

an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: John Pakwe Tel: (063) 894-1979

Email: jpakwe@sahra.org.za

Case ID: 23614

Final Comment

Date: Wednesday, 9 April, 2025

In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999)

The Applicant, Inzalo Crushing and Aggregates (Pty) Ltd, applied for environmental authorisation (EA) and a mining permit to mine stone aggregate/ gravel on a portion of Portion 7 of the farm Roodekrans 457, Administrative district IS, Mpumalanga Province.

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.

Province(s): Mpumalanga

Chris Weideman Inzalo Crushing and Aggregates (Pty) Ltd PO Box 26730 East Rand Kempton Park 1462

Inzalo Crushing and Aggregates (Pty) Ltd was appointed by Greenmined Environmental to undertake an Environmental Authorisation (EA) application for the proposed Aggregate Mine on a portion of Portion 7 of the Farm Roodekrans 457 within the Local Municipality, Mpumalanga Province. MP 30/5/1/3/2/14842 MP.

A draft Basic Assessment Report (dBAR) was submitted in terms of the National Environmental Management Act, Act 107 of 1998 (NEMA) and the Environmental Impact Assessment Regulations, 2014 as amended (EIA) for activities that trigger the Minerals and Petroleum Resources Development Act, Act 28 of 2002 (MPRDA). The proposed mining activities include blasting and crushing, removal of topsoil, stockpiling, excavating, sloping and landscaping and replacement of topsoil and vegetation. Stockpile 1 is the preferred area and Stockpile 2 is the proposed alternative area.

Beyond Heritage (Pty) Ltd was appointed to undertake specialist Heritage Impact Assessment for input in the EIA process in terms of section 24(4)b(ii) of NEMA and section 38(8) of the National Heritage Resources Act,



an agency of the
Department of Arts and Cultur

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Act 25 of 1999 (NHRA).

Kraljevi?, L., 2025. Heritage Impact Assessment for the Proposed Roodekrans Mining Permit and Stockpile Near Morgenzon, Mpumalanga Province: Draft Report.

On Stockpile 1, the assessment identified a burial ground containing approximately 35 graves (RD001) considered to be of high heritage significance. Furthermore, sites RD002, RD003 and RD004 were identified, however, they have not had their ag, purpose or significance confirmed due to the overgrown vegetation and there is uncertainty of whether an archaeological deposit exists. No heritage resources were identified on Stockpile 2. All these sites will be affected by the proposed development on the preferred Stockpile 1. No studies required for Palaeontology as the proposed development footprint lies on the negligible PalaeoSensitivity in terms of the SAHRIS PalaeoSensitivity Map.

Recommendations made by the specialist report:

- A buffer zone of a 100 m around site RD001 containing identified graves.
- Buffer zones of 30 m must be observed around RD002, RD003 and RD004 with the layout plan adjusted to incorporate such no-go areas.

A letter of request for the relaxation of the recommended buffer zone around site RD001 has been submitted.

Norval. Z. 2025. Letter from Zoë Norval to the SAHRA DAU. [Letter]. Request for Approval of 40 m Buffer-Zone Around Identified Graves on Portion 7 of the Farm Roodekrans 457 Administrative District IS, Mpumalanga Province.

Greenmined Environmental is requesting for a reduction of the recommended 100m buffer zone to 40m around the graves identified on the proposed mining permit and stockpile application areas. The request was supported by a Blasting Report prepared by BME Blasting Solutions.

Sefara, P., Letoka M., Phiri, T. 2025. Roodekrans Quarry: Blast Proposal Report for Blasing Closer to Heritage Sites.

The normal tolerable vibration for graves is stipulated as 150mm/s. However, in this case, the maximum limit will be reduced to 50mm/s due to the condition of the graves. The maximum generated vibrations at 40m



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: John Pakwe Tel: (063) 894-1979

Email: jpakwe@sahra.org.za

Case ID: 23614

distance from RD001 are calculated as 91.5mm/s, which is higher than the 50mm/s tolerable limit. This then introduces a concept of decking, which is the separation of explosive charge within a blast that will fire at different delays.

Date: Wednesday, 9 April, 2025

The current blast designs may be applicable to a distance of 60m from the graves, or decking may be introduced between 60m to 40m, and a crushed aggregate must be used as a suitable stemming material. Scaled Depth of Burial (SDOB) is used to estimate the Flyrock range which confirmed that it may impact on RD001 and it is estimated to travel beyond a 100m radius.

Case Decision

Final Comment:

The following comments are made as requirement in terms of section 3(4) of the NEMA Regulations and section 38(8) of the NHRA in the format provided in section 38(4) of the NHRA and must be included in the final EIA and EMPr.

- 38(4)a The SAHRA Development Applications Unit (DAU) has no objections to the proposed development.
- 38(4)b The recommendations of the specialists are supported and must be adhered to. Further additional specific conditions are provided for the development as follows:
- Based on the Blasting Report, the SAHRA DAU is approving the reduction of the 100m buffer zone
 around site RD001 to 60m with decking due to the number of graves and unknown SDOB of all graves,
 and to mitigate the impacts of Flyrock. If the implementation of this condition is not possible, a permit in
 terms of section 36 of the NHRA for the Grave Relocation Process must be obtained and process
 completed prior to construction activities.
- 38(4)c(i) If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA DAU (John Pakwe 0638941979 / jpakwe@sahra.org.za) must be alerted as per section 35(3) of the NHRA. Non-compliance with this section of the NHRA is an offense in terms of section 51(1)e of the NHRA and item 5 of the Schedule;
- 38(4)d See section 51 of the NHRA regarding offences;
- 38(4)e The following conditions apply with regards to the appointment of specialists: If heritage resources are uncovered during the course of the development, a professional archaeologist or



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: John Pakwe Date: Wednesday, 9 April, 2025 Tel: (063) 894-1979

Email: jpakwe@sahra.org.za

Case ID: 23614

palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the heritage resource. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to permits issued by SAHRA;

 The decision regarding the EA Application must be communicated to SAHRA and uploaded to the SAHRIS Case application.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

John Pakwe

Heritage Officer: Development Applications Unit South African Heritage Resources Agency

Natasha Higgitt

Manager: Development Applications Unit South African Heritage Resources Agency

Terms & Conditions:



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Date: Wednesday, 9 April, 2025

Enquiries: John Pakwe Tel: (063) 894-1979

Email: jpakwe@sahra.org.za

Case ID: 23614

- 1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
- 2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
- 3. SAHRA reserves the right to request additional information as required.

ADMIN:

Direct URL to case: https://sahris.org.za/node/353003