



**HERITAGE SCOPING REPORT:
PROPOSED NEW BRICKWORKS FOR AFRICAN BRICK,
FARM ZUURBEKOM 297 IQ,
GAUTENG PROVINCE**

SUBMITTED TO: ¹Rock Environmental Consulting
DATE OF SUBMISSION: 21 March 2004

EXECUTIVE SUMMARY

This report fulfils the requirements for a Level 1 (scoping) report as part of a Heritage Impact Assessment (HIA) as provided for in the National Heritage Resources Act (Act 25 of 1999). The proposed township development area was surveyed. No significant heritage resources that will be affected by this development were identified. The only aspect that could give cause for concern is the possible negative impact by air pollution (dust, smoke, gases) generated by the proposed brickworks, on the historic Zuurbekom waterworks (1899) in the immediate vicinity. This issue needs to be assessed in more detail.

R C DE JONG
Cultmatrix cc

PART 1: REPORT ON PROJECT EXECUTION

1.1 Background

This study and report is part of an environmental impact assessment required for the development of a new brickworks site by African Brick, situated on a portion of the farm Zuurbekom 297 IQ, north of Lenasia, Gauteng Province.

1.2 Legal context

This study constitutes a Level 1 heritage scoping investigation as part of the environmental impact assessment required for the brickworks development. In terms of Section 38 (1)(c)(i) (listing any development or activity that could change the character of a site exceeding 5000 square metres) of the National Heritage Resources Act (Act 25 of 1999), a heritage impact assessment is normally required by the responsible heritage resources agency, which, in this case, is the Gauteng office of the South African Heritage Resources Agency based in Johannesburg.

The purpose of this Scoping Report is to alert the developer/contractor and the heritage resources agency at the earliest possible stage about existing and potential heritage resources that may be affected by the proposed development, and to recommend mitigatory measures aimed at reducing any negative impacts on these heritage resources.

1.3 Terms of reference

Cultmatrix cc, a heritage management consulting agency, was appointed by Rock Environmental Consulting to undertake a heritage impact assessment of the brickworks development area and to submit a report in this regard.

1.4 Status of this document

This document constitutes the Level 1 (scoping) report required to submit to the environmental consultant, the developer or his/her agency and to the provincial heritage resources agency the findings and ensuring recommendations of a heritage impact assessment in terms of Section 38(3) of the act.

1.5 Project team

The heritage scoping was undertaken by Dr R C de Jong (Principal Member of Cultmatrix cc), who is a qualified historian and heritage management specialist.

1.6 Method of work

- Field trip on 29 February 2004 during which the entire area was surveyed on foot.
- Perusal of existing databases of heritage sites
- Desktop research

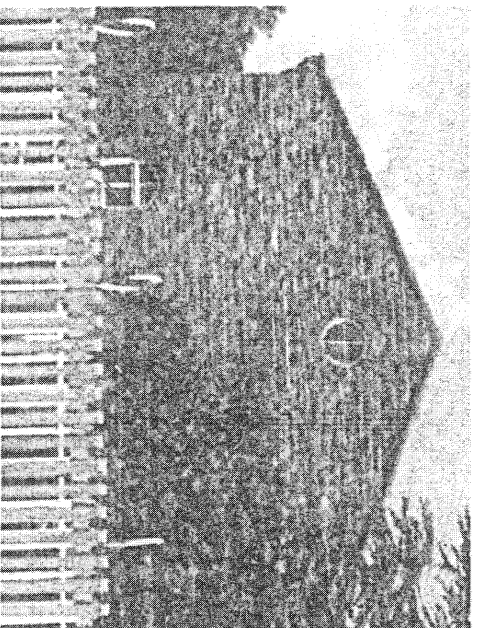
PART 2: HERITAGE CONTEXT OF THE AFFECTED AREA

This area is characterised as the Southern Highveld, featuring rolling grasslands, high altitudes, a number of river valleys, herds of game in the past and an abundance of water in rivers, streams, springs and pans. Stone Age communities have therefore inhabited it. No Stone Age artefacts were found during the site visit.

Permanent occupation of black Iron Age communities only began in the 17th century due to more favourable climatic changes. Lack of wood and an abundance of natural stone resulted in numerous stonewalled settlements. Neither traces of such settlements, nor any finds of potshards or other Iron Age material were identified during the site visit due to the fact that the area has been used extensively for construction and grazing purposes for over 150 years, during which all possible traces of Iron Age settlement would have been destroyed.

