

BASIC ASSESSMENT REPORT And ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

SUBMITTED FOR ENVIRONMENTAL AUTHORIZATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL 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: Raubex Construction (Pty) Ltd

TEL NO: 012 665 3226

FAX NO: -

POSTAL ADDRESS: -

PHYSICAL ADDRESS: Building 1 High Grove Park, 50 Tegel Avenue, Highveld 0169

FILE REFERENCE NUMBER SAMRAD: NW 30/5/1/3/2/10919 MP

1. IMPORTANT NOTICE

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

Unless an Environmental 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 report 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 nu-interpreted information and that it unambiguously represents the interpretation of the applicant.

2. Objective of the basic assessment process

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

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

PART A

3. SCOPE OF ASSSSMENT AND BASIC ASSESSMENT REPORT

CONTACT PERSON AND CORRESPONDENCE ADDRESS

a) DETAILS OF -

(i) Details of the EAP how prepared the report

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

Name of the Practitioner: DERA Environmental Consultants (Pty) Ltd.

Mr Daan Erasmus Tel No.: 018-468 5355 Fax No.: 018-468 4015

E-mail address:daane@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 1 - 3. (1)(a)(ii)

The EAP Mr. Daan Erasmus has a National Diploma in Agriculture Resource Utilization and a Baccalaureus Technologiae degree in Agricultural Extension.

See next page for copy of qualification, Figure 1.

Figure 1 - Copy of Qualification

TECHNIKON PRETORIA



BACCALAUREUS TECHNOLOGIAE

LANDBOU: VOORLIGTING

AGRICULTURE: EXTENSION

Toegeken aan

Awarded to

DANIEL ELARDUS ERASMUS

91004437

1970-09-07

met ingang van

with effect from

1997-01-01

Registrateur (Akademics) Registrar (Academic)

Rektor/Rector

97/206

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TECHNIKON PRETORIA



TECHNIKON PRETORIA

NASIONALE NATIONAL **DIPLOMA**

LANDBOU: HULPBRONBENUTTING

AGRICULTURE: RESOURCE UTILIZATION

Toegeken aan

Awarded to

DANIEL ELANDUS ERASMUS

91004437

7009075033088

met ingang van

with effect from

1994-01-01

Die volgende is voltooi

The following were completed

Landbou-ekonomie I, II en III Voorligtingsmetodiek I en III Akkerbou I, II en III Weidingkunde A Bodembeplanning I en II Bodembewaring I Grondkunde I en II *Meganisasie

Pissese Wetenskap Melkproduksietegnologie Vletsbeesproduksietegnologie Kleinveeproduksietegnologie

Grondklassifikasie III

Agricultural Economics I, II and III Extension Method I and II Field Husbandry I, II and III Pasture Science A Land Use Planning I and II Soil Conservation I Soil Science I and II Mechanisation* Physical Science Milk Production Technology Beefer Production Technology Small Stock Production Technology Soil Classification III ********

Minimum Opleidingstydperk: 3 Jaar Minimum Training Period : 3 Years

lacobs Uitvoerende Direkteur. Executive Director

Nr /No. ND1117/94

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Rektor/Rector

2) Summary of the EAP's past experience.

The EAP, Mr. Erasmus is involved in mining, environmental management, EMP & EMPR as well as Basic Assessments as from 1995. The EAP was involved in the NEMA Act through applications for chicken broilers where the Basic Assessments Report was also used to get to a ROD.

See Figure 2 - below Curriculum Vitae of D. E. Erasmus.

DAAN ERASMUS

ENVIRONMENTAL PRACTITIONER











+27 82 895 3516



Klerksdorp, North-west Province, South Africa

SKILLS



Report writing Conduct auditing Bilinguol (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 29 years' experience in Agricultural Science, and Mining- and Environmental Management.

Began own company - DERA Environmental Consultants (Pty) Ltd 2003. Main scope of business: Compiling and submission of mining related applications;

manage and compile legal environmental documents. Furthermore doing monitoring work to evaluated compliance to environmental

legislation; evaluating outstanding rehabilitation liabilities for mining companies. Assist legal companies in determining environmental damage.

Do risk assessment and applications for closure certificates.

Give guidance in rehabilitation practices.

Compile EMPR/EIA for Mining Rights and compilation of EMPlan's for Prospecting and Mining Right applications.

Compile BAR & EMPR reports in support of application of Chicken Broilers and -facilities, Feed lots, Fuel Storage, Ploughing of virgin soil and associated infrastructure for Environmental Authorizations and many more based on experience from management of the natural resources and the mitigation of impacts.

WORK EXPERIENCE

7.90

JAN 1989 SEPT 1990 MILITARY SERVICE

National Defence Force

Officers Course: Il Lieutenant

JAN 1991 FEB 2003

CHIEF RESOURCE CONSERVATION INSPECTOR

National Department of Agriculture

Administration of Act 43 of 1983, Agricultural Resource Conservation Act in North West Province. The main activities were veld inspections in order to monitor correct utilization of natural resources and where necessary take corrective steps. Other activities included discussions and lectures at farmers union meetings:

municipalities and other institutions in order to promulgate the Act. Management of personnel and personnel related matters; management of budget of regional office in Potchefstroom; management and control of declared weeds and invader species. Evaluation of EMPr's and EIA's and monitoring mine rehabilitation and environmental management out of agricultural point of view Audit and compliance inspections of mining operations.

WORK EXPERIENCE (Continues)

1

MAR 2003

ENVIRONMENTAL PRACTITIONER

PRESENT

DERA Environmental Consultants

Compiling and submission of mining related applications; manage and compile legal environmental documents.

Furthermore doing monitoring work to evaluated compliance to environmental legislation; evaluating outstanding rehabilitation liabilities for mining companies.

Assist legal companies in determining environmental damage. Do risk assessment and applications for closure certificates.

Give guidance in rehabilitation practices.

Compile EMPR/EIA for Mining Rights and compilation of EMPlan's

for Prospecting and Mining Right applications.

Compile BAR & EMPr reports in support of application of Chicken Broilers and Hacilities, Feed lots, Fuel Storage, Ploughing of Virgin soil and associated infrastructure for Environmental Authorizations and many more based on experience from management of the natural

resources and the mitigation of impacts.

EDUCATION



1988

HIGH SCHOOL DIPLOMA- with Full Exemption

Wolmaransstad High School, North West, SA

English

Afrikaans

Mathematics

Science

Geography

Accounting

1994

NATIONAL DIPLOMA: AGRICULTURE: RESOURCE

Pretoria Technikon (Tshwane University of Technology) - Pretoria, Tshwane

Agricultural Economics I, II and III

Extension Method I, II and III

Field Husbandry I, II and III

Pasture Science A

Land Use Planning Land II

Soil Conservation I

Soft Science Land II

Mechanization

Physical Science

Milk Production Technology

Beef Production Technology

Small Stock Production Technology

Soil Classification III

Computer Application I

1996

BACCALAUREUS TECHNOLOGIAE: AGRICULTURAL EXTENTION

Pretoria Technikon (Tshwane University of Technology) - Pretoria, Tshwane

Agricultural Communication (

Crop Production IV

Agricultural Extension IV

Research Methodology

EDUCATION - continues



1999

MASTERS DEGREE IN SUSTAINABLE AGRICULTURE - uncompleted Orange Free State University, Bloemfontein, SA

Conservation of agricultural resources and the Environment Soil-, climate and water use and soil and water Management Plant and energy utilization and management Economics of sustainability and development Scrip ~ project proposal Sustainable plant production systems Farm management for sustainable agriculture Strategic management, marketing and planning Communication and technology transfer Final dissertation - uncompleted

EIA- EXPERIENCE



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

- Compliance Creators (Goedgevonden) 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.
- Diamsure (Palmietfontein) was done as part of Prospecting Right Application with Bulk Sampling, my role entailed: site visit, impact assessment and evaluation and compilation of report and handling of application process.
- Brenda Gagiano (Katdoornplaats) was done as part of Prospecting Right Application with Bulk Sampling, my role entailed: site visit, impact assessment and evaluation and compilation of report and handling of application process.
- I & K Steyn Trust [Klipkuit] was done as part of Prospecting Right Application with Bulk Sampling, my role entailed; site visit, impact assessment and evaluation and compilation of report and handling of application process.
- Pilansberg Tented Facility (Pilansberg) was done as part of an Environmental Authorization for a listed activity for new tented camp, my role entailed; site visit, impact assessment and evaluation and compilation of report and handling of application process.
- FMS Trust (Saamgevoeg) was done as part of an Environmental Authorization for a listed activity, for the construction of Chicken Broilers, my role entailed: site visit, impact assessment and evaluation and compilation of report and handling of

SHORT COURSES



Computer training Dbase IV
Seminar in public speaking
Veid assessment course
Resource Identification and utilization course
ArcView GIS course
Persuasion skills
Wetlands identification
Rehabilitation of Wetlands
Management skills
Agricultural law course

Page J

b) LOCATION OF THE ACTIVITY

Table 1: Property Description

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

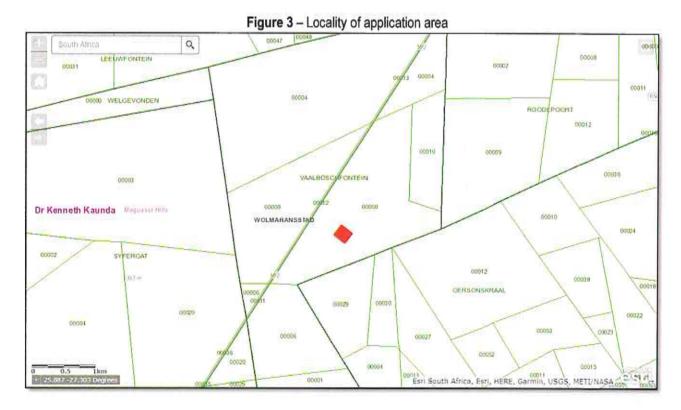
T0HC0000000020500000						
Vaalboschfontein 205 HO ✓ a certain portion of	of the Remaining	Extent of the fan	m Vaalboschfontein 205 HO.			
Co-ordinates List WG 27°	NAME	LAT	LONG			
1	A	-27.284123	25.926683			
	В	-27.285260	25.928546			
	C	-27.286925	25.927273			
	D	-27.285787	25.925410			
A -27.284123 25.926683						
5 hectares						
Wolmaransstad is a maize-farming town situated on the N12 between Johannesburg and Kimberley in North West Province of South Africa. The town lies in an important alluvial diamond-mining area and it is the main town of the Maquassi Hills Local Municipality. It is within the Maquassi Hills Local Municipality which is a local municipality in the Dr Kenneth Kaunda District Municipality of the						
Wolmaranssatd is approximate	ely 11.8 km north					
	a certain portion of Co-ordinates List WG 27° 5 hectares Wolmaransstad is a maize-fa in North West Province of So and it is the main town of the Nunicipality which is a local North West Province, South A Wolmaranssatd is approximate km south-west of the application	Vaalboschfontein 205 HO a certain portion of the Remaining Co-ordinates List WG 27° NAME A B C D A 5 hectares Wolmaransstad is a maize-farming town situar in North West Province of South Africa. The and it is the main town of the Maquassi Hills Lo Municipality which is a local municipality in the North West Province, South Africa. Course: https	Vaalboschfontein 205 HO ✓ a certain portion of the Remaining Extent of the fan Co-ordinates List WG 27° NAME LAT A -27.284123 B -27.285260 C -27.286925 D -27.285787 A -27.284123 5 hectares Wolmaransstad is a maize-farming town situated on the N12 b in North West Province of South Africa. The town lies in an im and it is the main town of the Maquassi Hills Local Municipality. Municipality which is a local municipality in the Dr Kenneth II North West Province, South Africa. Course: https://en.wikipedia.org/ Wolmaranssatd is approximately 11.8 km north-east, Makwassie km south-west of the application area.			

c) LOCALITY MAP

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

Wolmaransstad is a maize-farming town situated <u>on the N12 between Johannesburg and Kimberley</u> in North West Province of South Africa. The town lies in an important alluvial diamond-mining area and it is the main town of the <u>Maquassi Hills Local Municipality</u>. It is within the Maquassi Hills Local Municipality which is a local municipality in the <u>Dr Kenneth Kaunda District Municipality</u> of the North West Province, South Africa. See **Figure 3** and **Appendix 1(a)** attached for Locality Map.

Appendix 1(a) - Locality 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 1 - 3. (1)(d)

This will be a very small project with low impacts (only 5 ha). The application area is situated over an area that is over natural grazing. The proposed application area is situated 11.8 km south-west of Wolmaransstad. It is situated amides an area that is under <u>natural vegetation</u>, see **Appendix 1(b)** – Pre-Mining Infrastructure Map and **Figure 4** below for images of proposed area - http://daffarcgis.nda.agric.za/Comp_Atlas_v2/. On **Figure 4** it can be seen that this area is still virgin land with no previous disturbances. There is <u>no infrastructure</u> over the application area only entrance road and farm roads. It is within a bigger farm – Remaining Extent of the farm Vaalboschfontein 205 HO, which are 552 ha. Access to the prosed site can be gained via the <u>N12 national road</u> that is running between the towns of Wolmaransstad and Bloemhof. This application area is near an old quarry located just west of this application area. There are further no surface water bodies on or near this application area. There are two farm steads between 829 m and 890 m east and south-east of the proposed application area and farm workers houses just on the opposite side of the gravel road about 100 m east.

The scope of the applications will be small scale Stone and Gravel quarry for road construction/maintenance purposes. The above area will be mined through opencast excavations where the gravel/stone will be removed with an excavator onto a stockpile and fed by a frond end loader into the screening/crushing plant. A stockpile will be created at the screening/crushing plant and loaded on the trucks for transporting to the clients. The area will be mined and rehabilitated and the sides will level to blend in with the surrounding environment. The area applied for is over natural grasslands. The vegetation cover seems to be scares partially with no big trees or shrubs. The mining focus area will be clearly demarcated and fenced off.

Appendix 1(b) – Pre-Mining Infrastructure Map

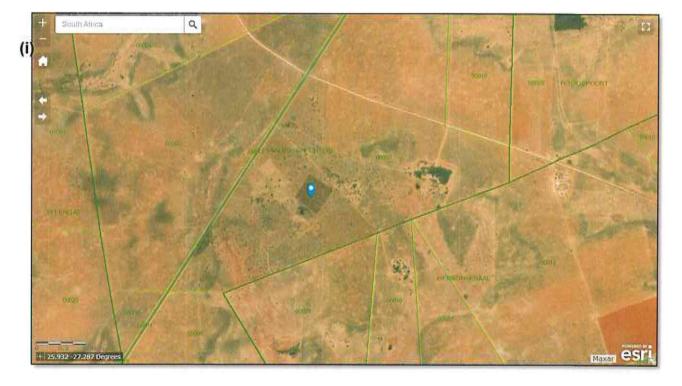


Figure 4: Images of proposed area

(ii) Listed and specified activities

Table 2: Listed Activities

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

NAME OFACTIVITY	Aerial extent of the Activity	LISTED ACTIVITY	APPLICABLE LISTING
Listing 1 – Activity 21: Any activity including the operation of that activity which requires a mining permit in terms of section 27 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), Inctuding a sesociated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource), [] or (including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2602 (Act No. 28 of 2002)) (b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing; our exaction, the smelting, beneficiation, teduction, refining, calcining or gasification of the mineral resource in which case activity 6 in Listing Notice 2 applies.		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 form. (i) the undertaking of a linear activity, or (ii) maintenance purposes undertaken in accordance with a brightness management plan.	5 ha	X	327

(iii)Description of the activities to be undertaken

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

Table 3: Description of Activities to be followed

Activities	Description of phases	Associated structures and infrastructures
The Mineral	Raubex Construction (Pty) Ltd. Intends to mine for Stone Aggregate; gravel and	,
	Gravel (grav) G5 situated on a portion of the farm Vaalboschfontein 205 HO,	
	Wolmaransstad district, and 5 hectares in total. The stone aggregate and gravel	
	will be used as filling material in road construction. The gravel and aggregate will	
	be used in different facets of the road construction industry.	
The extend	The gravel is situated on this demarcated area on average 4 - 5 meters deep and	
	3.5 m thickness. The identified and demarcated area, which is 5 hectares in	
	total, includes the entire mining area of 5 hectares, will be used for mining and for	
	the stockpiling and plant area. The gravel/stone reserve on this 5 hectares is	
	estimated at 175 000 m² (350 000 tons).	WAND
Mining method	The above area will be mined through opencast excavations where the	There will be a plant area with ablution facilities and roads to the excavations.
•	gravel/stone will be removed with an excavator onto a stockpile and fed by a	
	frond end loader into the screening/crushing plant. A stockpile will be created at	
	the screening/crushing plant and loaded on the trucks for transporting to the	
	clients. It is envisaged that some of the grave ! (G5) will be loaded directly onto	
	the trucks without any processing. The gravel/stone from the stockpile is	
	transported at an average rate of 450 tons a day to the clients or as needed.	
	The total estimated reserve of gravel is 350 000 tons taken at a production rate of	
	5000 tons a month it will take 70 months to work this reserve. The gravel/stone	
	which is 3.5 m thick and the relatively low production rate of this operation make	
	this 5 hectare to be worked sustainable over a period of two years.	
The grade	The total cost of the operation is taken at R 62/ton and the total material moved	
т	monthly at 5000 tons. The total monthly mining cost is then R 314 199 .00 and	
	the total monthly income is on average R 600 000.00. This operation can thus be	
	economical viable.	

