



HWC 002/02/ED (4 Jul 14)

NOTIFICATION OF INTENT TO DEVELOP

Completion of this form is required by Heritage Western Cape for the initiation of all impact assessment processes under Section 38(1) & (8) of the National Heritage Resources Act (NHRA).

Whilst it is not a requirement, it may expedite processes and in particular avoid calls for additional information if certain of the information required in this form is provided by a heritage specialist/s with the necessary qualifications, skills and experience.

A. APPLICABILITY OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA)

HWC Case Number:	DEADP Reference Number: NA DEA&DP is not the decision making authority for this EA application the Department of Mineral Resources is.
NOTE 1: An HWC case number must be obtained and application fee paid in advance of submission of this form.	
NOTE 2: A DEADP (W Cape Dept. Environment Affairs & Development Planning) reference number must be included in all NHRA Section 38(8) processes where DEADP is the decision making authority under NEMA. The effect of this requirement is that the NEMA process must be initiated with DEADP prior to the NHRA process with HWC.	
If a DEADP reference number is not entered above please check one of the following boxes:	
<p>This application is made in terms of Section 38(8) of the NHRA and an application under NEMA has been made to the following authority: Department of Mineral Resources Ref. - Proposed Bentonite and Zeolite Prospecting/Sampling on Erf 2224, Heidelberg, Western Cape</p> <p><input checked="" type="checkbox"/> (NOTE: this is NOT for a mining application this is for a prospecting application where sampling for viable bentonite and zeolite deposits are proposed via drilling, no trenching nor excavations are proposed and all prospecting/sampling activities are proposed on annually cultivated agricultural lands, please refer to the description below of proposed prospecting/sampling activities)</p> <p><input type="checkbox"/> This development will not require a NEMA application.</p>	
NOTE 3: Making an incorrect statement or providing incorrect information in this part of the form may result in all or part of the application having to be reconsidered by HWC in the future, or submission of a new application.	

B. BASIC DETAILS

PROPERTY DETAILS:

Name of property: Erf 2224	
Street address or location (eg: off R44): The property is situated approximately 2km northeast of the town Heidelberg and can be accessed via gravel roads leading from Heidelberg off Van Riebeeck street towards the N2.	
Erf or farm number/s: Erf 2224	Coordinates: 34 04' 34.60"S 20 58' 23.28"E (A logical centre point. Format based on WGS84.)

Town or District: Heidelberg - Swellendam	Responsible Municipality: Hessequa Municipality
Extent of property: 1011580.4m2	Current use: Agricultural- Cultivation and Livestock Grazing
Predominant land use/s of surrounding properties: Ploughed agricultural land	

REGISTERED OWNER OF PROPERTY:

Name Count the Silver 13 BK		
Address PO Box 25 Heidelberg 6665		
Telephone -	Cell -	E-mail -
<p>By the submission of this form and all material submitted in support of this notification (ie: 'the material'), all applicant parties acknowledge that they are aware that the material and/or parts thereof will be put to the following uses and consent to such use being made: filing as a public record; presentations to committees, etc; inclusion in databases; inclusion on and downloading from websites; distribution to committee members and other stakeholders and any other use required in terms of powers, functions, duties and responsibilities allocated to Heritage Western Cape under the terms of the National Heritage Resources Act. Should restrictions on such use apply or if it is not possible to copy or lift information from any part of the digital version of the material, the material will be returned unprocessed.</p>		
<p>I confirm that I enclose with this form four hardcopies of all material submitted together with a CD ROM containing digital versions of all of the same.</p>		

Signature of owner or authorised agent
(Agents must attach copy of power of attorney to this form.)

