

**DEA SCREENING TOOL REPORT
AND SITE SENSITIVITY VERIFICATION REPORT
FOR
SECTION 102 MINING RIGHT AMENMENT APPLICATION
PROPOSED BENTONITE AND ZEOLITE
EXPANSION OF BENTONITE AND ZEOLITE MINING
ACTIVITIES (ADDITIONAL QUARRIES) ON ERF RE/1412
AND ERF 3264 (PREVIOUSLY ERF 1412)
HEIDELBERG, WESTERN CAPE**

ORIGINALLY COMPILED APRIL 2025

UPDATED DECEMBER 2025

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1. INTRODUCTION

1.1 Terms of Reference

The “Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (“NEMA”), when applying for Environmental Authorisation” (“the Protocols”) (Government Notice No. 320 as published in Government Gazette No. 43110 on 20 March 2020) came into effect on 9 May 2020.

This report is compiled in accordance with Section 1 Site Sensitivity Verification and Minimum Report Content Requirements:

Prior to beginning the assessment, the current use of the land and the potential environmental sensitivity of the site as identified by the national web based environmental screening tool must be confirmed by undertaking a site sensitivity verification.

The site sensitivity verification must be undertaken by an environmental assessment practitioner or a registered specialist.

The site sensitivity verification must be undertaken through the use of:

- (a) a desk top analysis, using satellite imagery;
- (b) a preliminary on-site inspection to identify; and
- (c) any other available and relevant information.

The outcome of the Site Sensitivity Verification must be recorded in the form of a report that:

- (a) confirms or disputes the current use of the land and environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.;
- (b) contains a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity; and
- (c) is submitted together with the relevant report prepared in accordance with the requirement of the Environmental Impact Assessment Regulations.

1.2 Conditions Relating to this Report

The findings, results, observations, conclusions and recommendations given in this report are based on the author’s best scientific and professional knowledge as well as available information and knowledge of the area.

This report may not be altered or added to without the prior written consent of the author. This restraint also refers to electronic copies of this report which are supplied as sub portion of other reports, including main reports. Similarly, any recommendations, statements, or conclusions drawn from or based on this report must specifically refer to this report. If such comments form part of a main report for this investigation, the report must be included in its entirety as an appendix or separate section to the main report.

1.3 Site Sensitivity Verification Methods Used

The EAP made use of the following verification methods to compile the site sensitivity report:

- a desk top analysis using (amongst others) Google Earth, Cape Farm Mapper and BGIS;
- a site inspection conducted on 28 November 2024;
- taking into account all information as provided by the proposed developer.

2. SITE SENSITIVITY FINDINGS OF THE DEA ENVIRONMENTAL SCREENING REPORT

The table below indicates the relevant environmental sensitivities that have been identified by the DEA Environmental Screening Tool and associated level of each environmental sensitivity allocated to each theme.

Table 1: Environmental Sensitivities Identified and Associated Level Thereof allocated by DEA Screening Tool

THEME	LEVEL OF SENSITIVITY
Agriculture	Very High
Animal Species	High
Aquatic Biodiversity	Low
Archaeological and Cultural Heritage	Very High
Civil Aviation	Low
Defence	Low
Palaeontology	Very High
Plant Species	Medium
Terrestrial Biodiversity	Very High

3. EAP SITE SENSITIVITY VERIFICATION FINDINGS AND EVIDENCE

Proposed Project Description:

Imerys Refractory Minerals South Africa (Pty) Ltd t/a Cape Bentonite Mine is an existing Bentonite and Zeolite mining company operating under an existing mining right on Erf RE/1412 and Erf 3264 (previously Erf 1412) Ref: WC30/5/1/2/2/10076MR.

A total of 16.63ha (Phase 1 -15) has already been mined and rehabilitated under the current mining right and is part of annually cultivated agricultural land. Authorised mining right areas remaining and additional quarries proposed:

Authorised quarry mined and currently under rehabilitation:

- Quarry/phase 20 – 1ha

Authorised quarries still to be mined:

- Quarry/phase 16 – 1ha
- Quarry/phase 17 – 0.3ha
- Quarry/phase 18 – 0.34ha
- Quarry/phase 19 – 0.32ha
- Quarry/phase 21 – 0.73

Additional quarries proposed:

- Quarry/phase 22 – 1.49ha
- Quarry/phase 23 – 1.24ha
- Quarry/phase 24 – 0.7ha
- Quarry/phase 25 – 0.78ha

Total mining right activities area: 20ha

(includes all activities associated with the proposed bentonite mining such as any explorations required, site establishment, demarcations, excavations, any vehicular movements, access and internal roads, topsoil and overburden storage, implementation of rehabilitation measures etc.)

Mining Method

Mining is conducted 'in-house' by means of excavators, front-end loaders and 15-ton dumper trucks. The mining method comprises of relatively opencast quarrying. The topsoil and the overburden are removed and stockpiled separately along the perimeter of the quarry. As and when the bentonite is being mined, it is trucked to the Processing Plant at the head offices on Erf 1412, Heidelberg.

Overburden is mined in 20m wide and 3-4m thick benches to expose 3m of bentonite down-dip to be mined. This process is repeated until all bentonite is mined out. Through this process the quarry's depth will be a maximum of 30m deep, and no more than half of the quarry size will be open at a time.

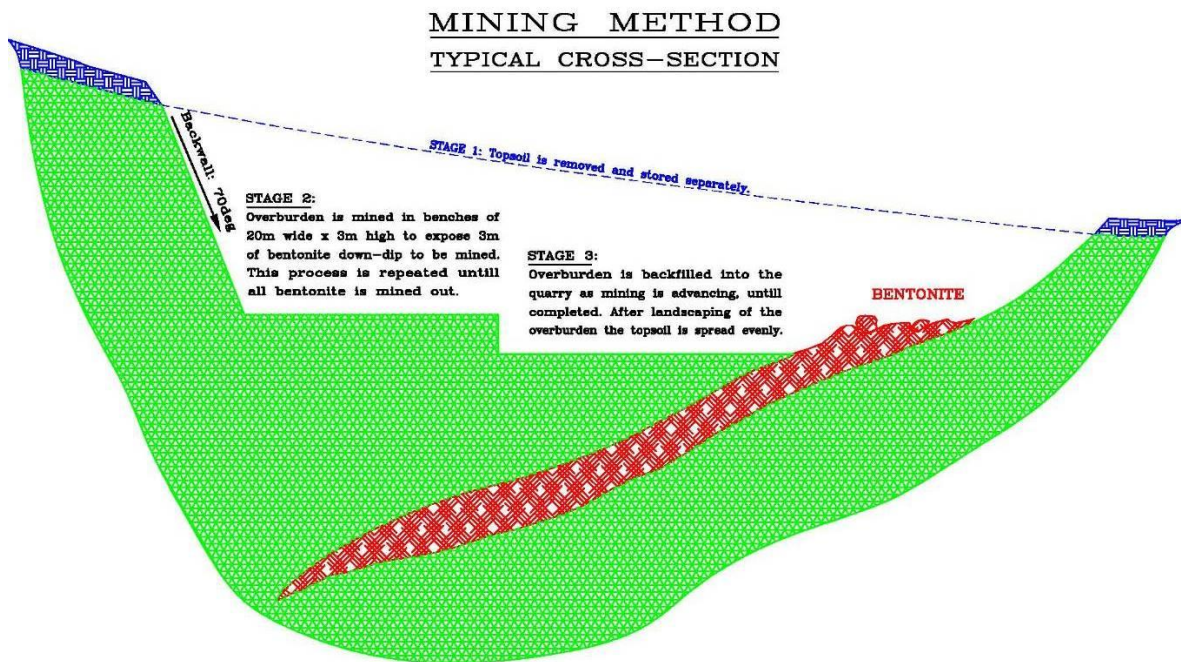
Rehabilitation takes place on an ongoing basis as mining proceeds. As the quarry advances along strike, the overburden is progressively replaced to backfill the excavation. The backfilled area is then contoured to prevent erosion, which could be caused by rain and surface water flow. Finally the topsoil is then spread over the disturbed surface area to restore the land to its previous state.