e) POLICY AND LEGISLATIVE CONTEXT

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

Table 4: Policy & Legislative Context

table to recipie a neglectative defined.		
APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE	HOW DOES THIS DEVELOPMENT COMPLY
(a description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spanial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process):	WHERE APPLIED	WITH AND RESPOND TO THE POLICY AND LEGISLATIVE CONTEXT (F.y In terms of the National Water Activities Use Licence has had been applied for).
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).		Mining Permit application submitted and EA application with DMR
National Environmental Management Act, 1998 (Act 107 of 1998): Environmental Impact Assessment Regulations, 2014 (G38262 – R982-985) EA Authoration and ENVEMP. Submit documents that will docarba the impacts and stationable medigation thereof Compliance to Act and Regulations during course of activities. Show impacts and midgation thereof.	,	Pasic Assessment Report in process
National Water Act, 1998 (Act 36 of 1998) Application for Water abstraction for mixing 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 rehabite to be sustainable with no erection. Erealization of dactored weeds	 	Regulation will be applicable during construction and operational phases of mining.
National Heritagos Resources Act, 1999 (Act 25 of 1999) Complience to Act and Regulations during course of activities. Entains that to graves of hurtilege site will be discussed.	Section 35	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 1 – 3, (1)(f)

The applicant believes that the applied area has prospects for <u>Stone Aggregate</u>, <u>Gravel (St)</u> & <u>Gravel (grav)</u> as applied for. Raubex is doing road construction and upgrading around the Wolmaransstad area. This project is of National importance for the upgrading of the N12. The portions over which the application was applied for is natural grazing with no signs of any mining disturbance or developments. The only disturbance is the old quarry outside this application area, but still on the same portion of land and other agricultural activities on the neighbouring farms. The area is under natural veld. There is no infrastructure on site prior to mining. Access to the farm is gained by an existing gravel road from the national tar road (N12). See **Figure 4** for Google Erath Images of proposed area. The whole of the 5 ha will be under mining infrastructure or activities. The area will be mined and rehabilitated. The mining focus area will be clearly demarcated. The area applied for is over the demarcated portion only. After mining the land will be rehabilitated and could be used for grazing again.

g) MOTIVATION FOR THE OVERALL PREFERRED SITE, ACTIVITIES AND TECHNOLOGY ALTERNATIVE

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

The applicant envisaged that the applied mineral <u>Stone Aggregate</u>, <u>Gravel (St)</u> & <u>Gravel (grav)</u> is present on this property as there is an old quarry just outside this area and therefore the application for a mining permit. As this is a mining permit area (5 ha) the whole of the 5 ha will be mine over the 2 year period, as all mining activities will be within this 5 ha area. This 5 ha area applied for is the preferred site, thus there cannot be an alternative site as all activities must stay within the boundaries of the 5 ha applied for. The applicant will surely investigate technology alternatives by looking at the newest equipment available that will be more productive, energy- and water efficient, thus lesser impact on the environment and more cost effective.

h) FULL DESCRIPTION OF THE PROCESS FOLLOWED TO REACH THE PROPOSED PREFERRED ALTERNATIVES WITHIN THE SITE

(i) Details of the development footprint alternatives considered

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

Alternative is not applicable. The current land is agricultural (natural vegetation) land. Thus the option to mine the area will be a new land use. If a mining permit is not issued the land owner will just carry on with their existing agricultural practices over this area.

(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 5 hectare area only. Since the area is so small area there are not really location alternatives. And the whole of the application area will systematically be mined eventually. There are no alternative sites as the whole of the application area was identified as being favourable to bear *Stone Aggregate, Gravel (St) & Gravel (grav)*.

(b) the type of activity to be undertaken

The type of activity is in line with the submitted Mining Plan. Stone Aggregate, Gravel (St) & Gravel (grav) mining normally use the opencast mining method in order to access the mineral where after it is fed by a frond end loader into the screening/crushing plant. A stockpile will be created at the screening/crushing plant and loaded on the trucks for transporting to the clients. It is envisaged that some of the gravel (G5) will be loaded directly onto the trucks without any processing. It is only when the operation go to a big scale mine where large volumes of gravel is being processed that better technology is required, but them you need to be able to sustain large volumes. As this a small scale mining operation it will be the basic opencast method with associated screening/crushing plant.

(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 as submitted with the application. And the whole of the application area will systematically be mined eventually. There are no preferred sites as the whole of the application area was identified as being favourable to bear <u>Stone Aggregate</u>, <u>Gravel (St) & Gravel (grav)</u>. A quarry will be created and all available mineral will be excavated and removed. They will perhaps have a temporary office building, the screening/crushing plant will be near the quarry/excavation and the mining machinery will be in and around the open excavation. 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 mining 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 Mining Plan and the best options will be determined by the applicant, which is open cast mining of the excavations whereby gravel is excavated. The technology used with regards to the processing of the gravel/stone gravel is normally with the use of screening/crushing plant. More advanced technology normally applies to bigger operations which required a greater volume to be processed per day. But all of these more advanced technology required a bigger financial investment, which it not always possible with a small scale mining operation.

(e) the operational aspects of the activity, and

The operational aspect is only the mining of <u>Stone Aggregate, Gravel (St) & Gravel (grav)</u> on this specific area, making use of conventional opencast mining technology. Operations will be done through systematically mining the whole of the 5 ha. The stone and gravel will be excavated and the sides will be sloped in order to make it safce en encourage vegetation growth on the side slopes again. There will be minimal backfilling taking place as most of the material will be crashed and process for construction processes. The importance will be to work this area from one side to another not leaving any patches of gravel, but rather work out the reserve systematically so that proper rehabilitation can take place.

(f) the option of not implementing the activity

This option might only be possible if the applicant decide to abandon the project. The landowner will just continue with existing agricultural activities, which is grazing if this project does not continue. Thus not exploiting the mineral reserve and somebody else can apply.

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

The process as described by NEMA for Environmental Authorization was followed. See **Table 5 & 6** below for the identification of Interested and Affected Parties to be consulted with. The landowner (A.J.E. Meyer) and the direct neighbours were consulted personally and through letters that was given to them by hand. The result of this consultation and responses as received are all attached under **Appendix 2**. An advertisement was placed in the local newspaper of <u>Stellalander Newspaper of the 15th September 2021</u>, also see copies of these attached. Notice was put up at the entrance to the application area, where all passers-by are invited to give through their comments of objections toward the proposed application. A copy of the BAR was sent to all the State Departments and these were incorporated throughout point i) of this document. See proof of consultation under **Appendix 2**.

Appendix 2 - Proof of consultation.

a. Details of the Public Participation Process Followed

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

The public participation process followed was in line with this prescription as per NEMA for Environmental Authorization. All relevant interested and affected parties was identified and consulted with. See **Table 5** below for identification list and how they were consulted.

Table 5: Identification of Interested and Affected Parties to be consulted

Table of Identification of Intelested and Affected Faith	es in n	e com	ouncu
		arı X where	
IDENTIFICATION CRITERIA	YES	NO NO	ACTIONS
Will the landowner be specifically consulted?	×		He was consulted through personal and written consultation.
Will the lawful occupier on the property other than the Landowner be consulted?	х		They were consulted through personal and written consultation.
Will a tribal authority or host community that may be affected be consulted?		Х	N/A
Will recipients of land claims in respect of the area be consulted?	х		E-mail was sent to Keabetswe Mothupi, no roply was received.
Will the landowners or lawful occupiers of neighbouring properties been identified?	х		The landowner and neighbours were all consulted in person.
Will the local municipality be consulted?	×		Letter was sont to Mr P. Bolao of Magwassi Hills Local Municipality, no reply was received.
Will the Authority responsible for power lines within 100 metres of the area be consulted?		х	There are no power lines within 100m from application area.
Will the Authorities responsible for public roads or railway lines within 100 metres of the area applied for be consulted?		×	There are no public roads within 100 m that will be affected.
Will the Authorities responsible for any other infrastructure within 100 metres the area applied for be consulted? (Specify)		х	There are no surface infrastructure that will be affected; the application area is within cultivated fields.
Will the Provincial Department responsible for the environment be consulted?	х		Draft BAR was sent to DEDECT on 11/10/2021
Will all of the parties identified above be provided with a description of the proposed mining/prospecting operation as referred above?	×	,	All consultation letters included the full properly description and summary of intended activities
Will all the parties identified above be requested in writing to provide information as to how their interests (whether it be socio-economic, cultural, heritage or environmental) will be affected by the proposed mining project?	X		All consulted letter invited all t&AP's to send through any comment or objections.
Other, Specify			

(iii)Summary of issues raised by I&AP's

In term of NEMA - EIA Regulations No. 326 of 7 April 2017 - Reg. 21, Appendix 1 - 3. (1)[h](iii)

The public participation process was followed as described by NEMA for Environmental Authorization and as described under the previous point (ii) Details of the Public Participation. See Table 6 below for summary of all (&AP's which was consulted with and Appendix 2 for copies of all letter, notices and photos on public participation.

Table 6: Summary of Identified I&AP's

I ADIC V. SHIRING F OF IVEHIEL IN S				
Interested and Affected Parties		Date sent and lor		
LIST (TRE STATES OF PERSONS CONSERVED IN THIS COLUMN, BRD SEARCH WITH BIT "X" WHERE THOSE WHO MUST BE CONSUMED WERE IN Tact		Comments Received	Ssues raised	EAP's response to the applicant
AFFECTED PARTIES				
Landowneri's	×			
A J.R Meyer (Andre)		27 July 2021	Telephonically consultation - no rejection	
e-mail: andredupmeyer@gmail.com		8 Oct 2021	Telephonically and via e-mail reminder - the landowner	
Cell.083 255 3253			confirmed that he will sign the consultation letter - awaiting	£**
Lasadowner & surrounding neighboar	······		Written response.	
Lawful occupier/s of the land				
A J R Meyer (Andre)		27 July 2021	Telephonically consultation - no objection	
e-mail: andredupmeyer@gmail.com		8 Oct 2021	Telephonically and via e-mail reminder - the landowner	
Cell.083 255 3253			Contamed that he will sign the consultation letter - awaring	
(Neighbour)			Mistal Italyaise	
Landowners or lawful occupiers on adjacent properties	×			
Municipal coencilor				
Municipality	×			
Maguassi Hills Local Muracapality		27 July 2021	Consultation letter sent to Mr. Bolao	
LED officer: Peter Bolao				
E-mail: bolaopeter@gmail.com				
Organs of state (Responsible for antrastructure that may be affected Roads Department, Eskom, Telkom, DWA,				
Eskom				
Communities				
NA				
Dept. Land Affairs	×<			
Keabetswelvolhupi		27 July 2021	Request for verification of land claims sent to	11 August 2021 – acknowledgement received
E-mail. Keabelswe.mothupi@drdlr.gov.za			Keabelswe Mothups	16 August 2021 – response letter received
Traditional Leaders				
WA				
Dept. Rural, Environment and Agricultural Bevelopment	×			

OumaSkosana		6 September 2021	6 September 2021 BAR/EMPr sent with Fastway couriers for comments	
Agricentre Building, Cnr James Moroka& Stadium Road, Mmabatho, 2735				
e-mail: oskosana@rwpg.gov.za				
Dept. Water and Sanitation	×		TOTAL STREET, TO	WORKS 111 010
Dr.T. Nuis		6 September 2021	6 September 2021 BAR/EMPr sent with Fastway counters for comments	
24 Floor, Bioem Plaza Building				
Cnr East Burger & Charatte Maxeke				
Blcemfontein, 9300			• • •	
Tel: 051 405 9000 E-mail: NighT@dws.gov.za				
Dept. Agriculture, Forestry and Fisheries	×			
Maurice Vuyega	; ;	6 September 2021	6 September 2021 BAR/EMPr sent with Fastway coursers for comments	
Louis le Grange Building, Chr Peter Mokaba & Wolmarans street, 3rd			•	
Pacz, Office no 318, Potchefsfroom, 2520			•••	
Fel: 018-389 5156 e-mail: MauriceV@daff.gov.za				
Other Competent Authorities				
OTHER AFFECTED PARTIES				
INTERESTED PARTIES				

Notice was published in the Stellalander Newspaper of the 15x September 2021

(iv)The Environmental attributes associated with the alternatives

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

1. Baseline Environment

<u>Introduction:</u> The purpose of this section is to provide information on the environment in which the proposed mining 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: **Vaalboschfontein 205 HO - a certain portion of the Remaining Extent.** This area can be described as being under natural vegetation, see Appendix 1(b) and Figure 3.

<u>Magisterial District:</u> Wolmaransstad is a maize-farming town situated <u>on the N12 between Johannesburg and Kimberley</u> in North West Province of South Africa. The town lies in an important alluvial diamond-mining area and it is the main town of the <u>Maquassi Hills Local Municipality</u>. It is within the Maquassi Hills Local Municipality which is a local municipality in the <u>Dr Kenneth Kaunda District Municipality</u> of the North West Province, South Africa. Course: https://en.wikipedia.org/wiki/Wolmaransstad.

<u>Direction from neighbouring town:</u> The site is situated from: Wolmaransstad is approximately 11.8 km north-west, Makwassie 9 km south-east and Bloemhof 53.6 km south-west of the application area. The site is over natural grazing. See location of proposed site on Locality Map Appendix 1(a).

<u>Longitude</u> (approximate center of mining site): 25.928626°E <u>Latitude</u> (approximate center of mining site): -27.285008°S

Existing Surface Infrastructure: This will be a very small project with low impacts (only 5 ha). The application area is situated over an area that is over natural grazing. The proposed application area is situated 11.8 km south-west of Wolmaransstad. It is situated amides an area that is under natural vegetation, see Appendix 1(b) — Pre-Mining Infrastructure Map and Figure 4 below for images of proposed area - http://daffarcgis.nda.agric.za/Comp_Atlas_v2/. On Figure 4 it can be seen that this area is still virgin land with no previous disturbances. There is no infrastructure over the application area only entrance road and farm roads. It is within a bigger farm — Remaining Extent of the farm Vaalboschfontein 205 HO, which are 552 ha. Access to the prosed site can be gained via the N12 national road that is running between the towns of Wolmaransstad and Bloemhof. This application area is near an old quarry located just west of this application area. There are further no surface water bodies on or near this application area. There are two farm steads between 829 m and 890 m east and south-east of the proposed application area and farm workers houses just on the opposite side of the gravel road about 100 m east.

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

<u>Distribution:</u> North-West Province: In two sets of patches, one in the Wolmaransstad, Ottosdal and Hartbeesfontein region, and the other from the Botsolano Game Park north of Mafikeng to the vicinity of Madibogo in the south. Altitude 1 260-1 580 m.

<u>Climate:</u> Warm-temperate, summer-rainfall region, with overall MAP of 533 mm. Summer temperatures are high. Frequent frosts occur in winter. For this area the maximum summer temperatures can range between 24.7°C − 26.9°C and the minimum winter temperatures can go as low as 4°C − 5.5°C, first frost of the season is normally 11-20 April and last occurrence of frost can be as late as 21-30 September.

Topography: The topography is characterized as being <u>level plains with open low hills or ridges</u>. The slope being ≤2 %. The average elevation is between 1 260-1 580 m. The area is characterized by predominantly one-terrain unit that form part of the natural topography of the area. The application area is over natural vegetation.

Geology & Soil: Shale, slate and quartzite of the Pretoria Group with interlaid diabase sills and Hekpoort lava supporting relatively shallow and rocky soils (Glenrosa and Mispah forms), typical of the Fb lend type. Equally represented are eutrophic red plinthic soils (Hutton form), derived mainly from a thick succession of volcanics and sediments of the Ventersdorp Supergroup (Bc land type). Bd and Ae of minor occurrence. See Figure 5 for an extract of the geological map below.

South Arica, Page 1997 P

Figure 5: Extract of geological map

<u>Vegetation & Landscape Features</u>: Plains or slightly irregular undulating plains with open to dense *Acacia karroo* bush clumps in dry grassland see Figure 6 below. The agricultural region within which this application area falls is classified as being: <u>IV – Marginal potential arable land</u>. The <u>grazing capacity</u> was set at <u>6 ha/LSU</u> (1993) and have deteriorated to <u>8 ha/LSU</u> (2016). The adjacent are was previously mined by alluvial diamond miners and an open excavation/quarry was left. See distorical images from Google Earth dated 2010 below as Figure 6. Furthermore according to the DEDACT's (Department of Economic Development, Environment, Conservation and Tourism's) new screening tool the footprint of this application area, although only mall scale mining, are classified as per Table 7 below.

