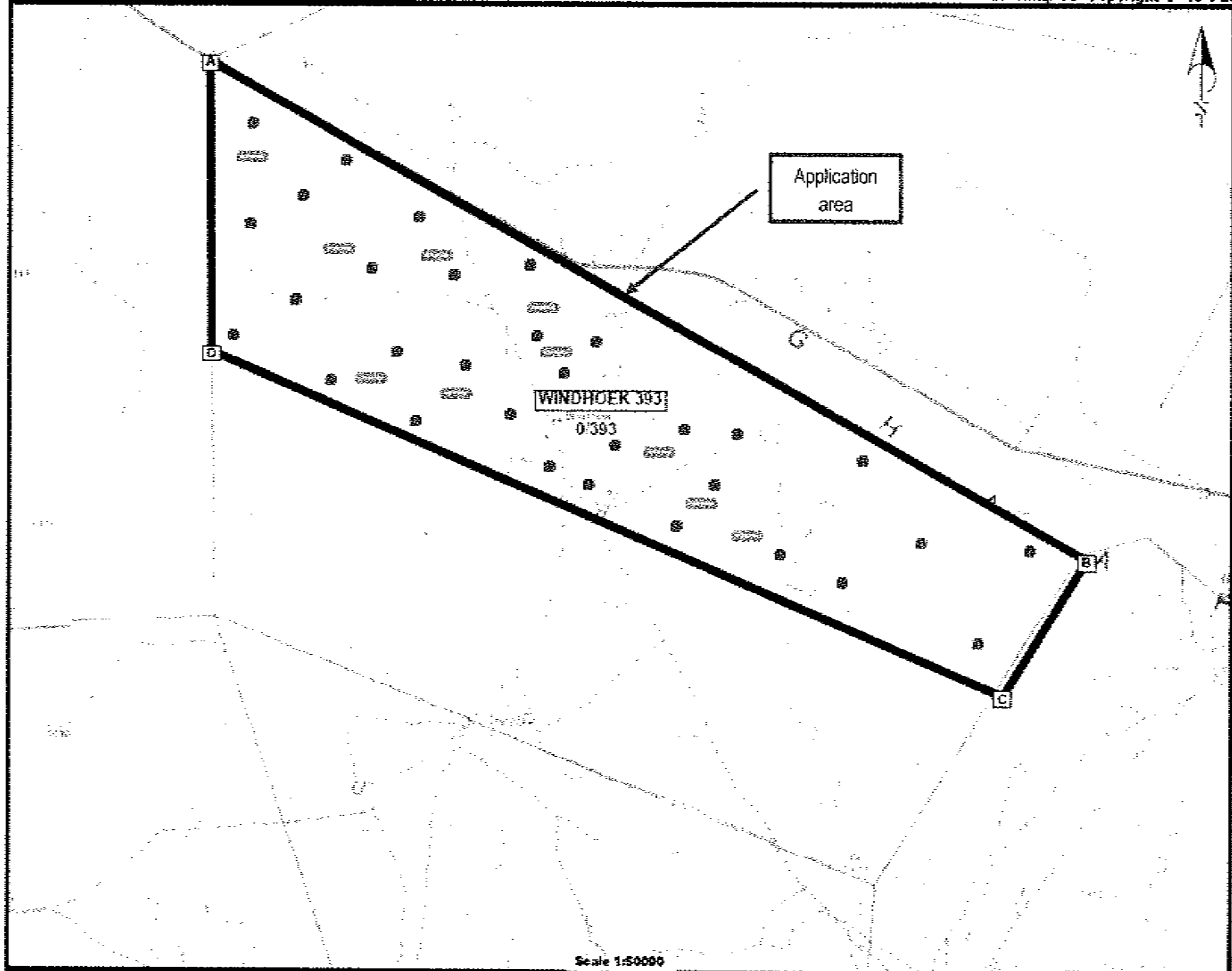
CO-ORDINATE LIST WG 23°

NAME	Y	X
A	-25478.20	3214668.66
B	-33374.26	3219016.13
C	-32822.81	3220213.77
D	-25496.27	3217207.93
A	-25478.20	3214668.66
NAME	LAT	LONG
A	-29.045459	26.261600
B	-29.087500	23.340802
C	-29.098325	23.335119
D	-29.071369	23.261564
A	-29.045459	23.261600

APPENDIX 1C

PLAN No. 20210118_1

SurvMap cc Copyright © 18/1/2021



OFFICIAL PURPOSES
DMR REF. No.: NC 30/5/1/1/2(.........) PR

SurvMap cc
Survey and Mapping
Engineering Survey

REG. No.: 40626
Date: 18/1/2021

DMR: ....

DATE: ....

APPLICANT: ....

DATE: ....

CO-ORDINATE LIST WG 23°		
NAME	Y	X
A	[illegible]	[illegible]
B	[illegible]	[illegible]
C	[illegible]	[illegible]
D	[illegible]	[illegible]
A	[illegible]	[illegible]
NAME	LAT	LONG
A	[illegible]	[illegible]
B	[illegible]	[illegible]
C	[illegible]	[illegible]
D	[illegible]	[illegible]
A	[illegible]	[illegible]

Proposed test pits sites

Proposed trenches

The figure lettered (A, B, C, D, A) approximately 1503,9041 ha in extent, applicable to a prospecting right over the REMAINING EXTENT of the farm WINDHOEK 393, situated in the HAY DISTRICT, NORTHERN CAPE PROVINCE, granted in terms of Section 16 of the Mineral and Petroleum Resources Development Act, No. 28 of 2002,

to ELECTRI CITY MINING (Pty) Ltd, (2012/042114/07)

APPENDIX 2 - RESULTS OF CONSULTATION

Interested and Affected Parties List the names of persons consulted in this column, and Mark with an "X" where those who must be consulted were in fact consulted.		**Date sent and/or Comments Received**	**Issues raised**	**EAP's response to the applicant**
AFFECTED PARTIES				
Landowner/s	X			
Louis Botha Trust - Landowner on the farm Windhoek 393 3 Van Riebeeck Street, Griekwastad, 8365 Cell: 082 443 0526, E-mail: lbotma@gmail.com		1 Dec 2020 21 Jan 2021	The landowner does not have any objection, see signed consultation letter	
Lawful occupier/s of the land	X			
Landowners or lawful occupiers on adjacent	X			
Jose Dhems - Neighbour Cell: 083 298 1908		1 Dec 2020	Awaiting written response	
Lieb Swiegers - Neighbour Cell: 084 491 2701		1 Dec 2020	Awaiting written response	
Municipal councilor				
Municipality	X			
Siyancuma Local Municipality Municipal Manager: Mr. M. Fillis (acting) Fax: 053 298 3141; Tel: 053 298 1810		1 Dec 2020	Consultation letter sent to Municipal Manager	
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom.				
Eskom				
Communities				
Dept. Land Affairs	X			
Ms. Ruwayda Baulackey Tel: 053 807 5700; E-mail: baulackey@drdlr.gov.za		1 Dec 2020	Request for verification of land claims sent to Ms Baulackey	
Traditional Leaders				
N/A				
Dept. Water and Sanitation	X			
Chief Director: Northern Cape Mrs. Lerato Mokhoantle 28 Central Road, Beaconsfield, Kimberley, 8300 Tel: 053-830 8800/083 655 8312 E-mail: MokhoantleL@dws.gov.za		11 Feb 2022	EMP/EIA sent via Courier Guy for comments	

APPENDIX 2 - RESULTS OF CONSULTATION

Dept. Agriculture, Forestry and Fisheries & Rural Development and Land Reform	X			
Attention: Thembisele Mabuza 02 Harrison Street, De Beers, Kimberley, 8300 Tel: 053-839 7800; Cell: 087 630 0387 E-mail: thembisileMA@daff.gov.za E-mail: MagdelineH@daff.gov.za		11 Feb 2022	EMP/EIA sent via Courier Guy for comments	
Department Agriculture, Land Reform and Rural Development				
Attention: Hannes Roux 162 George Street, Kimberlite Building, Kimberley, 8301 Tel: 071 860 7550 E-mail: hroux@gmail.com		11 Feb 2022	EMP/EIA sent via Courier Guy for comments	
SAHRA				
SAHRA P.O. Box 4637, Cape Town, 8000 Tel: 021 462 4502 e-mail: info@sahra.org.za	X	14/02/2022	Case ID: 17950	
Other Competent Authorities				
OTHER AFFECTED PARTIES				
INTERESTED PARTIES				

Notice published in the DFA Newspaper of 11th December 2020 for Scoping and 11th February 2021for EMP/EIA

Gerda

From: Gerda <dera.office@dera.co.za>
Sent: Thursday, 14 January 2021 15:45
To: morne@ncts.co.za
Subject: Konsultasiebriewe - Electri City Mining - Windhoek
Attachments: Konsultasiebriewe - Electri City Mining - Windhoek.pdf

Goeie dag Mornè

Sal jy asseblief vir my die aangehegte konsultasie briewe laat teken deur die grondeienaar (Louis Botha Eiendomme Trust) en die aangrensende bure.

Ek sal waardeer as jy vir my die getekende vorms voor 21 Jan 2021 kan stuur sodat ons dit kan insluit by die Scoping Report wat ons die 22ste Januarie per koerier moet stuur na DMR.

Groete.

Gerda Els
Cell: 083 225 1593

Daan Erasmus
Dera Omgewingskonsultante (Pty) Ltd.
Reg no: 2014/051013/07
P.O. Box 6499, Flamwood, 2572
VAT no: 4590284073
Tel: 018 468 5355
Fax: 018 011 3760
Cell: 082 895 3516
e-mail: dera.office@dera.co.za or daane@dera.co.za

Your message is ready to be sent with the following file or link attachments:

Konsultasiebriewe - Electri City Mining - Windhoek

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

P O Box 6499
Flamwood
2572
Fax: 018 011 3 760
Mobile: 082 895 3516
E-mail: dera.office@dera.co.za
daane@dera.co.za

DERA

Environmental Consultants

1 December 2020

To whom it may concern

CONSULTATION WITH INTERESTED AND AFFECTED PARTIES WITH REGARD TO AN APPLICATION FOR A PROSPECTING RIGHT IN TERMS SECTION 16 OF THE MINERALS AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AND NEMA, EIA 2014 OVER: REMAINING EXTENT OF THE FARM WINDHOEK 393, MAGISTERIAL DISTRICT OF HAY.

You are herewith informed that **Electri City Mining (Pty) Ltd.** has submitted an application in terms of Section 16 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002) and NEMA, EIA 2014, to the Regional Manager: Mineral Regulation, Northern Cape Region in respect of the prospecting of **Diamonds Alluvial & Diamonds in Kimberlite** in the magisterial district of Hopetown.