The bentonite found on the mining area is emplaced as relatively thin seams of 1-4m thick. The topsoil is normally less than 30cm thick. Overburden consists of a sequence of siltstone with conglomerate lenses; the latter also form the footwall of the succession.

Mining Phases:

- **Phase 1** entails the removal and stockpiling of top soil and overburden material for later rehabilitation purposes. Topsoil and overburden materials are removed and stockpiled separately adjacent to the proposed mining area on already ploughed and cultivated land and protected from potential erosion.
- **Phase 2** entails mining the bentonite and zeolite materials.
- **Phase 3** entails the rehabilitation of the area mined (which also takes place while active mining is in progress).

Also refer to mining method illustration below:



Natural Environmental Features of the Site:

The farm is characterised by its undulating landscape with associated steep slopes, drainage lines and gorges which limits the extent of cultivation to moderate slopes and more flat lying areas.

Several secondary non-perennial drainage lines with associated man-made and natural dams occurs throughout the property which drains mainly from north to south and eventually feeds into the Duiwenhoks tributary within Heidelberg..

On a regional level the site geology is derived from the Bokkeveld group as part of Worcester Normal Fault of the Cape Fold Belt Area.

On a local level the site geology consists mainly of volcanic sedimentary deposit in the early Cretaceous layers composed of continental layers from Alluvial to Siltstones and Lacustrine.

The study area lies within the East Coast Renosterveld bioregion (Mucina & Rutherford 2006). This bioregion has a moderately distinct flora, and high numbers of plant Species of Conservation Concern, with the main pressures being extensive habitat loss, due mainly to agriculture, followed by alien invasive vegetation, quarrying and urbanisation, and habitat modification due to lack of appropriate fire regimes. Critically Endangered - Eastern Ruens Shale Renosterveld is the main indigenous vegetation type mapped as occurring within the remaining undeveloped areas adjacent to the proposed additional quarries.

Most of the drainage lines with their associated wetland characteristics are in a moderate to good condition as they are located within the "klowe" too steep to plough and surrounded by indigenous vegetation remnants which also remains because the areas are too steep to plough for cultivation. The proposed mining expansion areas does not fall within any mapped non-perennial drainage lines nor within any mapped NFEPA wetland areas.

From the site survey conducted and historical google earth map images it is evident that all of the proposed mining areas have been annually cultivated for several years. No natural, near natural or rehabilitating indigenous vegetation remnants are located on the proposed mining expansion areas except for one individual Milkwood tree recorded which must be demarcated beforehand and may not be impacted upon. As per the 2023 Western Cape Biodiversity Spatial Plan (WCBSP) none of the proposed mining activities expansion areas are earmarked as CBA or ESA.

The proposed access roads that will be used during mining activities are also located on existing farm access roads and no new access roads may or will be created during the proposed mining activities.

Similar mining activities have already been conducted on the property and the water was not reached and is therefore lower than the proposed maximum depth of 30m. The actual depths of the groundwater table on the relevant properties are unknown as no active boreholes occur on the proposed mining areas, or on nearby properties or surrounds. Due to the general >30m depth groundwater table average and low yields in the Heidelberg/Riversdale region groundwater is an unused resource in the region and according to the Water Research Commission, the probability of drilling an successful borehole according to accessibility is less than 40% while, such a borehole will only have a 10-20% chance of delivering 2L/s. The proposed mining activities is therefore not expected to have any significant detrimental impacts on the geohydrological dynamics and/or groundwater quality/table of the site. However, if any groundwater is reached during the proposed mining activities on site, mining of that area must immediately be ceased, the Environmental Control Officer must be informed and the area must be rehabilitated to prevent any potential detrimental impact on the groundwater resource.

Heritage Features of the Site:

No significant heritage resources are located on nor within close proximity to the site. And the proposed activities are not expected to have any significant detrimental archaeological, palaeontological or visual/landscape impacts. A Notice of Intent to Develop was submitted to Heritage Western Cape whom confirmed no HIA required.

Agricultural Characteristics:

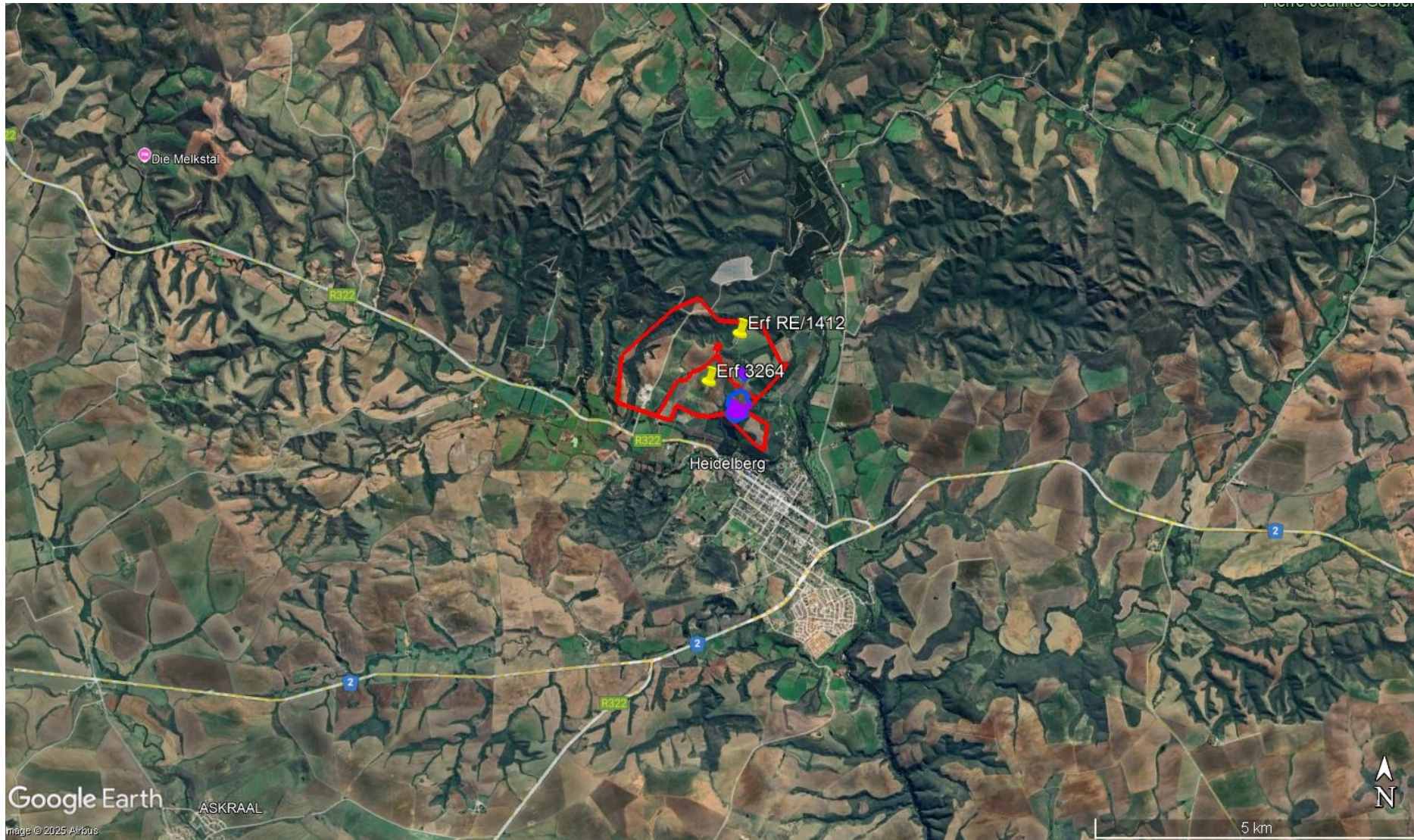
The screening tool classifies the assessed footprint as being entirely very high agricultural sensitivity. The very high sensitivity classification by the screening tool is due to irrigated crop status. The agricultural impact assessment confirms the very high agricultural sensitivity classification of the mining areas on Erf 3264 by the screening tool. It disputes the very high agricultural sensitivity classification of the mining areas on Erf RE1412 by the screening tool and verifies that site as being of high agricultural sensitivity because of its assessed cropping potential. The total size of the additional mining activities areas is 12.8 hectares. The baseline production potential is suitability for cropping. The amount of potential decrease is estimated at a 10 to 40% reduction in year 1 which will decrease to zero within 4 years, provided that rehabilitation is effectively implemented.