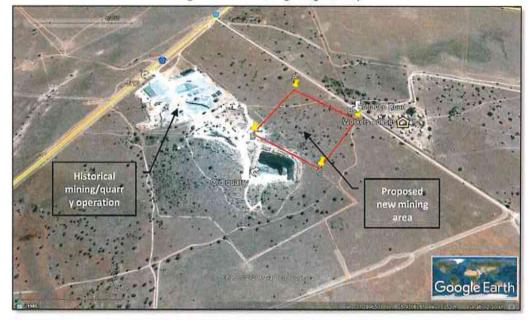


Figure 6: Extract of geological map

Table 7: DEDACT - Screening Report

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sens itivity
Agriculture Theme			X	The state of the s
Animal Species Theme	3792			X
Aquatic Biodiversity Theme	X			X
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme			X	
Palaeontology Theme			X	
Plant Species Theme			X	X
Defence Theme				Х
Terrestrial Biodiversity Theme	X			

The most sensitive area identified is: Aquatic Biodiversity Theme and Terrestrial Biodiversity Theme which was both listed as being very high sensitive. There are however no visual surface water bodies or stream on this part of the farm Vaalboschfontein 205 HO. There is what looks to be various wetland areas on the neighbouring farm Oersonskraal 207 HO. Area that looks as if it can get saturated with water during high rainfall periods, between 1.3 km - 4.5 km east to southeast of the application area. The Makwassie Spruit run 5.8 km east of the application area between the towns of Wolmaransstad and Makwassie and the Bamboes Spuit runs 2.1 km west of the application area on the opposite side of the N12. All mining activities will be more than 100 meters horizontally away from these surface river area, its banks and associated wetland area. With regards to the Terrestrial Biodiversity Theme that was also classified as being very high sensitive. Because of the fact that previous mining activities have taken place over this portion of the farm Vaalboschfontein, the natural vegetation although restored to some extent can no longer be seen as pristing of virgin land. Next to this application area the old quarry is still visible. The other themes that was classified as medium sensitive: Agriculture Theme, Civil Aviation Theme, Palaeontology Theme and Plant Species Theme. This area was years ago cultivated and have since pre-1990's been withdrawn form cultivation. Thus the vegetation is characterized as pioneer species with no big shrubs or trees. As indicated by the Agriculture. Department Development Comprehensive of Land Reform and Rural http://daffarcgis.nda.agric.za/Comp_Atlas_v2/, the agricultural region within which this application area falls is classified as being: IV - Marginal potential arable land, but this are no longer the situation of this area. With regards to the Paleontology Theme, the mining operators will have to be sensitive if any artifacts are discovered and must be reported immediately to responsible authority, but with cultivation that have taken place year ago and the previous mining activities that was also done. the chances that any items are still percent are high unlikely. The impacts can all be partially mitigated except geology and because of the fact that a depression will remain where material was removed and with time the area can again be utilized for grazing if the side are sloped to a acceptable safe gradient. Thus specialized studies are not deemed necessary at this stage.

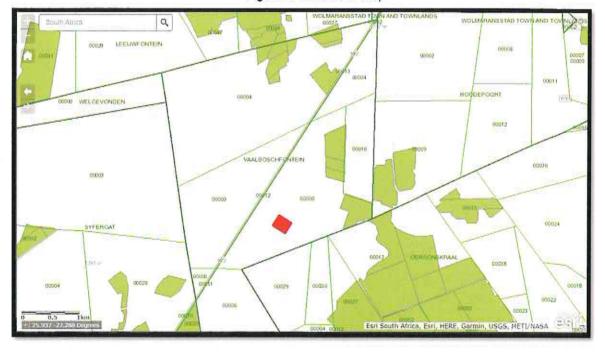


Figure 6: Land cover map

According to VEGMAP (2006) the area is classified as part of the <u>[Gh 13] Klerksdorp Thornveld</u>. See **Figure 7**. Below is a summary of the plant species that may occur over the surrounding undisturbed areas, 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 karroo (d), A. caffra, Celtis africana, Rhus lancea, Ziziphus mucronata, Tall Shrubs: Acacia hebeclada, Diospyros lycioides subsp. lycioides, Ehretia rigida, Grewia flava, Gymnosporia buxifolia, Rhus pyroides, Tarchonanthus camphoratus. Woody Climber: Asparagus africanus. Low Shrubs: Asparagus laricinus (d), A. suaveolens (d), Felicia muricata (d), Anthospermum hispidulum, A. rigidum subsp. pumilum, Aptosimum elongatum, Gnidia capiata, Gomphocarpus fruticosus subsp. fruticosus, Helichrysum dregeanum, Leucas capensis, Pavonia burchellii, Pentzia globosa, Solanum supinum var. supinum, Triumfetta sonderi, Ziziphus zeyheriana. Graminoids: Aristida congesta (d), Cynodon dactylon (d), Eragrostis lehmanniana (d), E. trichophora (d). Microchloa caffra (d), Panicum coloratum (d), Sporobolus fimbriatus (d), Themeda triandra (d), Andropogon schirensis, Anthephora pubescens, Aristida junciformis subsp. galpinii, A. stipitata subsp. graciliflora, Brachiaria nigropedata, B. serrata, Bulbostylis burchellii, Cymbopogon pospischilii, Digitaria eriantha, Diheteropogon amplectens, Elionurus muticus, Eragrostis curvula, É. obtusa, E. racemosa, E. superba, Eustachys paspaloides, Heteropogon contortus, Setaria sphacelata, Sporobolus africanus, Tragus berteronianus, Trichoneura grandiglumis, Triraphis andropogonoides. Herbs: Acalypha angustata, Acanthospermum australe, Berkheya onopordifolia var. onopordifolia, B. setifera, Blepharis integrifolia var. clarkei, Chamaesyce inaequilatera, Chascanum adenostachvum. Dicoma macrocephala, Helichrysum nudifolium var. nudifolium, Hermannia lancifolia, Hibiscus pusillus, Justicia anagalloides. Lippia scaberrima, Nidorella microcephala, Nolletia clliaris, Pollichia campestris, Rhynchosia adenodes, Salvia radula, Selago densiflora, Teucrium trifidum, Tolpis capensis. Geophytic Herbs: Bulbine narcissifolia, Ledebouria marginata, Ornithogalum tenuifolium subsp. tenuifolium, Raphionacme hirsuta. Herbaceous Climber: Rhynchosia venulosa. Conservation Vulnerable. Target 24 %. Only about 2.5 % conserved in the statutory Mafikeng Game Reserve, private Botsolano Game Park and Faan Meinties Nature Reserve. Almost a third already transformed for cultivation and by urban sprawl. This vegetation unit has a high grazing capacity and this leads to overutilisation and degradation, and subsequent invasion of Acacia karroo into adjacent dry grassland. Due to the great habitat and floristic diversity and for aesthetical reasons, the landscape deserves to be conserved. References: Louw (1951). Morris (1973, 1976), Bredenkamp & Bezuidenhout (1990), Bezuidenhout (1993), Bezuidenhout et al. (1994c, d).



Figure 7: The VEGMAP classification: (Gh 13) Klerksdorp Thornveld

<u>Surface Water:</u> This application area fall within the water management area of the <u>Middle Vaal (9)</u> and secondary catchment area <u>C25</u> and tertiary drainage region <u>C25E</u>. There is no open water of surface water body on the application area. All precautions will have to be taken to prevent erosion during heavy storm events. See **Figure 8** for where the application area is situated within the water management areas of the region. There are <u>no visual surface water bodies or stream</u> on this part of the farm Vaalboschfontein 205 HO. There is what looks to be various wetland areas on the neighbouring farm Oersonskraal 207 HO. Area that looks as if it can get saturated with water during high rainfall periods, between 1.3 km – 4.5 km east to southeast of the application area. The Makwassie Spruit run 5.8 km east of the application area between the towns of Wolmaransstad and Makwassie and the Bamboes Spuit runs 2.1 km west of the application area on the opposite side of the N12. All mining activities will be more than 100 meters horizontally away from these surface river area, its banks and associated wetland area.

<u>Ground Water:</u> There are <u>no boreholes</u> on the application area, but there will probably be one near the application area on the rest of the farm, which with the necessary agreement can be used for mining processing. The applicant intends to use water from the current boreholes and the necessary water use conversion will be done. The water uses out of this borehole will be for dust suppression on roads and processing. They will require about 2 000 liters per hour for all these mining processes.

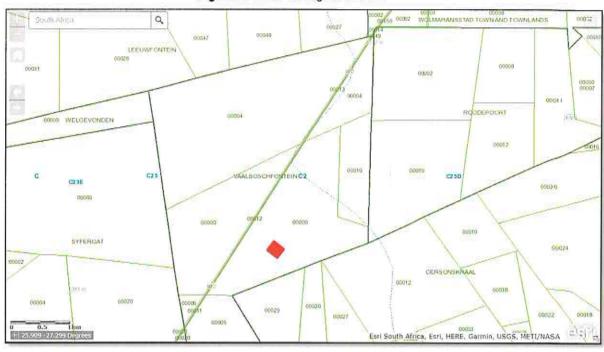


Figure 8: Water Management Area

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. Because of many years of constant mining practices it is also assumed that most of the natural animal live have move away from this disturbed areas to area outside this area in order to have a saver nesting and habitat areas. 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), Orycteropus afer (Aardvark), Pedetes capensis (South African Ground Squirrel), Orynictis penicillata (Yellow Mongoose), Canismesomelas (Black-backed Jackal), Hystrix africaeaustralis (Cape Porcupine), Herpestes sanguineus (Slender Mongoose), Phacochoerus africanus (Common Warthog), Raphicerus campestris (Steenbok), Iconyx striatus (Striped Polecat), Suricata suricata (Meerkat), Pedetes capensis (South African Spring Hare), Genetta genetta (Common Genet), Atilax paludinosus (Marsh Mongoose).

<u>Air Quality:</u> With reference to the Scheduled processes under the Atmospheric Pollution Act, 1965 (Act No. 45 of 1965): No scheduled process relates to any proposed mining activity on this applied area. The current source of air pollution in the area stems from vehicles travelling on the gravel roads of the area and agricultural activities. The source of air pollution will be nuisance dust generated by the movement of excavators, hauling of raw mineral to and from excavations to the processing are via the mining roads, as well as from the crusher. Gas emissions from vehicles will be within legal limits. The landowner and surrounding neighbours may from time to time be negatively impacted upon. It is however foreseen that the overall dust impact will be medium to low negative. The mining activities will be +500m form the N12 and if the wind blows in a northwestern direction, the traffic on the N12 can be negativity impacted.

Noise: The movement of heavy vehicles, as well as die screening and crushing during the operational and closure phase and the mining of the stone and gravel will have a low impact on the noise levels in the vicinity of the mine. The mining and transporting of the gravel which is during normal office hours and will blend in with the daily noise impact of cars travelling on the N12 and in the vicinity and other agricultural practices. These noise levels will be continuous and the operators will be issued with earplugs. 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 and the influence on wild life.

<u>Sites of Archaeological and Cultural Interest:</u> There are no graves on the application area.

Sensitive Landscapes: There are no sensitive areas over the mining permit application area.

<u>Visual Aspects:</u> The nearest residences are the farm workers houses ±100m east of the application area on the other side of the entrance road. There are also twee farmsteads between 829 km - 890 km east and south east of the application area. The operation will not be shielded by the natural vegetation, as it is within an area with no big trees or shrubs. As it will not be a big operation the impact is seen as being medium negative. The mining site will be visible to the land owner and people traveling on the local gravel road as well as motorist traveling on the N12. The negative visual impact associated with the stockpiling of gravel dumps to be processed and the processing plant (crushing plant) are not seen to be a high visual impact since this infrastructure will only been part of the topography for <u>two years</u>. The mitigation of this impact will be done concurrent with operations as mining progress, the stockpile dumps will get smaller and eventually diminish and in the long term this site will sloped and rehabilitated.

Social:

The proposed activity will employ 8 people, of which are resident from Wolmaransstad/Makwassi area. Various social amenities are available close to the operation. These include schools, hospitals churches, recreation facilities as well as a Police Station at Wolmaransstad or Makwassie, which is located between 9 to 11.8 km north east and southeast of the proposed operation.

(a)Description of the current land uses

The application area is situated over an area that is over natural vegetation. There is no infrastructure over the application area beside for a entrance road. There are no structures over this application area. It is part of a bigger farm portion of the rest of the Remaining Extent. Access to the farm is gained via the N12 road running between Wolmaransstad and Bloemhof. The surrounding areas are used mostly as agriculture cultivation and grazing.

(b)Description of specific environmental features and infrastructure on the site

Please refer to Section 2 (d)(ii) **Table 2** for a description of the activities and the infrastructure which are foreseen to form part of the mining activity. This will be a very small project with low impacts (only 5 ha). The application area is situated over an area that is over natural grazing. The proposed application area is situated 11.8 km southwest of Wolmaransstad. It is situated amides an area that is under natural vegetation, see **Appendix 1(b)** – Pre-Mining Infrastructure Map and **Figure 4** for images of proposed area - http://daffarcgis.nda.agric.za/Comp_Atlas_v2/. On **Figure 4** it can be seen that this area is still virgin land with no previous disturbances. There is no infrastructure over the application area only entrance road. It is within a bigger farm - Remaining Extent of the farm Vaalboschfontein 205 HO, which are 552 ha in total. Access to the prosed site can be gained via the N12 tar road that is running between the towns of Wolmaransstad and Bloemhof. See **Appendix 1(b)** of existing infrastructure.

(c)Environmental and current land use map

Current land use of the application area is natural grazing, probably use for grazing of cattle. See **Appendix 1(b)** [Pre-Mining Infrastructure Map] and **Figure 4** [Images of existing infrastructure] for more detail.

(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 1 – 3. (1)(h)(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 Basic Assessment Report 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, which will be investigated further in the Impact Assessment Phase of the project, are summarized in **Table 8** on next page.

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	Components	SIDERGLY	Activity, Product or Service	Denastration of mines (co.ses are)	Erzekstreetjekepspacken vagatotin dennen troon serval and sovjekelj diptyce access raals/esgele saattepack, infolwagearfor charava, lyskel nerved 2 sorsjekely with them the board and	Establishmen of combic desel and of them calls frage bodyes, dearing tolers	iju eskada papi eta kenod poe ines beşuci espodaj sun sõems puosvojj	Ponison d wate tending dispusal fastes (donosti s nuscrid sesaites	Fencing -off actor minica see na nequivolm loms of the VAISA Ensure porces corrol ligher), ext	Vegeskon cieranos, spool vemos é sobsiskos med ka milmo de mise kous assa (Colha d'sudas area-dea-deal es gosen amej	trading orlo and transport with tracks away from the six	Szocuret badif ag et quay wahmants ardudósa jux. Vará coerapai el matja diras ardiszabbat quany en tela stockászt neszikwerkerten modusel its amazel avaltake is sofoert.	Ena sociey of all voids where cossides	See an smeal of transfer by the April 1885	Statement of regulation cover.	Percee of a terporary Lensition of al perceed
		PHASE				ioliouita		,			noiten				ainsc	
			[чтг	7	47	v	r.	9	f	57	\$2	=	5	÷2	20

(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 1 - 3. (1)(h)(vi)

Introduction:

This section below describes and evaluates the effects of the different mining 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
- Soil
- 4. Land Capability
- 5. Land Use
- 6. Vegetation
- 7. Wildlife
- Surface Water

- Ground Water
- 10. Air Quality
- Noise
- Archaeological and Cultural sites
- 13. Sensitive Landscapes
- Visual Aspects
- Socio-economic Structure
- Interested and Affected Parties

IMPACT ASSESSMENT

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

ACTIVITIES:

- 1. Access Roads (Existing roads to be upgraded)
- 2. Temporary office, workshops, ablution facility, water tanks, diesel tanks, and other temporary buildings
- 3. Mining equipment (conveyor, screen/crusher, generator)
- Stockpiles
- 5. Opencast trenches

Environmental Impact Assessment Summary:

Environment likely to be affected by the mining operation. (See Appendix 1 (b) for location)

Environmental aspect	Affe	Affected				
	Negligible	Substantial	1			
1. GEOLOGY		X				
2. TOPOGRAPHY	Х					
3. SOIL		X				
4. LAND CAPABILITY		X				
5. LAND USE	Χ		***			
6. VEGETATION		X				
7. WILDLIFE	Х					
8. SURFACE WATER			X			
9. GROUND WATER	X					
10. AIR QUALITY	Х					
11. NOISE	Х					
12. SENSITIVE LANDSCAPES			X			
13. VISUAL ASPECTS	X					
14. SOCIO ECONOMICS	X					
15. INTERESTED & AFFECTED PARTIES	X		THE RESERVE THE PROPERTY OF TH			
16. ARCHAEOLÓGICAL			X			

Environment likely to be affected by the alternative land use

Mining will not be a new land use over this area, as the area was previously disturbed by mining activities. The site that is earmarked for mining represents \pm 100 % of the total area applied for. And it is further not foreseen that mining activities would disturbed an area of more than 0.5 ha at any given time. The whole of the 5 ha area will be under mining associated infrastructure or activities.

Assessment of the impacts created by the mining activity

Before any assessment can be made the following evaluation criteria need to be described:

Explanation of probability of impact occurrence

Probability of impact	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 extend of impact

The special section of the section o					
Extend of impact	Explanation of extend				
Site specific	Direct and indirect impacts finited to site of impact only.				
Local	Direct and indirect impacts affecting environmental elements within the Wolmaransstad district.				
Regional	Direct and indirect impacts affecting environmental elements within North West 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 significance	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 reat 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 afternative to achieving the benefit.

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

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

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 mining permit is being applied for the sole purpose of mining of <u>Stone Aggregate</u>, <u>Gravel (St) & Gravel (grav)</u>. The no-go option entails the continuation of the current land use (grazing) on the study site by the landowner/applicant. The project will contribute towards providing continued jobs. Should the proposed project therefore not be authorized to proceed, it is anticipated that employment opportunities will be lost.

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. The site layout will be only the excavation, plant area and office container. The stockpiles of the topsoil will be placed next to the side walls of the excavation on the outside. This will have the advantage to be nearby available to be used for rehabilitation. The stockpiles for the <u>Stone Aggregate</u>, <u>Gravel (St) & Gravel (grav)</u> (product) and the screening/crushing plant will be placed just outside the excavation within the mining area which will have the advantage that the loading of trucks can proceed without hampering the mining process and will be a safer mining environment.

(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 1 - 3. (1)(h)(viii)

Refer to the results of consultation contained in **Table 6** for the issues that were raised by I&AP's and stakeholders during the review period of the Consultation phase of the BAR/EMPr report, 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. Please see section below for more detail.