Electri City Mining (Pty) Ltd. is in the process of compiling the Scoping Report, which needs to be submitted by at the Regional Office of DMR. An Environmental Management Programme (EMP) & Environmental Impact Report (EIA) need to be submitted at the Regional Office of DMR within 106 days from date of acceptance of the Scoping Report. The documents will be available for I&AP's for comments. See attached the Sketch plan & Environmental Authorisation.

In terms of Section 10 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and in terms of Regulation 39(1) of the regulations published in the Government Notice No. R 10328 (of 4 December 2014) under Chapter 6 of the NEMA, EIA 2014, the landowner or legal occupier of the land, as well as any other interested party must be notified and consulted with in terms of the proposed project.

Electri City Mining (Pty) Ltd. deems it necessary to consult with inter alia yourself / your company/ your organization, and you are therefore kindly requested to comment very clearly and unambiguously with regards to the proposed prospecting project. You are requested to submit in writing, any interest/ objection and/or comments you may have and return it to the appointed consultants (**Reference no. NC30/5/1/1/12680PR**) within 30 days from the date of receipt of this letter. If no correspondence is received from you within the mentioned time frame, the applicant shall accept that you have no objection with the proposed prospecting activities.

Please call me if any further information is needed.

Your co-operation will be appreciated.

Yours faithfully
P.P.
Daan Erasmus
DERA Environmental Consultants

REGISTRATION FORM AND COMMENT FOR THE PUBLIC PARTICIPATION PROCESS OF THE PROPOSED PROSPECTING RIGHT ON THE REMAINING EXTENT OF THE FARM WINDHOEK 393, MAGISTERIAL DISTRICT OF HAY.

Daan Erasmus
P.O. Box 6499
KLERKSDORP
2572

Tel. 018-468 5355
Fax: 018-011 3760
Mobile: 082 895 3516
E-mail: daane@dera.co.za

PERSONAL INFORMATION:

~~Title~~/Titel: Mnr Initials/Voorletters: L ~~First Name~~/Eerste naam: Louis

~~Surname~~/Van: Botma

E-mail/E-pos: lbotma76@gmail.com

Telephone/Telefoon: 0824430596 Fax/Faks: nvt

Organisation (if applicable)/Organisasie(indien van toepassing: nvt

Capasity (member, etc.)/Kapasiteit (lid ens): nvt

~~Landowner~~/Grondeienaar/~~Neighbour~~/~~Buurman~~/~~Interested~~ and/or affected party on the farm/ op die plaas Windhoek 393

Postal Address/ Posadres van Riebeeckstr 3

Town/City/Dorp/Stad: Griekwastad Code/Kode: 8365

COMMENT/OBJECTION:

1. What is the nature of your interest in the proposed project/Wat is u belang in die voorgenome projek?

Grondeienaar

2. Do you have any ground for objection /Het u enige gronde tot beswaar ten opsigte van die bogenoemde projek?

Nee, geen

YES/(NO) JA/NEE

If "Yes", please list shortly/Indien 'JA', lys asseblief kortliks.

nvt

3. Do you foresee that this activity will have a negative impact on yourself or the environment/Voorsien u dat die voorgenome projek 'n negatiewe inpak kan he op uself of die omgewing?

YES/(NO) JA/NEE

If "Yes", please describe shortly/Indien 'JA', verduidelik asseblief kortliks.

nvt

Filled in on/Ingevul op 21 ste day of /dag van Januarie (month)/maand) 20 21

Louis Botma

Name and Surname/ Company
Naam en Van/Maatskappy

Signature/Handtekening

Gerda

From: Gerda <dera.office@dera.co.za>
Sent: Thursday, 14 January 2021 15:40
To: 0532983141@faxsend.co.za
Subject: Consultation letter - Siyancuma Local Municipality
Attachments: Consultation letter - Siyancuma Local Municipality.pdf

Good day

Please find attached our consultation letter to complete as I&AP regarding a new Prospecting Right application on the farm Windhoek in the district of Hay.

It will be appreciated if you can complete the attached form and return to dera.office@dera.co.za

Regards.

Gerda Els
Cell: 083 225 1593

Daan Erasmus
Dera Omgewingskonsultante (Pty) Ltd.
Reg no: 2014/051013/07
P.O. Box 6499, Flamwood, 2572
VAT no: 4590284073
Tel: 018 468 5355
Fax: 018 011 3760
Cell: 082 895 3516
e-mail: dera.office@dera.co.za or daane@dera.co.za

Your message is ready to be sent with the following file or link attachments:

Consultation letter - Siyancuma Local Municipality

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

P O Box 6499
Flamwood
2572
Tel: 018-468 5355
Fax: 018-011 3760
Cell: 082 895 3516
E-mail: dera.office@dera.co.za
daane@dera.co.za

DERA

Environmental Consultants

1 December 2020

Siyancuma Local Municipality

Attention: Mr. M. Fillis (acting)

RE: CONSULTATION WITH INTERESTED & AFFECTED PARTIES

It is hereby confirmed that that Electri City Mining (Pty) Ltd has applied for a prospecting right over the Remaining extent and ~~Portion 1 (Tevrede)~~ of the farm Windhoek 393, district of Hay

The Department of Mineral Resources has requested that the Siyancuma Local Municipality must be informed about the proposed prospecting right application.

Please find attached the consultation letter with the information regarding the proposed prospecting right.

It would be highly appreciated if you could return the attached consultation letter to Dera Environmental Consultants at Fax: 018 011 3760 or dera.office@dera.co.za

Should you have any questions regarding the above, please call Mr. Erasmus at 082 895 3516

DERA Environmental Consultants can be contacted for any further enquiries.

Yours sincerely

p.p.

Daan Erasmus
DERA Environmental Consultants

P O Box 6499
Flamwood
2572
Fax: 018 011 3760
Mobile: 082 895 3516
E-mail: dera.office@dera.co.za
daane@dera.co.za

DERA

Environmental Consultants

1 December 2020

To whom it may concern

CONSULTATION WITH INTERESTED AND AFFECTED PARTIES WITH REGARD TO AN APPLICATION FOR A PROSPECTING RIGHT IN TERMS SECTION 16 OF THE MINERALS AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AND NEMA, EIA 2014 OVER: REMAINING EXTENT OF THE FARM WINDHOEK 393, MAGISTERIAL DISTRICT OF HAY.

You are herewith informed that **Electri City Mining (Pty) Ltd.** has submitted an application in terms of Section 16 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002) and NEMA, EIA 2014, to the Regional Manager: Mineral Regulation, Northern Cape Region in respect of the prospecting of **Diamonds Alluvial & Diamonds in Kimberlite** in the magisterial district of Hopetown.

Electri City Mining (Pty) Ltd. is in the process of compiling the Scoping Report, which needs to be submitted by at the Regional Office of DMR. An Environmental Management Programme (EMP) & Environmental Impact Report (EIA) need to be submitted at the Regional Office of DMR within 106 days from date of acceptance of the Scoping Report. The documents will be available for I&AP's for comments. See attached the Sketch plan & Environmental Authorisation.

In terms of Section 10 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and in terms of Regulation 39(1) of the regulations published in the Government Notice No. R10328 (of 4 December 2014) under Chapter 6 of the NEMA, EIA 2014, the landowner or legal occupier of the land, as well as any other interested party must be notified and consulted with in terms of the proposed project.

Electri City Mining (Pty) Ltd. deems it necessary to consult with inter alia yourself / your company/ your organization, and you are therefore kindly requested to comment very clearly and unambiguously with regards to the proposed prospecting project. You are requested to submit in writing, any interest/ objection and/or comments you may have and return it to the appointed consultants (**Reference no. NC30/5/1/1/12680PR**) within 30 days from the date of receipt of this letter. If no correspondence is received from you within the mentioned time frame, the applicant shall accept that you have no objection with the proposed prospecting activities.

Please call me if any further information is needed.

Your co-operation will be appreciated.

Yours faithfully
P.P.
Daan Erasmus
DERA Environmental Consultants

REGISTRATION FORM AND COMMENT FOR THE PUBLIC PARTICIPATION PROCESS OF THE PROPOSED PROSPECTING RIGHT ON THE REMAINING EXTENT OF THE FARM WINDHOEK 393, MAGISTERIAL DISTRICT OF HAY.

Daan Erasmus
P.O. Box 6499
KLERKSDORP
2572

Tel. 018-468 5355
Fax: 018-011 3760
Mobile: 082 895 3516
E-mail: daane@dera.co.za

PERSONAL INFORMATION:

Title/Titel:..... Initials/Voorletters: ..... First Name/Eerste naam:.....

Surname/Van.....

E-mail/E-pos.....

Telephone/Telefoon..... Fax/Faks.....

Organisation (if applicable)/Organisasie(indien van toepassing: .....

Capasity (member, etc.)/Kapasiteit (lid ens): .....

Landowner/Grondeienaar/Neighbour/Buurman/ Interested and/or affected party on the farm/ op die plaas.....

Postal Address/ Posadres .....

Town/City/Dorp/Stad: ..... Code/Kode: .....

COMMENT/OBJECTION:

1. What is the nature of your interest in the proposed project/Wat is u belang in die voorgenome projek?

_____

_____

_____

2. Do you have any ground for objection /Het u enige gronde tot beswaar ten opsigte van die bogenoemde projek?

_____

_____

YES/NO JA/NEE

If "Yes", please list shortly/Indien 'JA', lys asseblief kortliks.

_____

_____

_____

3. Do you foresee that this activity will have a negative impact on yourself or the environment/Voorsien u dat die voorgenome projek 'n negatiewe inpak kan he op useIf of die omgewing?

YES/NO JA/NEE

If "Yes", please descibe shortly/Indien 'JA', verduidelik asseblief kortliks.

_____

_____

Filled in on/Ingevul op..... day of /dag van..... (month)/(maand) 20...

_____ _____

Name and Surname/ Company
Naam en Van/Maatskappy

Signature/Handtekening

. . . . . .

Gerda

From: Gerda <dera.office@dera.co.za>
Sent: Thursday, 14 January 2021 15:30
To: ruwayda.baulackey@drdlr.gov.za
Subject: Verification of land claims - Windhoek 393
Attachments: Verification of land claims - Windhoek 393.pdf

Good day Ruwayda

See attached our request for verification of land claims on the farm Windhoek 393 in the Hay district.

Regards.