Socio-economic Characteristics:

The mine provides direct employment for at least 54 local persons and compensation to the landowner. The operation further creates indirect employment opportunities in equipment supply industries, transport and bentonite mining, and the mining environment.

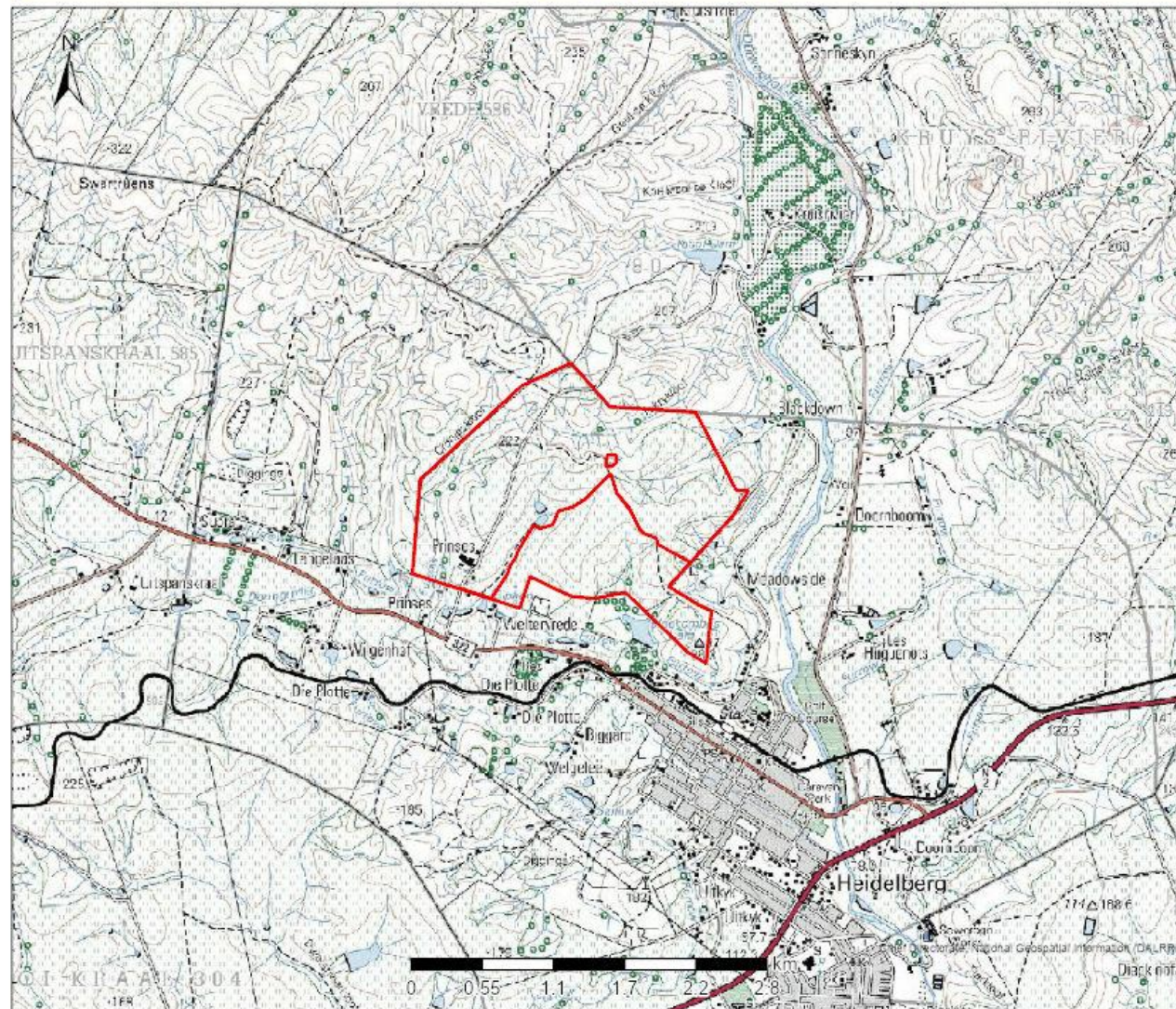


Map 1: Locality of Heidelberg in the Western Cape.



Map 2: Locality of Erven RE/1412 and 3264 near Heidelberg in the Western Cape.
GPS co-ordinate for proposed expansion sites - $34^{\circ} 04' 20.43''\text{S } 20^{\circ} 57' 02.44''\text{E}$
 $34^{\circ} 04' 38.29''\text{S } 20^{\circ} 56' 59.79''\text{E}$

1:50 000 topographical map for Erven RE/1412 and 3264



Legend

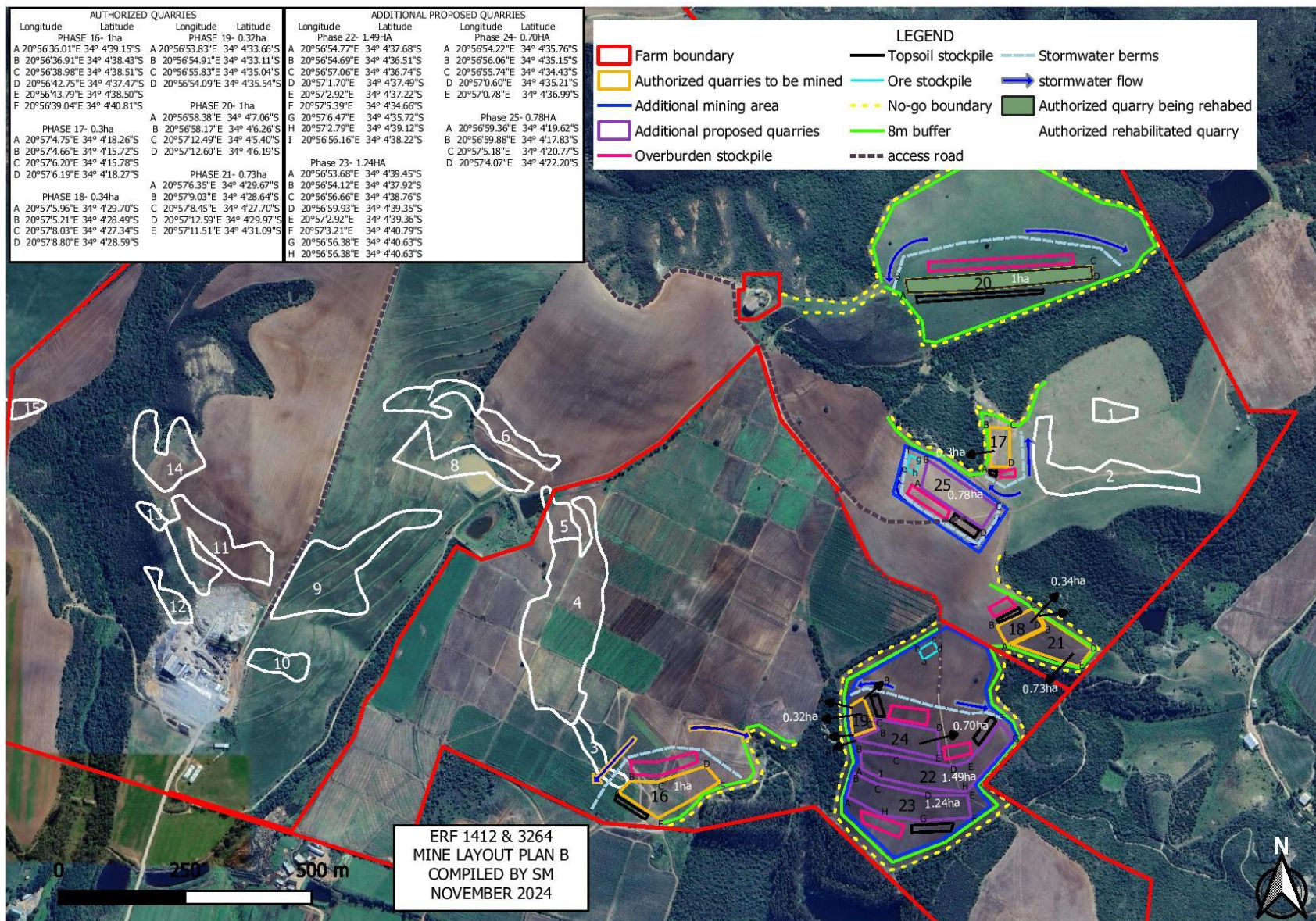
Map Center: Lon: 20°56'44.1"E
Lat: 34°4'19.4"S