Table 9: Assessment of the nature, extent, duration, probability and significance of the potential environmental, social and cultural impacts of the proposed mining operation, including the cumulative environmental impacts

ASPECT	IMPACTS				CUMULATIVE IMPACTS
1. GEOLOGY	1				
Nature of the impact	During operation wh Gravel (St) & Grave	ill be destroyed during the ich wilt be for the next 2 yea / (grav)) will be extracted frought of the material is dispose			
Extent	Site			The second secon	Activity causing the impact
Duration	Permanent			***************************************	An opencast mining method will be used to extract
Probability	Definite			THE PARTY OF THE P	mineral deposits. Therefore the original geology will be
Significance	High		totally destroyed.		
Phase responsible for the impact	Phase 1	Phase 2 X	Phase 3 X	Closure	

ASPECT 2. TOPOGRAPHY	IMPACTS		CUMULATIVE IMPACTS		
Nature of the impact	* Disturbance of The mining of the 4-5m or less), the activities will be Normal surface of	Itorm: its situated on: plains with the surface drainage; mineral deposits wilt res at act as depressions in the concentrated as indicated trainage will be disturbed.	### WATER OF THE PARTY OF THE P		
Extent	Site				Activity causing the impact
Duration	Very long to Perr	lanent			Creation of excavations
Probability	Definite	THE RESERVE OF THE PROPERTY OF		1	
Significance	High	THE RESERVE THE PROPERTY OF TH	7		
Phase responsible for the	Phase 1	Phase 2	Phase 3	Closure	1
impact		X	X	Х	

3. SOIL	IMPACT\$				CUMULATIVE IMPACTS
Nature of the impact	The surface area is characterized by gravel with only thin organic layer on top. Any construction of infrastructure should be preceded by the removal of all available topsoil where available.				THE STATE OF THE S
Extent	Site				Activity causing the impact
Duration	Long				In the process of removing topsoil the soil layers are
Probability	High				mixed and the structure may be disturbed.
Significance	Moderate		THE RESERVE TO THE PERSON OF T		-
Phase responsible for the	Phase 1 Phase 2 Phase 3 Closure				
impact		Х	Х		

3. SOIL	IMPACTS		CUMULATIVE IMPACTS		
Nature of the impact		construction, operation an he access roads, stockpile			
	All mining activities deposits could be fo	will be concentrated on the	a where mineral		
			at any given time for the ne		
Extent	Site				Activity causing the impact
Duration	Long				Site preparation for additional mining sites and the
Probability	High			construction, operation of listed infrastructure.	
Significance	Moderate				
Phase responsible for the	Phase 1	Phase 2	THE TRANSPORT OF THE PROPERTY		
impact		XX	XX	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
3. SOIL					
Nature of the impact	would lead to lesse bare disturbed surf	o the fact that certain surfa er infiltration of rainwater a aces. Erosion would alway rehabilitation phase.			
Extent	Site			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Activity causing the Impact
Duration	Very short	11 11 11 11 11 11 11 11 11 11 11 11 11	THE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	When removing topsoil during site preparation, tittle
Probability	Very low			***************************************	storm water control structures are in place. If a severe
Significance	Low	"		***************************************	storm hits the area, it may lead to erosion on site.
Phase responsible for the	Phase 1	Phase 2	Topsoil stockpiles may be prone to erosion due to lack of vegetation cover.		
impact	X X X				Water control structures may fail or severe rainstorms may cause excessive run-off. Surface compaction due to activities taking place.

ASPECT	IMPACTS				CUMULATIVE IMPACTS
3. SOIL					
Nature of the impact	Potential of soil con	tamination.			None.
Extent	Site				Activity causing the impact
Duration	Long				Vehicle/equipment breakages and oil/lubricant /diesel
Probability	Moderate			THE RESERVE THE PROPERTY OF THE PERSON NAMED IN COLUMN TO PERSON NAMED	spitls may contaminate soil.
Significance	Moderate				
Phase responsible for the	Phase 1 Phase 2 Phase 3 Closure				
impact		X	Х	×	

ASPECT 3. SOIL	IMPACTS		CUMULATIVE IMPACTS		
Nature of the impact	Loss of sail structure	9			None
Extent	Site				Activity causing the impact
Duration	Long				In the process of removing topsoit the soil layers are
Probability	High		mixed and the structure may be disturbed.		
Significance	Moderate				
Phase responsible for the	Phase 1	Phase 2	Phase 3	Closure	
impact		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
3.SOIL					
Nature of the impact	Loss of soil fertility		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		None
Extent	Site				Activity causing the impact
Duration	Short		The mixing of soil during site preparation, compaction		
Probability	Definite	The state of the s	VII. VII. VII. VII. VII. VII. VII. VII.		and potential pollution (spillages form oil etc.) all may
Significance	Low	THE RESERVE THE PROPERTY OF TH			cause this situation.
Phase responsible for the	Phase 1 Phase 2 Phase 3 Closure				
impact		X	X		

ASPECT 4.LAND CAPABILITY	IMPACTS				CUMULATIVE IMPACTS
Nature of the Impact	the active mining a will thus be tempor All excavations wo	fland capability to suppor ctivities occur (excavations, party alienated, until the area and be rehabilitated as part of oped, The rest of the applicat	ng equipment) etc. 3 which		
Extent	Site				Activity causing the impact
Duration	Long		THE THE STATE OF T		Site preparation for additional mining sites and the
Probability	Definite				construction, operation of listed infrastructure, the land
Significance	Moderate		capability of the active mining area will be totally destroyed.		
Phase responsible for the	Phase 1	Phase 2	desnoyed.		
impact		X	X	X	

ASPECT 5 LAND USE	IMPACTS		CUMULATIVE IMPACTS		
Nature of the impact	this area of the 5 ha would be affected by	operation and therefore we during the next 2 years. Continuing operation, All of during which excavations a			
Extent	Site	•	·		Activity causing the impact
Duration	Long to permanent				Site preparation for mining and the construction,
Probability	Definite				operation of listed infrastructure
Significance	Moderate				
Phase responsible for the	Phase 1 Phase 2 Phase 3 Closure				
impact					

ASPECT 6.VEGETATION	IMPACTS .				CUMULATIVE IMPACTS
Nature of the impact	Vegetation clearance, disturbance and trampling. Destruction of habitats for vegetation. Due to a disturbed ecosystem, bare ground and spreading of exotics can follow.				
Extent	Site				Activity causing the impact
Duration	Long				The site preparation for new sites, construction of listed
Probability	Definite				infrastructure will cause destruction of habitats for
Significance	High				vegetation. Due to a disturbed ecosystem, bare ground
Phase responsible for the	Phase 1 Phase 2 Phase 3 Closure				and invasion of exolics could further spread. The vegetation needs to be cleared to remove the
impact		Х	Х		topsoil.

ASPECT 6.VEGETATION	!MPACTS				CUMULATIVE IMPACTS
Nature of the Impact	Habitat change, los	s of species, spread of alle		#	
Extent	Site				Activity causing the impact
Duration	Permanent				The change in the current habitat will be mitigated
Probability	High				during final rehabilitation.
Significance	Moderate		1 1 11		
Phase responsible for the	Phase 1	Phase 2	Phase 3	Closure	
impact		X	X		

ASPECT	IMPACTS		CUMULATIVE IMPACTS		
6.VEGETATION					
Nature of the impact	Dust coverage of p	olants.			None
Extent	Site		Activity causing the impact		
Duration	Long		Heavy trucks and other vehicles on dirt roads,		
Probability	High				stockpilling, dumping of tailings are mainly responsible for this impact.
Significance	Low			ici (ns supect,	
Phase responsible for the	Phase 1 Phase 2 Phase 3 Closure				
impact		Х	Х		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
7. WILDLIFE					
Nature of the impact	Wildlife or wildlife h	abitat destruction /change /	None		
Extent	Site		Activity causing the impact		
Duration	Permanent				The flora which normally serves as habitat for animals
Probability	Very High				would be destroyed during site preparation. The
Significance	Moderate			increase in activity will temporarity scare other animals.	
Phase responsible for the	Phase 1	Phase 2	The area will serve as a new habitat after rehabilitation.		
impact		Х	Х		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
7. WILDLIFE					
Nature of the impact	Injury and death to w	vildlife		None	
Extent	Site			Activity causing the impact	
Duration	Short				The movement of vehicles may kill certain insects.
Probability	Very tow				rodents and possible birds. Most of the remaining
Significance	Low				animai life will however move away due to noise.
Phase responsible for the	Phase 1	Phase 1 Phase 2 Phase 3 Closure			
impact		Х	X		

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

ASPECT 8. SURFACE WATER	IMPACTS		CUMULATIVE IMPACTS		
Nature of the impact	system and dec	or footprint areas can inc rease buffering capacity r increase the risk of con	rease infiltration rates of wa of soils to absorb contam Itamination of the groundwa		
Extent	Local				Activity causing the impact
Duration	Short				The clearance of vegetation and the traffic on access
Probability	Moderate			TO THE RESIDENCE OF THE PERSON	roads will all contribute to an increase in the sift load on
Significance	Moderate			the mining area.	
Phase responsible for the	Phase 1 Phase 2 Phase 3 Closure				<u> </u>
impact		X	X	X	

ASPECT 8. SURFACE WATER	IMPACTS		CUMULATIVE IMPACTS				
Nature of the impact	from the active regarding water qualities if not adequiveld. If the nature	water quality. hicles and also surface water in the water quality and hindering the minitately contained on site couples surface run-off is not adeng sections it could become					
Extent	Local				Activity causing the impact		
Duration	Short				"Dirty / Clean" water systems at facilities like the		
Probability	Moderate	<u> </u>	overburden dumps, roads, excavations, etc. may				
Significance	High		impact on the quality of the surface water. The water should be contained in the surface runoff control				
Phase responsible for the	Phase 1	Phase 2	Phase 3	Closure	measures provided therefore.		
impact		X	Х				

ASPECT B. SURFACE WATER	IMPACTS		CUMULATIVE IMPACTS		
Nature of the impact	have any effect on water in excavation	vater quantity: above-mentioned facts, it the boundaries or the gen s could as the result of for the dust suppression m	thment. Standing ing up in shallow		
Extent	Site				Activity causing the impact
Duration	Long				It is an operational objective to contain or divert all
Probability	High				surface run-offs from the active mining excavations
Significance	High	AND THE PROPERTY OF THE PROPER		area mainty due to pollution (sediment) potential. This	
Phase responsible for the	Phase 1	Phase 2	will reduce the run-off quantity, although small in comparison with the drainage area in total.		
impact		X	X		companion was the diamphe area (i) (Old).

ASPECT	IMPACTS		CUMULATIVE IMPACTS		
9. GROUND WATER					
Nature of the impact	used during the mi cause various type	dwater quality e not likely to impact on lo ning process. Handling of s of spills (domestic waste, I the groundwater system.	lding material can		
Extent	Site		The state of the s	THE PROPERTY OF THE PROPERTY O	Activity causing the impact
Duration	Long			THE TAXABLE PROPERTY OF THE PROPERTY OF THE PARTY OF THE	
Probability	Definite				
Significance	High		The state of the s		
Phase responsible for the	Phase 1 Phase 2 Phase 3 Closure				
impact		Х	X	X	

9. GROUND WATER					
Nature of the Impact	users, this is a Groundwater v water needed	new use, and groundwat vill be abstracted for pota	e a minimal effect on the si ter levels are expected to able water supply and pro- comparison to other water u		
Extent	Site				Activity causing the impact
Duration	Long				Opencast mining operation.
Probability	Low				
Significance	High				
Phase responsible for the	Phase 1	Phase 2	Phase 3	7	
impact		X	X	Х	7

ASPECT 10. AIR QUALITY					CUMULATIVE IMPACTS
Nature of the impact	plant) and transport	ed during the mining operat atlon to the client and on gr Stone Aggregate, Gravel (dust is generated.	TO BE TO THE POST OF THE POST		
Extent	Site		Activity causing the Impact		
Duration	Long		initial construction work with regard to infrastructure		
Probability	Moderate			(roads) that involves earth moving equipment. Dust	
Significance	Moderate			could be generated as indicated during mining.	
Phase responsible for the	Phase 1	Phase 2	•		
impact		X	X	Х	

ASPECT 11. NOISE POLLUTION	IMPACTS		CUMULATIVE IMPACTS	
Nature of the impact	loader into the cru- The mine itself is	rated during the minking oper shing plant) and transportati located in on open level pla of worker environment that s nd Safety Act.		
Extent	Local		Activity causing the impact	
Duration	Long		Earth moving equipment and vehicles (trucks).	
Probability	Definite			
Significance	Moderate			
Phase responsible for the	Phase 1	Phase 2		
Impact		X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
12. ARCHAEOLOGICAL AND CULTURAL SITES					
Nature of the Impact		chaeologically vulnerable as ent will result in any signific	, , , , , , , , , , , , , , , , , , ,		
Extent	Site		Activity causing the Impact		
Ouration	Permanent				**************************************
Probability	Definite				
Significance	High				
Phase responsible for the	Phase 1	Phase 2	Phase 3	Closure	
impact		X			

ASPECT	IMPACTS		·		CUMULATIVE IMPACTS
13. SENSITIVE					
LANDSCAPE					
Nature of the impact	No sensitive landso	apes identified.			The state of the s
Extent	Not applicable				Activity causing the impact
Duration	Not applicable				WWW.W.L.
Probability	Not applicable				
Significance	Not applicable				
Phase responsible for the	Phase 1	Phase 2	Phase 3	Closure	
impact					

ASPECT 14.VISUAL ASPECTS	IMPACTS	CUMULATIVE IMPACTS
Nature of the impact	Mining will be visible to the landowners, neighbours and motorist traveling on the N12. There are no big trees of shrub that could help to shield this operation.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Extent	Site	Activity causing the impact
Duration	Long	Mining operation.
Probability	Definite	
Significance	Łow	
Phase responsible for the impact	Phase 1 Phase 2 Phase 3 Closure X X X	

ASPECT	IMPACTS			CUMULATIVE IMPACTS	
15. SOCIO ECONOMICS					
Nature of the impact	The project in itself some time. Job cre and their dependent	economic activity at local would ensure that approx ation plays a major role in ts in the Wolmaransstad a grations have ceased it wo	The increase in socio-economic activity will add to the current growth and development in Wolmaransstad district already created by industry and mining.		
Extent	Local		Activity causing the impact		
Duration	Long		Additional employment opportunities created.		
Probability	Definite				
Significance	High	THE PROPERTY OF THE PROPERTY O			
Phase responsible for the impact	Phase 1	Phase 2 X			

ASPECT 15. SOCIO ECONOMICS	IMPACTS		CUMULATIVE IMPACTS		
Nature of the impact		n the landowners is visual in Itural activities at any given	The economic benefits in terms of investment and the delivery of services in the North West province will get an additional benefit from the project.		
Extent	Regional		***************************************	Activity causing the impact	
Duration	Very Long	1 11	WINTERPORT HOLD FOR PROPERTY AND		
Probability	High				
Significance	Moderate				
Phase responsible for the	Phase 1	Closure			
impact		X	X	X	

ASPECT 16. INTERESTED & AFFECTEDPARTIES	IMPACTS		CUMULATIVE IMPACTS		
Nature of the impact	benefits far out weigh	lization of the mining focu at the current benefits from a expected that could be			
Extent	Local			Activity causing the impact	
Duration	Long			The state of the s	
Probability	High				
Significance	High				
Phase responsible for the	Phase 1	Phase 2	Phase 3	Closure	
impact	THE PARTY OF THE P	X	X	X]

(ix)Outcome of site section matrix

in term of NEMA - EIA Regulations No. 326 of 7 April 2017 - Reg. 21, Appendix 1 - 3, (1)(h)(ix)

Alternative is not applicable. The current land use is natural vegetation. The option to explore the possibility for mining is an alternative land use. The applicant, Raubex Construction (Pty) Lrd is not interested in any other alternative land use over this land aside of mining of <u>Stone Aggregate</u>, <u>Gravel (St) & Gravel (grav)</u> or any other activity, or method use other than mining for the aforementioned minerals in the conversional way, which is the most cost effective. Please note that no additional infrastructure will be established, and therefore no alternatives for the location of infrastructure were identified

(x) Statement motivating the alternative development location within the overall site

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

The application area applied for is only 5 hectares thus the development location is limited to this area and the area where the mineral deposits occur. The occurrence of economical viable <u>Stone Aggregate</u>, <u>Gravel</u> (St) & Gravel (grav) was identified over this specific area, thus this site selection.

i) FULL DESCRIPTION OF THE PROCESS UNDERTKEN TO IDENTIFY, ASSESS AND RANK THE IMPACTS AND RISKS THE ACTIVITY WILL IMPOSE ON THE PREFERRED SITE (IN RESPECT OF THE FINAL SITE LAYOUT PLAN) THROUGH THE LIFE OF THE ACTIVITY

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

See Table 10 below

Table 10: Technical & Management Action Plans

Environmental Component Geology Environmental Management/Mitigation Measures/Action Plans/Commitments

No militartion quieta expent to along the executions where it was not expelled to built.

- No mitigation exists except to slope the excavations where it was not possible to backfill.
- As mining progressed and the excavation has been sloped, 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 mining of the mineral resource (Stone Aggregate, Gravel (St) & Gravel (grav)) should take place.
- . Optimal utilization of the mineral resource should take place within the boundaries of the mining 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 mining would take place in a particular section or which might still be traversed by vehicles and disturbed in the process. Cognisance should be taken of the fact that bulk sampling would take place by means of an opencast mining method until such level is reach / cut-off point is reach where rehabilitation could begin.
- Care must be taken that the removal of Stone Aggregate, Gravel (St) & Gravel (grav) 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 mining 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 partly back-filled where possible with waste and eventually sloped and covered with a shallow layer of topsoil (if available).
- Access to all active mining excavation areas should be controlled. The active mining area should be fenced off. The necessary warring signs should be put in place. All mining 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 rehabilitated tailings dumps and overburden dumps in order to prevent
 the loss of growth medium on top of the dumps.