Date / / 20

DEVELOPMENT DETAILS:

Please indicate below which of the following Sections of the National Heritage Resources Act, or other legislation has triggered the need for notification of intent to develop.	
<p><input type="checkbox"/> S38(1)(a) Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.</p> <p><input type="checkbox"/> S38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.</p> <p><input type="checkbox"/> S38(1)(d) Rezoning of a site exceeding 10 000m² in extent.</p> <p><input checked="" type="checkbox"/> Other triggers, eg: in terms of other legislation, (ie: National Environment Management Act, etc.) Please set out details: Environmental Authorisation in terms of National Environmental Management Act, 1998 (Act No. 107 of</p>	<p>S38(1)(c) Any development or activity that will change the character of a site -</p> <p><input checked="" type="checkbox"/> (i) exceeding 5 000m² in extent;</p> <p><input type="checkbox"/> (ii) involving three or more existing erven or subdivisions thereof;</p> <p><input type="checkbox"/> (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years.</p> <p>If you have checked any of the three boxes above, describe how the proposed development will change the character of the site: Bentonite</p>

1998)	and Zeolite prospecting/sampling activities as proposed on completely transformed and cultivated agricultural land.
<p>If an impact assessment process has also been / will be initiated in terms of other legislation please provide the following information:</p> <p>Authority / government department (ie: consenting authority) to which information has been /will be submitted for final decision: Department of Mineral Resources AND Department of Water and Sanitation/Breede-Gouritz Catchment Management Agency</p> <p>Present phase at which the process with that authority stands: Application for EIA Environmental Authorisation AND potential Water Use Authorisation to be submitted.</p>	
<p>Provide a <u>full</u> description of the nature and extent of the proposed development or activity including its potential impacts (eg: changes in land use, envisaged timeframes, provision of additional bulk services, excavations, landscaping, total floor area, height of development, etc. etc.): Eco Impact Legal Consulting (Pty) Ltd (Eco Impact) has been appointed by the Imerys Refractory Mineral SA to assess the biodiversity and freshwater ecosystems impacts of the proposed prospecting activities on Erf 2224 near Heidelberg in the Western Cape.</p> <p>Imerys Refractory Minerals South Africa (Pty) Ltd t/a Cape Bentonite Mine is an existing Bentonite and Zeolite mining company operating on various farms in close proximity to the towns of Heidelberg and Riversdale that fall within the Hessequa Local Municipality and Eden District Municipality in the Western Cape Province.</p> <p>Cape Bentonite Mines proposes to apply for a PROSPECTING (not mining) right to prospect for bentonite and zeolite on the erven 2224 near the town of Heidelberg in the Western Cape.</p> <p>The proposed prospecting activities will entail the following phases:</p> <ul style="list-style-type: none"> Phase 1 – Field Mapping and Surveying A qualified geologist will survey/explore the transformed cultivated areas on the proposed prospecting property by foot and map potential visible bentonite and zeolite outcrops. If such visible outcrops are found on the transformed cultivated areas of property the geologist will map these areas for potential sampling during phase 3. Phase 2 – Literature Review A qualified geologist will research known geological literature of the property and surrounds to assist in determining approximate location of viable bentonite and zeolite deposits on the transformed cultivated areas of the property. <p>After the completion of phases 1 and 2 the geologist will produce potential bentonite and zeolite deposits maps for the property which will serve as guidelines for the next phase which will entail trenching, drilling and sampling.</p> <ul style="list-style-type: none"> Phase 3 –Drilling and Sampling <p>Direct push sampler drilling and sampling – using the maps as produced by the geologist during phases 1 and 2 the geologist will determine which orebodies must be investigated further by direct push sampler drilling. This is conducted by the mining company itself and involves the use of a direct push sampler drill rig. The drill rig will push a stainless steel tube of 50-60cm long into the ground, once full it will bring it up and the sample will be taken out. This process will be carried out until bentonite is found or reaching the depth of around 6m. The hole will then immediately be rehabilitated by backfilling and a month later the site is revisited to determine if any the holes re-</p>	

opened due to decompaction. The sampler holes will have the following maximum temporary footprints – Diameter 60mm; depth 6m = 3.6m³ overburden material produced by drilling to be backfilled immediately after sample has been taken. Samples would be collected according to the geology. Approximately 1000 sampler holes are proposed for the property, but final proposed direct sampler holes's amount will be determined during the completion of phases 1 and 2 therefore proposed direct sampler holes amount might increase or decrease.