Scale: 1:50,000

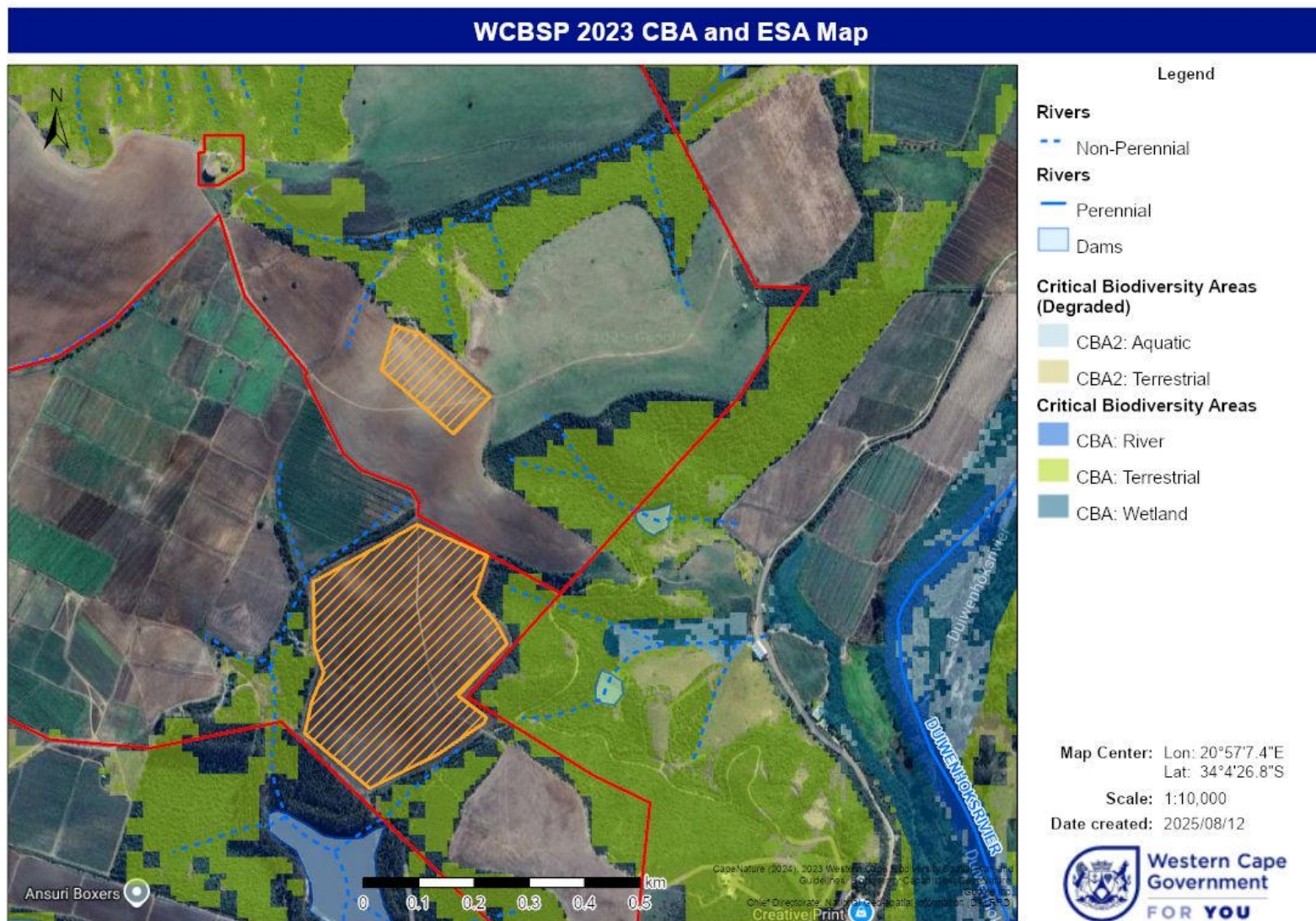
Date created: 2025/14/05



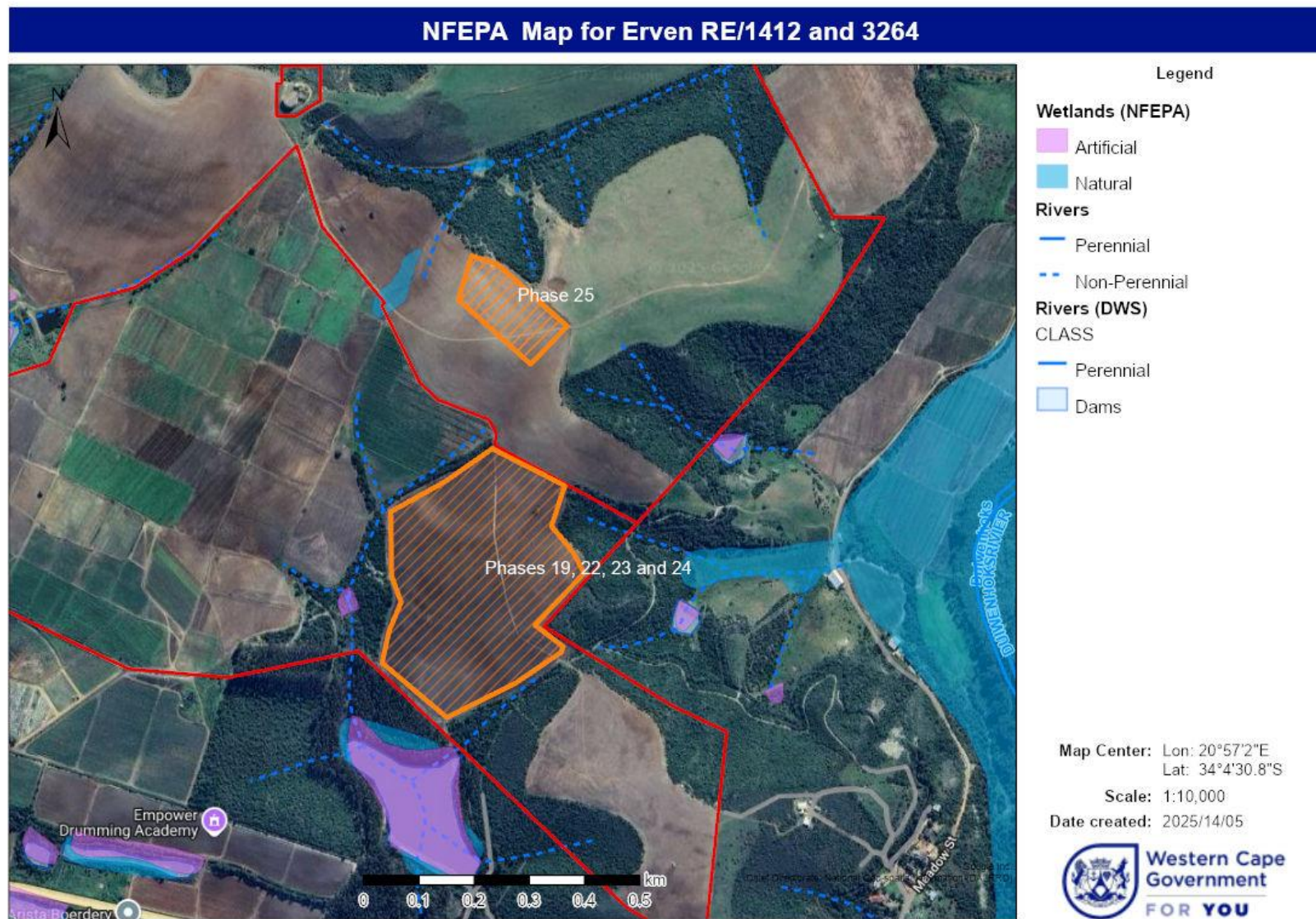
Map 3: The 1 in 50 000 topographical map for Erven RE/1412 and 3264 near Heidelberg in the Western Cape.