Gerda Els
Cell: 083 225 1593

Daan Erasmus
Dera Omgewingskonsultante (Pty) Ltd.
Reg no: 2014/051013/07
P.O. Box 6499, Flamwood, 2572
VAT no: 4590284073
Tel: 018 468 5355
Fax: 018 011 3760
Cell: 082 895 3516
e-mail: dera.office@dera.co.za or daane@dera.co.za

Your message is ready to be sent with the following file or link attachments:

Verification of land claims - Windhoek 393

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

P O Box 5499
Flamwood
2572
Tel: 018-468 5355
Fax: 018-011 3760
Cell. 082 895 3516
E-mail:dera.office@dera.co.za
daane@dera.co.za

DERA

Environmental Consultants

1 December 2020

Department of Land Affairs & Rural Development

Attention: Ms. Ruwayda Baulackey
E-mail: ruwayda.baulackey@drdlr.gov.za

Re: Verification of Land Claims

We are Environmental Consultants situated in Klerksdorp and has applied on behalf of Electri City Mining (Pty) Ltd. for a Prospecting Right on the following farm in the Hay district.

- **Remainder**
- **~~Portion 1 (Tevrede)~~ of the farm Windhoek 393**
- **Siyancuma Local Municipality**

Could you please be so kind to verify if there are any land claims over the farms as mentioned above?

It would be highly appreciated if you could help us in this matter as soon as possible.

Please feel free to contact the office of Dera Environmental Consultants or Mr. Erasmus on his cell: 082 895 3516 for any further information.

Yours truly.

p.p.

Daan Erasmus

PUBLIC NOTICE

APPLICATION FOR AN ENVIRONMENTAL AUTHORIZATION FOR THE PROPOSED ACTIVITIES.

Notice is given for the following application:

1) Environmental authorization application for prospecting.

- **Proponent:** The applicant is Electri City Mining (Pty) Ltd.
- **Ref. no:** NC30/5/1/1/2/12680PR
- **Property description:** The proposed prospecting area is over Remaining extent the farm Windhoek 393, in the district of Hay. The total extent of the mining area is 1503.9041 hectares.

(21 SG digital codes: C03100000000039300000

Location: The property is situated ±45 km south- west from Douglas.

- **Project description:** The purpose of the application is to obtain the required authorisation from the Department to successfully: undertake Geological surveys, test pits, & bulk sampling.
- **Process of EMP/EIA is followed**
- **Activity applied for:** the following activities as listed in terms of NEMA (Act No. 107 of 1998) as amended and EIA Regulations, 2014 was applied for under Activity 19, (Listing Notice 2)GNR325
  Activity 20 (Listing Notice 1) GNR327
  Activity 27 (Listing Notice 1) GNR327
- **Minerals applied for:** Diamonds Alluvial & Diamonds in Kimberlite
- **Date submitted:** 14 August 2020
- **Stakeholder involvement:** Stakeholders are invited to register as interested and affected parties and to participate in the application process by identifying issues of concern and suggestions for consideration in the EMP/EIA and can contact Dera Environmental Consultants for any further information. Please submit your written comments by mail, fax or e-mail in this 30 day of this notice to:

Mr. Esna Erasmus of DERA Environmental Consultants

PO Box 6499	E-mail: daane@dera.co.za
Flamwood	Tel: 018 468 5355
2572	Fax: 018 011 3760
	Cell: 082 895 3516;

- Date of advertisement: Friday 11 February 2022.

PUBLIC NOTICE

Application for an Environmental Authorization for the proposed activities.

Notice is given for the following application:

1) Environmental authorization application for prospecting.

- **Proponent:** The applicant is Electri City Mining (Pty) Ltd.
- **Ref. no:** NC30/5/1/1/2/12680PR
- **Property description:** The proposed prospecting area is over Remaining extent the farm Windhoek 393, in the district of Hay. The total extent of the mining area is 1503.9041 hectares. (21 SG digital codes: C03100000000039300000 Location: The property is situated ±45 km south- west from Douglas.
- **Project description:** The purpose of the application is to obtain the required authorisation from the Department to successfully: undertake Geological surveys, test pits, & bulk sampling.
- Process of EMP/EIA is followed
- **Activity applied for:** the following activities as listed in terms of NEMA (Act No. 107 of 1998) as amended and EIA Regulations, 2014 was applied for under Activity 19, (Listing Notice 2)GNR325
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  Mr. Esna Erasmus of DERA Environmental Consultants

  PO Box 6499
  Flamwood
  2572

  E-mail: daane@dera.co.za
  Tel: 018 468 5355
  Fax: 018 011 3760
  Cell: 082 895 3516;

- Date of advertisement: Friday 11 February 2022.

714 PUBLIC NOTICES

PUBLIC NOTICE

Application for an Environmental Authorization for the proposed activities.

Notice is given for the following application:

1) Environmental authorization application for prospecting.

- **Proponent:** The applicant is Electri City Mining (Pty) Ltd.
- **Ref. no:** NC30/5/1/1/2/12680PR
- **Property description:** The proposed prospecting area is over Remaining extent the farm Windhoek 393, in the district of Hay. The total extent of the mining area is 1503.9041 hectares. (21 SG digital codes: C0310000000039300000 Location: The property is situated ±45 km south- west from Douglas.
- **Project description:** The purpose of the application is to obtain the required authorisation from the Department to successfully: undertake Geological surveys, test pits, & bulk sampling.
- Process of EMP/EIA is followed
- **Activity applied for:** the following activities as listed in terms of NEMA (Act No. 107 of 1998) as amended and EIA Regulations, 2014 was applied for under Activity 19, (Listing Notice 2)GNR325
  Activity 20 (Listing Notice 1) GNR327
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Mr. Esna Erasmus of DERA Environmental Consultants
PO Box 6499 E-mail: daane@dera.co.za
Flamwood Tel: 018 468 5355
2572 Fax: 018 011 3760
Cell: 082 895 3516;

- Date of advertisement: Friday 11 February 2022

714 PUBLIC NOTICES

NOTICE OF PUBLIC PARTICIPATION FOR PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORIZATION APPLICATION

Application for Prospecting Right: **Raycom Resources (Pty) Ltd** has received an acceptance letter with **DMRE Ref: NC 30/5/1/1/2/ (13033) PR** for the purpose of prospecting **Diamond, Manganese, Iron ore, Zinc, Lead, nickel, Rare Earths, Uranium, Copper, Platinum Group Metals, Gold, Limestone, Dolomite, Silver, Tigers Eyes, Dimension stone and Gemstones on the remaining extent and portion 3 of farm no 467, Remaining extent of farm no 468 and remaining extent, portions 1,2,3,4 and 5 of farm no 457 within the Administrative District of Hay, Northern Cape Province.**

Notice is hereby 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 8 December 2014, amended on 7 April 2017, that **Raycom Resources (Pty) Ltd** has applied for Prospecting Right Application for the above-mentioned minerals.

INVITATION TO COMMENT

Registration as Interested & Affected Party: 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 **Ms Vhumatshelo Phosa**. The public is also invited to review and comment on the draft Basic Assessment Report (BAR) and Environmental Management Programme report (EMPr). The Draft BAR & EMPr will be available for review for 30 days' calendar period from **Sunday the 13th of March 2022 until Tuesday the 12th of April 2022**. The Draft BAR & EMPr will be available at **Postdene Public Library, (Plein street, Postdene)** and a soft copy upon request from Singo Consulting (Pty) Ltd using the detailed EAP's contact's below, via emails; Dropbox link; Google drive; WeTransfer, etc.

ENVIRONMENTAL ASSESSMENT PRACTITIONER AND APPLICANT'S DETAILS:

CONSULTANT'S DETAILS		APPLICANT'S DETAILS	
Singo Consulting (Pty) Ltd		RAYCOM RESOURCES	
Physical Address:	Office 870, 5 Balalaika Street, Tasbet Park Ext 2, Witbank 1040	**Physical Address:**	Hertford Office Park, Building 4, Vorna Valley, Midrand, Gauteng, 1682
Contact person:	Ms Vhumatshelo Phosa	**Contact Person:**	Mr Lesego Mathebula
Tel No.:	+27 13 692 0041	**Tel No:**	011 207 7740
Fax No.:	+27 86 514 4103		
Cell No.:	+27 68 356 1989	**Cell:**	062 873 2244
Email:	vhumatshelo@singoconsulting.co.za	**Email:**	lesego@raygrowth.co.za

714 PUBLIC NOTICES

mdb

THE MDB UNPACKS THE MUNICIPAL BOUNDARY CHANGE PROCESS

The municipal boundary change/re-determination process is now open, and is conducted in terms of the Municipal Demarcation Act (MDA) of 1998 and other appropriate legislation enacted in terms of Chapter 7 of the Constitution.

In line with lessons learnt in the previous cycle and to maximise public participation, members of the public and stakeholders who wish to submit proposals to determine or re-determine municipal boundaries, (not ward boundary delimitation) are welcome to submit by not later than **31 March 2022**. It should be noted that no late submissions will be accepted after the closing date.

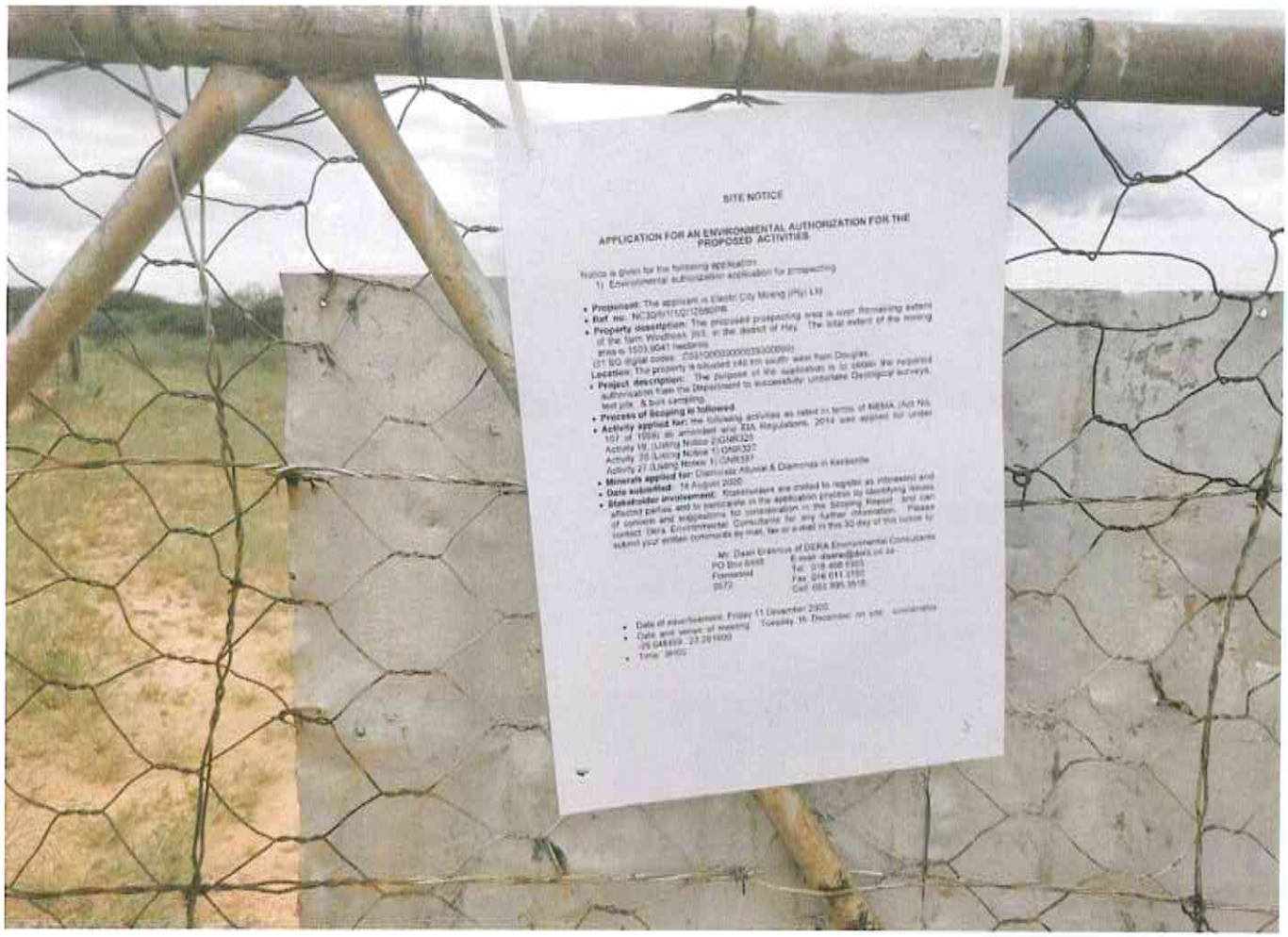
All proposals submitted must be motivated in terms of section 24 and 25 of the MDA (Demarcation criteria) and section 2 of the Municipal Structures Act (MSA) for re-categorization of municipalities.

