



# SOCIAL SCREENING ASSESSMENT

**Proposed Mining of Aggregate on a Portion of Portion  
15 on the Farm Rietspruit Nr 437, Msukaligwa Local  
Municipality, Mpumalanga Province.**

**March 2022**

**PREPARED FOR:**



**PREPARED BY:**

**Enviroworks**

Unit 81, Millennium Business Park, 19 Edison Way  
Century City, 7446

Tel. 051 436 9675


[michael@enviroworks.co.za](mailto:michael@enviroworks.co.za)

[elbi@enviroworks.co.za](mailto:elbi@enviroworks.co.za)

Today's Impact | Tomorrow's Legacy

## QUALITY AND REVISION RECORD

### QUALITY APPROVAL

	Capacity	Name	Signature	Date
<b>Author</b>	Environmental Assessment Practitioner and Social Facilitation Specialist	Michael Leach		31/03/2022
<b>Reviewer</b>	Director and Social Specialist	Elbi Bredenkamp	Not internally reviewed	

This report has been prepared in accordance with Enviroworks Quality Management System.

### REVISION RECORD

Revision Number	Objective	Change	Date
1	Review		

### DISCLAIMER:

Even though every care is taken to ensure the accuracy of this report, environmental assessment studies are limited in scope, time and budget. Discussions are to some extent made on reasonable and informed assumptions built on bona fide information sources, as well as deductive reasoning. Since environmental impact studies deal with dynamic natural systems additional information may come to light at a later stage during the impact assessment phase. The author does not accept responsibility for conclusions made in good faith based on own databases or on the information provided. Although the author exercised due care and diligence in rendering services and preparing documents, he accepts no liability, and the client, by receiving this document, indemnifies the author against all actions, claims, demands, losses, liabilities, costs, damages, and expenses arising from or in connection with services rendered, directly or indirectly by the authors and by the use of this document. This report should therefore be viewed and acted upon with these limitations in mind.

## Table of Contents

1	SECTION 1: INTRODUCTION .....	4
1.1	INTRODUCTION .....	4
1.2	TERMS OF REFERENCE .....	4
1.3	APPROACH TO STUDY .....	4
1.3.1	Definitions of social impacts .....	4
1.3.2	Timing of Social Impacts .....	5
1.4	ASSUMPTIONS AND LIMITATIONS .....	5
1.4.1	Assumptions.....	5
1.4.2	Limitations.....	5
1.5	SPECIALIST DETAILS.....	6
1.6	PROJECT LOCATION.....	7
2	SECTION 2: POLICY AND PLANNING ENVIRONMENT.....	7
2.1	INTRODUCTION.....	7
2.2	SUMMARY OF REVIEWED DOCUMENTS.....	7
2.2.1	The National Development Plan (2030).....	7
2.2.2	Mpumalanga Spatial Development Framework – Policy Context Report 2018 .....	8
2.2.3	Gert Sibande District Municipality Spatial Development Framework Final Report - November 2014 .....	9
2.2.4	Msukaligwa Spatial Development Framework - Legislation / Policy Review and Vision Draft 3, July 2019 .....	10
2.2.5	Msukaligwa Local Municipality: Integrated Development Plan Amended 2020/2021	10
3	SECTION 3: Receiving environment and potential impacts .....	11
3.1	Development Proposal and Receiving Environment .....	11
3.2	Potential Social Impacts.....	12
3.3	Potential Impacts - Operational Phase .....	12
3.3.1	Health and social well-being impacts .....	12
3.3.2	Quality of the living environment impacts .....	12

3.3.3	Economic impacts and material well-being impacts .....	13
3.3.4	Cultural impacts .....	13
3.3.5	Family and community impacts .....	13
3.3.6	Institutional, legal, political and equity impacts .....	13
3.3.7	Gender relations impacts.....	13
3.3.8	Decommissioning Phase .....	14
4	Conclusion.....	14
4.1	Summary of Document Review Findings and Impact Ratings .....	14
4.2	Conclusion.....	14
5	References .....	15

# 1 SECTION 1: INTRODUCTION

## 1.1 INTRODUCTION

Enviroworks was appointed by Greenmined Environmental on behalf Inzalo Crushing and Aggregates (Pty) Ltd (the Proponent) to undertake a Social Screening Assessment (SSA) for the proposed mining of aggregate on a Portion of Portion 15 on the Farm Rietspruit Nr 437, Msukaligwa Local Municipality, Mpumalanga Province.