Map 4: Proposed mining layout map for Erven RE/1412 and 3264 (previously Erf 1412) indicating approved mining right areas and proposed additional quarries.



Map 5: 2023 WCBSP land use map indicating mapped terrestrial and aquatic Critical Biodiversity Areas (“CBA”) and Ecological Support Areas (“ESA”) as according to Fine Scale Planning (“FSP”) for Hessequa in relation to the proposed mining activities additional areas (demarcated in orange) as assessed for Erven RE/1412 and 3264 near Heidelberg in the Western Cape.



Map 6: NFEPA map for Hessequa in relation to the proposed mining activities additional areas (demarcated in orange) as assessed for Erven RE/1412 and 3264 near Heidelberg in the Western Cape.



Site Photo 1: Phases 22-24 additional quarry areas proposed within transformed cultivated land of Erf 3264.



Site Photo 2: Phases 22-24 additional quarry areas proposed within transformed cultivated land of Erf 3264.



Site Photo 3: Phase 25 additional quarry areas proposed within transformed cultivated land of Erf RE/1412



Site Photo 4: Phase 25 additional quarry areas proposed within transformed cultivated land of Erf RE/1412

Table 2: EAP and/or specialist Findings that either Confirms or Disputes the Environmental Sensitivity as Identified by the DEA Screening Tool

THEME	EAP AND/OR SPECIALIST RECOMMENDED LEVEL OF SENSITIVITY	MOTIVATION	EVIDENCE
Agriculture	High to Very High	The screening tool classifies the assessed footprint as being entirely very high agricultural sensitivity. The very high sensitivity	Refer to maps, site photos and project description.

		classification by the screening tool is due to irrigated crop status. The agricultural impact assessment confirms the very high agricultural sensitivity classification of the mining areas on Erf 3264 by the screening tool. It disputes the very high agricultural sensitivity classification of the mining areas on Erf RE1412 by the screening tool and verifies that site as being of high agricultural sensitivity because of its assessed cropping potential.	
Animal Species	Medium to Low	Phased mining activities has been taking place on the property for several years. The proposed additional mining activities area and most of the property is annually cultivated and therefore it is not expected to be home to animal species of conservation concern. However due to remaining indigenous remnants throughout the property indigenous animal species may be impacted upon by the proposed mining activities therefore an Animal Species Impact Statement is proposed.	Refer to maps, site photos and project description.
Aquatic Biodiversity	Low (Agree with DEA Screening Tool Report finding)	Aquatic features of the site are limited to non-perennial drainage lines and man-made dams as found in the gorges/"klowe" of the property too steep to plough for cultivation, only flowing during heavy rains. Mining activities are proposed on annually cultivated agricultural land. No drainage lines that have not been completely transformed by agricultural cultivation remains on the proposed mining areas. Aquatic impact statement is proposed.	Refer to maps, site photos and project description.
Archaeological and Cultural Heritage	Low	To date no significant archaeological or cultural heritage features has been found during mining activities that has taken place on the property. Therefore there are also no significant archaeological or cultural features expected to be found on the site or surrounds that will be impacted upon by the	A notice of intent to develop submitted to Heritage Western Cape, whom confirmed no HIA required.

		proposed additional quarries.	
Civil Aviation Theme	Low (Agree with DEA Screening Tool Report finding)	-	-
Defence	Low (Agree with DEA Screening Tool Report finding)	-	-
Palaeontology	Low	To date no significant palaeontological features has been found during mining activities that has taken place on the property. Therefore there are also no significant palaeontological features expected to be found on the site or surrounds that will be impacted upon by the proposed additional quarries	A notice of intent to develop submitted to Heritage Western Cape, whom confirmed no HIA required.
Plant Species	Low	The proposed mining areas are to be restricted to completely transformed cultivated land therefore no indigenous vegetation or habitat will be disturbed during the proposed mining activities. Plant impact statement to be conducted.	Refer to maps, site photos and project description.
Terrestrial Biodiversity	Low	Phased mining activities has been taking place on the property for several years. The proposed mining activities areas are to be restricted to completely transformed cultivated land therefore no indigenous vegetation or natural animal habitat will be disturbed during the proposed mining activities. A Terrestrial impact statement is proposed.	Refer to maps, site photos and project description.

4. SPECIALIST ASSESSMENTS REQUIRED VERIFICATION FINDINGS

Table 3: The table below indicates the specialist assessments identified by the screening report and reasons/motivation for the specialist assessment to be conducted or not to be conducted

Specialist Report Identified	Reason/s for the Assessment to be Conducted or Not to be Conducted (as provided by the EAP)
1. Agricultural Impact Assessment	Agricultural Impact Assessment conducted.
2. Landscape/Visual Impact Assessment	Not required. All bentonite and zeolite mining activities are proposed on annually cultivated and ploughed agricultural lands. No undisturbed or rehabilitating land is to be impacted upon by the

	proposed mining activities therefore no pristine landscapes will be visually disturbed. • Mining activities proposed adjacent to and within properties where mining activities has already taken place in the past and disturbed areas are to be rehabilitated to cultivated land once mining is completed. • The proposed mining activities are temporary, takes place in phases and rehabilitation of the site to previous cultivated agricultural land happens immediately after mining is completed returning it to its previous visual state. The mining is also conducted in phases so mining of all proposed phases will not all happen simultaneously. • Temporary mining activities as proposed will not be visible from any major tourist route.
3. Archaeological and Cultural Heritage Impact Assessment	Notice of Intent submitted to Heritage Western Cape, no HIA required.
4. Palaeontological Impact Assessment	Notice of Intent submitted to Heritage Western Cape, no HIA required.
5. Terrestrial Biodiversity Impact Assessment	The proposed mining activities areas are to be restricted to completely transformed cultivated land therefore no indigenous vegetation or natural animal habitat will be disturbed during the proposed mining activities and mining activities has already taken place on the property for several years and been successfully rehabilitated to its previous status quo of cultivated agricultural land. A Terrestrial impact statement is proposed.
6. Aquatic Biodiversity Impact Assessment	Aquatic features of the site are limited to non-perennial drainage lines and man-made dams as found in the gorges/"klowe" of the property too steep to plough for cultivation, only flowing during heavy rains. Mining activities are proposed on annually cultivated agricultural land. No drainage lines that have not been completely transformed by agricultural cultivation remains on the proposed mining areas. Aquatic impact statement is proposed.
7. Hydrology Assessment	Mining activities are not proposed on any significant hydrological features i.e. within drainage lines or watercourses and stormwater are to be managed in accordance with stormwater management plan and environmental management programme. Stormwater will be directed to flow into its existing flow paths around the mining areas so as not to have any

