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PROPOSED CONSTRUCTION OF A ROOF SHEETING FACTORY, UMZIMKHULU LOCAL MUNICIPALITY, KWA-ZULU NATAL

Date: 17th September 2020

INTRODUCTION

Sharples Environmental Services cc (SES) has been appointed by the Mazibi Consulting Engineers on behalf of Leratong Victim Empowerment Co-operative Ltd. (the proponent) to compile this Basic Assessment Report in accordance with the National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations of 2014, as amended, for the proposed Roof Sheeting Factory, Umzimkhulu Local Municipality, Kwa-Zulu Natal.

SEScc is part of a multi-disciplinary team that was put together to ensure that the social, economic as well as biophysical components are considered to create a sustainable development. The team comprise Town Planners, Civil Engineers, Environmental Assessment Practitioners and various specialists; namely a Biodiversity specialist, Freshwater Specialist and an Agricultural Specialist.

LOCATION DESCRIPTION

The proposed site is located within Ward 14, of the southern portion of Umzimkhulu Local Municipality, Harry Gwala District Municipality, on the Remainder of the Farm Zamenkomst No.18261 and Farm No. 18269. Ntlabeni Primary School is located to the East of the site, upon entrance into the low – medium density rural settlement of Ntlobeni. The rural settlement of Nomdaphu can be seen to the west of the proposed site, across from the R56, which forms the western border of the proposed site. The southern border of the site is undeveloped and is dominated by Ngongoni grass, it slopes down to an existing watercourse, that has been formed due to the drainage from the adjacent road and topography.

GPS Co-ordinates are 30°27'39.30"S; 29°52'10.07"E.



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Figure 1: Locality map.

Accessibility

According to the Umzimkhulu Local Municipality IDP 2020 - 2021, UMzimkhulu town is bordered by Ixopo to the North East, Underberg to the North West, Kokstad to the West and Harding to the South. The municipality is made up of 22 wards and is predominantly characterized by dispersed rural settlements with minimum economic activity in the hinterland, along with some trading stores and subsistence agriculture. The R56 is the only main road, this acts as the inland connection between KZN and the Eastern Cape, with economic activity taking place on either side of this main road.

According to the engineering report, the site extends for approximately 6 hectares. The proposed site is accessible via the gravel road L2258, off of the R56 towards Kokstad Town. The site is located some 205km's from Durban.

Flora and Fauna

The proposed site is located within the Savanna Biome according to the National Vegetation Map, 2012. The present site is dominated by Aristida Junciformis, or Ngongoni grass, which is not endemic to South Africa and is classified of least concern according to SANBI's realist.

It has been observed that the site undergoes occasional burning, by the surrounding community, who also utilize this area for grazing of livestock (such as cows).

Watercourses

There is a watercourse located to the south, and it is located within 32m's of the proposed site. As a result of the topography and adjacent development of the road, this drainage line has been created. Degraded wetland systems have been identified to the north and south of the site, within 500m radius of the proposed development, along with a dam located to the north east of the site.



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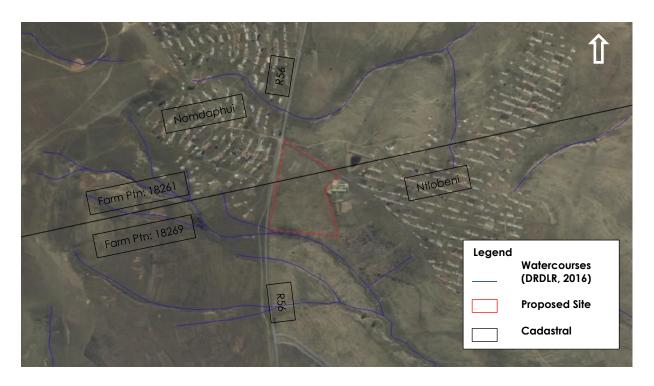


Figure 2: General layout of area.