## 1.2 TERMS OF REFERENCE

The key aim of this Social Screening Assessment (SSA) is to identify, from a social impact perspective, potential fatal flaws ('red-flags') or major sensitivities in regard to the proposed mining of aggregate at the proposed site. The SSA is

The Terms of Reference for this SSA required the conducting of a desktop study which included the review of:

- The relevant Provincial and Municipal planning documents;
- Review of desktop imagery;
- Review of project information, including:
  - o Background Information Document; and,
  - o Comments and Response Report.

## 1.3 APPROACH TO STUDY

This SSA was undertaken in the form of a desktop study. The identification of potential social issues associated with the proposed developments has been based on:

1. Review of project information;
2. Review of aerial imagery, to identify features such as human settlements, recreational areas and other points of interest; and,
3. Review of National, Provincial and Municipal planning documents.

### 1.3.1 Definitions of social impacts

Social impacts can be defined as consequences (positive and negative) to human populations of any public or private actions (including policies, programmes, plans and/or projects) that alter the ways in which people conduct everyday life. These impacts are felt at various levels, including:

- 1) Individual level;
- 2) Family or household level;
- 3) Community;
- 4) Organisation;
- 5) Society level.

### **1.3.2 Timing of Social Impacts**

In terms of timing, all projects and policies go through a series of phases, usually starting with initial planning, followed by construction, operation, and finally decommissioning. The activities, type of activities and duration of the social impacts associated with each of these phases are likely to differ.

## **1.4 ASSUMPTIONS AND LIMITATIONS**

### **1.4.1 Assumptions**

- It is assumed that the development site represents a technically suitable site for the mining of aggregate.
- It is assumed that all information provided by the Proponent was accurate and true.
- Legislation and policies reflect societal norms and values. The legislative and policy context therefore plays an important role in identifying and assessing the potential social impacts associated with a proposed development. In this regard a key component of the Social Impact Assessment process is to assess the proposed development in terms of its fit with key planning and policy documents. As such, should the findings of the study indicate that the proposed development, in its current format, does not conform to the spatial principles and guidelines contained in the relevant legislation and planning documents, and there are no significant or unique opportunities created by the development, the development cannot be supported.

### **1.4.2 Limitations**

- This Social Impact opinion purely as a 'desktop study', with time and resource constraints.
- No site inspection was conducted as part of the undertaking of this assessment.
- No Organs of State, Stakeholders or potential Interested and Affected Parties were consulted as part of undertaking the assessment.
- Where population dynamics have been investigated this was conducted primarily using data from the 2011 Census, which is the most recent source of official statistics. While the data does provide useful information regarding the socio-economic situation of the area concerned, it needs to be noted that the data is now somewhat outdated and actual population demographics may differ.
- While this study did attempt to make use of as wide a range of data sources as possible, there was a limitation due to time and budgetary constraints.

## 1.5 SPECIALIST DETAILS

This report, and its appendixes, was compiled by Michael Leach and reviewed by Elbi Bredenkamp, of Enviroworks.

**Table 1: Details of the Specialist and Review Specialist**

<b>Business name of Specialist:</b>	Enviroworks
<b>Specialist Name:</b>	Michael Leach
<b>Review Specialist Name:</b>	Elbi Bredenkamp
<b>Physical address:</b>	Unit 81, Millennium Business Park, 19 Edison Way, Century City, Western Cape
<b>Postal address:</b>	Suite 1064 Private Bag X2, Century City
<b>Postal code:</b>	7446
<b>Telephone:</b>	051 436 0793
<b>E-mail:</b>	michael@enviroworks.co.za / elbi@enviroworks.co.za
<b>Fax:</b>	086 601 7507

### DECLARATION OF INDEPENDENCE

I, Michael Leach, hereby confirm that as the specialist consultants responsible for undertaking this study and preparing the report, am independent and do not have vested or financial interests in the proposed project being either approved or rejected.

**Michael Leach**



## 1.6 PROJECT LOCATION

The proposed development is situated on a portion of Portion 15 of Farm Rietspruit 437, IS, approximately 5km south west of the town of Ermelo, in the Msukaligwa Local Municipality, Limpopo Province.