Boreholes and sampling - following the results of the samples collected during the direct push sampler drilling, a qualified drilling contractor will be appointed by the mining company and under the guidance and supervision of the qualified geologist conduct the following drilling activities on the areas as identified by the geologist. Drilling involves using a rotary percussion drilling rig bringing samples to the surface in the form of chips. The drilled boreholes will have the following maximum temporary footprints - diameter 0.2m by 0.2m; depth 30m = 12 m³ maximum overburden material produced per borehole to be replaced immediately after sample has been taken. <1kg of sample material is collected by the geologist from each borehole for testing. The drilling samples collected are sent to the laboratory at the cape bentonite mine processing plant near Heidelberg and tested for specific properties to establish the quality of ore as well as determine approximate extension and volume of the available ore body. Approximately 60 drilling sections/lines with 3 boreholes each are proposed for the property = approximately 180 boreholes in total for the property, but final proposed boreholes amount will be determined during the completion of phases 1 and 2 and direct push sampler drilling results and the number of proposed drilling boreholes therefore might increase or decrease.

Rehabilitation – immediately (same day) following samples taken during drilling as described above the excavated material will be replaced and existing agricultural land contour structures will be reinstated. The disturbed prospecting areas will be monitored for signs of erosion for at least six months after sampling and erosion rectification and prevention measures will be implemented as and if required. Alien invasive and weed vegetation monitoring and removal will be undertaken for at least a year after sampling on disturbed prospecting areas or until the landowner starts with the annual cultivation activities on the affected land. This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology depending on the contract agreement that the applicant has with the landowner.

- Phase 4 – Sample Analysis

<1kg of sample material is collected by the geologist from each trench and borehole for testing. The samples collected are sent to the laboratory at the cape bentonite mine processing plant near Heidelberg and tested for specific properties to establish the quality of ore as well as determine approximate extension and volume of the available ore body.

- Phase 5 – Reserve and Resource Modelling

Following the results of sample analysis conducted the geological reserve modelling is done by using SURPAC and AUTOCAD geological software to determine the grades and quantities of available bentonite and zeolite resources and produce the feasibility reports for the property as investigated/surveyed.

Sensitive environmental features that were identified on the property include indigenous vegetation remnants which exists throughout the property and consists of Critically Endangered - Eastern Ruens Shale Renosterveld also identified as Terrestrial Critical Biodiversity Areas ("CBA") as according to the Fine Scale Planning ("FSP") for Hessequa, as well as scattered Milkwood trees (*Sideroxylyn inerme*) within the cultivated lands.

Other sensitive environmental and landscape features identified on the property include non-perennial drainage lines, man-made and natural dams with associated wetland characteristics mostly connected to remaining indigenous remnants, also classified as Critical Biodiversity Areas ("CBA") and Ecological Support Areas ("ESA") and National Wetland Freshwater Ecosystems Priority Areas

("NFEPA").

Significant direct impacts potentially associated with the prospecting excavation phase are direct loss of indigenous terrestrial and aquatic vegetation and disturbance of soil which may lead to partial disruption of ecological processes due to fragmentation of habitat and erosion. The extent in this case would be local. Indirect impacts would occur mostly during the rehabilitation phase and in this case the nature would vary from the introduction of alien vegetation to partial disruption of ecological processes due to the effects of the alien species encroachment and/or erosion. The extent of the potential indirect impacts in this case would be local.

Where no existing gravel roads exists as buffer areas an buffer area of at least 8m as measured from the edge of the sensitive environmental and landscape features and located on completely transformed cultivated land must be maintained throughout the prospecting activities phase. The proposed buffer areas may only be used as roads and for stormwater/erosion management and no other activities associated with the proposed prospecting of the site may occur within the buffer areas.

The ecological baseline assessment concluded that if the proposed prospecting activities remains on the completely transformed cultivated agricultural areas of the property as indicated on Map 4 of this report and the specialist recommendations as listed in this report are adhered to that the proposed prospecting activities will not have any significant detrimental environmental impacts on any of the sensitive environmental and landscape features as present on the site.