Geology and Soils

Typical materials found on site are clay, sandy clay, clayey sand, sand with silt and weathered dolerite gravel. The materials found on site falls under the Phanerosoic Group, Karoo Super Group, subgroup Ecca (Pe), Beaufort - Adelaide (Pa). Typical materials found in the area are (Pa) Mudstone, Sandstone and (Jd) Dolerite. Rocks found in the area are Dolerite (Jd) that is covered with weathered dolerite, sandy clay and clay. The above is applicable before any development occurred.

DESCRIPTION OF PROPOSED ACTIVITY

The site on which the development is proposed is approximately 6 ha in extent.

The proposed establishment of a factory will entail the construction of the following:

<u>Table 1: Details on proposed scope</u>

Proposed Development	Dimensions of proposed infrastructure	Further details
Boundary Walls	51 019 m ²	Concrete Blocks and Concrete
A Guard House	27.040 m ²	
A Waste house	84.690 m ²	 Recycled material will be the responsibility of LVEC Will Store Recycled Oil (250L per Month) Will Store Recycled Paper (50Kg per Month)

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Proposed Development	Dimensions of proposed infrastructure	Further details
		Normal Dumping Material (Municipality Dump Site)
A Metal waste concrete area	2 700 m ²	 Offcuts from production will be stored on site. All materials will be recycled for reuse on site, where possible. Capacity of facility – 50 Tons.
An Office block	215.011 m ²	
Factory B: Storage Factory	1075 m ²	
Factory A: Production factory	1891 m²	
Elevated Tank stand with 4 x 10 000L Jojo Tank	6.1m high elevated stand, excluding tanksJojo Tank: 4x 10 000L	Steel Material40L Capacity Stand
A Septic Tank	420 m ²	960 Cubic Meters (Capacity)Concrete material only
Storm water lines	Length:1750m Diameter: 400mm Trench widths: 700mm	Constructed with concrete pipe
Sewer Reticulation	Length: 1500m Trench width: 500mm Diameter: 200mm	PVC Pipe Material
Water Reticulation	Length: 3000m Trench width: 500mm Diameter: 110mm	PVC/HDPE Material



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Proposed Development	Dimensions of proposed infrastructure		Further details
Paved Yard and walkways	45200 Square meters	•	Constructed with Concrete brick pavers

Engineering Services

Water

There are several water reservoirs located on the West side of the site which are believed to be operated by Harry Gwala District Municipality. The water pump station and the borehole of the Zamenkomst area is located on the south of the proposed site and is about 50m away from the site boundaries. It has been confirmed by Harry Gwala District Municipality, that the proposed development will require the establishment of a separate borehole for water.

The water demand for the proposed were estimated at:

AADD for the site is considered 0.0160 M ℓ /day and the instantaneous peak flow = 0.0415 M ℓ /day = 0.480 ℓ /sec as shown on the table below and an additional 1001/s for firefighting.

It has been established that a borehole will need to be established to service the proposed development.

Sewer

The site is located in a rural undeveloped area and as result does not have any sewer lines connecting the local houses, neither is there a connection to the waste water treatment works. The system for the proposed site will be serviced by Leratong Victim Empowerment Co-Operative in collaboration with Harry Gwala District Municipality (HGDM).

The site will be serviced either by a septic tank, soakaway and or conservancy tanks. This will depend to the HGDM preference and also the costing of the proposed method of disposal.

The size of the tank is equal to the six-day per capital sewage flow.

Volume of Septic Tank = 960.4 KL (960.4 m3)

The required surface area will be determined once the percolation test results have been obtained from the Geotechnical Engineer.

Road

There is currently no road network within the proposed area of development. The designed layout makes provision for internal roads and access to the existing road.

The site can be accessed via the existing R56 intersection to Ntlabeni Primary which compromise of the gravel road. The existing gravel road to Ntlabeni Primary School is determined to become a service



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road for access to the Leratong Victim Empowerment Co-Operative site only since no other development is envisaged in the short term.

The access road planned for the development will be submitted to uMzimkhulu Local Municipality planning department for approval since the access will be obtained from the municipal road leading to R56.

The existing access road is the property of the uMzimkhulu Local Municipality. The internal roads designed for the development will remain the responsibility of the developer (Leratong Victim Empowerment Co-Operative) to maintain and ensure that it is fully operational at all times and maintain its standard. The upgrading of the Ntlabeni Primary School road will provide improved accessibility to the proposed development and the surrounding areas.