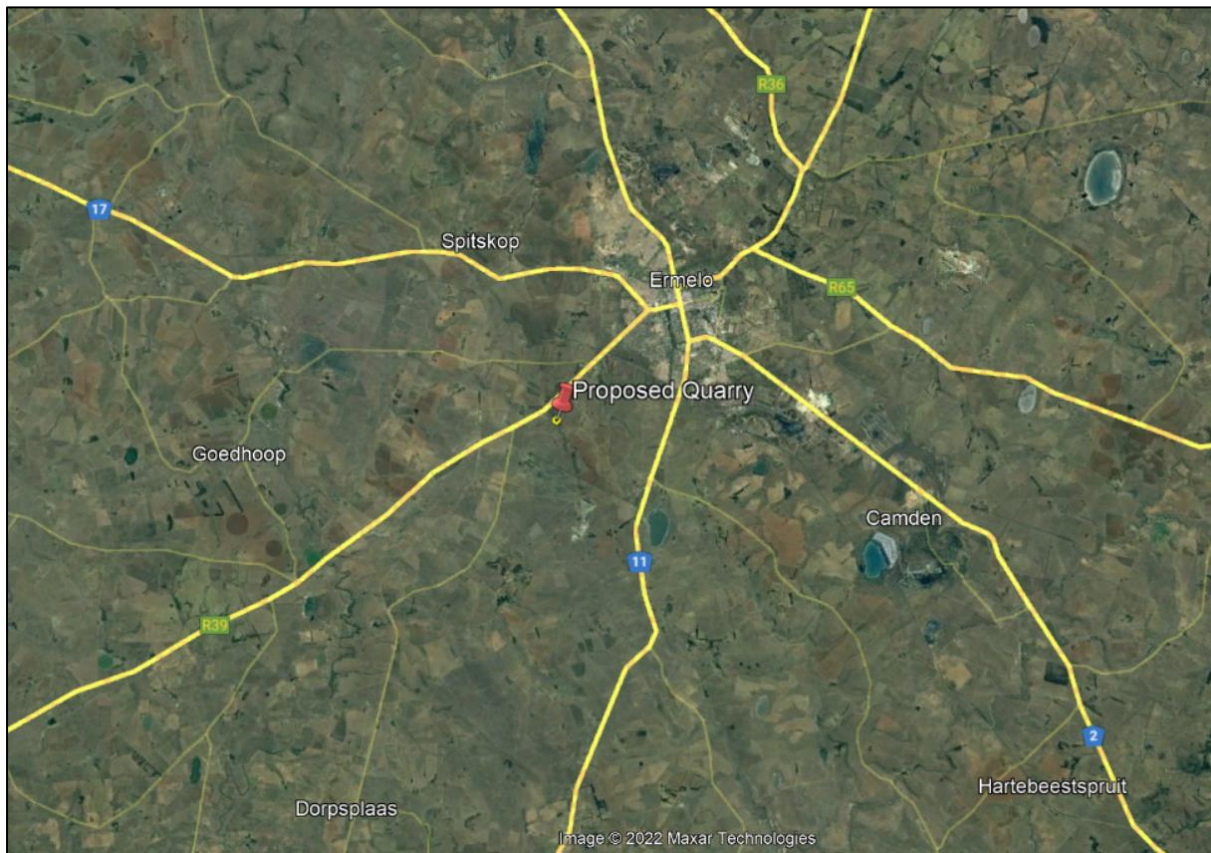


Figure 1: Locality Map of the Proposed Aggregate Quarry.

## 2 SECTION 2: POLICY AND PLANNING ENVIRONMENT

### 2.1 INTRODUCTION

Section 2 of this SSA provides an overview of the most significant policy documents of relevance to the proposed mining right amendment. The key documents reviewed included the following:

- The National Development Plan (2030)
- Mpumalanga Spatial Development Framework – Policy Context Report 2018
- Gert Sibande District Municipality Spatial Development Framework Final Report - November 2014
- Msukaligwa Spatial Development Framework - Legislation / Policy Review and Vision Draft 3, July 2019
- Msukaligwa Local Municipality: Integrated Development Plan Amended 2020/2021

### 2.2 SUMMARY OF REVIEWED DOCUMENTS

#### 2.2.1 The National Development Plan (2030)

The National Development Plan (NDP) contains a plan aimed at eliminating poverty and reducing inequality by 2030 making this one of the guiding objectives of the NDP over the next 20 years. The NDP aims to address



poverty and exclusion on the while simultaneously attempting to nurture economic growth by creating a virtuous cycle of expanding opportunities, building capabilities, poverty reduction, involving communities in their own development, all leading to rising living standards. The NDP identifies 9 key challenges and associated remedial plans. While all nine challenges/ plans are envisaged as part of an integrated whole, the highest priorities are regarded as employment creation and improving the quality of national education. Expansion and acceleration of development which would result in increased employment opportunity is identified as a key intervention strategy. It is specifically noted in the NDP that “South Africa must leverage its solar resource and regional hydropower opportunities as competitive advantages, in parallel with the responsible exploitation of fossil fuels and minerals”.