C. HERITAGE RESOURCES AND IMPACTS THEREUPON

Section 3 of the National Heritage Resources Act sets out the following categories of heritage resource as forming part of the national estate. Please indicate the known presence of any of these by checking the box alongside and then providing a description of each occurrence, including nature, location, size, type

Failure to provide sufficient detail or to anticipate the likely presence of heritage resources on the site may lead to a request for more detailed specialist information.

(The assistance of relevant heritage professionals is particularly relevant in completing this section.)

Provide a short history of the site and its environs (Include sources where available):

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 flat lying areas.

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 Lacustine

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 also identified as Terrestrial Critical Biodiversity Areas ("CBA") as according to the Western Cape Biodiversity Plan ("WCDP") 2017, is the indigenous vegetation type remaining within the area.

Several non-perennial secondary drainage lines is located throughout the property due to the undulating nature of the topography which eventually feeds into manmade dams and eventually the Duiwenhoks River.

<p>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.</p> <p>All prospecting activities are proposed on completely transformed cultivate agricultural lands except for four scattered individual Milkwood trees remaining within the cultivated agricultural lands.</p> <p>The remaining Eastern Ruens Shale Renosterveld remnants are located in-between the transformed cultivated areas, along the drainage line areas associated with steep slopes which could not be ploughed for cultivation.</p> <p>From the site survey conducted and most recent google earth map images it is evident that the proposed prospecting activities areas have been ploughed and cultivated within the last year 2017-2018. Except for four scattered individual Milkwood trees remaining within the cultivated agricultural lands, which must not be impacted upon, no natural, near natural or rehabilitating indigenous vegetation remnants are located on the proposed prospecting activities areas.</p> <p>(Hanekom N. June 2018. Ecological Baseline Assessment for Propsoed Bentonie and Zeolite Prospecting Right on Erf 2224, Heidelberg, Western Cape. Eco Impact.)</p>	
<p>Please indicate which heritage resources exist on the site and in its environs, describe them and indicate the nature of any impact upon them:</p>	
<input type="checkbox"/>	<p>Places, buildings, structures and equipment of cultural significance</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Places to which oral traditions are attached or which are associated with living heritage</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Historical settlements and townscapes</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input checked="" type="checkbox"/>	<p>Landscapes and natural features of cultural significance</p> <p>Description of resource: Indigenous vegetation areas and drainage lines</p> <p>Description of impact on heritage resource: All potential direct and indirect impacts as associated with proposed prospecting activities can be mitigated to such a extent that it will not cause significant ditremental environmental impacts.</p> <p>Significant direct impacts potentially associated with the prospecting excavation phase are direct loss of indigenous terrestrial and aquatic vegetation and disturbance of soil which may lead to partial disruption of ecological processes due to fragmentation of habitat and erosion. The extent in this case would be local. Indirect impacts would occur mostly during the rehabilitation phase and in this case the nature would vary from the introduction of alien vegetation to partial disruption of ecological processes due to the effects of the alien species encroachment and/or erosion. The extent of the potential indirect impacts in this case would be local.</p> <p>Where no existing gravel roads exists as buffer areas an buffer area of at least 8m as measured from the edge of the sensitive environmental and landscape features and located on completely transformed cultivated land must be maintained throughout the prospecting activities phase. The proposed buffer areas may only be used as roads and for stormwater/erosion management</p>