The existing farm Zuurbekom 297 IQ was established in the late 1850s when white pioneer farmers settled themselves in the area.

Johannesburg obtained its first water of good quality from an underground source on this farm. Dr David Draper, a geologist employed by a waterworks company owned by the goldmine and diamond magnate Barney Barnato, pointed out the site in 1895. A pumping station building was completed in 1899 and the supply from this source has been constant. This water never needed filtration. The pumping station is now a declared provincial heritage resource in terms of the National Heritage Resources Act. It is situated immediately north of the Johannesburg-Soweto-Westonaria-Carltonville railway line that forms the northern boundary of the development site.



View of the 1899 pump house of Zuurbekom waterworks

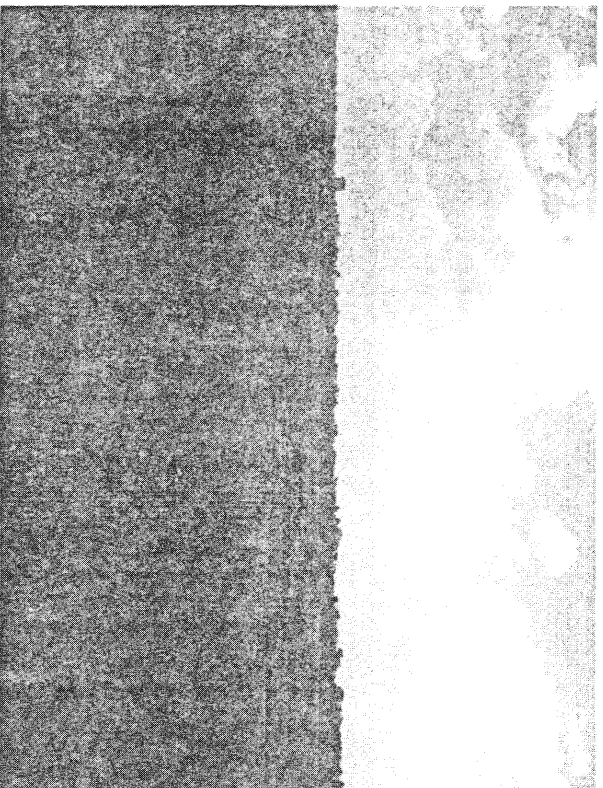
The site's western boundary is formed by an extensive forest of eucalyptus trees and black wattles, whilst a gravel road forms the eastern boundary. Located between this road and the Lenasia Extension 1 township is the Lenz military base.

PART 3: FINDINGS AND RECOMMENDATIONS

No significant archaeological and historical sites, structures, buildings and objects were detected specifically in the area earmarked for development

3.1 Identification and mapping of heritage resources

The proposed brickworks development site is a relatively featureless plain covered with tall grass. The only sign of human use is a shallow excavation that was presumably used to quarry the local limestone and shale. This quarry is of no particular heritage significance.



View of the shallow quarry, seen towards the west

3.2 Assessment of significance of heritage resources

The quarry is of no particular heritage significance. The development site is also not associated with any particular event, individual or community. However, the neighbouring Zuurbekom waterworks are an important provincial industrial site and are protected by law.

3.3 Impact assessment

The proposed development will not negatively impact on this area within the context of heritage conservation. This is due to the fact that the area has already been changed significantly by recent human interventions such as stock farming. This does not mean that there are no such sites, structures, buildings and objects at all. It can happen that they will only become visible when actual construction work begins.

3.4 Social and economic benefits

The benefits of the proposed development will be industrialisation (brick production for housing etc) and the creation of jobs.

3.5 Consultation with affected communities

Since no heritage resources of significance were identified, no consultation was necessary. However, it could be possible to consult heritage specialists when the impact of the proposed development on the Zuurbekom waterworks becomes better understood with reference to possible air pollution.

3.6 Consideration of alternatives

With the possible exception of the Zuurbekom waterworks, there are no heritage resources that will be affected by the proposed development. Since the possible effects of air pollution from the brickworks are as yet unknown, it is too early to consider alternatives at this stage that will mitigate the effects of air pollution.

3.7 Mitigation of adverse effects during and after construction

We recommend that:

- Construction work be monitored for the uncovering of any archaeological and historical sites, structures and objects through excavation activities;
- This recommendation must be included in construction tender documents.

Due to the distance between the proposed development site and the Zuurbekom waterworks, it is unlikely that the latter will be affected negatively by the brickworks, except for possible air pollution in the form of dust, smoke and exhaust gases from kilns. This has to be taken into account, depending upon the amount of dust generated by the brickworks and the prevailing wind direction.