Mining would be done according to a definite Mining Plan (only disturbing an area that is really necessary). As part of the Mining Plan the handling of tailings material, 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 continua. As soon as a section of the mining 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 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 transported to an area earmarked for 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 mining 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 roads & roads established in consultation with the surface owner). No land would be disturbed unnecessarily.

Mining & rehabilitation should be done in a well-planned manner (according to a MP) 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 mining terrain, including roads.

Environmental Component

Soll (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 on tailings dumps, 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 tertilizer 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.

Cłosure Objective

Closure can only be given once all soil contamination measures have been conducted to prevent and remediate any incidences

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 sloping is done

No unnecessary driving outside the active mining area is allowed due to soil compaction that may occur.

Use organic material e.g. manure to restore the soil structure during rehabilitation.

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, time 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 opssible.

The soil on the rehabilitated area must be analysed to determine the deficiencies and fertilizer and time 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 topsoll 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 topsoit is analysed 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 mining site only. Remove topsoil where it is available. Take care that roads needed are restricted to one entry to the area for mining 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 mining site only. Remove topsoil where it is available.

Take care that roads are the only areas used to enter the area for mining 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). Topsoif 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 cultivation.

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.

Mining should be done in a well-planned manner (according to a MP) 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 mining site exposed surfaces, tallings dumps, etc.).

Environmental Component

Vegetation

Environmental Management/Mitigation Measures/Action Plans/Commitments

Habitat change, loss of species, spread of after and invasive species:

No mitigation exists except to replace the vegetation by reseeding of grasses.

Mining should be done in a well-planned manner (according to a MP) 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 Action Conservation of Agricultural Resources, 1983 (Action, 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 mining site (utilized by mining 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

Esvironmental 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 mining 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.

BAR - Raubex Construction (Pty) Ltd - Vaalboschfontein 205 HO - NW 30/5/1/3/2/10919 MP

Environmental Component

Wildlife (injury and death)

Environmental Management/Mitigation Measures/Action Plans/Commitments

injury and death to wildlife:

Re-establish trees and gress cover as soon as possible during and after mining. 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 tecture 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 mining 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

The Mining Plan 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/EtA.

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. The depth of the operation of maximum of 5m will not intersect the groundwater table thus no negative impact.

EMP Performance Assessment & Monitoring Reporting

To be included in EMP/EIA

Cłosure Objective

Ultimately rehabilitation of the disturbed mining site and the construction of run-off control structures in a planned and phased manner would ensure normal drainage and stability of rehabilitated site. The drainage must be away from the gravel road.

BAR - Raubex Construction (Pty) Ltd - Vaalboschfontein 205 HQ - NW 30/5/1/3/2/10919 MP

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 (sit) 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 hexards 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 mining 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 mining 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 mining method will serve as mitigation measure because mining will limit dust to the active mining 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 mining. Rehabilitation of the mining 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 mining 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 graveyards was identified in or near this application area.

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

BAR - Raubex Construction (Pty) Ltd - Vaalboschfontein 205 HO - NW 30/5/1/3/2/10919 MP

Environmental Management/Mitigation Measures/Action Plans/Commitments

None

EMP Performance Assessment & Monitoring Reporting

To be included in EMP/EIA.

Closure Objective

Environmental Component Visual Aspects

Environmental Management/Mittigation 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, dornestic waste, etc. that would otherwise contribute to a negative visual impact.
- Concurrent rehabilitation should be done simultaneously as mining 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 mining 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 mining 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 mine and pollution.

No mining 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.

BAR - Raubex Construction (Pty) Ltd - Vaalboschfontein 205 HO - NW 30J5[1]3[2]10919 MP

ASSESSMENT OF EACH IDENTIFIED POTENTIALLY SIGNIFICANT IMPACT AND RISK

In term of NEMA - EIA Regulations No. 326 of 7 April 2017 - Reg. 21, Appendix 1 - 3. (1)((1)(i)(ii)(iv)(v)(vii)

The process flow that will be required in order to access the mineral are systematically described in Table 11 below and rating each identified potential significant impact and risk that could be associated with them.

Table 11: Identified Potentially Significant Impacts & Risks

(iv) PROBABILITY OF (v) DEGREE TO WHICH (vi) DEGREE TOWHICH (vii) DEGREE TOWHICH THE IMPACT IMPACT IMPACTRISK CAN BE IRREPLACEABLE LOSS IMPACTRISK CAN BE OCCURRING REVERSED MAY OCCUR	Not mitgated	Filey Mingated	Fully Mitgated	Fully mitigated	paletiya Ing	िगीं गर्झावुवास्त्र.
(W) DEGREE TO WHIC IRREPLACEABLE LOS MAY OCCUR	Not reversible at all	Parly reversible	Partly reversible	Reversible	Reversible	Reversible
(v) DEGREE TO WHICH IMPACT/RISK CAN BE REVERSED	ampossible	Possible	Impossible	Possible	Possible	Possible
(IV) PROBABILITY OF THE IMPACT OCCURRING	出的	Moderate	High	, COW	Low	_or
(iii) EXTEND AND DURATION	A open excavations 2 years	2 years	2 years	2 years	2 years	2 years
(ii) SIGNIFICANCE	- 45P	Moderate -	• 407	**************************************	Low.	LOW -
(I) CUMULATIVE	Mone	5	Localized		If old disturbances not rehabilitated.	Air quelity
NAME OF ACTIVITY POTENTIAL (1) CUNULATE IMPACTS	1.f Removal of the Stone Aggregate, Gravel (St) & Gravel (grav) between 4 - 5 m deep. Disturbance of 0.5 hectare at any given time.	1.2 Change in sandform. The entire Tropography on adjacent mining area will be towered by 4 - 5 area if mining is also mass normal surface drainage will practised be disturbed at this specific point. The pit will be sloped	1.3 Stripping of all available topsoil land stockpiled. Stockpile area of 1.4 hectare at any given time.	1.4 Soil erosion: Due to the fact that Localized certain surface areas would become devoid of any vegetation cover and compacted this would lead to lesser infiltration of rain water and more furn-off that could cause erosion on bare disturbed areas and side slopes	1.5 Land capability and land use.	1.6 Generation of dust by excavating and vehicle movement
NAME OF ACTIVITY	Excavations for Stone Aggregate: gravel & Gravel (gra) G5		,		adini a tarah	area i sa dalla

() SUMMARY OF SPECIALIST REPORTS

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

This area can no longer be seen as pristine area. As a depression will remain after mining was completed the land use over this 5 ha will forever be changes. Furthermore according to mining. The most sensitive area identified is: Aquatic Biodiversity Theme and Terrestrial Biodiversity Theme which was both listed as being very high sensitive. There are however no activities will be more than 100 meters horizontally away from these surface river area, its banks and associated wetland area. With regards to the Terrestrial Biodiversity Theme that was Comprehensive Attas V2: http://daffarcgis.nda.agric.za/Comp_Atfas_v2/, the agricultural region within which this application area falls is classified as being. IV - Marginal potential arable and, but this are no longer the situation of this area. With regards to the Paleontology Theme, the mining operators will have to be sensitive if any artifacts are discovered and must be the DEDACT's (Department of Economic Development, Environment, Conservation and Tourism's) new screening tool the footprint of this application area, although only mall scale Area that looks as if it can get saturated with water during high rainfall periods, between 1.3 km - 4.5 km east to southeast of the application area. The Makwassie Spruit run 5.8 km east of the application area between the towns of Wolmaransstad and Makwassie and the Bamboes Spuit runs 2.1 km west of the application area on the opposite side of the N12. All mining also classified as being very high sensitive. Because of the fact that previous mining activities have taken place over this portion of the farm Vaalboschfontein, the natural vegetation although restored to some extent can no fonger be seen as pristine of virgin land. Next to this application area the old quarry is still visible. The other themes that was classified as medium sensitive: Agriculture Theme, Civil Aviation Theme, Palaeontology Theme and Plant Species Theme. This area was years ago cultivated and have since pre-1990's been withdrawn form reported immediately to responsible authority, but with cultivation that have taken place year ago and the previous mining activities that was also done, the chances that any items are still percent are high unlikely. The impacts can all be partially mitigated except geology and because of the fact that a depression will remain where material was removed and with time the visual surface water bodies or stream on this part of the farm Vaalboschfontein 205 HO. There is what looks to be various wetland areas on the neighbouring farm Oersonskraal 207 HO. cultivation. Thus the vegetation is characterized as pioneer species with no big shrubs or trees. As indicated by the Department of Agriculture, Land Reform and Rural Development area can again be utilized for grazing if the side are stoped to an acceptable safe gradient. Thus specialized studies are not deemed necessary at this stage.

Table 14: Specialist Reports

	IS OF SPECIALIST REPORTS SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT (Mark with an X SECTION OF REPORT WHERE SPECIAL IST SP		
Street of the post	LIST OF STUDIES UNDERTAKEN RECOMMENDATIONS OF SPECIALIST REPORTS	None	

I) ENVIRONMENTAL IMPACT STATEMENT

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

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

The small scale <u>Stone Aggregate</u>, <u>Gravel (St) & Gravel (grav)</u> mining 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 <u>Stone Aggregate</u>, <u>Gravel (St) & Gravel (grav)</u> resource will be mined over a period of 2 years or less. The existing land-use is natural vegetation. This is a small operation and for the next 2 years only a small portion of the town lands 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 5 ha, the top at least 30-50 cm topsoil where available needs to be removed prior to mining of the underlying <u>Stone Aggregate</u>, <u>Gravel (St) & Gravel (grav)</u> gravel (up to 4-5 m depth). This will be used again as growth medium during the rehabilitation phase on the slopes of the quarry. Topsoil will be stored in berm walls 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

Because the area will be mined systematically the crushing plant will be near the excavations and will be moved around the open pit as mining progress. It will not be possible to generate a final site map as the mining company will assist the terrain once the first excavation is made the rest of the mining related infrastructure will be place on site.

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

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 regrowth of natural vegetation again and the utilization thereof. The rest of the area will still be continued to be used for grazing land.

Although this is small <u>Stone Aggregate</u>, <u>Gravel (St) & Gravel (grav)</u> mining operation it would also add to the increased economic activity within the farming and exiting mining community around Wolmaransstad. Jobs for 8 permanent labourers 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 <u>Stone Aggregate</u>, <u>Gravel (St) & Gravel (grav)</u> deposit dictates the selection of the specific mining site.

m) 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 1 - 3. (1)(m)

The main closure objective of the applicant is to rehabilitate the entire mining site in such a way to ensure that the man-made topographical landscape would be rehabilitated toward agricultural use and to blend in with the surrounding landscape and 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 (cultivation);
- 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) Aspects for Inclusion as Conditions of Authorisation.

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

None

o) Description of Any Assumptions, Uncertainties and Gaps in Knowledge.

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

None

p) Reasoned Opinion As To Whether The Proposed Activity Should Or Should Not Be Authorised

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

(i) 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 mining activities will have no significant impacts on them or their surrounding environment.

(ii) Conditions that must be included in the authorisation

None

q) Period for which the environmental authorisation is required.

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

24 months for initial permit period, thus 24 months in total.

r) UNDERTAKING

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

UNDERTAKING

- I, <u>D.E. Erasmus</u>, the undersigned and duly authorised thereto by <u>DERA</u>
 <u>Omgewingskonsultante (PTY) Ltd</u> hereby confirm:
 - the correctness of the information provided in this report;
 - the inclusion of comments and inputs from stakeholders and I&AP's:
 - the inclusion of inputs and recommendations from the specialist reports where relevant and where applicable and;
 - all information provided to the interested and affected parties a true reflection of this document.

Signed a	at	<u>Klerksdorp</u>	OB	this	day	6 th	September	2021

Signature of EAP

s) FINANCIAL PROVISION

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

The total application area is 5 hectares but only 0.3 hectares will be disturbed by opencast excavations and 0.2 hectares by surface disturbance to be used for crushing plant and the stockpile at any given time. These figures were used for the calculation of the quantum, thus a total of R 109'229.00 needed for the rehabilitation guarantees. R 109'229.00 for rehabilitation. See quantum attached as Appendix 3.

(i) Explain how the aforesaid amount was derived.

The amount was determined through the quantum tables provided by DMR.

(ii) Confirm that this amount can be provided for from operating expenditure.

Yes, it is hereby confirmed that the amount will be provided from operating expenditure.

t) SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY

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

- (i) Compliance with the provisions of sections 24(4)(a) and (b) read with section 24 (3) (a) and (7) of the National Environmental Management Act (Act 107 of 1998), the EIA report must include the:-
 - Impact on the socio-economic conditions of any directly affected person.

The applicant has an agreement with the landowner and the landowner will be paid for the land used by mining when the activity starts. No other person will be directly affected by this activity.

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

This activity will have no impact on archaeological structures.

u) 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 1 - 3. (1)(u)

None

PART B

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

1. DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME.

A) DETAILS OF THE EAP

Name of the Practitioner: DERA Environmental Consultants (Pty) Ltd.

Mr. Daan Erasmus Tel No.: 018-468 5355 Fax No.: 018 011 3760

E-mail address: daane@dera.co.zaThe EAP Mr. Daan Erasmus has a National Diploma in Agriculture Resource Utilization and a Baccalaureus Technologiae degree in Agricultural Extension.

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

B) DESCRIPTION OF THE ASPECTS OF THE ACTIVITY

Activities	Description of phases	Associated structures and infrastructures
The Mineral	Raubex Construction (Pty) Ltd Intends to mine for Stone Aggregate gravel and Gravel (gray) G5 situated on a portion of the farm Vasiboschfontein 205 HO, Wolmaransstad district, and 5 hectares in total. The stone aggregate and gravel will be used as filling material in road construction. The gravel and aggregate will be used in different facets of the road construction industry.	
The extend	The gravel is situated on this demarcated area on average 4 - 5 meters deep and 3.5 m litickness. The identified and demarcated which are 5 hectares in total includes the entire mining area of 5 HECTARES will be used for mining and for the slockpiling and plant area. (See sketch plan aftached). The gravel/stone reserve on this 5 hectares is estimated at 175 000 m ³ (350 000 tons).	
Mining method	The above area will be mined through opencast excavations where the gravel/stone will be removed with an excavator onto a stockpile and fed by a frond end loader into the screening/crushing plant. A stockpile will be created at the screening/crushing plant and toaded on the trucks for transporting to the clients. It is envisaged that some of the gravel/(G5) will be loaded directly onto the trucks without any processing. The gravel/stone from the stockpile is transported at an average rate of 450 tons a day to the clients or as needed. The total estimated reserve of gravel is 350 000 tons taken at a production rate of 5000 tons a month it will take 70 months to work this reserve. The gravel/stone which is 3.5 m thick and the relatively low production rate of this operation make this 5 hectare to be worked sustainable over a poriod of two years.	There will be a plant area with abtution facilities and roads to the excavations.
The grade	The total cost of the operation is taken at R 62/ton and the total material moved monthly at 5000 tons. The total monthly mining cost is then R 314 199 .00 and the total monthly income is on average R 600 000,00. This operation can thus be economical viable.	94-00-0-10-0-10-10-10-10-10-10-10-10-10-10

C) COMPOSITE MAP

As this is a mining permit application there will not be a final site layout as this will not be a static operation. The excavator will be moving over the application area in order to mine the entire area. Excavations will be made; gravel will be removed and crunched.

D) DESCRIPTION OF IMPACT MANAGEMENT OBJECTIVES INCLUDING MANAGEMENT STATEMENTS

(i) Determination of closure objectives

The main closure objective of the applicant is to rehabilitate the entire mining site in such a way to ensure that the 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.

Raubex Construction (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.

Raubex Construction (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 (Stone Aggregate; gravel & Gravel (gra) G5);
- ensure that the mining 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) Volumes and rate of water use required for the operation

2 000 litres a day will be used for processing of alluvial gravel.

(iii)Has a water use licence been applied for?

Applicant will apply that the current water use over one of the existing boreholes will be converted to mining use for the duration of the Mining Permit.

BAR - Raubex Construction (Pty) Ltd - Vaalboschfontein 205 HO - NW 30|5|1|3|2|10919 MP

(iv)Impacts to be mitigated in their respective phases

Table 15: Measures to rehabilitate the environment affected by the undertaking of any listed activity

יישני ואיזורים כי היות שוויים כי היות היות היות היות היות היות היות היו	MITIGATION MEASURES COMPLIANCE WITH STANDARDS IME PERIOD FOR IMPLEMENTATION	0.3 hectares at any stage Concurrent rehabilitation by backfilling and sloping the stable stable stable and sides of the excavation to be stable sustainable and covered with topsoil and vegetate.	Keep this area as small as possible within the demarcated area. Prevent spillages of fivels by machines.	SOLUTION OF THE SOLUTION OF TH
are our is confirmed to be come as	SIZE AND SCALE of disturbance	0.3 hectares at any stage Concurner sides of th covered w	0.2 hectares at any stage Keep this area. Prev	
ot of the leadership of	PHASE	Operational	Operational	aren en e
3000 IAI 0248 -	ACTIVITIES	1. Excavations	Stone Aggregate; gravel & Gravel (gra) Operational Stockpile arealptent area	

BAR - Raubex Construction (Pty) Ltd - Vaalboschfontein 205 HO - NW 30/5/1/3/2/10919 MP

E) IMPACT MANAGEMENT OUTCOMES

ACTIVITY	POTENTIAL IMPACT	ASPECTS AFFECTED	PHASE	MITIGATION TYPE	STANDARD TO BE ACHIEVED
. Excavations of alluvial gravel	1.1 Removal of the Stone Aggregate; gravel & Gravel (gta) G5 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 erosioe.	A stable levelled area that can sustain vegetation without excessive erosion.
	5.2 Change in landform. The excavation will be sloped	Тородгарћу	Operational and closure	A surface water cut-off bench should be put in place accord the active mining site I ocder to prevent surface water on the mining site. Rehabilitation of the new rehabilitated landscape in such a way that it would been in with the surrounding landscape.	If not complete backfilled it must be gentle stable slopes.
	1.3 Stripping of all available topsoi≩ 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 demancated area for rehabilitation purposes.	Encugh topsoil for rehabilitation to ensure sustainable wegetation.
	1.4 Soil ecosion 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 remotiful 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 terms around the mining area to prevent water entering that can cause excessive erosion.	No excessive erosion that cannot be stabilized.
	1.5. Loss of Land capabर्জिए & land धse.	Land capability & land use	Operational and closure	As this is only a very snaß area of 5 hectares, the ingast is low. As the sides will be sloped and vegetates, the rehabilitated area must be freated as sensitive.	Sustainable rehabilitated area.
	1.6 Generation of dust by excavating, crushing/screening and vehicle receivement	Air quality	Operational	The generation of dust will only be focalized at the manag site. Daily spraying of roads with water	No excessive dust that can be harmfal to the environment and humans.