	detrimental impacts on the hydrology of the site and surrounds. Aquatic impact statement is proposed.
8. Noise Impact Assessment	Not required – No activities that will generate noise levels above the legal limit for rural areas in terms of the Environmental Conservation Act, Western Cape Noise regulations will be conducted.
9. Radioactivity Impact Assessment	Not required – there is no radioactive resources on the property nor within close proximity to the property that will be impacted upon by the proposed mining activities.
10. Traffic Impact Assessment	Not required – traffic impacts are expected to be the same as per mining operations that has already taken place and no use of public roads is proposed and mining traffic will only be temporary.
11. Geotechnical Assessment	Not required – it has already been determined through previous and ongoing mining operations taking place on the site that the bentonite and zeolite resources are present.
12. Climate Impact Assessment	Not required – the proposed additional quarries on cultivated agricultural lands is not to such a scale that it is expected to have any climate impacts.
13. Health Impact Assessment	Not required- to date there has been no indication that the previous mining activities has had any detrimental health impacts and proposed additional quarries is not expected to lead to any such significant health impacts.
14. Socio-economic Assessment	Not required – landowners consent has already been obtained for mining activities as proposed and proposed additional quarries within an is just a continuation of the ongoing mining activities hence it is not expected to lead to any significant socio-economic impacts.
15. Ambient Air Quality Impact Assessment	Not required – the proposed additional quarries on cultivated agricultural lands is not proposed at such a scale that it is expected to have any ambient air quality impacts.
16. Seismicity Assessment	Not required –current and proposed mining activities not expected to have any impacts on the frequency or distribution of earthquakes likely to take place within the area as this is also not an area known for active seismic activities.
17. Plant Species Assessment	The proposed mining areas are to be restricted to completely transformed cultivated land therefore no indigenous vegetation or habitat will

	be disturbed during the proposed mining activities; a Plant Species Impact Statement is proposed.
18. Animal Species Assessment	Phased mining activities has been taking place on the property for several years. The proposed additional mining activities area and most of the property is annually cultivated and therefore it is not expected to be home to animal species of conservation concern. However, due to remaining indigenous remnants throughout the property indigenous animal species may be impacted upon by the proposed mining activities therefore an Animal Species Impact Statement is proposed.

5. DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I **Johmandie Pienaar**, as the appointed EAP hereby declare/affirm the correctness of the information provided or to be provided as part of the report, and that:

- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - ~~am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);~~
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification.
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.



Signature of the EAP:

8 December 2025

Date:

Enviro-EAP (Pty) Ltd

Name of company (if applicable):

APPENDIX A: DEA ENVIRONMENTAL SENSITIVITY SCREENING REPORT

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

EIA Reference number: -

Project name: 10076MR Amendment Application

Project title: -

Date screening report generated: 09/12/2025 09:33:43

Applicant: Imerys Refractory Minerals SA

Compiler: EAP - Johmandie Pienaar

Compiler signature:

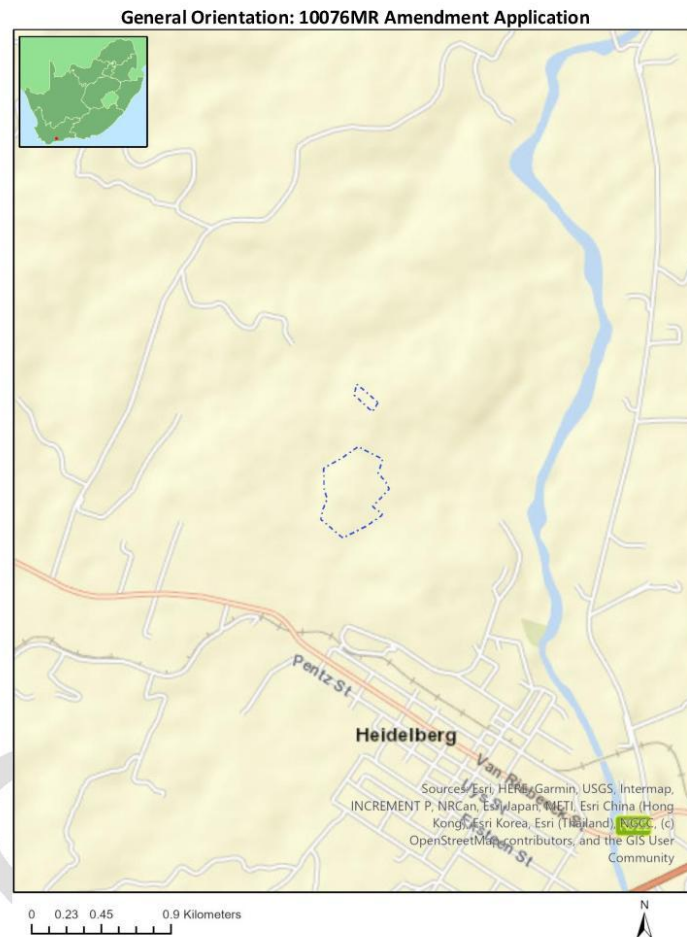
Application Category: Mining | Mining Right

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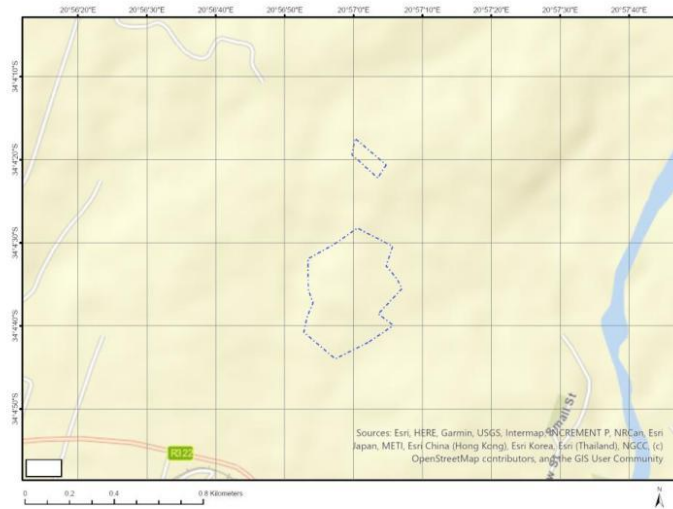
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Proposed Project Location

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	HEIDELBERG	1412	0	34°4'12.22S	20°56'37.54E	Erven
2	HEIDELBERG	1412	0	34°4'11.37S	20°56'37.52E	Erven
3	HEIDELBERG	3264	0	34°4'28.53S	20°56'46E	Erven

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	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	12/12/20/1815/3	Wind	Approved	5.4

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

Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

Environmental screening results and assessment outcomes

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

Mining | Mining Right.

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.

