

Appendix 8:

Site Sensitivity Verification Report

**Site Sensitivity Verification Report for Vlakfontein Sand Mine Section 102
extension of Mining Right area**

VLAKFONTEIN SAND MINE (AFRIMAT): SITE SENSITIVITY REPORT FOR AN EXTENSION OF MINING RIGHT THROUGH A SECTION 102 ON FARM WOODLANDS 874 PTN 2 IN THE MALMESBURY REGISTRATION DISTRICT, WESTERN CAPE PROVINCE.

1) Background

Afrimat Aggregates (Operations) (Pty) Ltd has been operating at this Vlakfontein Sand Mine since the early 2000s. This Sand Mine operation supplies the Malmesbury and surrounding areas with the competent sand material for plastering and construction projects. Therefore, Afrimat has established market share in the region.

In late early 2022, the mine management determined that mine reserves are becoming limited within the approved Mining Right area. Therefore, a need to identify a new site for continuation of supply of quality sand to surrounding area arose. As Afrimat has been mining in this area for a while and having knowledge from the farm of average depth of sand around his property an area north of the site was identified. Consequently, this Section 102 application is now lodged for such northern area.

Please see Figure 1 Location Plan, Figure 2 Mine Plan and Layout of the site.

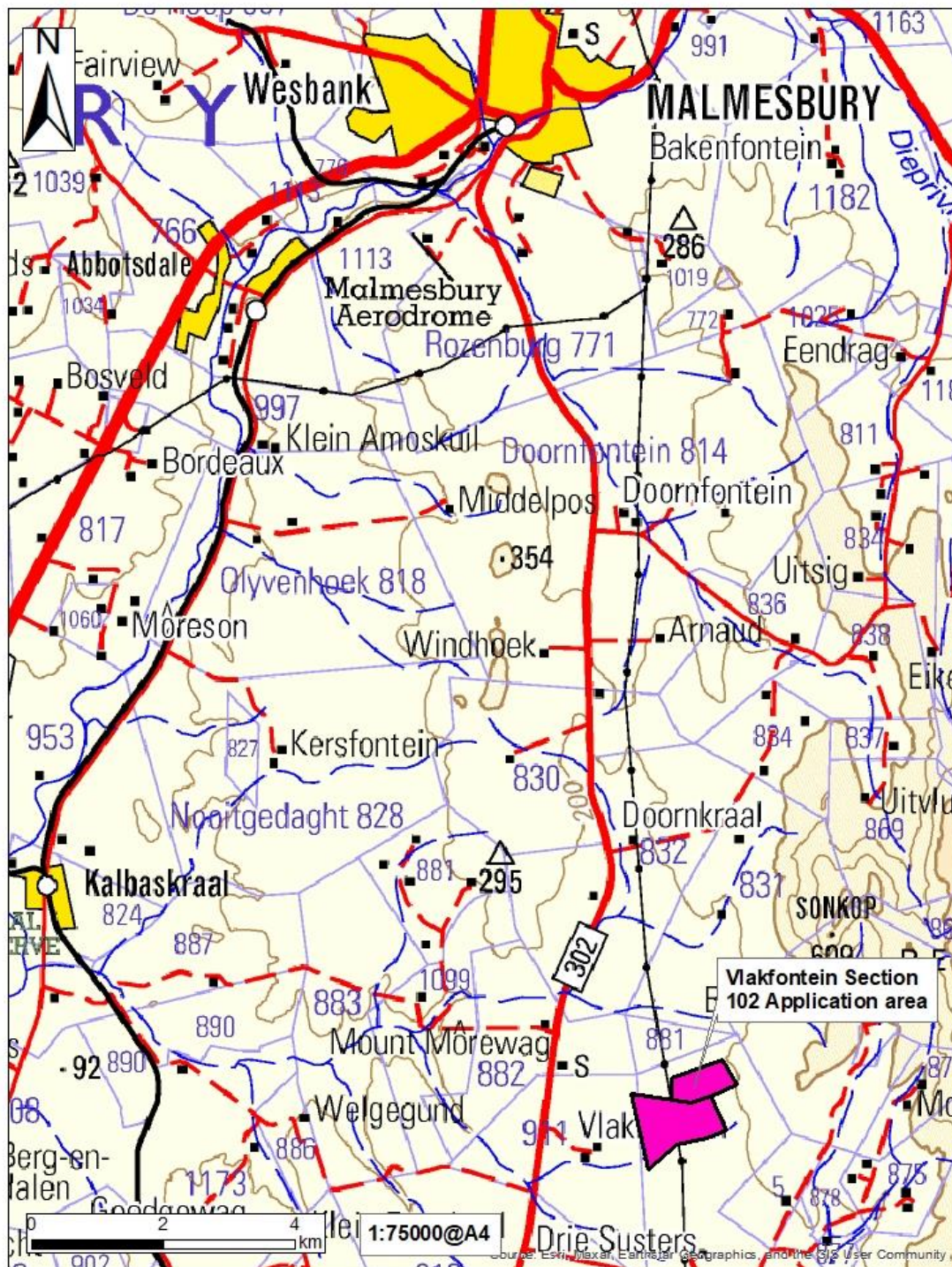


Figure 1: Locality Plan

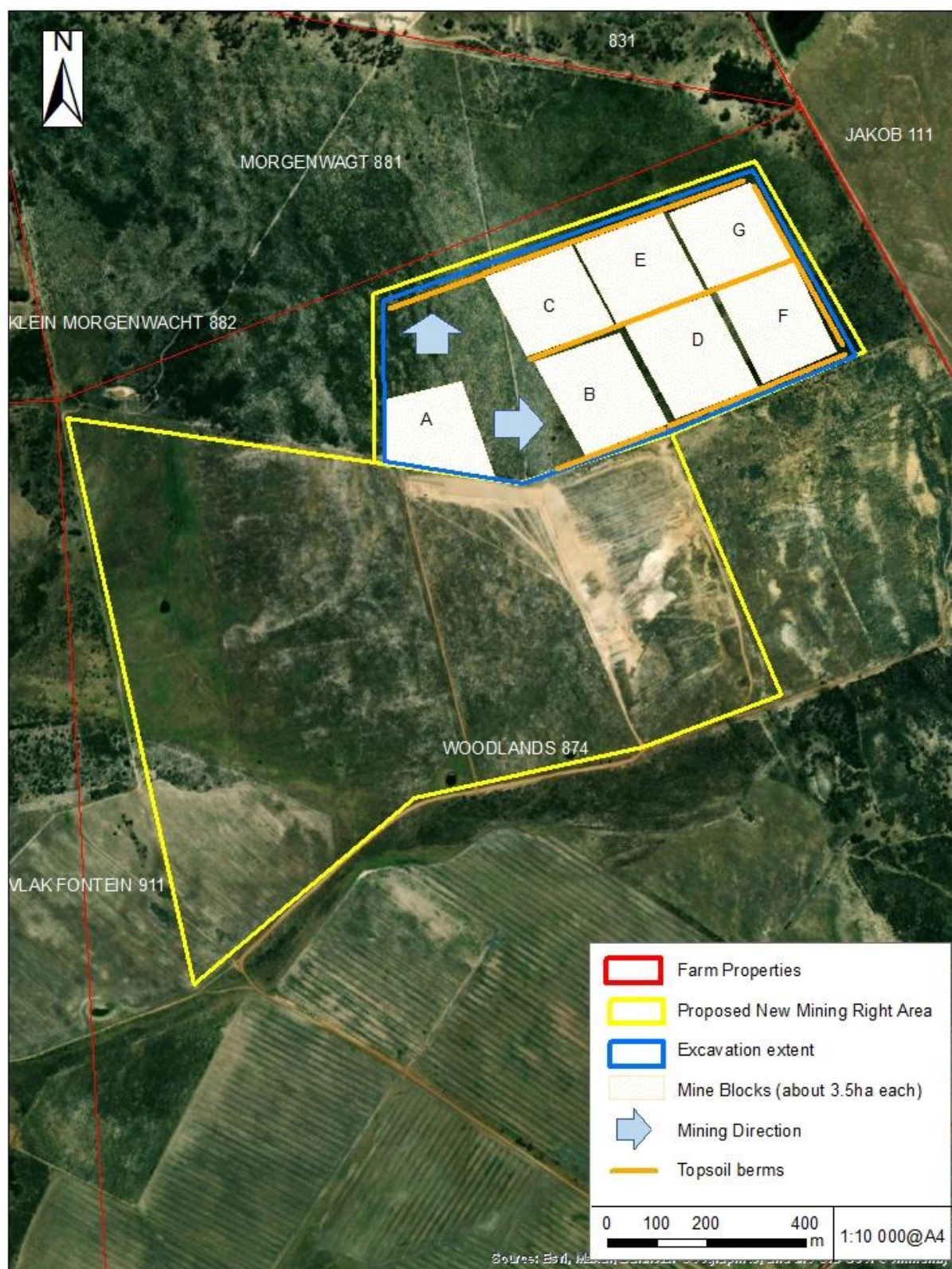


Figure 2: Mine Layout Plan

2) Screening tool classification of the site

The screening tool report for the application classified the site sensitivity against the environmental elements as follows:

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			

Furthermore, the Screening Tool Report identifies the following specialist studies needed for the development:

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/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.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

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		rotocols.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

3) Site visit by Environmental Specialist to assess site against screening tool reporting and need for specialist site sensitivities of environmental elements at this stage

The EAP Mr. Siphumelelo Mbali, who has been part of management and leader of more than 25 EA applications and Environmental Audit Reports as an EAP, visited the site on the 21st of February 2023 to assess the screening tool assessment in relation to what the site has been used for with consideration of what Afrimat intends to use the site for which is extension of its Mining Right.