Storm water

No storm water network is in place at present, however the storm water flow generated by the proposed development is considered low, and will be directed into the surrounding open ground, which has the potential to impact upon the watercourse to the south.

Rainwater harvesting will be encouraged within the properties of the development to retain some of the water resulting from rain.

The proposed internal and external storm water designed for the development will remain the responsibility of the developer (Leratong Victim Empowerment Co-Operative) to maintain and making sure that it is in full operational at all times. The implementation and impact will improve serviceability for the new facilities.

DEVELOPMENT SITE: BIOPHYSICAL CONTEXT

Based on the latest Department of Environmental Affairs screening tool report, the following sensitivities were detected on site:

<u>Table 2: DEA screening tool sensitivity themes applicable to this project.</u>

THEME	VERY HIGH SENSITIVITY	HIGH SENSITIVITY	MEDIUM SENSITIVITY	LOW SENSITIVITY
Agriculture Theme		Х		
Animal Species Theme			Х	
Aquatic Biodiversity				Χ
Theme				
Civil Aviation Theme			X	
Plant Species Theme			X	
Defence Theme				Χ
Terrestrial Biodiversity Theme	X			

There are no CBA's identified on site (EKZNW, 2016) on site, however the site does fall within an ESA, delineated as a movement corridor between landscape corridors and important biodiversity areas (including PAs, CBAs, stewardship sites).

Based on this assessment, a Basic Assessment will be undertaken. An Aquatic Impact Assessment, Terrestrial Biodiversity Assessment and an Agricultural Impact Assessment will be undertaken to inform the Basic Assessment and Water Use License.

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LEGAL REQUIREMENTS

Environmental Authorisation

National Environmental Management Act 107 of 1998

In terms of Government Notice No. R. 327, R.325 and R. 324 and listed activities therein, environmental authorization needs to be obtained. As such an application for Environmental Authorisation is being applied for.

GNR in terms of the Environmental Impact Assessment Regulations, 2014 (As amended 2017)		npact t 4 (As	Listed Activity and Description	Applicability to Proposed Development
GNR.327 Notice 1	-	Listing	Activity 12 [The development of— (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs— (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;—	The proposed development is located approximately 21m's north of a minor drainage line.
			Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	The site is currently zoned as Agricultural I. An application for rezoning of the site to an Industrial Zone will be undertaken.

Based on the identification of two wetland systems within 500m radius of the site, as well as the need to

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establish a borehole for water usage, specific to the site. A water use license will be required in terms of the **National Water Act**, **1998 (Act 36 of 1998)**, in accordance with the following water uses:

Section 21 a: Abstraction

Section 21 c: Impeding or diverting the flow of water in a watercourse.

Section 21 i: Altering the bed, banks, course or characteristics of a watercourse.

MOTIVATION FOR PROPOSED DEVELOPMENT

The project site is ideally located off of the R56, the main transport node of the municipality. Umzimkhulu Local Municipality is characterized by rural settlements, as is the case of the surrounding communities of Nomdaphu and Ntlobeni, which houses a low socio-economic population.

The establishment of a factory will allow for the maximum utilization of locally based workers, temporarily, during the construction phase, and on a permanent basis during the operational phase. The creation of temporary and permanent jobs will directly influence the quality of the lives of the employed laborer's, as well as indirectly improve and influence the lives of their families and local shops/traders through local expenditure and economy.

According to the Umzimkhulu Local Municipality IDP 2020/2021 the population of Umzimkhulu is currently sitting at approximately 197 286, translating to 0.34% growth rate per annum, with a higher percentage of males from age 0-19 born (more than 15%) than females (less than 15%). While from age, 24 to age 85+ there seem to be more females than men, indicating that government must create more activities that includes females. This project will allow for and motivate for the employment of women, where possible. All unskilled workforces, as well as resources will be sourced from the local community.

The community will have ownership of the project when complete. According to the preliminary design Report created by Mazibi Consulting, this project has been identified and planned with the full support of the community. The local community attends and participates in all meetings.