More information on the process including proposal submission forms can be obtained on the MDB website; www.demarcation.org.za or on request by contacting 012 342 2481 or email at info@demarcation.org.za.

The proposals must be emailed to registry@demarcation.org.za or faxed to 012 342 2480, or posted to Private Bag X123, Centurion, 0046 or hand delivered to Eco Origins Office Park, Block C1, 349 Witch-Hazel Avenue, Highveld, 0157. The proposals must be addressed for the attention of the Chairperson of the MDB.

Follow us:

Municipal Demarcation Board
Municipal Demarcation Board
@MunicipalBoard


SITE NOTICE
APPLICATION FOR AN ENVIRONMENTAL AUTHORIZATION FOR THE PROPOSED ACTIVITIES
Notice is given for the following applications:
1) Environmental authorization application for prospecting
• Proponent: The applicant is Elektic City Mining (Pty) Ltd
• Ref no: NC30/5/1/1/2/12580PR
• Property description: The proposed prospecting area is over remaining extent of the farm Windhoek 263, in the district of Hay. The total extent of the mining area is 1503,9041 hectares
(21 SG digital codes: C0310000000000263000000)
Location: The property is situated 140 km south west from Douglas.
• Project description: The purpose of the application is to obtain the required authorisation from the Department to successfully undertake Geological surveys, test pits, & bulk sampling.
• Process of scoping is followed
• Activity applied for: the following activities as listed in terms of NEMA (Act No. 107 of 1998) as amended and EIA Regulations, 2014 are applied for under
Activity 19 (Listing Notice 2 GNR325
Activity 20 (Listing Notice 1) GNR327
Activity 27 (Listing Notice 1) GNR327
• Minerals applied for: Diamonds Alluvial & Diamonds in Kimberlite
• Date submitted: 14 August 2020
• Stakeholder involvement: Stakeholders are invited to register as interested and affected parties and to participate in the application process by identifying issues of concern and suggestions for consideration in the Scoping Report and can contact Dera Environmental Consultants for any further information. Please submit your written comments by mail, fax or e-mail in this 30 day of this notice to:
Mr. Dean Erasmus of DERA Environmental Consultants
PO Box 6668 E-mail: dera@dera.co.za
Fonteintuin Tel: 018 468 2303
2572 Fax: 018 011 3755
Cell: 082 895 3515
• Date of advertisement: Friday 11 December 2020
• Date and venue of meeting: Tuesday 15 December on site: coordinates -28.048859, 23.281600
• Time: 9h00

SAHRIS

MyDashboard Explore Create Calendar Maps Help

Heritage Cases *NC 30/5/1/1/2/12680PR* has been created.

Heritage Cases

NC 30/5/1/1/2/12680PR

CaseHeader LocationInfo Admin

ProposalDescription:
Prospecting Right over the farm Windhoek 393

Expanded_Motivation:
The applicant applied for a Prospecting Right over: the Remaining Extent of the farm Windhoek 393, the application area is situated over a rural area of the Northern Cape Province. The area are characterized as being rural area under natural vegetation and probably used for grazing. There are not a lot of infrastructure over the application area, entrance roads, fence lines, farm roads, cement dams and two farmsteads and other small farming sheds or structures. Beside for that there are further no other structures of infrastructure over this property. Access to the application area is gain via gravel roads out of Griekwastad. The scope of the prospecting activities will entail that the prospecting area will be identified through geological surveys and mapping. The extent of the prospecting area is 3007 hectares. Information from Geological surveys will be used in order to determine where the test pits will take place. This will in turn help to determine the boundaries of the proposed prospecting area for more detailed surveying. The prospecting phase will only be: Phase 1 – Geological desktop studies and surveys, Phase 2 – Test pits and Phase 3 – Bulk Sampling. Access to the application area is gained via existing roads with the nearest town being Griekwastad 25 km north of the site. All of the area is under natural veld. Only a small portion of the land will be impacted upon at any given time and land use on the rest of the area can proceed normally. The prospecting focus area will be clearly demarcated after Phase 1 is completed. The area applied for is over the entire portion. It is envisaged that all impacts on the environment can be properly managed and mitigated and no high negative long-term impacts will take place.

ApplicationDate: Monday, February 14, 2022 - 11:04

CaseID: 17950

Applicants: Electri City Mining (Pty) Ltd

Consultants/Experts: Esna Erasmus

This application relates to these sites or objects (SKIP if case=development/S38):
Windhoek 393

OtherReferences:

Dept	CaseReference	DueDate	FinalDecision
DMR - NC	NC 30/5/1/1/3/12680 PR	17/02/2022	

ReferenceList:

AdditionalDocuments

1. Electri City Mining (Pty) Ltd - Scoping Report - Windhoek 393

Back to Top

South African Heritage Resources Agency
(SAHRA)
Head Office
111 Harrington Street
CAPE TOWN
8001

PO Box 4637
Cape Town, 8000
Tel 021 462 4502/Fax 021 462 4509
Email info@sahra.org.za
Web www.sahra.org.za
(http://www.sahra.org.za)

P O Box6499
Flamwood
2572
Tel: 018-468 5355
Fax: 018-011 3760
Cell: 082 895 3516
E-mail: dera.office@dera.co.za

DERA

Environmental Consultants

11 February 2022

Department of Water and Sanitation
28 Central Road
Beaconsfield
Kimberley
8300

Attention: Mrs. Lerato Mokhoantle

RE: EMP/EIA

Reference Number: NC30/5/1/1/2/12680PR

It is hereby confirmed that Electri City Mining (Pty) Ltd has applied for a prospecting right over the Remaining extent of the farm Windhoek 393, situated in the district of Hay, Northern Cape.

The application was accepted by the Department of Mineral Resources and they have requested that the Department of Water and Sanitation (Northern Cape Regional Office) must be consulted about the proposed prospecting right. See attached the EMP/EIA

Should you have any questions regarding the above, please call Mrs. Erasmus at 082 895 3516.

DERA Environmental Consultants can be contacted for any further enquiries.

Yours sincerely

pp

Esna Erasmus
DERA Environmental Consultants

THE COURIER GUY

Worldwide Express

CLG3M

DO2KRO	CLG3M		2022-02-14	1	2	0.0096	KLK	KIM	

Gerda Els
0832251593

27 Lewis Street

Wilkoppies

Klerksdorp ZA

collect before 16h00

1	Standard flyer	2.0 kg	40.0 cm x 30.0 cm x 8.0 cm

[redacted]

[ ] [X]

0.00

Lerato Mokhoantlo
0836558312

Department of Water and Sanitation

26 Central Road

Beaconsfield

Kimberley ZA 8301

Economy (ECO)

P O Box6499
Flamwood
2572
Tel: 018-468 5355
Fax: 018-011 3760
Cell: 082 895 3516
E-mail: dera.office@dera.co.za

DERA

Environmental Consultants

11 February 2022

Department of Agriculture, Forestry and Fisheries
Department of Agriculture, Land Reform and Rural Development
Head of Department
02 Harrison Street
De Beers
Kimberley
8300

Attention: Thembisele Mabuza

RE: EMP/EIA

Reference Number: NC30/5/1/1/2/12680PR

It is hereby confirmed that Electri City Mining (Pty) Ltd has applied for a prospecting right over the Remaining extent of the farm Windhoek 393, situated in the district of Hay, Northern Cape.

The application was accepted by the Department of Mineral Resources and they have requested that the Department of Agriculture, Forestry and Fisheries (Northern Cape Regional Office) must be consulted about the proposed prospecting right. See attached the EMP/EIA.

Should you have any questions regarding the above, please call Mrs. Erasmus at 082 895 3516.

DERA Environmental Consultants can be contacted for any further enquiries.

Yours sincerely

Esna Erasmus
DERA Environmental Consultants

COURIER

Worldwide Express

P8L4F

DO2KRO	P8L4F		2022-02-14	1	2	0.0096	KLK	KIM

Gerda Els
0832251593

27 Lewis Street

Wilkoppies

Klerksdorp | ZA | 2571

collect before 16h00

No.	Description	Weight	Dimensions
1	Standard flyer	2.0 kg	40.0 cm x 30.0 cm x 8.0 cm

X

0.00

Thembisile Mabuza
0876300387

Department of Agriculture, Forestry and Fisheries

02 Harrison Street, De Beers

Kimberley

Kimberley | ZA | 8301

Economy (ECO)

P O Box 6499
Flamwood
2572
Tel: 018-468 5355
Fax: 018-011 3760
Cell: 082 895 3516
E-mail: dera.office@dera.co.za

DERA

Environmental Consultants

11 February 2022

Department Agriculture, Land Reform and Rural Development
Head of Department
162 George Street
Kimberlite Building
Kimberley
8300

Attention: Hannes Roux

RE: EMP/EIA

Reference Number: NC30/5/1/1/2/12680PR

It is hereby confirmed that Electri City Mining (Pty) Ltd has applied for a prospecting right over the Remaining extent and Portion 1 (Tevrede) of the farm Windhoek 393, situated in the district of Hay, Northern Cape.