	<p>and no other activities associated with the proposed prospecting of the site may occur within the buffer areas.</p> <p>The ecological baseline assessment conducted concluded that if the proposed prospecting activities remains on the completely transformed cultivated agricultural areas and the four individual Milkwood trees are protected and avoided that the proposed prospecting activities will not have any significant detrimental environmental impacts on any of the sensitive environmental and landscape features as present on the site.</p>
<input type="checkbox"/>	<p>Geological resources of scientific or cultural importance</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input checked="" type="checkbox"/>	<p>Archaeological resources (Including archaeological sites and material, rock art, battlefields & wrecks):</p> <p>Description of resource: The site is not known to contain any archaeological resources of significance and it is also important to note that prospecting (not mining) activities are proposed on annually cultivated land.</p> <p>Description of impact on heritage resource: The proposed prospecting technique as described above only include drill sampling and no extensive trenches will be excavated therefore the chance for potential impacts on any archaeological resources is very low.</p>
<input checked="" type="checkbox"/>	<p>Palaeontological resources (ie: fossils):</p> <p>Description of resource: The site is not known to contain any palaeontological resources of significance and it is also important to note that prospecting (not mining) activities are proposed on annually cultivated land.</p> <p>Description of impact on heritage resource: The proposed prospecting technique as described above only include drill sampling and no extensive trenches will be excavated therefore the chance for potential impacts on any paleontological resources is very low.</p>
<input type="checkbox"/>	<p>Graves and burial grounds (eg: ancestral graves, graves of victims of conflict, historical graves & cemeteries):</p> <p>Description of Resource:</p> <p>Description of Impact on Heritage Resource:</p>
<input type="checkbox"/>	<p>Other human remains:</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Sites of significance relating to the history of slavery in South Africa:</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Other heritage resources:</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>

<p>Describe elements in the environs of the site that could be deemed to be heritage resources:</p> <p>Listed above</p> <p>Description of impacts on heritage resources in the environs of the site:</p> <p>Impacts on possible heritge resource as listed above.</p>

<p>Summary of anticipated impacts on heritage resources:</p> <p>Listed above.</p>

ILLUSTRATIVE MATERIAL (This form will not be processed unless the following are included):

Attach to this form a minimum A4 sized locality plan showing the boundaries of the area affected by the proposed development, its environs, property boundaries and a scale. The plan must be of a scale and size that is appropriate to creating a clear understanding of the development.

Attach also other relevant graphic material such as maps, site plans, satellite photographs and photographs of the site and the heritage resources on it and in its environs. These are essential to the processing of this notification.

Please provide all graphic material on paper of appropriate size and on CD ROM in JPEG format. It is essential that graphic material be annotated via titles on the photographs, map names and numbers, names of files and/or provision of a numbered list describing what is visible in each image.

D. RECOMMENDATION

In your opinion do you believe that a heritage impact assessment is required? ☐ Yes ☒ No

Recommendation made by:

Name Johmandie Pienaar

Capacity Environmental Assessment Practitioner

PLEASE NOTE: No Heritage Impact Assessment should be submitted with this form or conducted until Heritage Western Cape has expressed its opinion on the need for such and the nature thereof.

E. INFORMATION TO BE PROVIDED AND STUDIES TO BE CONDUCTED AS PART OF THE HERITAGE IMPACT ASSESSMENT (HIA)

If it is recommended that an HIA is required please complete this section of the form.

DETAILS OF HERITAGE PRACTITIONERS AND SPECIALISTS INTENDING TO CONDUCT THE HIA:

1.	Name of individual:	Name of Practice:	Area of specialisation:
	Qualifications:		
	Experience:		
	Standing in heritage resource management:		
	E-mail Address:	Telephone:	Cell:
2.	Name of individual:	Name of Practice:	Area of specialisation:
	Qualifications:		
	Experience:		
	Standing in heritage resource management:		
	E-mail Address:	Telephone:	Cell:

3.	Name of individual: Name of Practice: Area of specialisation: Qualifications: Experience: Standing in heritage resource management: E-mail Address: Telephone: Cell:
4.	Name of individual: Name of Practice: Area of specialisation: Qualifications: Experience: Standing in heritage resource management: E-mail Address: Telephone: Cell:
5.	Name of individual: Name of Practice: Area of specialisation: Qualifications: Experience: Standing in heritage resource management: E-mail Address: Telephone: Cell:
If this submission is made in terms of Section 38(8) of the National Heritage Resources Act indicate below the particulars of the principle environmental consultant on the project.	
Name of individual: Johmandie Pienaar Name of Practice: Eco Impact Legal Consulting Area of specialisation: Environmental Assessment Practitioner and Biodiversity Specialist E-mail Address: johmandie@ecoimpact.co.za & admin@ecoimpact.co.za Telephone: 021 671 1660 Fax: 088 021 671 1660 Cell: 072 240 3092 Postal Address: PO Box 45070 Claremont South Africa 7735	

