

# CULTURAL HERITAGE ASSESSMENT 

## AS PART OF THE

## ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

FOR THE PROPOSED
MINING OF GRANITE

ON
PORTION 1219

OF THE FARM
HARTEBEESPOORT "B" 410 - JQ
$\operatorname{IN}$
NORTH WEST PROVINCE SOUTH AFRICA

HELIO

$-8 \exists H-\times d O M \exists O V d L$
Esmeralde, Brits District", which can be viewed in Annexure D Late Iron Age Stone Walled Settlements a nd Structures, Proposed Granite Mine at are contained in a proposal document titled "Phase 2 Archaeological Investigation of
 apinold al pauolssimumos sem yons se pue 'uolbel 24t 10 Kbojoeeyore aby uou (UNISA), was taken to the proposed mining area. Mr. Coetzee is a specialist in the

 Archaeological Area 2. demarcated as Archaeological Area 1, and those from the two smaller outcrops as purely on geographical distribution. The features found a ssociated with the hill was settlement, two roughly demarcated "Archaeological Area's" were identified, based site. Although it seems highly likely that these features all formed part of a single features are found concentrated around and across the hill and two outcrops found on stonewall enclosures and associated artefacts and features. These archaeological The survey resulted in the discovery of Late Iron Age (c. AD 1640-AD 1830s) Process was also held, part of which was a Public Meeting nonedioned mand e '(ddWa) hoday amurebold jowabeuew jepuownomaug auf

 atf Kq uodn papedul aq of eare aut 10 fuoussasse abepuay lemino e ayepapun

L- $\mathrm{d} \exists \mathrm{H}-\mathrm{XAOMJOVZ1}$


HERITAGE REQUIREMENTS IN TERMS OF SECTION 38(3) OF
HERITAGE REQUIREMENTS IN TERMS OF THE AIDE-MEMOIRE... 9 FINDINGS.

National Heritage Resources Act 25 of 1999........................................... 6

 Field surveys Consultation with local residents and community members.......... 4


DESCRIPTION OF PROPOSED MINING AREA
INTRODUCTION
DOCUMENT CONTENTS
$l-\mathrm{d} \exists \mathrm{H}-\mathrm{XdOM} \mathrm{\exists O} \mathrm{\forall d1}$
with local residents and Interested and/or Affected Parties were also undertaken. The primary methodological approach consisted of foot surveys. Limited consultation
3. METHODOLOGY
around these three outcrops and hills.
The archaeological features located during the fieldwork tended to be located on and/or higher-lying outcrops forming a plateau in the middle.

 pressure (Robbeson, 2003).
indication that a change in species composition has resulted due to high grazing species that forms a closed canopy. The dominance of Dichrostachys cinerea is an Dichrostachys cinerea, the outcrops and hills are characterised by broadleaf trees (refer Annexure C Photograph 1), which is dominated by Acacia species and vegetated. While the lowland areas are characterised by a microphyllous vegetation type indispersed with three rocky outcrops and hills. The property as a whole is densely
The proposed mining property is presently largely undisturbed, and consists of savannah
DESCRIPTION OF PROPOSED MINING AREA
Report.
This heritage study forms part of the project's Environmental Management Programme
Refer Annexure A for the Locality Map of the proposed development. proposed mining of granite on portion 1219 of the farm Hartebeespoort "B" 410 - JQ undertake a cultural heritage assessment of the area to be impacted upon by the

[^0][^1] Distribution Map). provide a general distribution of the Iron Age features (refer Annexure B Site the hand-held Garmin E-Trex GPS. The idea behind this was that these waypoints would whenever archaeological features were observed, waypoints were documented using archaeological features here formed part of an extended Iron Age complex. As such, documented as an individual site. However, it soon became apparent that the Initially, when archaeological features such as stone walling were observed, it was property was surveyed. property near impossible. Nevertheless, as much as possible of the entire mining

 May 2003 and Monday, 12 May 2003.