The application was accepted by the Department of Mineral Resources and they have requested that the Department Agriculture, Land Reform and Rural Development (Northern Cape Regional Office) must be consulted about the proposed prospecting right. See attached the EMP/EIA.

Should you have any questions regarding the above, please call Mrs. Erasmus at 082 895 3516.

DERA Environmental Consultants can be contacted for any further enquiries.

Yours sincerely

Esna Erasmus
DERA Environmental Consultants

The Courier Guy

Worldwide Express

W3WLC

DO2KRO	W3WLC		2022-02-14	1	2	0.0096	KLK	KIM

Gerda Els
0832251593

27 Lewis Street

Wilkoppies

Klerksdorp ZA 2571

collect before 16h00

1	Standard flyer	2.0 kg	40.0 cm x 30.0 cm x 8.0 cm

X

0.00

Hannes Roux
0718607550

Department of Agriculture, Land Reform and Rural Development

162 George Street, Kimberlite Building

Kimberley

Kimberley ZA 8301

Economy (ECO)

SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE ENVIRONMENTAL SENSITIVITY

EIA Reference number: NC 30/5/1/1/2/12680 PR

Project name: Prospecting Right

Project title: Windhoek 393

Date screening report generated: 12/02/2022 15:25:01

Applicant: Electri City Mining (Pty) Ltd

Compiler: DERA Omgewingskonsultante (Pty) Ltd

Compiler signature:

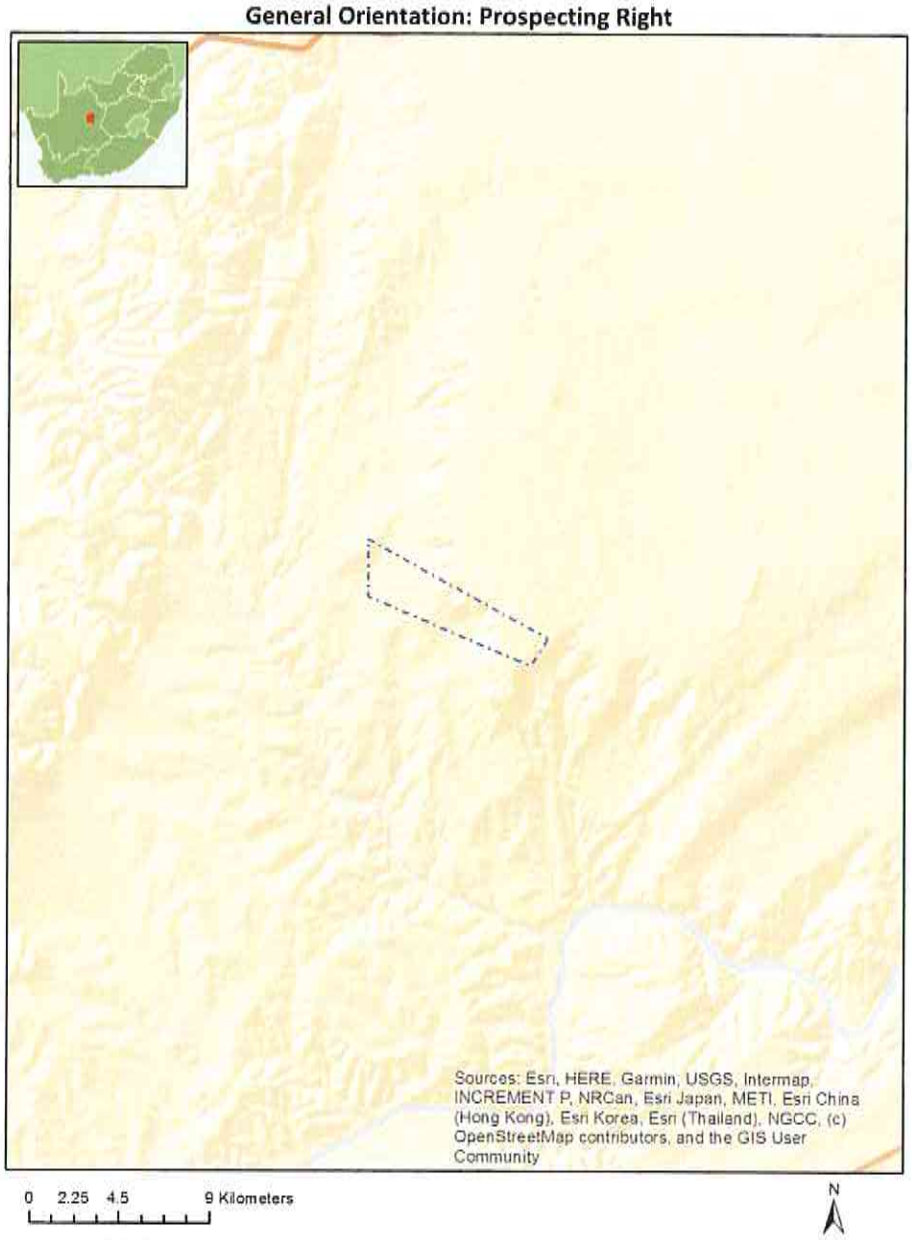
.....

Application Category: Mining|Prospecting rights

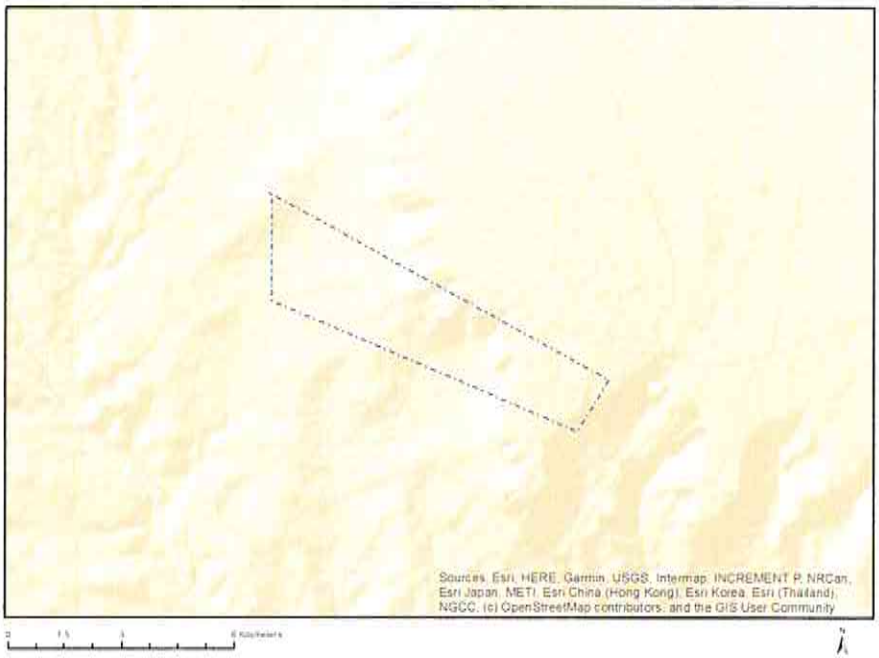
Table of Contents

Proposed Project Location

Orientation map 1: General location



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	WINDHOEK	393	0	29°5'3.2S	23°17'47.15E	Farm
2		401	0	29°3'30.75S	23°19'9.33E	Farm
3	WINDHOEK	393	0	29°4'30.01S	23°17'50.35E	Farm Portion
4		401	0	29°3'54.17S	23°19'55.04E	Farm Portion
5		401	2	29°3'0.51S	23°17'49.81E	Farm Portion

Development footprint[1] vertices:
No development footprint(s) specified.

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	14/12/16/3/3/1/484	Solar PV	Approved	27.9

[1] "development footprint", means the area within the site on which the development will take place and incudes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

Environmental screening results and assessment outcomes

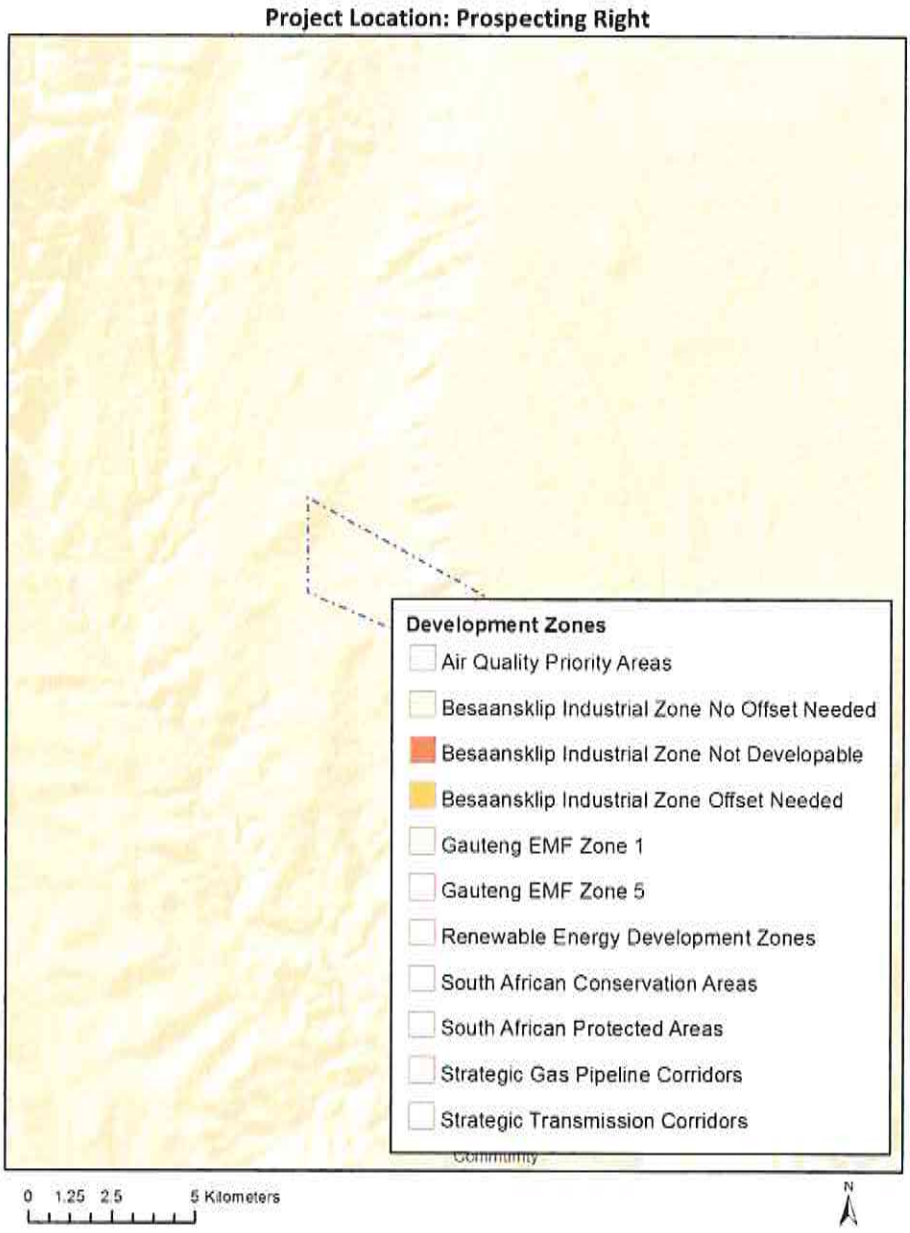
The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is: **Mining|Prospecting rights**.

Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

No intersection with any development zones found.

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones



Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Animal Species Theme			X	

Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme				X
Defence Theme				X
Paleontology Theme		X		
Plant Species Theme				X
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

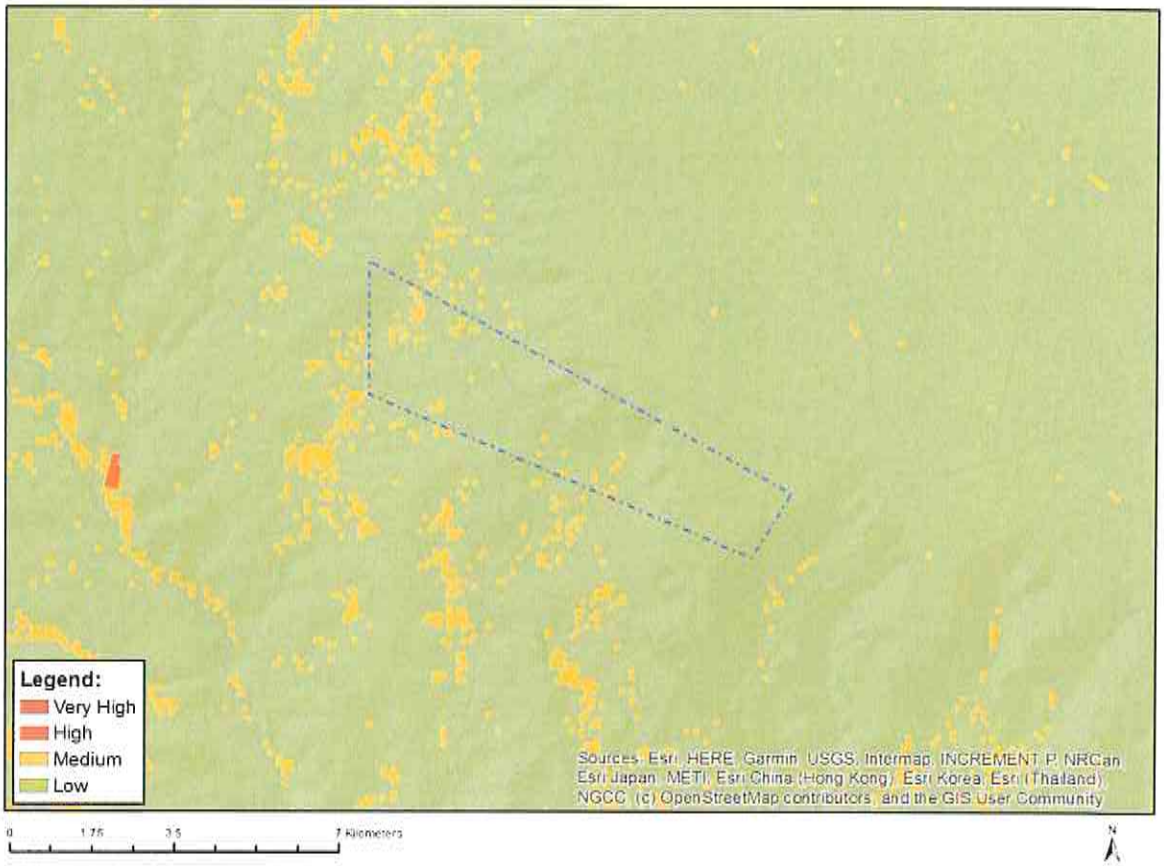
No	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf
2	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
5	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
6	Noise Impact Assess	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf

	ment	
7	Radioactivity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
8	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
9	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

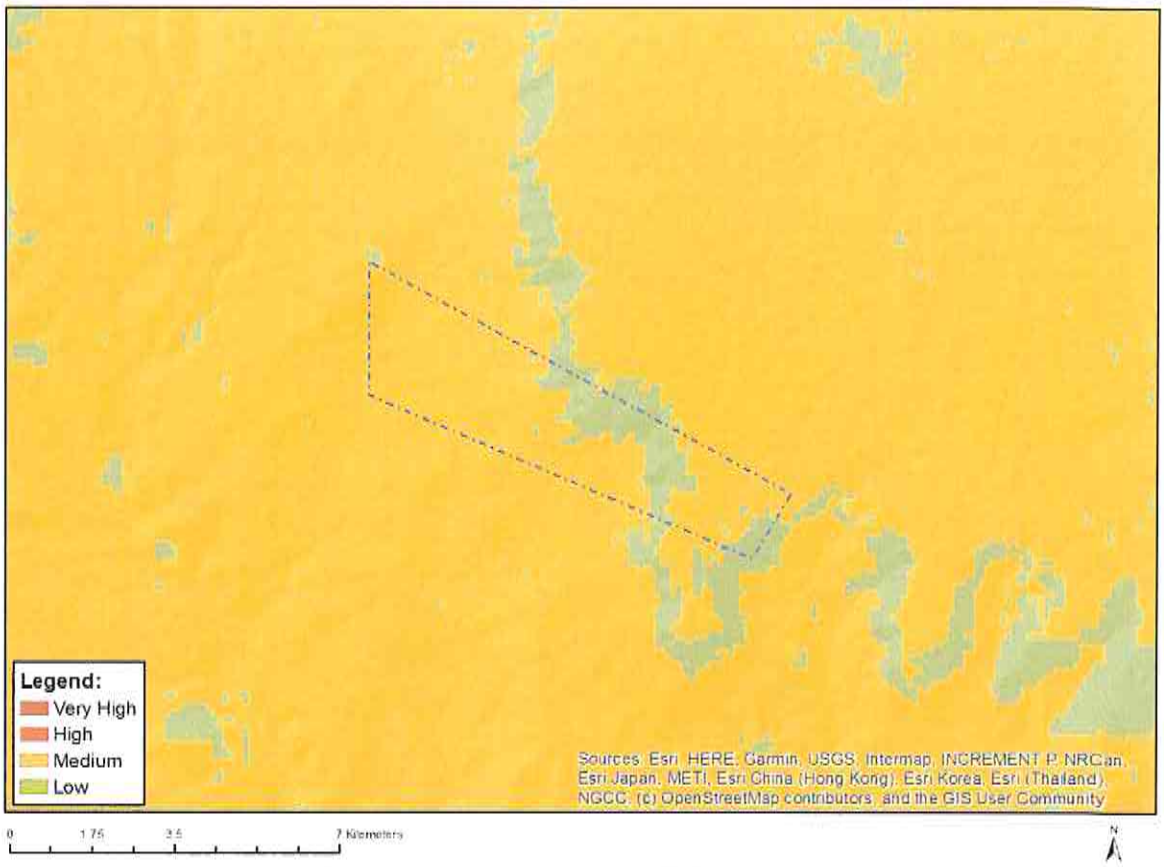


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



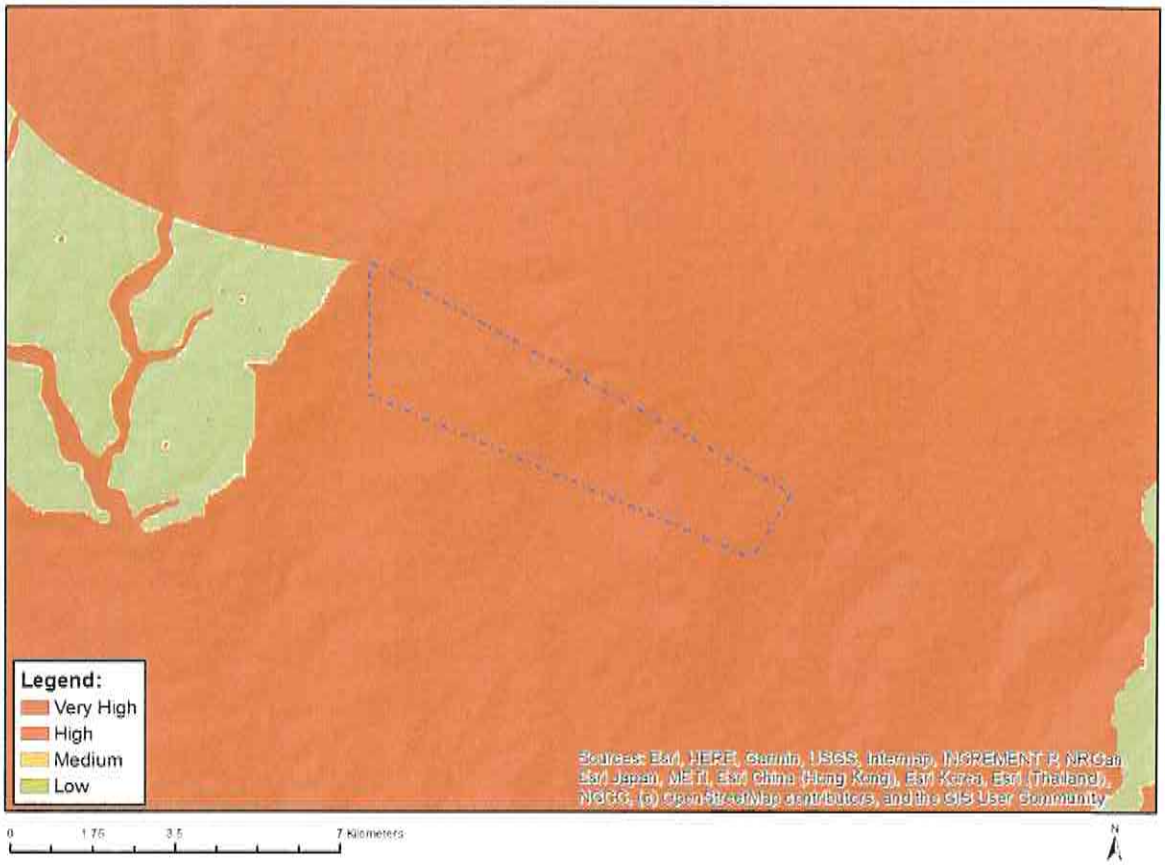
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Medium	Aves-Neotis ludwigii