Incentive, restriction or prohibition	Implication
Strategic Gas Pipeline Corridors-Phase 1a & 1b: Saldanha to Ankerlig and Saldanha to Mossel Bay	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf
South African Conservation Areas	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SACAD_OR_2025_Q3_Metadata.pdf

Proposed Development Area Environmental Sensitivity

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

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

Specialist assessments identified

Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the

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[Disclaimer applies](#)
09/12/2025

assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

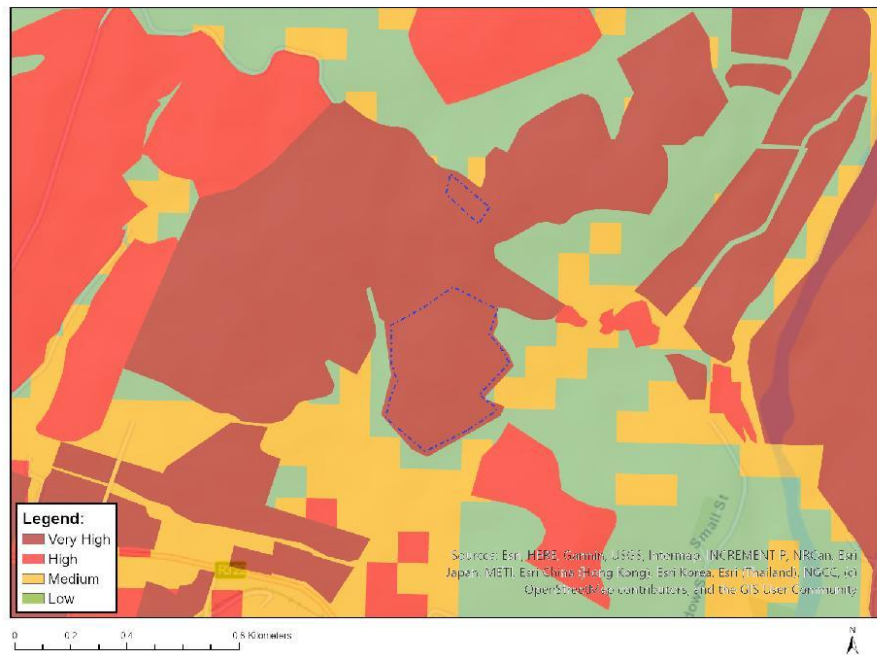
No	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforHIA.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforPIA.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
7	Hydrology Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
8	Noise Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf
9	Radioactivity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
10	Traffic Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
11	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
12	Climate Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
13	Health Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
14	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
15	Ambient Air Quality Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf

16	Seismicity Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
17	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf
18	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Animal Species Assessment Protocols.pdf

Results of the environmental sensitivity of the proposed area.

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

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

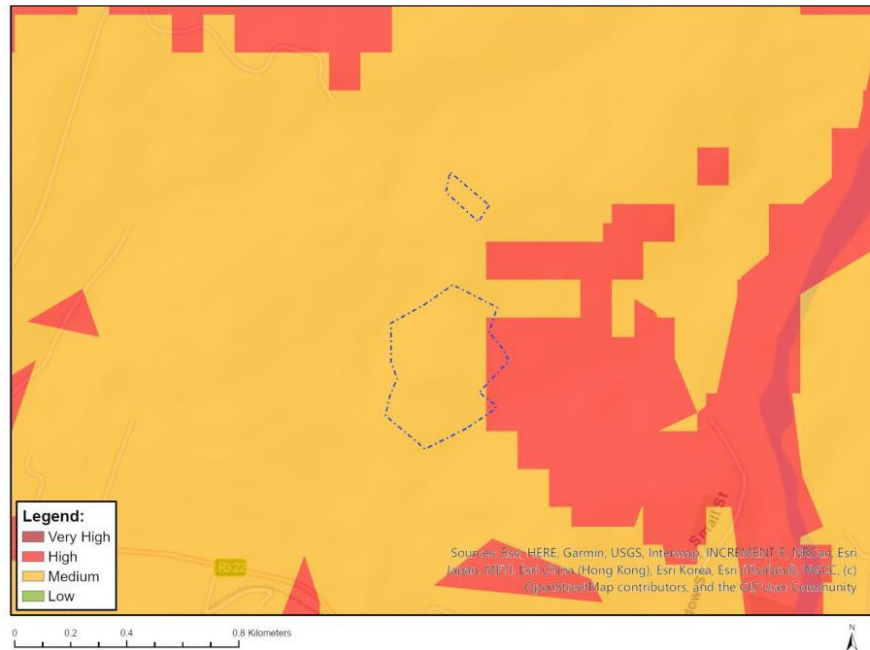


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	05. Low
Low	04. Low-Very low
Low	03. Low-Very low
Medium	06. Low-Moderate
Very High	Non-pivot Irrigated Annual Crop Cultivation / Planted Pastures

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



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

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Aves-Neotis denhami
Medium	Invertebrate-Aneuryphymus montanus

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

Legend:

- Very High
- High
- Medium
- Low

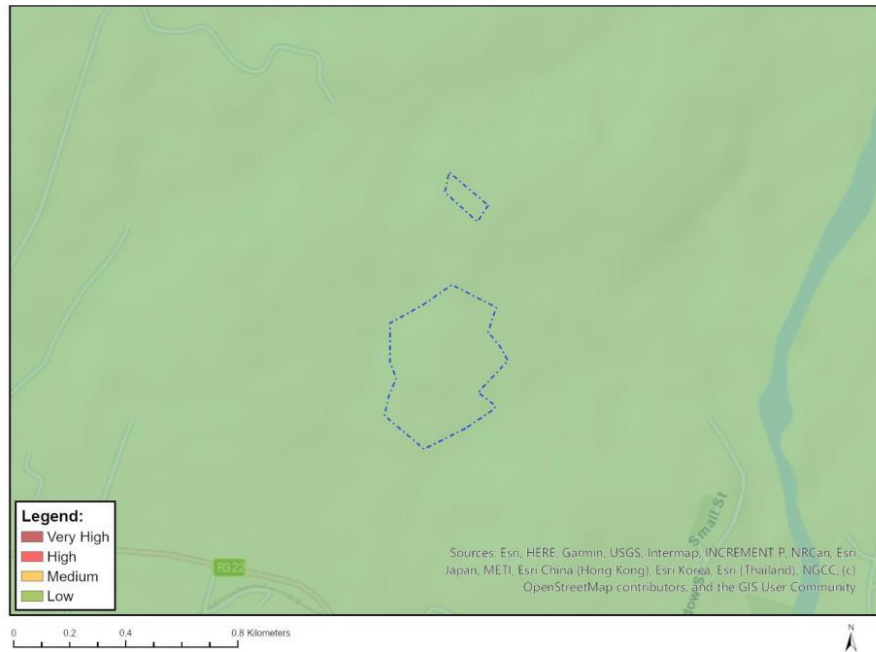
0 0.2 0.4 0.8 Kilometers

Map of the study area showing the distribution of the four species. The map is color-coded by risk level: Very High (dark red), High (red), Medium (yellow), and Low (green). The study area is a large red area. The map includes a legend, a scale bar (0 to 0.8 Kilometers), and a north arrow. The map also shows the location of the study area relative to the city of Hanoi, Vietnam, and the surrounding areas. The map is titled 'Map of the study area showing the distribution of the four species'.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Very High	Within 2km of a Grade II Heritage site