## 2.2.2 Mpumalanga Spatial Development Framework – Policy Context Report 2018

The Mpumalanga Spatial Development Framework serves to ensure “spatial justice, spatial sustainability, efficiency, spatial resilience and good administration”. The PSDF integrates the various spheres of government to deliver a services which are linked to an integrated development approach within the province. It is noted that mining, manufacturing and forestry and major sectors within the province. The tourism and agro-processing sectors have shown significant potential for growth over the years. Agricultural activities within the province are characterised by a combination of commercial and subsistence farming. The town of Ermelo and surrounds is noted in the PSDF and as an area set aside for mining, as illustrated in Figure 1.

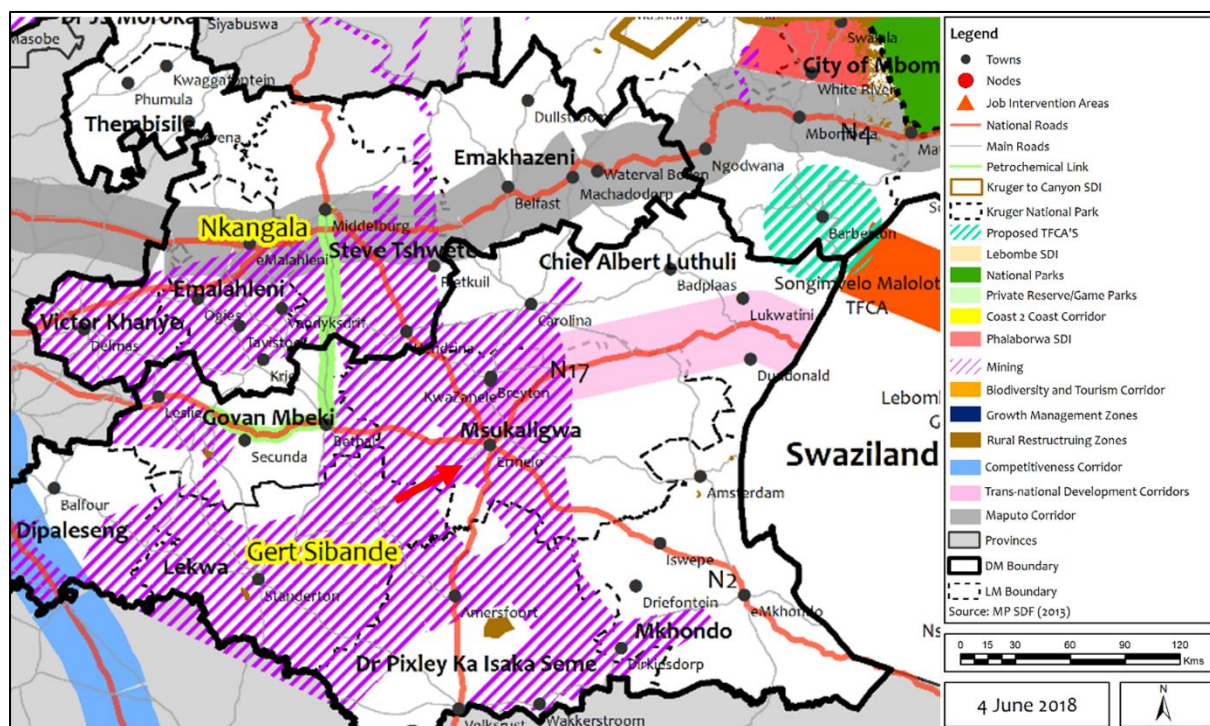


Figure 2: Map of the Mpumalanga Regional Spatial Development Initiatives (Policy Context Report – Mpumalanga Spatial Development Framework, 2018).

The PSDF makes reference to the Mpumalanga Vision 2030 Strategic Implementation Framework (2013-2030), which identifies four socio-economic outcomes as priorities, in accordance with the principles of the National Development Plan:

- Employment & Economic Growth

- Education and Training
- Health Care for all
- Social Protection

A spatial rationale, based on nine Key Drivers, for the province is framed in the Mpumalanga Vision 2030 document. Key Driver 1 concerns Nodal Development and identifies five primary nodes for the concentration of development. Ermelo is noted as one of these nodes.