This aspect, which does, strictly speaking, not form part of this report, needs to be assessed urgently in more detail.

PART 4: INFORMATION SOURCES USED IN COMPILING THIS REPORT

National Heritage Resources Act, No 25 of 1999

Standard Encyclopedia of Southern Africa, Vol 11. Cape Town: Nasou, 1976.

PART 5: TERMINOLOGY USED IN THIS REPORT

Development

Any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of a heritage resources authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability or well-being.

Heritage resources

Any place or object of cultural significance, including:

- (a) places, buildings, structures and equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and palaeontological sites;
- (g) graves and burial grounds, including—
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the Gazette;
 - (v) historical graves and cemeteries; and

(vi) other human remains, which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);

(vii) sites of significance relating to the history of slavery in South Africa;

(viii) movable objects, including—

(i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;

(ii) objects to which oral traditions are attached or which are associated with living heritage;

(iii) ethnographic art and objects;

(iv) military objects;

(v) objects of decorative or fine art;

(vi) objects of scientific or technological interest; and

(vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

Heritage significance

(a) its importance in the community, or pattern of South Africa's history;

(b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;

(c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;

(d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;

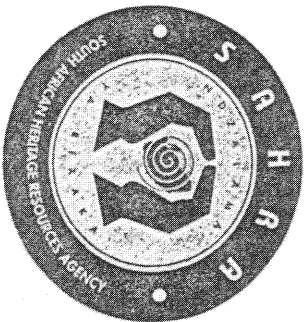
(e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;

(f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;

(g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;

(h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and

(i) sites of significance relating to the history of slavery in South Africa.



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SOUTH AFRICAN HERITAGE RESOURCES AGENCY

NORTHWARDS, 21 ROCKRIDGE ROAD, PARKTOWN 2193
P.O. Box 87552, HOUGHTON 2041
TEL: (011) 482 8365 FAX: (011) 482 8196

OUR REF: 9/2/283/3; 9/2/262/13

YOUR REF:

ENQUIRIES: Ms J Kitto

DATE: 11 October 2004

Rock Environmental Consulting (Pty) Ltd
PO Box 40541
MORELETA PARK
0044

BY FAX.: (012) 997-0346

Attention: Pieter van der Merwe

Dear Sir

RE: ENVIRONMENTAL SCOPING REPORT (INCLUDING A HERITAGE SCOPING REPORT) FOR THE PROPOSED BRICKMAKING FACILITY ON PORTION 38 OF THE FARM ZUURBEKOM 297 IQ, WESTONARIA, GAUTENG

1. Your notification, dated 11 March 2004, regarding the above, and our reply dated 16 April 2004 requesting an opportunity to comment on the Heritage Impact component of the Scoping Report, refer. Please excuse the inordinate delay in responding.
2. It is confirmed that a copy of the Environmental Scoping Report for the above was received subsequently, including a Heritage Scoping Report.
3. The following points were noted from the Heritage Scoping report:
 - 3.1 no significant archaeological and historical sites, structures, buildings and objects were detected specifically in the area earmarked for development.
 - 3.2 a provincial heritage resource, the Zuurbekom pumping station, is located just outside the northern boundary of the development site.

4. However, it is noted that although the heritage specialist who produced the Scoping Report is a qualified historian, there is no indication that an archaeologist was also involved. Only an accredited archaeologist can state that there are no archaeological sites or material present. We therefore request a clarification of the methodology on which the findings on the archaeological aspect of the site are based.

5. Our final comment will be provided subject to the above written clarification being received by SAHRA. In the meantime, the HIA recommendation that:

- i. construction work be monitored for the uncovering of any archaeological sites or material through excavation activities; and
 - ii. that this recommendation be included in the construction tender documents;
- is supported in principle by SAHRA.

6. **Please note for future reference,** that due to the diverse nature of heritage resources it may be necessary for specific heritage specialists to be consulted in the assessment of a particular area. For example: open land, which may also contain graves, will usually require an archaeologist (or palaeontologist, eg: on dolomitic ground), while the presence of buildings/structures will require a heritage architect. An historian would be useful in researching either the history of the over-all area or a specific site (especially if built-up). There is also the possibility that two or more specialists would be required; eg: if both structures and open land are present.

Should you require any clarification, please contact us at the above telephone or facsimile number.

Yours Sincerely,



Jennifer Kitto

Assistant Manager

for MANAGER: GAUTENG OFFICE