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

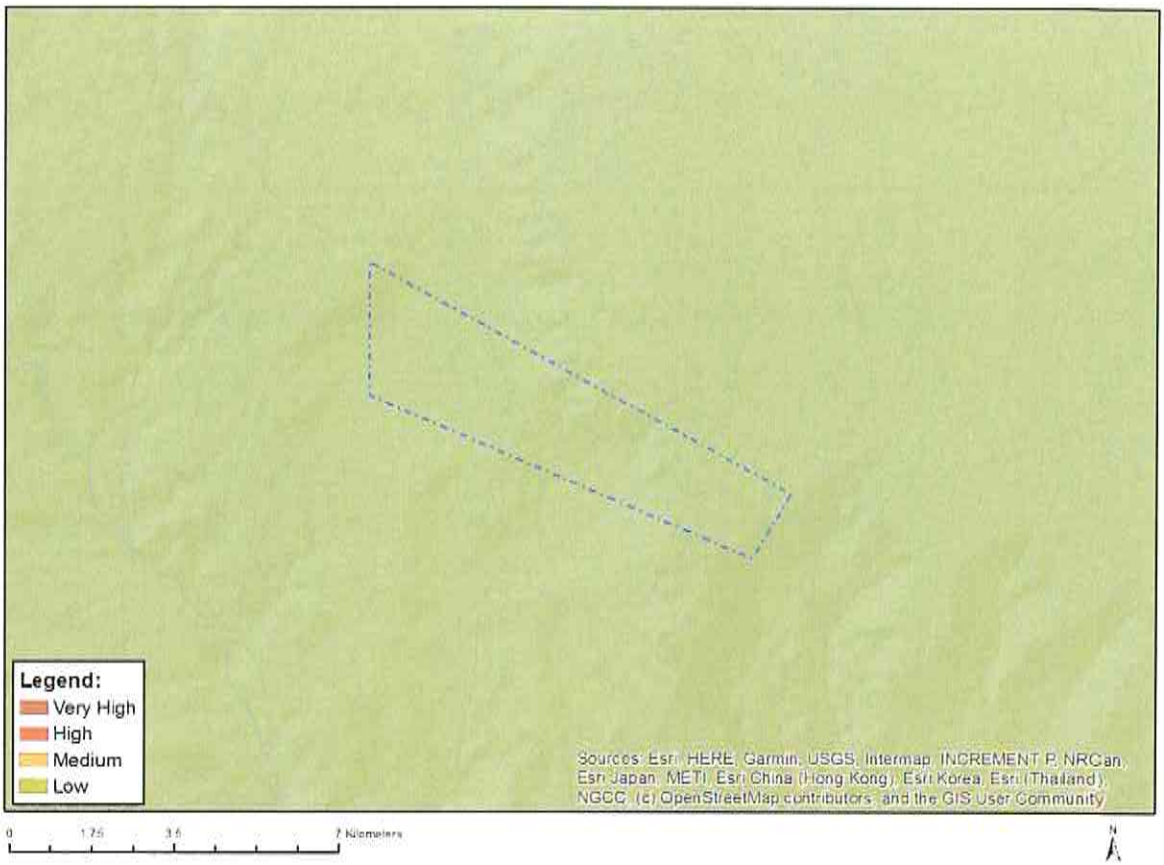


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Strategic water source area
Very High	Wetlands and Estuaries
Very High	Freshwater ecosystem priority area quinary catchments