### 2.2.3 Gert Sibande District Municipality Spatial Development Framework Final Report - November 2014

Second to Secunda, Ermelo is one of the dominant urban centres within the Gert Sibande District Municipality (GSDM) as it features high levels of economic diversification and value-adding activities.

Ermelo is one of the important centres for providing employment opportunities, and social and economic services to the fairly large and densely populated settlement areas within the north-eastern and central-eastern extents of the GSDM. The GSDM is noted as have the largest the largest agricultural sector, in the province, with Ermelo being one of the strong service centres. Mining (including quarrying) is noted as one of the key sectors driving the GSDM economy.

It is noted that there is a tension between agricultural and mining activities within the GSDM. The proposed quarry site is noted as falling in an area identified as an agricultural area and a mining focus area. The facilitation and accommodation of mining, in a sustainable manner, within the District is one of the development principles in the SDF, required for supporting local electricity generation and industrial development.

As can be seen in Figure 1, the proposed quarry site falls within an area identified for agriculture and mining.



Figure 3: Sectoral Map of the Gert Sibanda District Municipality for the Development Principle 10 - Mining.

### 2.2.4 Msukaligwa Spatial Development Framework - Legislation / Policy Review and Vision Draft 3, July 2019

The Msukaligwa Spatial Development Framework (MSDF) aimed to guide the overall spatial distribution of current and desired future land uses within a municipality in order to achieve the vision, goals and objectives identified in the municipal Integrated Development Plan.

As can be seen in Figure 4, the proposed development site falls within an area identified as being of moderate mining potential.

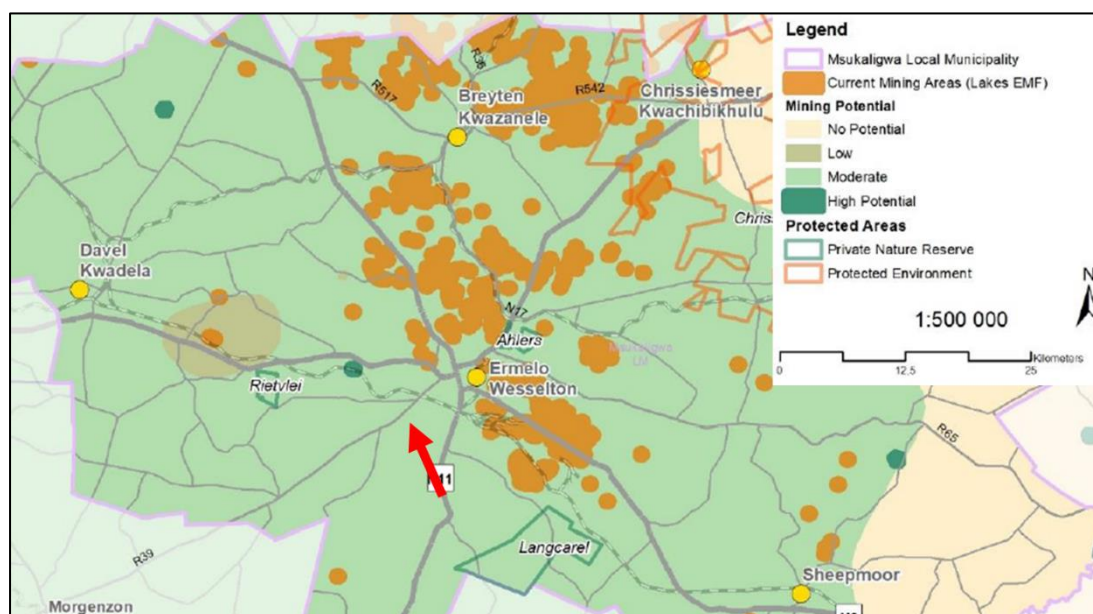


Figure 4: Map of mining potential within the Msukaligwa Local Municipality.

### 2.2.5 Msukaligwa Local Municipality: Integrated Development Plan Amended 2020/2021

It is noted with the Msukaligwa Local Municipality: Integrated Development Plan (MIDP) that mining conflicts with other land uses in the Municipality, including agriculture and human settlements. The conflict between mining and human settlements is noted to be a particular issue around the Ermelo/Wesselton area. As per Figure 5, the proposed quarry site is situated in an area designated for agriculture, as per the Municipal Spatial Concept.