### 3.2 Field surveys

No additional information could be obtained from these consultations and processes. region.

press advertisements as well as a Public Meeting held in Brits on Friday, 11 July 2003. sanou alls pepnou! ssopold SIL1 vayenopun osje sem ssooold uonediphed olfand As part of the process of compiling the Environmental Management Programme Report,

$$
\begin{aligned}
& 1 \cdot \varepsilon \\
& \text { Consultation with local residents and community members }
\end{aligned}
$$

$1-\triangleleft \exists H-X d O M \exists O \forall \& 1$ proponent must describe how the impact will be managed".

 -seseyd Buluolssimuooea interest" should be undertaken for the Construction, Operational and

 also required.
recognised archaeological and cultural interest should be noted". A plan/map is


In this document three aspects relating to heritage are required: - bunum pue bunoadsold 101 spoday aumeibold luaurbeven addressed with the publication of the Aide-Mémoire for the Preparation of Environmental In November 1992 this need for a prescribed method of compiling an EMPR was, does not however, stipulate the way in which such a report must be prepared submit an environmental management programme report (referred to as an EMPR). It these activities are to be given. In this the act requires the minerals rights applicant to mining activities would have on the environment, before permission and permits for The Minerals Act requires that an assessment be made of the impact prospecting and

$$
\text { 4.1 Minerals Act } 50 \text { of } 1991 \text { / Aide-Mémoire }
$$

Act 50 of 1991, as well as the associated Aide-Memoire is especially relevant. National Heritage Resources Act 25 of 1999. In terms of the present project the Minerals heritage resources. Of these the most important is surely the recently promulgated South Africa has a number of legislative measures in place aimed at protecting its
$9 \quad \quad \downarrow-8 \exists H-\times 8 O M \exists O V Z \perp$

National Heritage Resources Act states that: objects (as well as paleontological sites and meteorites). Section 35(4) of the The National Heritage Resources Act offers protection of archaeological sites and sites and objects is especially important. below). In terms of the present study, the Act's stipulations regarding archaeological offers general protection for a number of heritage related features and objects (see Replacing the old National Monuments Act 28 of 1969, the Heritage Resources Act "Iuoudolanap pasodoid a4t to uonolduoo aul lone pue bulnp spofo asionpe रue to uonebnlu lof sueld pue 'sanneualle jo uoneiop!suoo if heritage resources will be adversely affected by the proposed development, the resources;
 the results of consultation with communities affected by the proposed development
 an evaluation of the impact of the development on heritage resources relative to an assessment of the impact of the development on such heritage resources; assessment criteria set out in section 6(2) or prescribed under section 7 ; an assessment of the significance of such resources in terms of the heritage
 must be included: provided in a report required in terms of subsection (2) (a): Provided that the following "(3) The responsible heritage resources authority must specify the information to be heritage report. The act states: Section 38 (3) of the act provides an outline of ideally what should be included in a international trends and standards. conservation and management of heritage resources in South Africa on par with The promulgation of the National Heritage Resources Act 25 of 1999 brings the
4.2 National Heritage Resources Act 25 of 1999

5. FINDINGS

$$
\begin{aligned}
& \text { (d) features, structures and artefacts associated with military history which are older } \\
& \text { than } 75 \text { years and the sites on which they are found;..." }
\end{aligned}
$$ SAHRA considers to be worthy of conservation; and artefacts found or associated therewith, which is older than 60 years or which



 wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in ‘uonejuәsadas


 :samınis pue samper ןе!!!ue pue sulemas p!uluoч pue
"(a) material remains resulting from human activity which are in a state of disuse and the concept "archaeological" set out in section 2(ii) of the Heritage Act:
In order to understand exactly what is protected, it is important to look at the definition of



(d) bring onto or use at an archaeological or palaeontological site any excavation 10
 (c) trade in, sell for private gain, export or attempt to export from the Republic any

 archaeological or palaeontological site or any meteorite; (a) destroy, damage, excavate, alter, deface or otherwise disturb any authority-
"No person may, without a permit issued by the responsible heritage resources
 Although the whole area as demarcated as Archaeological Area 1 contains
archaeological artefacts in the form of undecorated potsherds, other artefacts such as a

 s008ь Киеә could be derived from the latter period of Iron Age history, for example the late 1700 s to
 settlement on the site. This said, it is worth mentioning that midden-like deposits were conclusive evidence (in the form of extensive deposits) for a very long period of tendency in settlement design and layout. This feeling is underlined by the lack of location of this kraal, as well as the general feel of the site, indicates a strong defensive On top of the highest outcrop of the hill, a circular cattle kraal was also observed. The