BAR - Raubex Construction (Pty) Ltd - Vaalboschfontein 205 HO - NW 30/5/1/3/2/10919 MP

F) IMPACT MANAGEMENT ACTIONS

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
Excavations for alluvial gravel	1.1 Removal of the Stone Aggregate; gravet & Gravet (gra) G5 up to 5 m	The impact will be militated by backfilling the excavation and stabilizing the excavation and stabilizing the soil to prevent soil erosion.		
	1.2 Change in landform. The excavation will be sloped.	The side of pit will be sloped and the soil stabilized to prevent erosion. A surface water cut-oif trench should be put in place around the active mining site order to prevent surface water on the mining site. Rehabilitetion of the new sloped landscape in such a way that it would belend in with the surrounding landscape.		
	1.3 Stripping of all avasable topsort and stockpiled	The top soil must be removed before any disturbance take place. The top soil must be removed and stockpe in a demarcated area for rehabilitation purposes	THE STATE OF THE S	
	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 infattation of rain water and more run-off that could cause erosion on bare disturbed areas and side slopes.	To take preventive steps against erosion. Implement and maintain cut-ciff trenches and or beims around the mining area to prevent water entering that can cause excessive erosion.	MAY PLUTTE BY NEW YORK GROWN SALAS AND	
	1.5 Loss of Land cagebility. & land use	As this is only a very small area of 5 hectares, the impact is low. As the excavations will be backfilled and levelled and must be treated as sensitive till soil has settled to ground level.		
	1.6 Generation of dust by excavating, creshing/screening and vehicle movement	The generation of dust wis only be localized at the mining site. Daily spraying of roads with water		

G) FINANCIAL PROVISION

1. Determination of the amount of Financial Provision

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

The main closure objective of the applicant is to rehabilitate the entire mining 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.

Raubex Construction (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.

Raubex Construction (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 (<u>STONE</u> AGGREGATE; GRAVEL & GRAVEL (GRA) G5);
- ensure that the mining 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.

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

Yes, the disturbance that will take place and the rehabilitation thereof were discussed on the site visit with the landowner.

C. Provide a rehabilitation plan that describes and shows the scale and aerial extent of the main mining activities, including the anticipated mining area at the time of closures.

Rehabilitation:

The clearing of soil surface areas would be restricted to what is really necessary for the construction of infrastructure/crushing plant. During rehabilitation of these sites, or where vegetation is lacking or compacted, the areas would be ripped or ploughed and levelled in order to re-establish a growth medium and if necessary appropriately fertilised to ensure the regrowth of vegetation and the soil ameliorated based on a fertilizer recommendation (soil sample analysed).

Rehabilitation of access roads

- Whenever a mining permit is suspended, cancelled or abandoned or if it lapses and the holder does not wish
 to renew the permit or right, any access road or portions thereof, constructed by the holder and which will no
 longer be required by the landowner/tenant, shall be removed and/or rehabilitated to the satisfaction of the
 Regional Manager.
- Any gate or fence erected by the holder which is not required by the landowner/tenant, shall be removed and the situation restored to the pre-mining situation.
- Roads shall be ripped or ploughed, and if necessary, appropriately fertilised (based on a soil analysis) to
 ensure the regrowth of vegetation. Imported road construction materials which may hamper regrowth of
 vegetation must be removed and disposed of in an approved manner prior to rehabilitation.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining operation, be corrected and the area be seeded with a seed mix to the Regional Manager's specification.

Rehabilitation of the surface mining site

On completion of operations, all buildings, structures or objects on the camp/office site shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), which states:

- (1) When a prospecting right, mining right, retention permit or mining permit lapses, is cancelled or is abandoned or when any prospecting or mining operation comes to an end, the holder of any such right or permit may not demolish or remove any building, structure, object -
 - (A & B) which may not be demolished in terms of any other law;
 - (C) which has been identified in writing by the Minister for purposes of this section; or
 - (c) which is to be retained in terms of an agreement between the holder and the owner or occupier of the land, which agreement has been approved by the Minister in writing.
- (2) The provision of subsection (1) does not apply to bona fide mining equipment which may be removed. The surface area shall be ripped or ploughed to a depth of at least 300mm and the topsoil previously stored adjacent the site, shall be spread evenly to its original depth over the whole area.

After all the foreign matter has been removed from the mining sites, the side slopes and the final void area will be sloped and levelled and the previously stored topsoil replaced.

The area shall then be fertilised if necessary (based on a soil analysis). The site shall be seeded with a vegetation seed mix (section C) adapted to reflect the local indigenous flora. Where the site has been rendered devoid of vegetation/grass or where soils have been compacted owing to traffic, the surface shall be scarified or ripped. Photographs of the site, before and during the mining operation and after rehabilitation, shall be taken at selected fixed points and kept on record for the information of the Regional Manager.

Rehabilitation of the new topographical landscape in such a way that it would blend in with the surrounding landscape and allow normal (controlled) surface drainage to continue.

Implement water control systems in order to prevent erosion. Seed the area (see C. (below) for recommended seed mixture).

Visual impact would be addressed by means of;

- re-vegetation (grasses);
- removal of any building, scrap, domestic waste, etc. that would otherwise contribute to a negative visual impact.

Fertilising of Areas to be Rehabilitated

If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining operation be corrected and the area be seeded with a seed mix to his or her specification.

Seeding of Grass Seed Mixture and planting of Woody Species

The eventual seed mixture takes into account the availability of seed, different soil situations and the prevailing climatic conditions of the area. The following mixture will be applicable to the mining permit site:

- Cenchrusciliaris
- Cynodondactylon
- Digitariaeriantha
- Heteropogoncontortus
- Panicum maximum

a. Demolition of infrastructure/buildings

On completion of operations, all buildings, structures or other on the mining terrain shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002). There will be no permanent buildings.

b.Invasive and alien control programme

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.

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

All the mined areas will be rehabilitated by sloping the sides in order to have sustainable vegetation, thus no after mining impacts or residues.

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

The total application area is 5 hectares but only 0.3 hectares will be disturbed by opencast excavations and 0.2 hectares by surface disturbance to be used for the plant area at any given time. These figures were used for the calculation of the quantum, thus a total of R 109'229.00 needed for the rehabilitation guarantees. R 109'229.00 for rehabilitation. See quantum attached as **Appendix 3**.

F. Confirm that the financial provision will be provided as determined

The financing for this project will be done from the account Raubex Construction (Pty) Ltd the applicant himself out of own funds. The guarantee will be provided in the form of Bank Guarantee after confirmation of the amount.

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

vii.Monitoring of Impact Management Actions

- viii. Monitoring and reporting frequency
- vx. Responsible persons
- x. Time period for implementing impact management actions
- xi. Mechanism for monitoring compliance

SOURCE ACTIVITY	IMPACTS REQUIRING MONITORING PROGRAMMES	FUNCTIONAL REQUIREMENTS FOR MONITORING	ROLES AND RESPONSIBILITIES	MONITORING AND REPORTING FREQUENCY and TIME PERIODS FOR IMPLEMENTING IMPACT MANAGEMENT ACTIONS
Mining site/Soil	Possible spillages of	Checking for spillages on daily basis.	Manager and Applicant	Daily checking and reporting with Performance
	petrochemicals.	Checking correct stripping and		Assessment
	Stripping of topsoil	stockpiling of topsoil		
Mining site/	Concurrent backfilling of the	Checking stability of slope and erosion	Manager and applicant	Quarterly
Topography	excavations	preventive measures	, ,	
Mining site/Air quality	Dust pollution from mining	Regular wetting of roads and stockpile	Manager and applicant	Daily
		area where loading take place.		
Mining site	Chemical toilet	Make sure that it is used and hygienic.	Manager and Applicant	Weekly,

H) INDICATE THE FREQUENCY OF THE SUBMISSION OF THE PERFORMANCE ASSESSMENT/ ENVIRONMENTAL AUDIT REPORT.

Annually

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.

Raubex Construction (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) (2) Manner in which risks will be dealt with in order to avoid pollution or the degradation of the environment.

The risks will be dealt with by proper management actions as described in 1d.

J) SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY

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

2. UNDERTAKING

The EAP herewith confirms

- (i) The correctness of the information provided in the reports;
- (ii) The inclusion of comments and inputs from stakeholders and I&APs;
- (iii)The inclusion of inputs and recommendations from the specialist reports where relevant; and
- (iv)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:

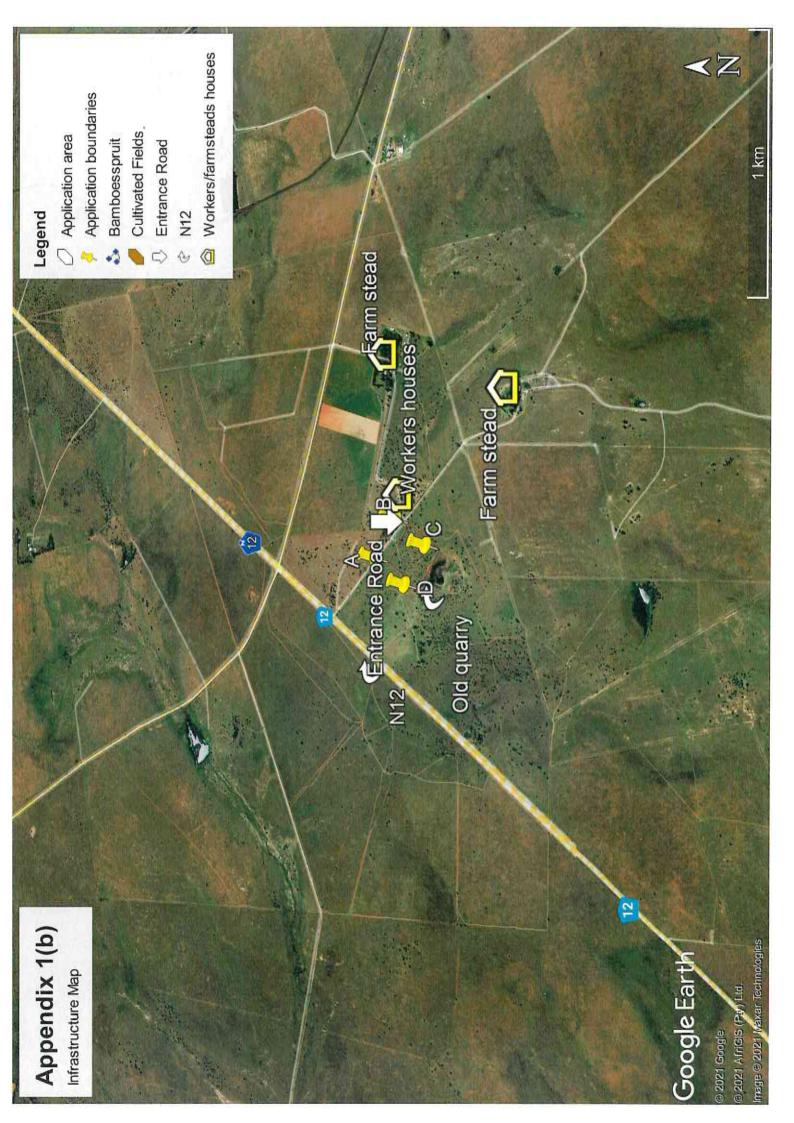
DERA Omgewingskonsultante (Pty) Ltd.

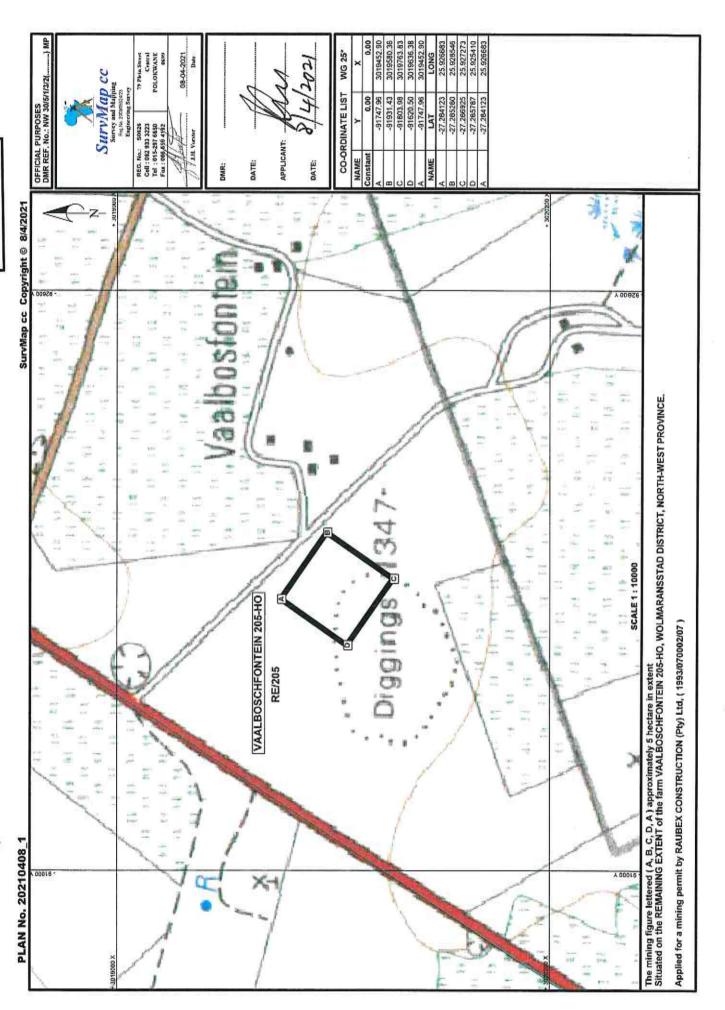
Name of company:

JERRY DEAN MENIN

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

-END-





APPENDIX 2: DETAILS OF THE PUBLIC PARTICIPATION PROCESS

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 andor Comments Received	Issues raised	EAP's response to the applicant
AFFECTED PARTIES			
Landowneris			
A J R Meyer (Andre) e-mail: andredupmeyex@gmail.com Cell:083 255 3253	27 July 2021 8 Oct 2021	l elephonically consultation - no objection l'elephonically and via e-mail reminder - the tandowner confirmed that he will sign the consultation letter - awaiting	
Landowner & surrounding neighbour		written response.	
Lawful occupieds of the land			
A J R Weyer (Andre)	27 July 2021	Teachtranically consultation – no objection	
e-maii. arateaqeiseyeriggiaali.com Gelly83 255 3253	727 137 0 0 137 0	i septionically alia via exitat rational - pre langueler confirmed that he we sign the consultation letter - awaising	
(Neighboar)	=,,.	written response.	
Landowners or lawful occupiers on adjacent properties X			
Municipal councilor			
Municipality X			
Maquassi Hills Local Municipality	27 July 2021	Consultation letter sent to Mr. Bolao	
LED officer: Peter Bolao E-mail: bolaopeter@gmail.com			
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA.			
Eskom			
Communities			
Dept. Land Affairs X			
Keabetsweldothapi	27 July 2021	Request for verification of land claims sent to	11 August 2021 – acknowledgement received
E-mail: Keabelswe.mothupi@drdlr.gov.za Traditima I eaders		Keabetswe Mothupi	16 August 2021 - response letter received
WA			
Dept. Rural, Environment and Agricultural Development X			
OumaSkosana Agricentre Building, Cnr James Moroka& Stadium Road, Minabatho, 2735	6 September 2021	6 September 2021 BARIEMPr sent with Fastway counters for comments	
e-mail: oskosana@nwpg.gov.za			
Dept. Water and Sanitation X			
Dr. F. Ntili 2nt Floor, Sloem Plaza Building Onr East Burner & Charlotte Mayoko	6 September 2021	6 September 2021 BARJEMPr sent with Fastway couriers for comments	
Bloemfordein, 9300 Tol- first Afte forthy Committee in the property of the After After State of the State St		m	
FOIL UST HUS SULVE E-ITIAIS, BIRELINGUEMS, USUNTA			

Dept. Agriculture, Forestry and Fisheries		
Маилсе Илуеда	6 September 2021 BARJEMP sent with Fastway courters for commercial	-
Louis & Grange Building, Chr Peter Mokaba & Wolmarans street, 314		
Floor, Office no 318, Potchelstroom, 2520		
Tel: 018-389 5156 e-mail: MauriceV@daff.gov.za	4000	
Other Competent Authorities		
OTHER AFFECTED PARTIES		
INTERESTED PARTIES		

Public Notice - Stellalander 15 September 2021

Gerda

From:

Gerda <dera.office@dera.co.za>

Sent:

Monday, 11 October 2021 11:16

To:

'andredupmeyer@gmail.com'

Subject:

Raubex Construction - Consultation letter - Vaalboschfontein

Attachments:

Raubex Construction - Consultation letter - Vaalboschfontein.pdf

Goeie dag Andre

Soos telefonies bespreek.