The Municipality is in the process of finalising a Draft Wall-To-Wall Land Use Scheme, the adoption of which will replace the existing Ermelo Town Planning Scheme 1982 and ensure that the MSDF is effectively implemented within the Municipalities jurisdiction. This will be an important document to consider when determining if the proposed quarry is in line with the local municipal planning information.



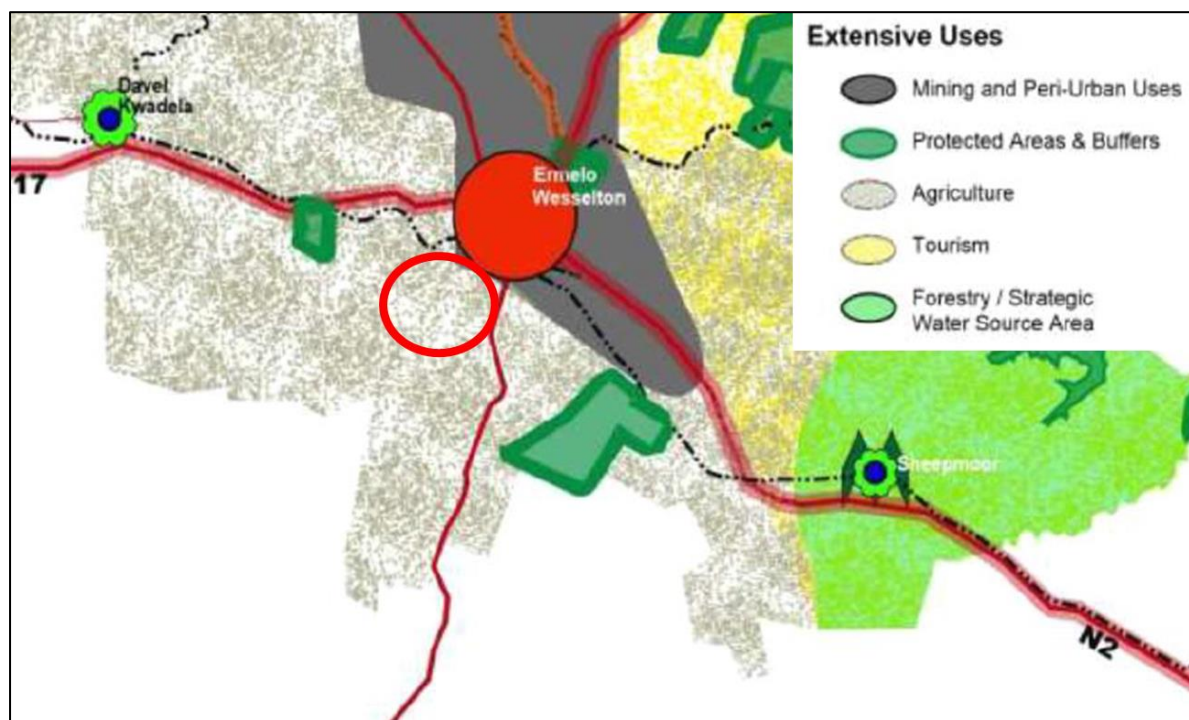


Figure 5: Spatial Concept of the Msukaligwa Local Municipality.

### 3 SECTION 3: RECEIVING ENVIRONMENT AND POTENTIAL IMPACTS

#### 3.1 Development Proposal and Receiving Environment

The proposed quarry on a portion of Portion 15 on the Farm Rietspruit nr 437, IS, will mine aggregate/gravel. The proposed mining footprint will be 4.9 ha and will be developed over an undisturbed area of the farm. The mining method will make use of blasting in order to loosen the hard rock; the material will then be loaded and hauled to the crushing plant where it will be screened to various sized stockpiles. The aggregate will be stockpiled until it is transported from site using tipper trucks. All mining related activities will be contained within the approved mining permit boundaries.

The proposed mining area is approximately 4.9 ha in extent and the applicant, intends to win material from the area for at least 2 years with a possible extension of another 3 years. The gravel to be removed from the quarry will be used for construction industry in the vicinity. The depth of the quarry will be approximately 35m with a possibility of going deeper. The proposed quarry will therefore contribute to the upgrading / maintenance of road infrastructure and building contracts in and around the Ermelo area (Greenmined, 2022).

The quarry will operate 24 hours a day, with two shifts (06h00 – 18h00 and 18h00 – 06h00). The workforce will consist of thirty four (34) personnel during a single shift and forty three (43) during the double shift.

