

**APPLICATION FOR PERMIT: DEMOLITION
OF EXISTING HISTORIC BUILDING AT OLD
VOORSPOED DIAMOND MINE, FREE
STATE**



**ANNEXURE TO PERMIT APPLICATION
FORM
SUBMITTED TO
FREE STATE HERITAGE**

DATE OF SUBMISSION:

TABLE OF CONTENTS

1. CHRONOLOGY OF VOORSPOED DIAMOND MINE HISTORY	1	
2. ASSESSMENT OF HISTORIC BUILDING FOR WHICH DEMOLITION PERMIT IS REQUIRED	2	
Location	2	
Original name	2	
Description and discussion	2	
Current heritage status	5	
Cultural significance	5	
Synoptic evaluation of cultural significance	5	
Conservation value	5	
Heritage assessment	6	
Description of impact	6	
Impact assessment	6	
Legal requirements	6	
Summary of mitigation measures	6	
3. MAPS AND PLANS	6	
4. PHOTOGRAPHS	6	
1900	1900	1900
1901	1901	1901
1902	1902	1902
1903	1903	1903
1904	1904	1904
1905	1905	1905
1906	1906	1906
1907	1907	1907
1908	1908	1908
1909	1909	1909
1910	1910	1910
1911	1911	1911
1912	1912	1912

1. CHRONOLOGY OF VOORSPOED DIAMOND MINE HISTORY

DATE	EVENT	INFORMATION SOURCE
250 000 years BP	Early Stone Age communities frequent the area	PISTORIUS, JCC, 2004, A heritage impact assessment (HIA) study for an EMP for the Voorspoed diamond mine near Kroonstad in the Free State Province. Submitted to Metago.
1850s	First white farmers settle in area later known as the <i>Riemland</i> (named after practice of large-scale hunting for procuring hides and skins for making thongs (riems))	Pistorius report
1854	Kroonstad established	Pistorius report
1866	More than 152 000 blesbok and gnu skins exported from Kroonstad area	Pistorius report
1860s	First diamonds discovered in the alluvial gravels of the Vaal and Orange rivers	Pistorius report
1870	Diamonds discovered at Jagersfontein, Free State	Pistorius report
1870-1891	Six kimberlite pipes discovered in Kimberley	<i>Mining Mirror</i> , July 2005, p 29
1880	Koffiefontein pipe discovered south of Kimberley	<i>Mining Mirror</i> , July 2005, p 29
1906	Kimberlite diamond pipe discovered on farm Voorspoed by HS Harger (part of discovery of other small but payable deposits in early 20 th century)	Pistorius report
1906-1912	Open-cast mining operations at Voorspoed	Pistorius report
Sep 1906-Dec 1907	46 340 carats mined, yield 21,18 carats per 100 loads	Pistorius report
1906-1907	Erection of mine offices	Personal deduction
1907	Voorspoed Diamond Mining Co opens shop (store)	VAB, CO 474 ref 4925/07
1907-1908	Labour unrest at mine	VAB, G 88 ref 270
1908	105 962 carats mined, yield 16,6 carats per 100 loads	Pistorius report
1909	274 785 carats mined, yield 14,9 carats per load	Pistorius report
1909	Mention made of JJ Reuff's boarding house at Voorspoed	VAB, CO 499 ref 18/151
1909	Lease entered between Voorspoed Diamond Mining Co and Orange River Colony for use of site for erection of police post for 24 years	SAB, PWD 1907 ref 6788
1909	Telephone line between Voorspoed and Kroonstad police stations	VAB, CT 92 ref 101/09/7
1910	228 916 carats mined, yield 16,6 carats per 100 loads	Pistorius report
1910	Arms and ammunition issued to special police unit at Voorspoed	SAB, JUS 132 ref 5/281/11
1911	242 111 carats mined, yield 14,1 carats per 100 loads	Pistorius report
1911	Erection of school at Voorspoed	SAB, PWD 1881 ref 6711
3 Aug 1912	Closure of mine due to low recovery rate from harder lithology at lower depth and De Beers acquires property, De Beers has	Pistorius report

DATE	EVENT	INFORMATION SOURCE
April 1914	no intention to work "unprofitable" mine Commission of Inquiry into the profitability of the mine, appointed by Union Department of Mines, finds that mine is indeed unprofitable	Pistorius report
1926	Police post closed down	SAB, PWD 1907 ref 6788
1927	Closure of Voorspoed school	SAB, PWD 1881 ref 6711
1949-1950	Police post buildings demolished or relocated	SAB, PWD 1907 ref 6788
1965-1967	Sampling operations	Pistorius report
1979	Sampling operations: Commencement of mining recommended for mid-1980s	Pistorius report

2. ASSESSMENT OF HISTORIC BUILDING FOR WHICH DEMOLITION PERMIT IS REQUIRED

Location: Voorspoed Mine

Original name: Not known

Existing documentation: None traced and/or retrieved.