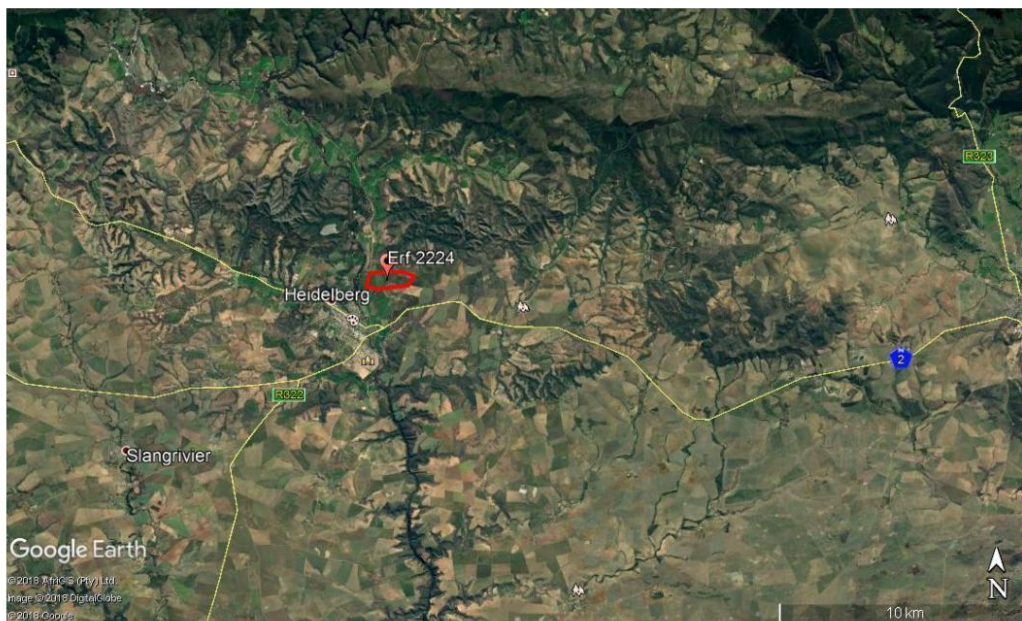
DETAILS OF STUDIES TO BE CONDUCTED IN THE INTENDED HIA

In addition to the requirements set out in Section 38(3) of the NHRA, indicate envisaged studies:	
<input type="checkbox"/>	Heritage resource-related guidelines and policies.
<input type="checkbox"/>	Local authority planning and other laws and policies.
<input type="checkbox"/>	Details of parties, communities, etc. to be consulted.
<input type="checkbox"/>	Specialist studies, eg: archaeology, palaeontology, architecture, townscape, visual impact, etc. Provide details:
<input type="checkbox"/>	Other. Provide details:
PLEASE NOTE: Any further studies which Heritage Western Cape may resolve should be submitted must be in the form of a single, consolidated report with a single set of recommendations. Specialist studies must be incorporated in full, either as chapters of the report, or as annexures thereto.	