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

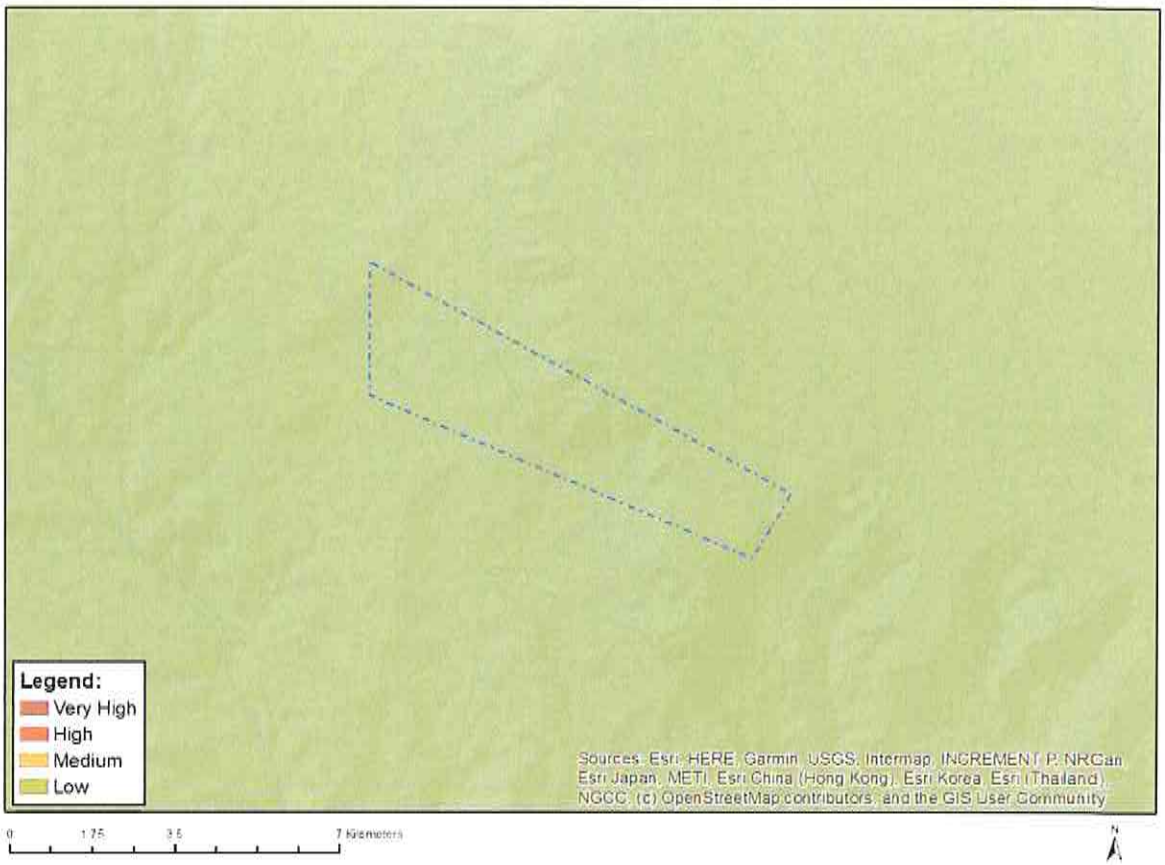


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

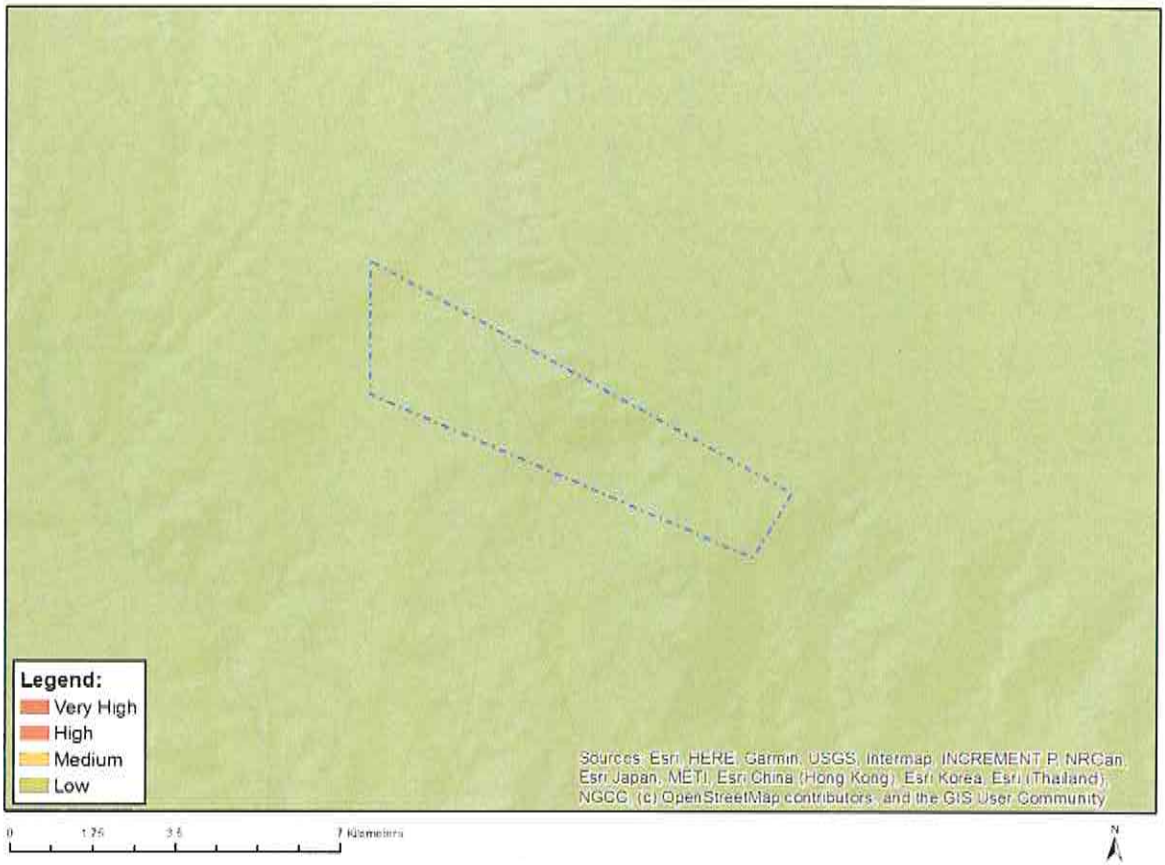


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

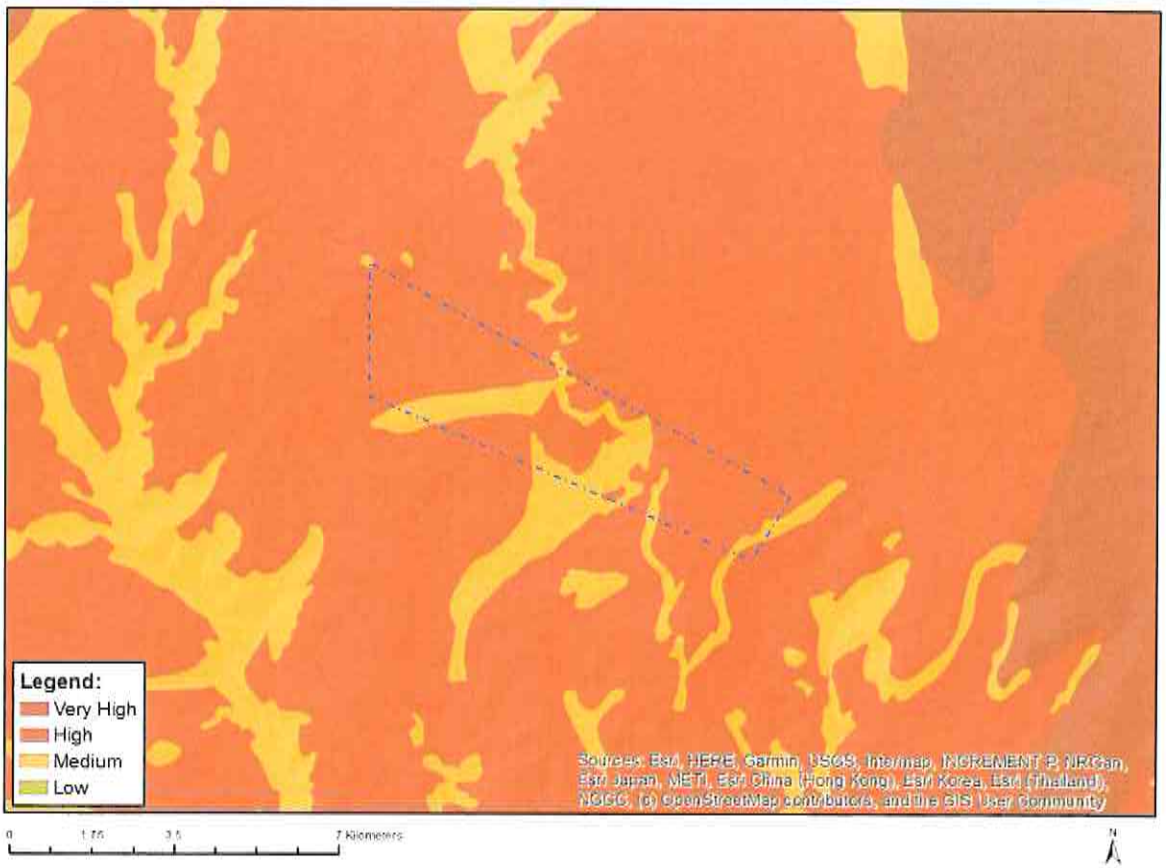


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

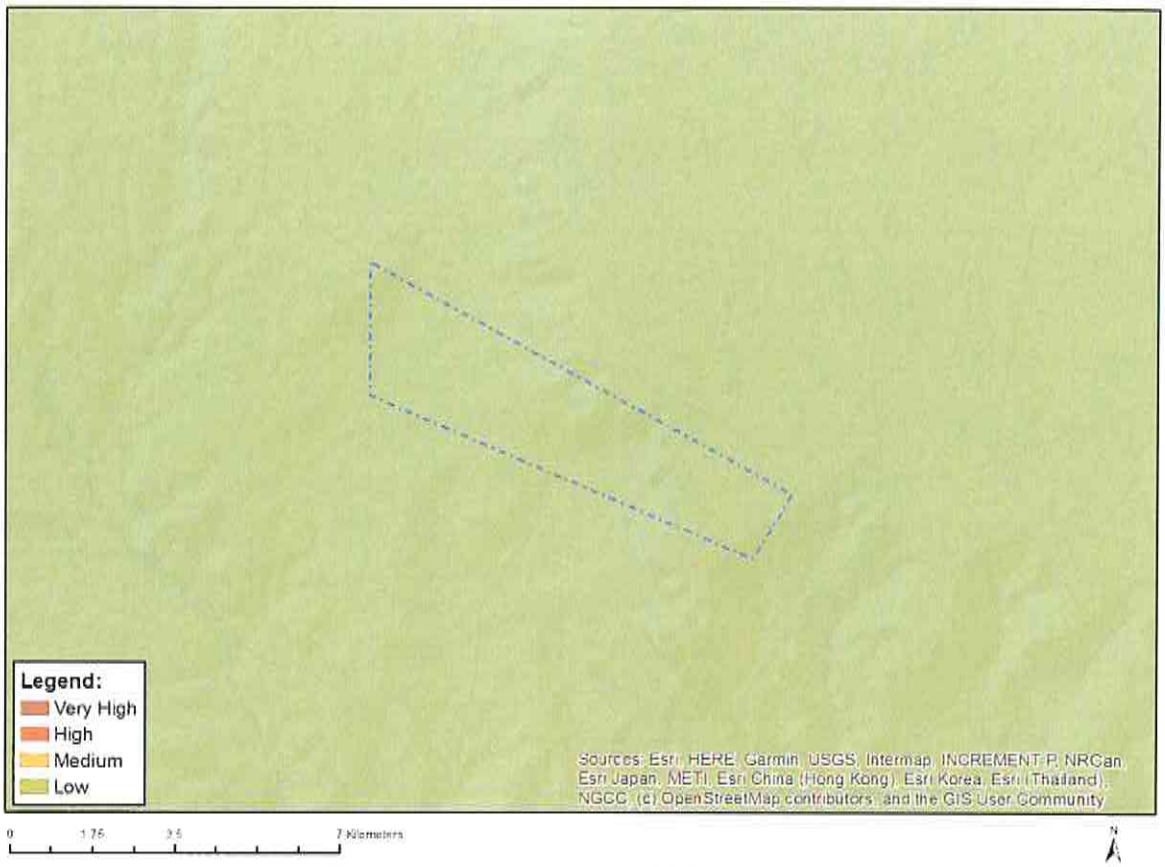


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Features with a High paleontological sensitivity
Medium	Features with a Medium paleontological sensitivity

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



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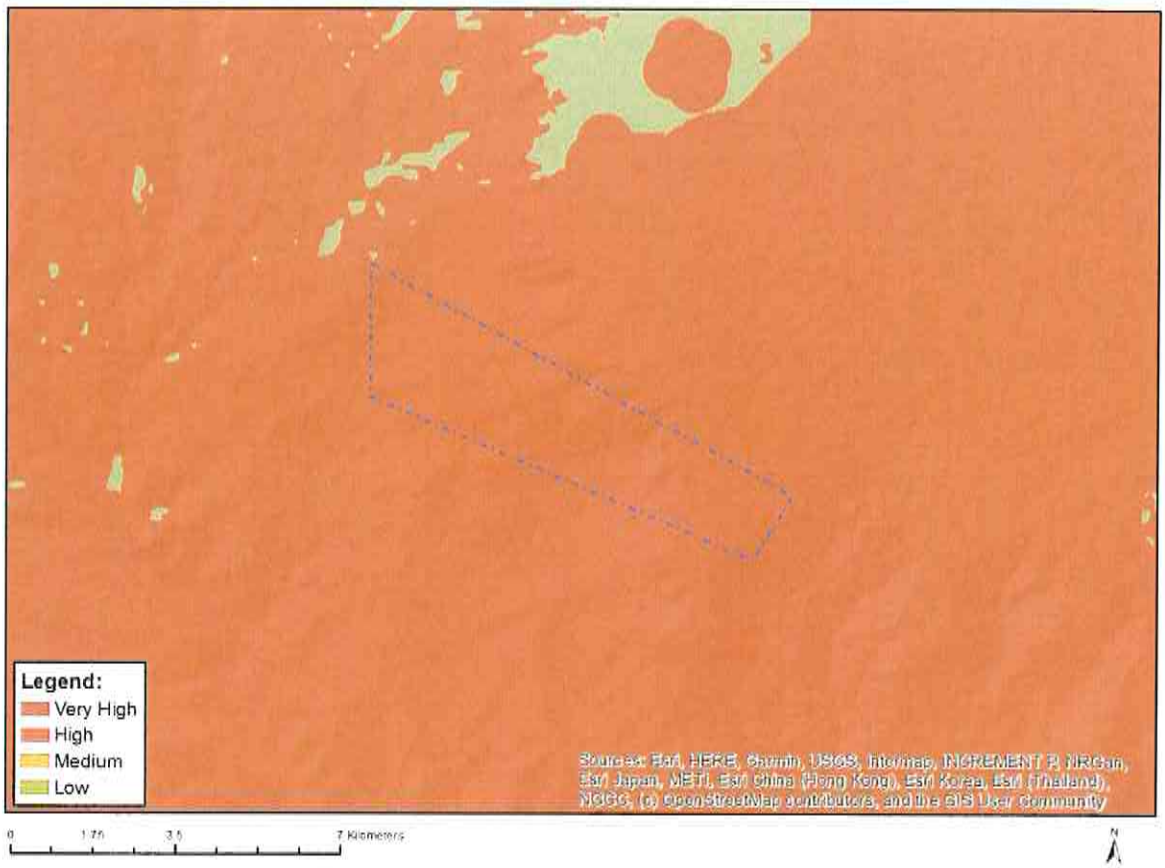
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Critical biodiveristy area 1
Very High	Critical biodiveristy area 2
Very High	Ecological support area
Very High	FEPA Subcatchments

CALCULATION OF THE QUANTUM

Applicant: **Electri City Mining (Pty) Ltd** **12680 PR**
Evaluators: **Date: 11/02/2022**

No.	Description	Unit	A Quantity	B Master Rate	C Multiplication factor	D Weighting factor 1	E=A*B*C*D Amount (Rands)
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	0	17	1	1	0
2 (A)	Demolition of steel buildings and structures	m2	0	241	1	1	0
2(B)	Demolition of reinforced concrete buildings and structures	m2	0	356	1	1	0
3	Rehabilitation of access roads	m2	500	43	1	1	21500
4 (A)	Demolition and rehabilitation of electrified railway lines	m	0	419	1	1	0
4 (A)	Demolition and rehabilitation of non-electrified railway lines	m	0	229	1	1	0
5	Demolition of housing and/or administration facilities	m2	0	483	1	1	0
6	Opencast rehabilitation including final voids and ramps	ha	0.6	253019	0.52	1	78,941.93
7	Sealing of shafts adits and inclines	m3	0	130	1	1	0
8 (A)	Rehabilitation of overburden and spoils	ha	0	168679	1	1	0
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	0	210087	1	1	0
8 (C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha	0	610192	1	1	0
9	Rehabilitation of subsided areas	ha	0	141244	1	1	0
10	General surface rehabilitation	ha	0.4	133622	1	1	53,448.80
11	River diversions	ha	0	133622	1	1	0
12	Fencing	m	0	152	1	1	0
13	Water management	ha	0	50807	1	1	0
14	2 to 3 years of maintenance and aftercare	ha	0.1	17782	1	1	1,778.20
15 (A)	Specialist study	Sum	0			1	0
15 (B)	Specialist study	Sum				1	0
					Sub Total 1		155,668.93

1	Preliminary and General	18680.27136	weighting factor 2 1	18,680.27
2	Contingencies	15566.8928		15,566.89
			Subtotal 2	189,916.09
			VAT (15%)	28,487.41
			Grand Total	**218,403.51**

APPENDIX 4