The area surrounding the proposed quarry site consists almost entirely of agricultural land, including livestock and crop farming. There is an existing quarry situated approximately one hundred and fifty metres (150m) west of the proposed quarry site. Based on a review of aerial imagery, there are approximately eight (8) residential dwellings within a two kilometre (2km) radius of the proposed quarry.

### **3.2 Potential Social Impacts**

The social variables considered for the proposed developments are grouped into seven main categories, in accordance with Vanclay's new list of social impact variables (Vanclay, 2002; Wong, 2013). The seven categories are as follows:

1. Health and social well-being impacts
2. Quality of the living environment impacts
3. Economic impacts and material well-being impacts
4. Cultural impacts
5. Family and community impacts
6. Institutional, legal, political and equity impacts
7. Gender relations impacts.

The categories listed above may, at times, overlap as certain impacts may affect more than one category. The categories were considered when identifying potential impacts posed by the development proposal. Given the nature of the proposed development, the activities taking place during the construction phase will be limited, thus only the Operational Phase and Decommissioning Phase.

### **3.3 Potential Impacts - Operational Phase**

#### **3.3.1 Health and social well-being impacts**

During the operation, the quarry will result in increased activity in the area, including traffic and dust producing activities. Although not expected to be significant, an increase in traffic could result in more accidents along the R39. Given the distance of residential dwellings, the likelihood of dust impacts to surrounding residents is anticipated to be low. Quarrying is a dangerous activity, and there is a high likelihood of injury to personnel working at the quarry. Mitigation measures to minimise dust and traffic impacts must be incorporated into the operational aspects of the quarry and the quarry operations must strictly adhere to the requirements of the Occupational Health and Safety Act 85 of 1993. Negative impacts to health and social well-being impacts are anticipated to be of Low significance.

#### **3.3.2 Quality of the living environment impacts**

Although there is an existing quarry directly to the west, the proposed quarry site is situated in an area characterised by agriculture, creating a 'rural sense of place'. Operation of the quarry will result in increased noise and activity. Noise impacts will be particularly high during blasting. As the quarry will operate 24 hours a day, lighting may result in a disturbance at night. Assuming that quarries are not developed in surrounding areas, the quarry will have resulted in impacts over a limited timescale.

Negative impacts to the quality of the living environment (i.e. sense of place) are anticipated to be of Medium to High significance at a local scale (approximately 8 surrounding dwellings will be impacted). At a larger scale, the impact will be of Low-Negative significance. The quarry must employ mitigation measures to reduce noise and light pollution as much as possible.

### **3.3.3 Economic impacts and material well-being impacts**

The quarry is anticipated to create an additional forty three (43) new permanent jobs. The households of those employed will directly benefit from the quarry. The new jobs will have small scale positive knock-on effects, as the personnel will spend some of their earnings on local goods and services. Positive impacts may be offset if the agricultural activities of surrounding landowners are negatively affected. The quarry will also compete with other quarries in the area, which may negatively influence their income. Economic impacts as a result of the quarry are anticipated to be of Low- to Medium Positive significance.

### **3.3.4 Cultural impacts**

Cultural impacts may result if a significant number of foreign workers are employed in the labour force. The quarry must, as far possible, employ local personnel. Given the small size of the quarry's labour force, an influx of foreign workers as a result of the quarry, is not expected. Cultural impacts are anticipated to be of no to Low-Negative significance.

### **3.3.5 Family and community impacts**

The workforce is expected to come from Ermelo or surrounding farmlands. Given the close proximity of the proposed quarry to Ermelo (approximately 7km), the personnel are likely to remain at their current place of residence, thus, a change in community dynamics is not anticipated. By creating new jobs, the quarry will improve the standard of living for the households of those employed by the quarry. Increased household income in the surrounding areas could lead to increased incidents of alcohol abuse and domestic violence but given the small work force and no-alcohol tolerance policy typical of quarries, this is not expected to be significant. The quarry is likely to compete with other quarries in the area, which could result in a level of disdain between companies and individuals in the community, particularly if the market for the quarried material is saturated. Given the positive impacts of income generation, the quarry is anticipated to have an overall Low-Positive impact on the surrounding families and communities.

### **3.3.6 Institutional, legal, political and equity impacts**

The proposed quarry is not anticipated to have any institutional, legal or political impacts. Based on a brief review of the relevant planning documentation, the quarry appears to align with the development ideals. It must be noted that while the proposed site does fall within an area identified for mining in the District Municipality SDF, it is also identified as an area earmarked for agriculture in the Local Municipality SDF. Development of the quarry is not anticipated to significantly negatively impact agricultural activities, but the Applicant must ensure, through consultation with the relevant municipal officials, that the development is in line with the municipal spatial planning. Potential impacts to agricultural activities must be mitigated.