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

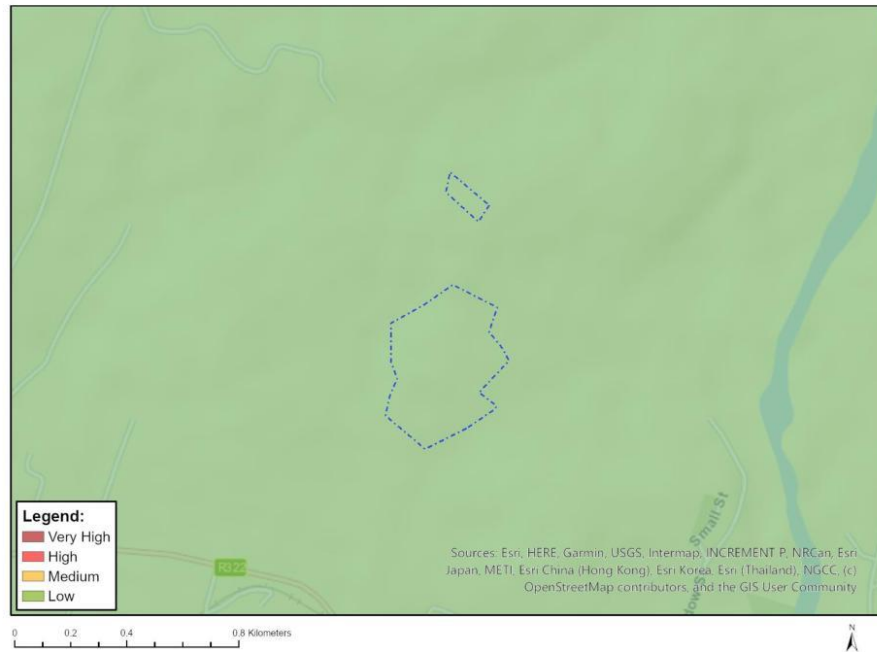


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

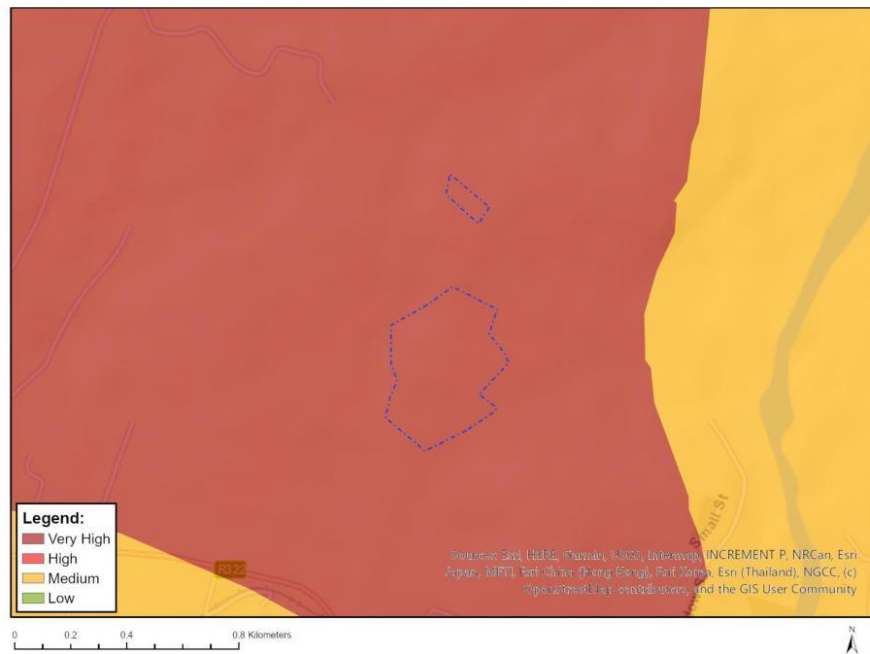


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

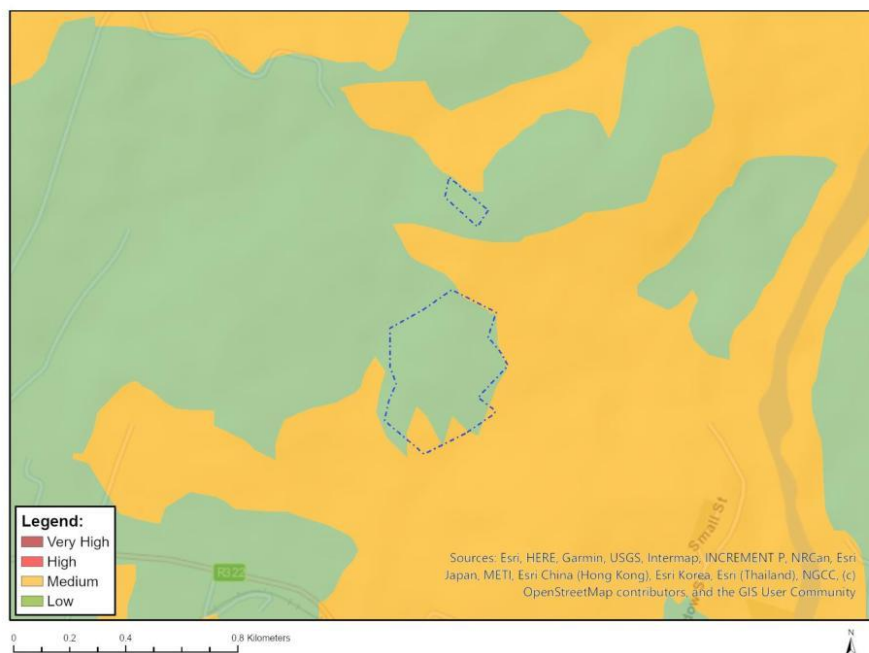


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Features with a Very High 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.

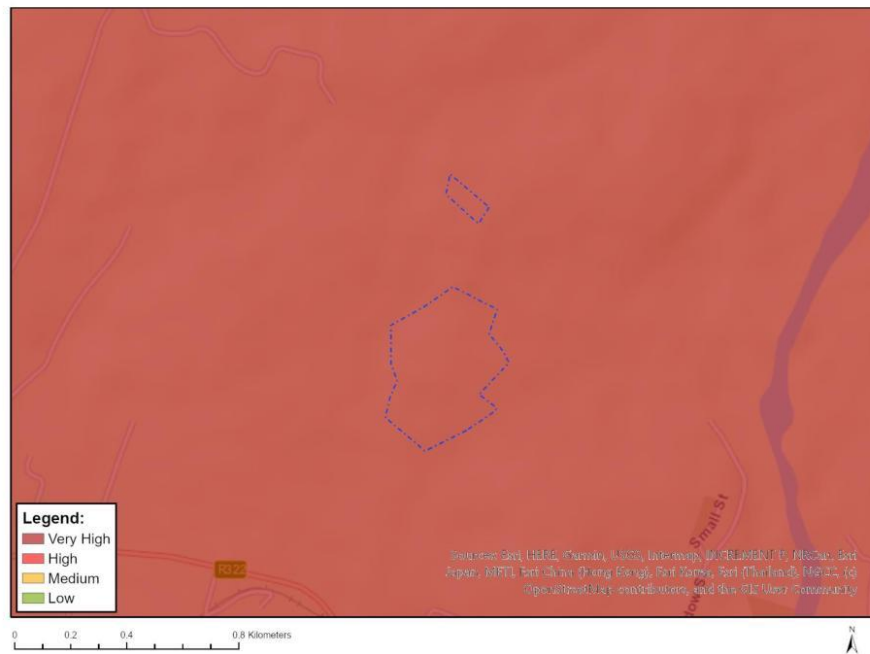
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Aspalathus campestris
Medium	Aspalathus grobleri
Medium	Aspalathus millefolia
Medium	Aspalathus steudeliana
Medium	Aspalathus zeyheri
Medium	Otholobium bowieanum
Medium	Otholobium pungens
Medium	Lotononis viborgioides
Medium	Leucadendron coriaceum
Medium	Selago ramosissima
Medium	Hesperantha muirii
Medium	Freesia fergusoniae

Medium	Sensitive species 157
Medium	Sensitive species 700
Medium	Sensitive species 802
Medium	Sensitive species 499
Medium	Oxalis duriuscula
Medium	Hermannia lavandulifolia
Medium	Sensitive species 439
Medium	Sensitive species 1142
Medium	Sensitive species 339
Medium	Duvalia elegans
Medium	Cynanchum zeyheri
Medium	Sensitive species 96
Medium	Gnidia ericoides
Medium	Chrysocoma flava
Medium	Stoebe rugulosa
Medium	Relhania garnotii
Medium	Acmadenia macropetala
Medium	Sensitive species 692
Medium	Sensitive species 980
Medium	Phyllica elimensis
Medium	Sensitive species 822
Medium	Drosanthemum lavisii
Medium	Drosanthemum micans
Medium	Drosanthemum striatum
Medium	Romulea jugicola
Medium	Sensitive species 521
Medium	Sensitive species 142
Medium	Elegia squamosa
Medium	Diosma passerinoides
Medium	Agathosma microcarpa

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	CBA2: Terrestrial
Very High	EN Eastern Ruens Shale Renosterveld