## \& еәУ ןеэ!





 the hill or the two smaller rocky outcrops.
occurrences are primarily associated with the higher lying areas found on site, namely

occurrences associated with these areas would be destroyed by the proposed mining
activities. gabbronorite. It can therefore be assumed that many of the archaeological features and proposed mining activities would essentially focus on these areas as the source of associated with the higher lying areas in the form of a hill and two rocky outcrops. The As mentioned elsewhere, the archaeological features and occurrences are primarily
 requirements. sections of the Iron Age complex, which would naturally also further address these Annexure $D$, the proposed Phase 2 investigations would also consist of the mapping of Distribution Map under Annexure B. As can be seen in the proposal outlined in As required by the Aide-Mémoire, a plan/map is supplied in the form of a Site

The heritage sites located during the fieldwork can be seen under Section 5 Findings
6.1 Description of pre-mining environment

Refer Section 4 Legislative Framework
6. HERITAGE REQUIREMENTS IN TERMS OF THE AIDE-MÉMOIRE

Archaeological Area 1, and represent part of the same Iron Age complex.
It appears highly likely that these features are associated with the ones from
as the ones from Archaeological Area 1 Annexure C Photograph 7) are found here, the occurrences here are not as extensive (refer Annexure C Photograph 6) as well as terraces and stonewalled enclosures (refer Although similar features such as the flat rock slabs with surrounding rough stonewalling have been damaged and even destroyed by the clearing of a vehicle road walling. Some archaeological features located in the area between the two outcrops occurrence of the archaeological features in the form of stonewalled enclosures and The two smaller outcrops located east of the hill are also characterised by the

Archaeological Area 2

01
 se pallduo aq of aje sal!s leonboloaeyore out 10 suonoes 10 sdeu inokel 'Allevonippy Arcview 3.8 GIS Software. Refer Annexure B for the resultant Site Distribution Map.




 HERITAGE RESOURCES ACT.
 giving permission for the archaeological sites to be destroyed. enough information from the sites in order for permits to be provided by SAHRA thereby site. The general aims of these investigations and studies would be to obtain sufficiently
 It is recommended that these investigations be completed to the satisfaction of SAHRA

Gundues jabnv ' $?$
Surveying and mapping following: Phase 2 investigations are recommended. These investigations would consist of the the mining property. As can be seen from Mr. Coetzee's proposal (refer Annexure D), recommendations on the way to proceed with the located archaeological sites found on
the mining property. As can be seen from Mr. Coetzee's proposal (refer Annexure D).

 Rग!

'pal!nbas!! pu甘 the area was also consulted. Meeting held on the 11th of May 2003 in Brits. A neighbouring farmer who grew up in As mentioned elsewhere, a full Public Participation Process was initiated, and a Public


 'sjoedu!
SAHRA, the positive impacts posed by the project would outweigh the negative heritage (refer Annexure D), is undertaken to the satisfaction of all concerned and e specially believed that should the recommendations as contained within Mr. Coetzee's proposal
 approximately ZAR 166650000 to the local economy. the multiplier effect, it is estimated that the proposed project would generate whom would be derived from the local communities. Furthermore, using the principles of

 development;" ач! woul panıəp aq of sh! səanosas aбе!!

- ənoqe Z゙9 uonvas rafay "'sajnosas
7.3 "A(a)n assessment of the impact of the development on such heritage
 it can certainly be said that the archaeological features observed on the property are

heritage assessment criteria set out in section 6(2) or prescribed under section 7,"
7.2 "A(a)n assessment of the significance of such resources in terms of the
21


 dense vegetation cover. As such, should any heritage features and/or objects not various reasons, including the subterranean nature of some archaeological sites and necessarily represent all the heritage resources located there. This may be due to











## 8. CONSLUSIONS AND GENERAL RECOMMENDATIONS

 Aq pepinold aq of stluiad $10 f$ aq pinom sainsea u uonebinu asəut jo fnsal puə ayl

 archaeological sites located here should mitigation not take place. A proposal has been It is expected that the proposed mining activities would have a severe impact on the of the proposed development."