The following photos (overleaf) shows the site condition as per the 21 February 2023 visit:



Photo 1: Current mining area



Photo 2: The North-east side shows the current mined area and vegetation noted on site.



Photo 3: Showing status of the vegetation in the extension area



Photo 4: Looking north is the status of the extension area.



Photo 5: Looking on the southern side is the status of the Mining Right area.



Photo 6: Showing the status of the westerly side.

4) Discussion in relation to Site Verification report and reporting as per standard procedure

This Site Sensitivity Report is designed to determine if the Screening Tool designation is consistent with what is found on site i.e. ground-truthing. Such ground-truthing will then ensure that reasonable considerations are taken before excessive costs are incurred by relevant applicants. Ground-truthing also ensures that relevant report by specialists is undertaken to limit impacts.

Therefore, the EAP appreciates that these Regulations and Protocols are in place to ensure especially the mining companies do not cause catastrophic environmental disasters and they must be respected.

Consequently, this report informs the I&APs on the Screening Tool Report request for identified specialists reports and subsequent protocols as follows:

Identified specialist report	EAP comment
Agricultural Impact Assessment	The screening tool has identified the agricultural theme as of High Sensitivity. Agricultural Impact Assessment was conducted in 2015 by a Soil Scientist to determine the potential impact the extension may have and recommendations will be outlined in the EMP.
Landscape/Visual Impact Assessment	Visual impact on the Mining Right extension area will be insignificant as the extension area is not visible from most adjacent users. Consequently, no specialist visual impact study is deemed necessary.
Archaeological and Cultural Heritage Impact Assessment and Palaeontology Impact Assessment	Archaeological and Cultural Heritage Impact Assessment is rated as low by the screening tool and no specialist report is warranted for this theme.
Terrestrial Biodiversity Impact Assessment	The Screening Tool has marked the Terrestrial Biodiversity Impact as Very High sensitivity. Terrestrial Biodiversity may be impacted by the extension of the Mining Right area as such a specialist report will be undertaken to assess the impact.
Aquatic Biodiversity Impact Assessment	Aquatic Impact Assessment has been rated to High Sensitivity. However, the EAP visited the site and did not find any drainage lines or aquatic features that will be impacted therefore no specialist study is needed.
Hydrology Assessment	Hydrology Impact Assessment was conducted in March 2015 addressing hydrological impact. Recommendations have been included in the current EMP.
Noise Impact Assessment	The site is in a remote area relative to surrounding land uses and thus noise is not likely to be as significant impact. Nonetheless, the current EMP proposes noise mitigation measures.
Radioactivity Impact Assessment	There is no aspect that would cause significant impacts on radioactive perspective to warrant a specialist protocol report.
Traffic Impact Assessment	This is an already existing site and thus traffic impact will remain the same and a new traffic impact study is not warranted.
Geotechnical Assessment	This extension application is for an existing sand mine that is in a remote area.
Climate Impact Assessment	Climate impact assessment are not deemed necessary as the area does not fall within any floodplains/lines and the development is relatively small to impact climate.

Health Impact Assessment	The proposed activities will be the same as those of the already operational sand mine. Consequently, Afrimat knows how to manage effectively and comply with all regulations. The same will be applied for the extension area.
Socio-Economic Assessment	The socio-economic aspects of the extension area have been considered and addressed in the scoping and EIA-EMP. Further to that this aspect will be address in the reporting with I&AP commenting throughout the process.
Ambient Air Quality Impact Assessment	The extension is for an existing sand mine operation which poses no threat on the air quality. Therefore, there is no need for specialist impact assessment for this aspect.
Seismicity Assessment	This operation entails loading of product sand by excavator onto a dispatch truck. Consequently, the proposed activities of development and depth of development do not pose a significant seismic risk.
Plant Species Assessment	The Screening Tool has identified the Plant Species theme as high sensitivity. The EAP agrees with this rating and believes that the Terrestrial Biodiversity Specialist study will be sufficient to address impacts on the plants.
Animal Species Assessment	The Screening Tool has identified the Plant Species theme as high sensitivity. The EAP agrees with this rating and impacts will be addressed by a specislist.

5) Recommendation and conclusions on compliance statements for identified environmental themes

Environmental themes reporting have an important role in decision making, the applicability of having such report/s must be assessed on a site specific and case by case instance with reasonable considerations of prevailing site conditions.

At the present moment, with the information that the EAP has, the EAP believes that Terrestrial Biodiversity Impact Assessment and both Plant and Animal Impact Assessment would be the appropriate specialist report to be undertaken during the application as the site is in an area with vast vegetation and other specialist may be only an academic exercise. Nonetheless, should I&AP raise pertinent matters needing further specialist engagement, then such specialist inputs will be considered.