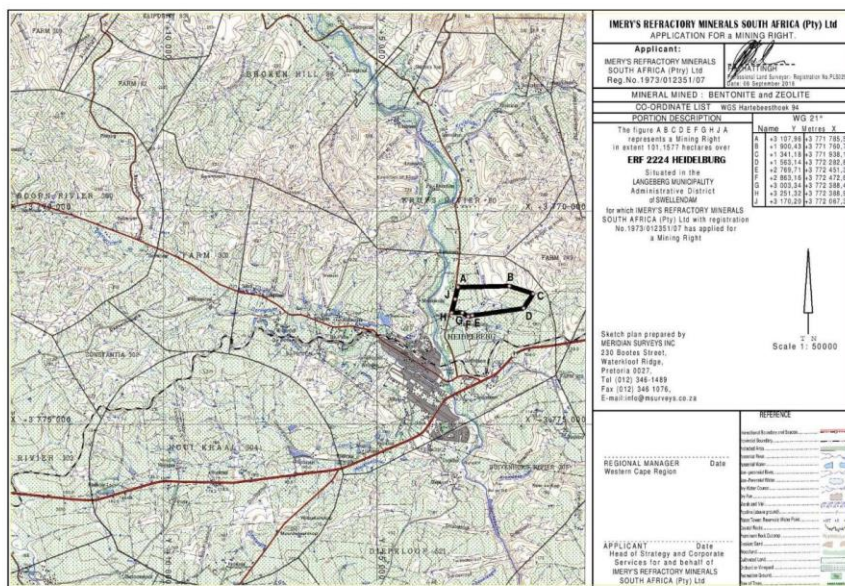
MAPS



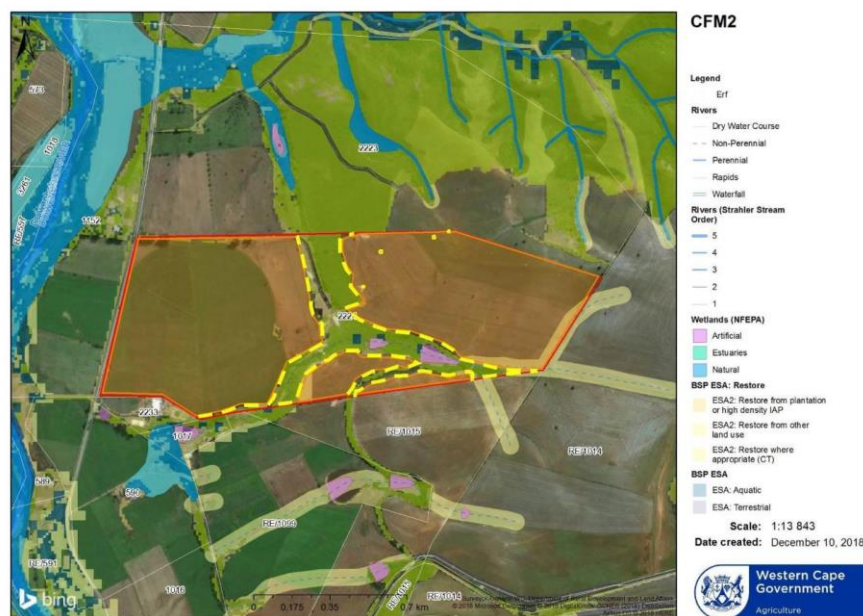
Map 1: Locality of Heidelberg in the Western Cape.



Map 2: Locality of the Erf 2224 near Heidelberg in the Western Cape.
GPS co-ordinate for "middle" of surveyed site - 34° 04' 34.60"S
20° 58' 23.28"E



Map 3: Boundary of Erf 2224 as surveyed for proposed prospecting activities.



Map 4: Biodiversity GIS ("BGIS") land use map indicating mapped terrestrial and aquatic Critical Biodiversity Areas ("CBA"), Ecological Support Areas ("ESA") and associated buffer areas as according to Fine Scale Planning ("FSP") for Hessequa in relation to the proposed prospecting areas on transformed cultivated agricultural land (as outlined in yellow).

SITE PHOTOS



Site Photo 1: Erven 2224 - Prospecting activities area as proposed on transformed cultivated land.



Site Photo 2: Erven 2224 - Prospecting activities area as proposed on transformed cultivated land.



Site Photo 3: Erven 2224 - Prospecting activities area as proposed on transformed cultivated land.



Site Photo 4: Erven 2224 - Prospecting activities area as proposed on transformed cultivated land.



Site Photo 5: Erven 2224 - Prospecting activities area as proposed on transformed cultivated land.



Site Photo 6: Erven 2224 - Prospecting activities area as proposed on transformed cultivated land.



Site Photo 7: Erven 2224 - Prospecting activities area as proposed on transformed cultivated land.



Site Photo 8: Erven 2224 - Prospecting activities area as proposed on transformed cultivated land.