PUBLIC PARTICIPATION

Public participation plays an integral part of the proposed development process and is required in terms of NEMA. Public participation is initiated by notifying potential Interested and Affected Parties (I&APs) of the proposal and by inviting potential I&APs to register as an I&AP and/or submit initial comment, if they wish to do so.

The public participation will commence from 21st September 2020 – 21st October 2020, for a total of 30 days. This document will be distributed to existing I&AP's, an advert in the iSolezwe newspaper and on-site notices will be provided 3 days prior to commencement of this public participation, at which point the public may still contact us and provide us with the details below.

OPPORTUNITY TO REGISTER & COMMENT AS AN I&AP

You are hereby given an opportunity to register as an I&AP and raise your issues or concerns by responding to this notice and sending it to SES within the designated time periods.



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By registering as an I&AP, you will be kept updated as the process continues and will be informed of the decision-making authority, the Department of Economic Development, Tourism and Environmental Affairs decision.

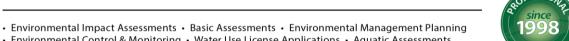
Your registration request and or comments on the Environmental Authorisation process must reach us by no later than 21st October 2020. Please provide the following details:

- Your Name:
- Contact Details: (preferred method of notification e.g. email address or fax number)
- An indication of any direct business, financial, personal or other interest which you have in the application.
- Preferred method to receive documents/correspondence (ie: email, online platforms, etc.).

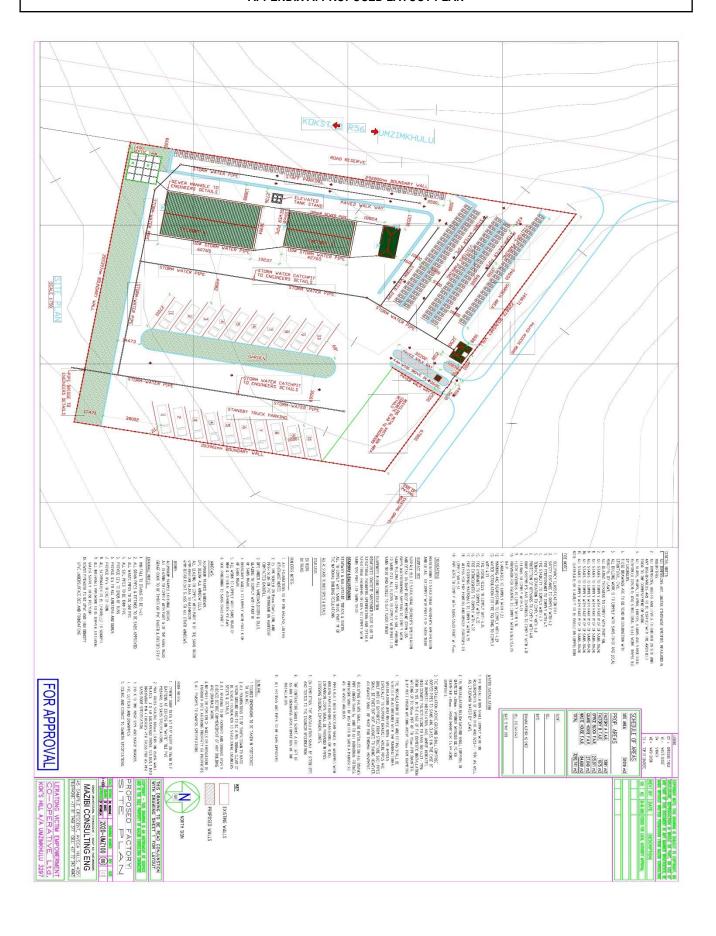
Should an I&AP require additional public participation time, please submit a request with sufficient motivation for the EAPs perusal and await response.

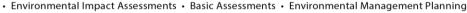
Correspondence throughout the remainder of the process will be distributed to Registered I&APs.

Further information on this application can be obtained from Ameesha Sanker at Tel: 021 554-5195 I Fax: 086 575 2869; email: ameesha@sescc.net or postal address: PO Box 447, Milnerton, 7435.



APPENDIX A: PROPOSED LAYOUT PLAN





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