consideration of alternatives are not required. Coetzee of Unisa would sufficiently address such impacts, and as such the

 development, the consideration of alternatives:"



GRAND PALACE TRALING $(\mathrm{F} / \mathrm{Y})$ itd






 structures older than 60 years are protected by the relevant legislation, in this case he Nationa
 'punosb aut uo 10 ul peusodap
 yoeorddy pue suo!!!!yod Propose possible mitigation measures and options during each step of the investige: $\mathrm{c}^{-}$
 Assess the significance of the impact of the proposed development on the aronaeological
remains within the proposed mining area Provide a detailed description of' all archaeological artefacts, structures (inclucing graves) and
 The broad terms of reference of this Phase 2 investigation, are as follows:
remains to be affected by the proposed mining activities. The Archaeology Contracts Unit (UNISA) has been approached by Helio Alliance to conduc: a Phase 2
archaeological investigation on Esmeralde, a proposed mining site near Brits. The range of fils within the
proposed mining area is still pristine and several archaeological sites have been icentifed on the
outcrops. According to preliminary investigations several archaeological sites will be negetvely affected
by the proposed mining activities. uo!วonpoมu

Phase 2 Archaeological Investigation of Late Iron Age Stone Walled Settlements and Structures,
Porposed Granite Mine at Esmeralde, Brits District

## 7 7 SOdOYd

Pretoria
Mr. Polke Birkholtz
Helio Alliance
$\frac{9}{3} \cong$
$\frac{7-8}{9} \div \frac{2}{4}$


Geography
PO Box 392
Department of Anthropology,
$\frac{7}{5}$
$\frac{5}{4}$
$\frac{5}{4}$
$\frac{1}{4}$

$\square$ uoljełono

| $\quad \forall \mathrm{HH} \mathrm{B}$ |
| :--- |


 stone walled structures must be surveyed and documented. This aspect is two-fold. walled complex on one of the outcrops which falls within the proposed area of mining. Midden-lik The focus of this part of the investigation is an extended Late Iron Age (c. AD 1640 - AD 1830s) stone 4.2 STEP 1: Surveying and mapping The following structure is proposed for this Phase 2 investigation scientific value from the settlements as possible, due to the strong possibility that these sites will be
destroyed by the mining development. Mitigation proposals to minimise the impact on these sites will
however, be proposed throughout this process. Please note that the aim of a Phase 2 archaeological investigation is to obtain as much information and Guluueld
and evaluation of the find(s) to take place (cf. NHRA (Act No. 25 of 1999), Section 36 (6)), uonebnsonu ue jof jopjo u! poynou aq of palnbel aq pinom unosnu do hisjonjun e pue polfeu It should be kept in mind that archaeological deposits usually occur below ground level. Should
artefacts or skeletal material be revealed at the site during construction, such activities should be


 - әqemouar-uou ale saounosed fernuno impact will also result in a high rating. The same rule applies if the significance rating of the site is
low. Rating the significance of the impact on a historical or archaeological site is linked to the
significance of the site itself. If the significance of the site is rated high, the significance of the
Environmental Management Act (Act No 107 of 1998) when making any recommendations.
 suonepuaumooed bulyeu u
he South African Heritage Resources Agency (SAHRA). Full cognisance is taken of this Act
อวz1000 slooued $=$
Abaou！s sino人
Be assured that progress made and new developments encountered during this process will be
communicated effectively． I hope this proposal provides a clear framework which will satisfy all parties concerned．
uo！snjuนoう＂ investigation is reached． As a result of its complexity a separate quotation will be provided when or if this stage of the Phase 2 －suonpuos п1uned
 pue saren6＇sulewos iny＇stisodap jequejsans
4．3 STEP 3：Rescue Excavations



 STEP 2：Auger sampling
4.2 STEP 2：




[^0]:    Hello Allance (Pty) Ltd was appointed by Grand Palace Trading 126 (Pty) Ltd to

[^1]:    eTrex Summit was used to obtain site coordinates
     uompuoo pue ampu ayt of se suondiosop pue (olqissod araym) sydeiboloud sopnjou! All sites located during the foot surveys were briefly documented. This documentation