Sien aangeheg die konsultasie brief wat jy asseblief vir ons moet invul en teken as grondeienaar.

By voorbaat dankie.

Groete.

Gerda Els

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:

Raubex Construction - Consultation letter - Vaalboschfontein

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 3760 Mobile: 082 895 3516

E-mail: dera.office@dera.co.za

daane@dera.co.za

DERA

27 July 2021

Environmental Consultants

To whom it may concern

CONSULTATION WITH INTERESTED AND AFFECTED PARTIES WITH REGARD TO AN APPLICATION FOR A MINING PERMIT IN TERMS SECTION 27(2) OF THE MINERALS AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AND NEMA, EIA 2014: THE PROPOSED MINING AREA IS OVER A CERTAIN PORTION OF THE REMAINING EXTENT OF THE FARM VAALBOSCHFONTEIN 205 HO, IN THE DISTRICT OF WOLMARANSSTAD.

You are herewith informed that Raubex Construction (Pty) Ltd. has submitted an application in terms of Section 27(2) of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and NEMA, EIA 2014 to the Regional Manager: Mineral Regulation, North West Region in respect of Stone Aggregate; gravel & Gravel (G5) in the magisterial district of Wolmaransstad.

Raubex Construction (Pty) Ltd. is in the process of compiling the Basic Assessment Report, which needs to be submitted at the Regional Office of DMR and will be available for I&AP's for comments.

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 notify and must be consulted with in terms of the proposed project.

Raubex Construction (Pty) Ltd. deem it necessary to consult with <u>inter alia</u> yourself / your company/ your organization, and you are therefore kindly requested to comment very clearly and unambiguously with regard to the proposed mining project. You are requested to put in writing any interest/ objection and/or comments you may have and send it back to the appointed consultants (Reference no. NW30/5/1/3/2/10919MP) within 30 days from the date of receipt of this letter. If no correspondence is received from you within the mentioned period, the applicant shall accept that you have no objection in the proposed mining activities.

Please call me if any further information is needed.

Your co-operation will be appreciated.

Yours faithfully

P.P. 5. Daan Erasmus

DERA Environmental Consultants

REGISTRATION FORM AND COMMENT FOR THE PUBLIC PARTICIPATION PROCESS PROPOSED MINING PERMIT APPLICATION ON A CERTAIN PORTION OF THE REMAINING EXTENT OF THE FARM VAALBOSCHFONTEIN 205 HO, MAGISTERIAL DISTRICT OF WOLMARANSSTAD.

Daan Erasmus P.O. Box 6499 KLERKSDORP 2572 Tel. 018-468 5355 Fax: 018-011 3760 Mobile: 082 895 3516

E-mail: dera.office@dera.co.za or daane@dera.co.za

PERSONAL INFORMATION:

Title/Titel: Initials/Voorletters:	First Name/Eerste naam:
Surname/Van	
E-mail/E-pos	
Telephone/Telefoon	
Organisation (if applicable)/Organisasie(indien van toepassing:	
Capasity (member, etc.)/Kapasiteit (lid ens);	
Landowner/Grondeienaar/Buurman/Neighbour/Interested and/or affected p	
Postal Address/ Posadres	
Town/City/Dorp/Stad:	
COMMENT/OBJECTION:	
1. What is the nature of your interest in the proposed project/Wat is u be	lang in die voorgenome projek?
Do you have any ground for objection towards the proposed project/l-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 negatiewe inpak kan he op uself of die omgewing?	or the environment/Voorsien u dat die voorgenome projek 'n
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) 2021
Name and Surname/ Company Si	gnature/Handtekening
Naam en Van/Maatskanny	

Gerda

From: Gerda <dera.office@dera.co.za> Wednesday, 28 July 2021 11:16 Sent: To:

Fanie Ferreira (Fanie.F@raubex.com)

dera.office2@dera.co.za Cc:

Raubex Construction (Pty) Ltd - Consultation letters - Vaalboschfontein - NW10919MP Subject:

& Acceptance letter

Attachments: Raubex Construction (Pty) Ltd - Consultation letters - Vaalboschfontein -

NW10919MP.pdf; Raubex Construction (Pty) Ltd - Acceptance letter - NW10919MP.pdf

Goeie dag Fanie

Sien aangeheg die aanvaardingsbrief soos ontvang van DMR vir Vaalboschfontein (Wolmaransstad) - NW 10919MP

Ek heg ook die konsultasie briewe aan wat deur die grondeienaar en aangrensende bure geteken moet word en so spoedig moontlik aan ons terug te stuur na dera.office@dera.co.za

Sal jy net laat weet of ons moet voortgaan met die plasing van die advertensie en voorbereiding van die Omgewingsdokument.

Kontak gerus vir Daan indien enige onduidelikheid of navrae.

Groete.

Gerda Els

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:

Raubex Construction (Pty) Ltd - Consultation letters - Vaalboschfontein - NW10919MP Raubex Construction (Pty) Ltd -Acceptance letter - NW10919MP

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.

REGISTRATION FORM AND COMMENT FOR THE PUBLIC PARTICIPATION PROCESS PROPOSED MINING PERMIT APPLICATION ON A CERTAIN PORTION OF THE REMAINING EXTENT OF THE FARM VAALBOSCHFONTEIN 205 HO, MAGISTERIAL DISTRICT OF WOLMARANSSTAD.

Daan Erasmus P.O. Box 6499 KLERKSDORP 2572 Tel. 018-468 5355 Fax: 018-011 3760 Mobile: 082 895 3516

E-mail: dera.office@dera.co.za or daane@dera.co.za

PERSONAL INFORMATION:

Title/Titel: Initials/Voorletters: First Name/Eerste naam:
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Telephone/Telefoon Fax/Faks
Organisation (if applicable)/Organisasie(indien van toepassing:
Capasity (member, etc.)/Kapasiteit (lid ens):
Landowner/Grondeienaar/Buurman/Neighbour/Interested and/or affected parties on the farm/op die plaas
Postal Address/ Posadres
Town/City/Dorp/Stad:
COMMENT/OBJECTION:
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 towards the proposed project/Het u enige gronde tot beswaar ten opsigte van 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 uself 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) 2021
Name and Surname/ Company Signature/Handtekening
Naam en Van/Maatskappy

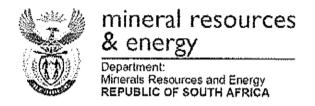
REGISTRATION FORM AND COMMENT FOR THE PUBLIC PARTICIPATION PROCESS PROPOSED MINING PERMIT APPLICATION ON A CERTAIN PORTION OF THE REMAINING EXTENT OF THE FARM VAALBOSCHFONTEIN 205 HO, MAGISTERIAL DISTRICT OF WOLMARANSSTAD.

Daan Erasmus P.O. Box 6499 KLERKSDORP 2572 Tel. 018-468 5355 Fax: 018-011 3760 Mobile: 082 895 3516

E-mail: dera.office@dera.co.za or daane@dera.co.za

PERSONAL INFORMATION:

Title/Titel: First Name/Eerste naam: 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/Buurman/Neighbour/Interested and/or affected parties on the farm/op die plaas
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THE PROPERTY OF THE PROPERTY O
Filled in on/Ingevul op day of /dag van(month)/(maand) 2021
Name and Surname/ Company Signature/Handtekening
Naam en Van/Maatskappy



Private Bag A1, KLERKSDORP 2570

Fax No: (018) 487 4394 / Tel No.: (018) 487 4300

Enquiries: J.H Makhubela Reference No. NW 30/5/1/3/2/10919 MP

Raubex Construction (Pty) Ltd P.O Box 6499 Flamwood KLERKSDORP 2572

Fax No: (018) 011 3760

E-mail Address: daane@dera.co.za

Attention: Daan Erasmus

ACCEPTANCE OF AN APPLICATION FOR A MINING PERMIT IN TERMS OF SECTION 27 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, ACT 28 OF 2002, AS AMENDED BY SECTION 23 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT AMENDMENT ACT, ACT 49 OF 2008 "HEREIN REFERRED TO AS THE AMENDED ACT": A PORTION OF PORTION OF THE REMAINING EXTENT OF THE FARM VAALBOSCHFONTEIN 205 HO, SITUATED IN THE MAGISTERIAL DISTRICT OF WOLMARANSSTAD.

I hereby confirm that your application for a mining permit to mine for gravel and stone aggregate gravel in terms of section 27 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) (as amended) has been accepted.

In terms of Section 23(5)(a) of the said Act, you are therefore required to consult in the prescribed manner with the landowner, lawful occupier and any interested and affected party and include the result of the consultation in the relevant environmental reports in light of the minimum requirements as stipulated on Regulation 16(1) and 16(2) of the EIA Regulations, your application for an Environmental Authorisation was incomplete as it was not accompanied by this acceptance letter as per Sub Regulation 16(1)(ix) and

considering that it is now completed by this acceptance letter, you are hereby required

to submit the documents as stipulated on Regulation 19(1) to 19(8) of the EIA

Regulations (Only in cases where Basic Assessment Report is applicable) or

Regulation 21 (Scoping Report) and Regulation 23 (EIR and EMPR) (In case of

Scoping and Environmental Impact Report). Please ignore the submission of this

report in case you have already submitted. All timeframes are effective from the date

of this letter.

Kindly take note that you are required to consult with the Department of Land

Affairs if the land is state owned and in the event that the land is subject to land

restitution, to consult the office of the Commission on Restitution of Land Rights

and submit on line and hard copy to the Regional Office the results of such

consultation on or before the 12th of August 2021.

Any person operating without a prospecting/mining right or mining permit will be in

contravention of Section 5(4) of the MPRDA and would be guilty of an offence in terms

of the relevant Act.

Take note further that failure to submit the documents as requested and failure to

adhere to the timeframes as stipulated above amounts to non-compliance with

the provision of the Act and will therefore lead to your application being

recommended for refusal without further notification to you.

Yours faithfully

REGIONAL MANAGER

NORTH WEST REGION

Date: ເ∽ຣ ໄວ

Gerda

From: Sent: Gerda <dera.office@dera.co.za> Tuesday, 27 July 2021 14:33

To:

'Peter Bolao'

Subject:

Raubex Construction (Pty) Ltd - Consultation for Mining Permit Raubex Construction (Pty) Ltd - Consultation for Mining Permit.pdf

Attachments:

Good day Peter

See attached the consultation letter of Raubex Construction (Pty) Ltd for a proposed Mining Permit application in the Wolmaransstad 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:

Raubex Construction (Pty) Ltd - Consultation for Mining Permit

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P O Box 64-99 Flamwood 2572

Tel: 018-468 5355 Fax: 018-0 11 3760 Cell: 082 895 3516

E-mail: <u>dera.office@dera.co.za</u>

daane@dera.co.za



27 July 2021

Environmental Consultants

Maquassi Hills Local Municipality

Attention: LED officer: Mr. P. Bolao E-mail: bolaopeter@gmail.com

RE: CONSULTATION WITH INTERESTED & AFFECTED PARTIES

It is hereby confirmed that Raubex Construction (Pty) Ltd has applied for a mining permit over a certain Portion of the Remaining extent of Vaalboschfontein 205 HO, situated in the magisterial district of Wolmaransstad.

The Department of Mineral Resources has requested that the Maquassi Hills Local Municipality must be informed about the proposed mining permit application.

Please find attached the consultation letter with the information regarding the proposed mining permit application.

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

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

27 July 2021

Environmental Consultants

To whom it may concern

CONSULTATION WITH INTERESTED AND AFFECTED PARTIES WITH REGARD TO AN APPLICATION FOR A MINING PERMIT IN TERMS SECTION 27(2) OF THE MINERALS AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AND NEMA, EIA 2014: THE PROPOSED MINING AREA IS OVER A CERTAIN PORTION OF THE REMAINING EXTENT OF THE FARM VAALBOSCHFONTEIN 205 HO. IN THE DISTRICT OF WOLMARANSSTAD.

You are herewith informed that Raubex Construction (Pty) Ltd. has submitted an application in terms of Section 27(2) of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and NEMA, EIA 2014 to the Regional Manager: Mineral Regulation, North West Region in respect of Stone Aggregate; gravel & Gravel (G5) in the magisterial district of Wolmaransstad.

Raubex Construction (Pty) Ltd. is in the process of compiling the Basic Assessment Report, which needs to be submitted at the Regional Office of DMR and will be available for I&AP's for comments.

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 notify and must be consulted with in terms of the proposed project.

Raubex Construction (Pty) Ltd. deem it necessary to consult with <u>inter alia</u> yourself / your company/ your organization, and you are therefore kindly requested to comment very clearly and unambiguously with regard to the proposed mining project. You are requested to put in writing any interest/ objection and/or comments you may have and send it back to the appointed consultants (Reference no. NW30/5/1/3/2/10919MP) within 30 days from the date of receipt of this letter. If no correspondence is received from you within the mentioned period, the applicant shall accept that you have no objection in the proposed mining 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 PROPOSED MINING PERMIT APPLICATION ON A CERTAIN PORTION OF THE REMAINING EXTENT OF THE FARM VAALBOSCHFONTEIN 205 HO, MAGISTERIAL DISTRICT OF WOLMARANSSTAD.

Daan Erasmus P.O. Box 6499 KLERKSDORP 2572 Tel. 018-468 5355 Fax: 018-011 3760 Mobile: 082 895 3516

E-mail: dera.office@dera.co.za or 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)/C)rganisasie(indien van toepassir	ng:
Capasity (member, etc.)/Kap	asiteit (lid ens):	
Landowner/Grondeienaar/Bu	urman/Neighbour/Interested an	d/or affected parties on the farm/op die plaas
Postal Address/ Posadres		
Town/City/Dorp/Stad:		Code/Kode:
COMMENT/OBJECTIO	<u> </u>	
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projek?		osed project/Het u enige gronde tot beswaar ten opsigte van bogenoemde
YES/NO JA/NEE		
If "Yes", please list shortly/Inc	dien 'JA', lys asseblief kortliks.	
	activity will have a negative impa	act on yourself or the environment/Voorsien u dat die voorgenome projek 'n
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Filled in on/Ingevul op	day of /dag van	(month)/(meand) 2021
Name and Surname/ C	ompany	Signature/Handtekening
Naam en Van/Maatska	ppy	

Gerda

From:

Gerda <dera.office@dera.co.za>

Sent:

Tuesday, 27 July 2021 14:31

To:

keabetswe.mothupi@dalrrd.gov.za

Subject:

Verification of land claims - Raubex Construction - Vaalboschfontein

Attachments:

Verification of land claims - Raubex Construction - Vaalboschfontein.pdf

Good day Kea

See attached our request for verification of land claims on the farm Vaalboschfontein 205 fHO in the district of Wolmaransstad.

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 - Raubex Construction - Vaalboschfontein

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 Q B0X 6499 Flamwood 2572

Tel: 018 468 5355 Fax. 018-01 1 3760 Cell. 082 895 3516

E-mail:dera.office@dera.co.za

daane@dera.co.za

Environmental Consultants

27 July 2021

Department of Land Affairs & Rural Development

Attention: Keabetswe Mothupi

Re: Verification of Land Claims

We are Environmental Consultants situated in Klerksdorp and has applied on behalf of Raubex Construction (Pty) Ltd. for a mining permit application on the following farm in the Wolmaransstad district.

A certain Portion of the Remaining extent of the farm Vaalboschfontein 205 HO

Maguassi Hills 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. ES

Daan Erasmus

Gerda

From:

Keabetswe Mothupi < Keabetswe. Mothupi@dalrrd.gov.za>

Sent:

Wednesday, 11 August 2021 15:36

To:

Gerda

Subject:

acknowledgement letters

Attachments:

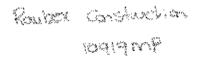
001,2,3.pdf

Good day

Kindly find the attached

Regards Ms Mothupi





(i) Fig. 1. The second of t

Reference: R/7/003/08/2021 Enguiries: Keabetswe Mothupi

Tel: (018) 388-7220 / E-mail: KMothupi@dalrrd.gov.za

By E-Mail: dera.office@dera.co.xe

Dear D Erasmus

LAND CLAIM ENQUIRY: A CERTAIN PORTION OF THE REMAINING EXTENT OF THE FARM VAALBOSCHFONTEIN 205 HO

I acknowledge receipt of your letter dated the 27th of July 2021 regarding the abovementioned matter.

Kindly note that a formal response could be expected from our office within the next 10(Ten) working days.

Should you however require any additional information, you can contact Ms K Mothupi at the above-mentioned contact details, expected

Yours faithfully

MR L.J BOGATSU CHIEF DIRECTOR

OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER

NORTH WEST PROVINCE

DATE: 10/08/2021



OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER: NORTH WEST Cnr James Moroka and Sekama Drive, West Gallery, Mega City, MMABATHO 2735 Tel: (018) 388 7000

Enquiries: Victor Tities

Email: victor.tities@dalrrd.gov.za

Telephone: 018 388 7005

By E-Mail: dera.office@dera.co.za

Dear D Erasmus

LAND CLAIM ENQUIRIES - A CERTAIN PORTOIN OF THE REMAING EXTENT OF THE FARM VAALBOSCHFONTEIN 205 HO

We refer to your letter dated 27th of July 2021.

We confirm that there is an existing land claim against the farm Vaalboschfontein. The claim was lodged under Maquassi Hills Local Municipality within Dr Kenneth Kaunda District. The information reflects on the database of claims lodged between 1 July 2014 and 27 July 2016 in terms of the Restitution of Land Rights Amendment Act, of 2014.

Whilst the Commission takes reasonable care to ensure the accuracy of the information it provides, there are various factors that are beyond the Commission's control, particularly relating to claims that have been lodged but not yet gazetted such as:

- Some Claimants referred to properties they claim dispossession of rights in land against using historical property descriptions which may not match the current property description; and
- Some Claimants provided the geographic descriptions of the land they claim without mentioning the specific portion/property description they claim dispossession of rights in land against.