### **3.3.7 Gender relations impacts.**

Given the nature of the work at the quarry, it is anticipated that the workforce will predominantly consist of males. As mentioned, alcohol abuse and subsequent domestic violence, as a result of the quarry, are not anticipated. No gender relations impacts are expected. The quarry must ensure that equal employment opportunities are provided to both men and women.

### 3.3.8 Decommissioning Phase

Once decommissioned, and assuming that no other quarries are developed in the immediate area, the negative impacts such as noise, dust and traffic will cease. The land will be rehabilitated, and the area will return to its original 'sense of place'. Households supported by persons employed at the quarry will be negatively affected if the breadwinners cannot find alternative employment. Decommissioning of the quarry is anticipated to have a Low-to Medium Positive impact on residents in the immediate vicinity. This is anticipated to be offset by the lost of jobs and income generation. Overall, decommission of the quarry will likely have a Low-Negative impact.

## 4 CONCLUSION

### 4.1 Summary of Document Review Findings and Impact Ratings

The proposed quarry can be considered to align with National and Municipal planning documents as it will contribute to job creation. It must however be noted that agriculture is an important economic driver in the area, and the quarry and its associated activities must not significantly impact the agricultural activities in the surrounding area.

**Table 2: Summary of the Impact Ratings for the Operational and Decommissioning Phase.**

Phase	Impact	Significance
Operational Phase	Health and social well-being impacts	Low Negative
	Quality of the living environment impacts	Low Negative
	Economic impacts and material well-being impacts	Low – Medium Positive
	Cultural impacts	None – Low Negative
	Family and community impacts	Low Positive
	Institutional, legal, political and equity impacts	None
	Gender relations impacts	None
Decommission Phase	N/A	Low Negative

### 4.2 Conclusion

Based on the findings of the desktop Screening, the proposed development is expected to have an overall positive impact at a municipal and local level. From a social perspective, no fatal flaws have been identified for the development and operation of an aggregate quarry at the proposed site. The quarry must employ mitigation measures to reduce impacts that will impact the areas 'sense of place', as perceived by the residents in the immediate surroundings, and agricultural activities. The Applicant must ensure, through consultation with the relevant municipal officials, that the development is in line with the municipal spatial planning. It must be noted that this statement is in the form of an 'Social Impact Opinion' which has been based solely on a desktop assessment and a limited review of available information.

## 5 REFERENCES

Background Information Document - Departmental Reference No: MP 30/5/1/3/2/13080 MP. (2019). *Greenmined Environmental*. [www.greenmined.com](http://www.greenmined.com).

National Development Plan 2030 Our Future-make it work. (2012). ISBN: 978-0-621-41180-5 Available at: [https://www.gov.za/sites/default/files/gcis\\_document/201409/ndp-2030-our-future-make-it-workr.pdf](https://www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf) [Accessed: 31/03/2022]

Gert Sibande District Municipality Spatial Development Framework Final Report - November 2014. (2014). Available at: <https://cer.org.za/wp-content/uploads/2021/03/GSDM-SDF-2014.pdf> [Accessed: 31/03/2022]

Mpumalanga Spatial Development Framework – Policy Context Report 2018. (2018). Available at: <https://cer.org.za/wp-content/uploads/2019/01/Phase1.pdf> [Accessed: 31/03/2022]

Msukaligwa Local Municipality: Integrated Development Plan Amended 2020/2021. (2020). Available at: [https://www.cogta.gov.za/cgta\\_2016/wp-content/uploads/2021/02/Msukalingwa-Municipality.pdf](https://www.cogta.gov.za/cgta_2016/wp-content/uploads/2021/02/Msukalingwa-Municipality.pdf) [Accessed: 31/03/2022]

Msukaligwa Spatial Development Framework - Legislation / Policy Review and Vision Draft 3, July 2019. (2019). Available at: <https://cogta.mpg.gov.za/documents/SpatialDevFramework/MsukaligwaSDFPhase2.pdf> [Accessed: 31/03/2022]

Wong, B. (2013). *Social Impact Assessment: The principles of the US and International Version, Criticisms and Social Impact Variables*. Kuala Lumpur: Proceeding of the Global Conference on Business, Economics and Social Science.