The Constitutional Court ordered that the claims that were lodged between 1 July 2014 and 27 July 2016 are validly lodged, but it interdicted the Commission from processing those claims until the Commission has finalised the claims lodged by 31 December 1998 or until Parliament passes a new law providing for the re-opening of lodgement of land claims. Parliament was given until 27 July 2018 to pass such a law.

The Commission will therefore not be processing the above claims until it finishes claims lodged by 31 December 1998 or until Parliament passes a new law providing for re-opening of lodgement of claims.

It is important to note that provisions of section 11(7) of the Restitution of Land Rights Act, 1994 do not apply until after the Commission has accepted the claim for investigation and published its details in the Government Gazette. That will only be done once either event in the previous paragraph has been finalized.

The Commission therefore does not accept any liability whatsoever if through the process of further investigation of claims it is found that there is/no land claim in respect of the above property.

If you are aware of any change in the description of the above property after 19 June 1913 kindly supply us with such description so as to enable us to do further search.

Yours faithfully

CHIEF DIRECTOR

OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER: NORTH WEST

PUBLIC NOTICE

APPLICATION FOR AN ENVIRONMENTAL AUTHORIZATION FOR THE PROPOSED ACTIVITIES.

Notice is given for the following application:

- 1) Environmental authorization application for mining.
- Proponent: The applicant is Raubex Construction (Pty) Ltd.
- Ref. no: NW30/5/1/3/2/10919MP
- Property description: The proposed mining area is over a certain area of the Remaining extent of the farm Vaalboschfontein 205 HO, in the district of Wolmaransstad. The total extent of the prospecting area is 5 hectares. (21 SG digital codes: TOHO0000000020500000
- Location: The property is situated ±10 km south-east of Womaransstad.
- Project description: The purpose of the application is to obtain the required authorisation from the Department to successfully: undertake opencast mining.
- Process of Basic Assessment 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 21 (Listing Notice 1) – GNR 327 &

Activity 27 (Listing Notice 1) - GNR 327

- Minerals applied for: Stone Aggregate; gravel & Gravel (G5)
- Date submitted: 7 May 2021
- 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 BAR/EMPr. Please submit your written comments by mail, fax or e-mail in this 30 day of this notice to:

Mr. Daan Erasmus of DERA Environmental Consultants

PO Box 6499 E-mail: daane@dera.co.za

Flamwood Tel: 018 468 5355 2572 Fax: 018 011 3760

Date of advertisement: Wednesday 15 September 2021



Tel: (053) 927 1043 -6216 - 3747 - 3907 Faks: (053) 927 1044

VRYBUKG 2600 Posbus/P.O. Box 443.

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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

6 September 2021

Department of Agriculture, Forestry and Fisheries Louis le Grange Building Cnr Peter Mokaba & Wolmarans street 3rd Floor, Office 318 Potchefstroom 2520

Attention: Maurice Vukeya

RE: Basic Assessment Report (BAR) & EMPr

Reference Number: NW30/5/1/3/2/10919MP

It is hereby confirmed that Raubex Construction (Pty) Ltd has applied for a mining permit over a certain Portion of the Remaining extent of the farm Vaalboschfontein 205 HO, situated in the district of Wolmaransstad, North West Province.

The Department of Mineral Resources has requested that the Department of Agriculture, Forestry and Fisheries (North West Regional Office) must be consulted about the proposed mining permit. See attached BAR/EMPr for comments.

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

Daan Erasmus

DERA Environmental Consultants

PP Strugger

Caubeax Construction (Phy) Ltd-BAC +EM-NW 10919MP

Signoture:

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Company Name:	, washington and the second and the
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3 rd Floor, Office 318 Potchefstroom, 2520	•
	6479 Attention: Maurice Vukeya —
Phone:	, Attention:
No Dangerous Goods Declaration	
I hereby certify that this consignment does not contain any dangerous or prohibited goods, eg.	
explosives, flammables, corrosives, aerosols or poisonous substances.	
	Pickup
Name:	- CA0006358210
	That Ped CA0006358210



P O Box 6499 Flamwood 2572

Tel: 018-468 5355 Fax: 018-011 3760 Cell: 083 225 1593

E-mail: <u>dera.office@dera.co.za</u> daane@dera.co.za

DERA

Environmental Consultants

6 September 2021

Department of Rural, Environment and Agricultural Development Agricentre Building Cnr James Moroka & Stadium Road Mmabatho 2735

Attention: Ouma Skosana

RE: Basic Assessment Report (BAR) & EMPr

Reference Number: NW30/5/1/3/2/10919MP

It is hereby confirmed that Raubex Construction (Pty) Ltd has applied for a mining permit over a certain Portion of the Remaining extent of the farm Vaalboschfontein 205 HO, situated in the district of Wolmaransstad. North West Province.

The application was accepted by the Department of Mineral Resources and they have requested that the Department of Rural, Environment and Agricultural Development (North West Regional Office) must be consulted about the proposed mining permit. See attached the BAR/EMPr for comments.

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

Daan Erasmus

2 P. 86-85

DERA Environmental Consultants

Raubez Construction (Ay) Ltd-8AR & Emp Nw 10919 MP

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Company value:		
Street Address: (no PO Boxes)		
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CA0006358209



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

6 September 2021

Department of Water and Sanitation 2nd Floor, Bloem Plaza Building Cnr. East Burger & Charlotte Maxeke Bloemfontein 9300

Attention: Dr. T. Ntili

RE: Basic Assessment Report (BAR) & EMPr

Reference Number: NW30/5/1/3/2/10919MP

It is hereby confirmed that Raubex Construction (Pty) Ltd has applied for a mining permit over a certain Portion of the Remaining extent of the farm Vaalboschfontein 205 HO, situated in the district of Wolmaransstad, North West Province.

The Department of Mineral Resources have requested that the Department of Water & Sanitation (North West Regional Office) must be consulted about the proposed mining permit. See attached BAR/EMPr for comments.

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

Daan Erasmus

66 Rudia.

DERA Environmental Consultants

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O Impany Nar	ne:
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	To: Department of Water & Sanitation
	- 2 nd Floor, Bloem Plaza Building —————
	Cnr East Burger & Charlotte Maxeke
	Bloemfontein, 9300
Lity/Town:	Phone: 051 405 9000/9109 Attention: Dr. T. Ntili 082 808 5584 / 082 878 5707
	082 303 3304 / 552 575 575
Phone:	Attention:

No Dangerous Goods Declaration

I hereby certify that this consignment does not contain any dangerous or prohibited goods, eg. explosives, flammables, corrosives, aerosols or poisonous substances.

Name: E. Kinger

Signature:

ere:



VA0013208131

CALCULATION OF THE QUANTUM

Raubex Construction (Pty) Ltd. DERA

Applicant: Evaluators:

10919 MP Oct-21

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VAT (15%) 13414.12 Grand Total 109229

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

EIA Reference number: NW 30/5/1/3/2/10919 MP

Project name: Mining Permit

Project title: Vaalboschfontein 205 HO

Date screening report generated: 05/10/2021 16:07:29

Applicant: Raubex Construction (Pty) Ltd

Compiler: DERA Omgewingskonsultante (Pty) Ltd

Compiler signature:

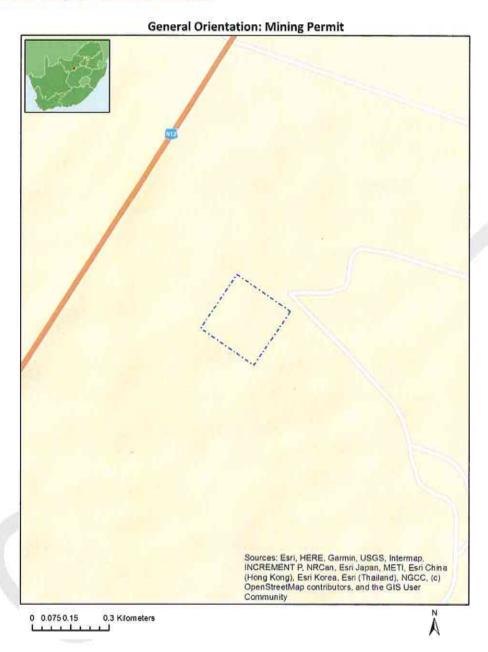
Application Category: Mining | Prospecting rights

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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	VAALBOSCHFONTEIN	205	0	27°18'42.59S	25°55'21.87E	Farm
2	VAALBOSCHFONTEIN	205	0	27°16'55.04S	25°55'40.07E	Farm Portion

Development footprint¹ 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 nearby wind or solar developments found.

Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

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 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:

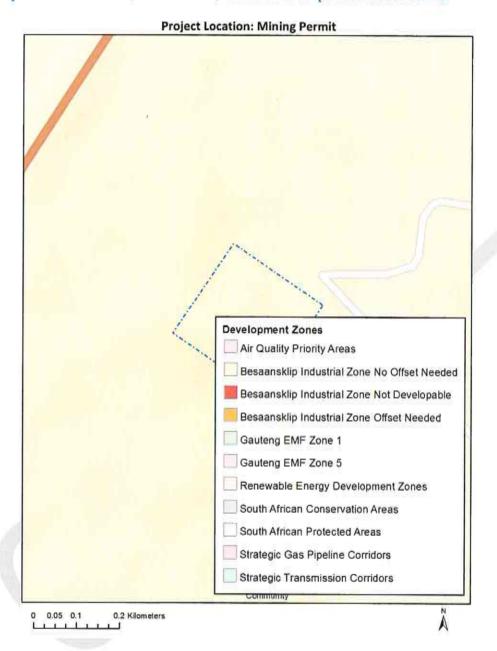
Mining | Prospecting rights.

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			×
Archaeological and Cultural Heritage Theme			×
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.

N 0	Speci alist asses smen t	Assessment Protocol
1	Agricul tural Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ Gazetted General Agriculture Assessment Protocols.pdf
2	Archae ologica I and Cultura I Heritag e Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ Gazetted General Requirement Assessment Protocols.pdf
3	Palaeo ntology Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ Gazetted General Requirement Assessment Protocols.pdf
4	Terrest rial Biodive rsity Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ Gazetted Terrestrial Biodiversity Assessment Protocols.pdf
5	Aquati c Biodive rsity Impact Assess ment	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

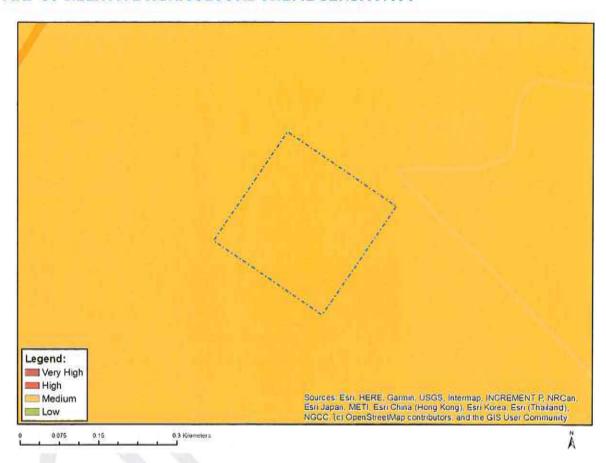
Page 7 of 17

	ment	
7	Radioa ctivity Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ Gazetted General Requirement Assessment Protocols.pdf
8	Plant Species Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ Gazetted Plant Species Assessment Protocols.pdf
9	Animal Species Assess ment	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.

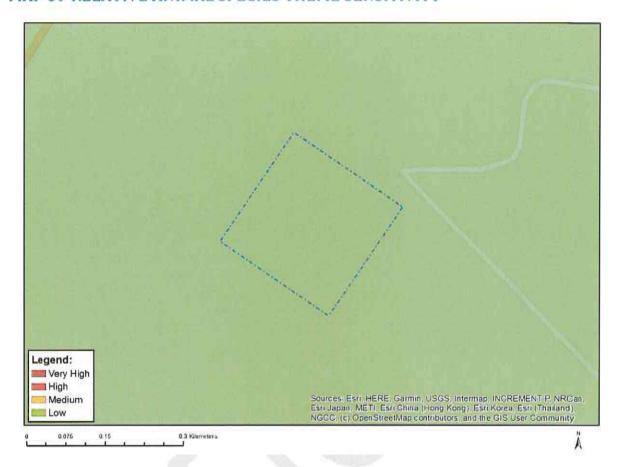
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity	Feature(s)
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
- T-	W		X

Sensitivity	Feature(s)	
Low	Low sensitivity	

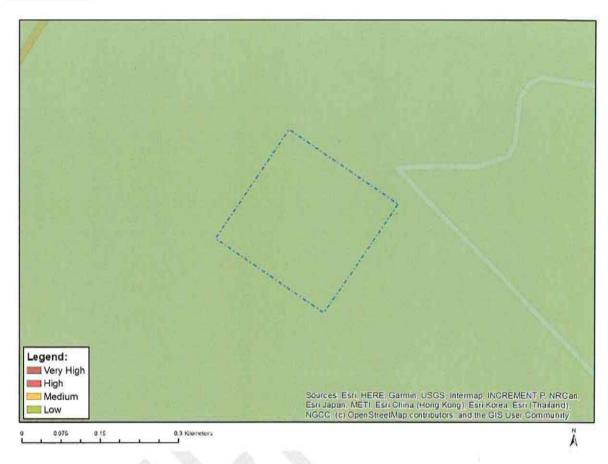
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity	Feature(s)	
Low	Low sensitivity	

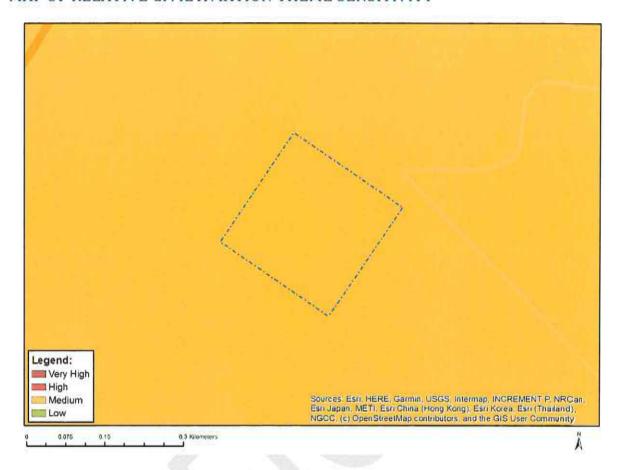
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity	Feature(s)
Low	Low sensitivity

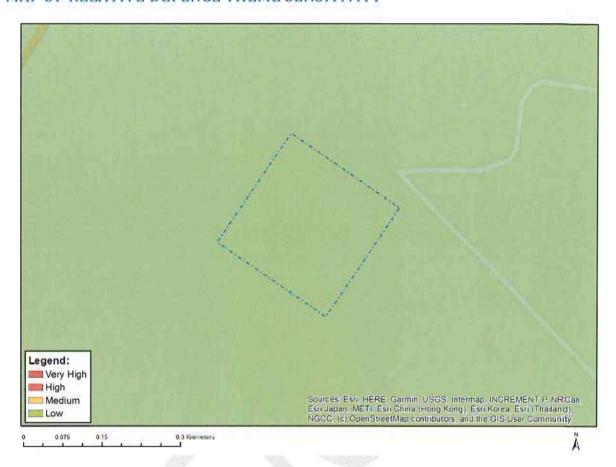
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity	Feature(s)
Medium	Between 8 and 15 km of other civil aviation aerodrome

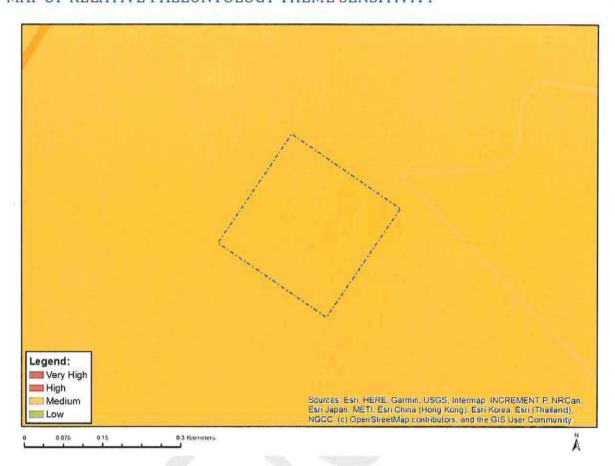
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	A 70		X

Sensitivity	Feature(s)	
Low	Low Sensitivity	

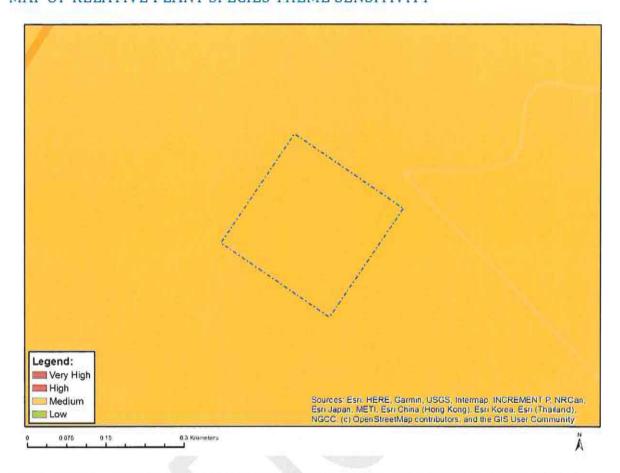
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	AF WA	×	

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

MAP OF RELATIVE PLANT 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
187		X	

Sensitivity	Feature(s)	
Medium	Sensitive species 1276	
Medium	Sensitive species 1261	

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
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Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	Ecological support area 1