New documentation: The building was surveyed and recorded on 7 August 2005 by KA Bakker (Heritage architect), M Meyer (Sr Architectural technologist) and A Olivier (Sr Architectural technologist) using appropriate and accepted heritage surveying and documentation techniques. Field sketches were prepared. The dimensions were taken in millimetres. CAD drawings of the plan, elevations, main sections, building elements and details were prepared from the fieldwork. The simple construction and form did not warrant use of a dumpy level or theodolite. GPS location was established as S 27 degrees 24 minutes 09.1036 seconds, E 27 degrees 11 minutes 35.4000 seconds. Photographs were taken of details, and composite photographs were assembled to give an idea of the current state of the elevations.

Description and discussion:

a The original office:

Building/s: The Mine Office was built as a long, narrow rectangular structure (8 040 x 23 589 metric or approx 78' x 26' Imperial; the proportion is therefore 1:3) of kiln baked face brick in English bond, on a plinth of roughly formed rectangular hard stone, with a hipped roof of galvanised corrugated sheet metal, and with a surrounding lean-to verandah and a colonnade of square timber posts at an interval of 3 500.

The office was sub-divided into 12 cellular rooms of equal dimension, forming 2 rows of 6 offices back-to-back, the central 4 offices on either side having a timber framed door on the side of each office with an eccentrically placed vertically proportioned timber framed sash window, and with the 2 outer offices on either side having their windows on the narrow facades of the structure, centrally placed in each office.

The top of window openings was formed by a flat arch of voussoir stones and with a steel flat bar reinforcing below the arch, acting as permanent formwork – the bottom of the window had a brick window sill. One complete window that is still *in situ* indicates that each sash of the timber window had 2 rows of 3 cottage panes, making 12 in total for the two sashes. Openings for the door frames were formed by the inner layer of bricks being rebated. There are no doors remaining, but they would probably have been panelled doors with a tall upper and squat lower panel.

The outer and inner walls of the office building were built of a double brick skin, the thickness of a full brick. Reinforcing exists in the form of sheet metal bands in between bricks at every 4-5th course. Two layers of brickwork were laid (one header, one stretcher – the header bond layer becomes the stretcher on the adjoining façade, and so also with the stretcher layer) above the plinth and below a damp barrier of galv sheet metal, with a bent down drip on the outside. The interior floor was finished to the same height as the damp barrier. The interior floors were of concrete with thin cement screed. A concrete sill was provided at each door. The exterior verandah floor is deemed to have been of cow-dung (the material remains are *in situ* in one location, and no traces of concrete flooring or of rubble was found on site) with an edging of roughly formed hard stone. Concrete footings were cast *in situ* for the timber verandah posts – these footings were located hard up to the inner surface of the outer edge of stone.

The inside walls of the offices were of a full brick width, plastered with cement plaster, and provided with a profiled timber skirting and a profiled (Cyma recta and reversa) timber cornice. A long timber rail with clothes hooks ran on the inner (n-s) wall of each office, and was fixed on top of the plaster work with bolts. The ceiling was finished with tongue and groove timber planking, with the era's trademark groove close to the tongue side of the plank.



Fig 1a Composite view of west elevation (Aug 2005, Bakker).



Fig 1b Composite view of east elevation (Aug 2005, Bakker).



Fig 1c Composite view of south elevation (Aug 2005, Bakker).



Fig 1d Composite view of north elevation (Aug 2005, Bakker).

The roof structure of the main inner building was constructed of a nailed timber truss made up of regular timber sections (see detail on drawings), resting on a timber roof plate the size of a brick in section. The verandah's roof was constructed of a separate timber beam, nailed to the roof truss on one side and resting on a timber beam on the other (While no beam was found on site, common sense as well as the existence of a cut-out on the verandah beam provides the rudimentary clue for the existence and size of the outer beam that rested on the square timber posts of the verandah). The roof edge was finished off with a formed timber fascia. The connection of the verandah roof and the outside wall of the office building had a formed timber cover plate similar to the fascia. The galvanised sheeting was nailed onto rectangular timber purlins, the section of which was positioned flat rather than upright. There was no gutter.

Details: All important connections and members of the building have been detailed as part of the survey and included in the documentation.

Condition of the original fabric: The original fabric of the building is in a very dilapidated and deteriorated state. The roof sheeting is rusted through and many sheets of the verandah have been removed, the timber of the trusses have been removed, the beams of the verandah have been removed bar one, the window sashes have been removed from the frames bar one, and no timber doors remain. The timber of the window- and door frames is in a very deteriorated condition. The ceiling and cornice of only one office remains. There is only one small section of skirting remaining in one office. Concrete floors are damaged.

Setting: The Mine Office is part of a group of buildings on the mining site that are situated along the western side of a lane of Blue Gum trees that were planted in a north-south direction. More buildings were situated a smaller clump of Blue Gums to the north-west of the office. Currently only the stone plinths of these buildings remain. The site is quite close to a dirt road, and currently grown over with veld grass. The buildings of the core of the mining operations, as well as the mine dump, are visible to the east from the office.

b Alterations and/or additions to the Mine office:

Alterations: Most of the alterations relate to the later habitation described here. There are various remains of habitation by indigenous Sotho dwellers that have settled in the building in

the past. The main alteration is the application of several layers of dung plasterwork on the walls, up to ceiling height in the inside and approx two brick layers above the flat arches of the doors on the exterior. These plaster layers were pigmented, and have been decorated with various patterns.

Condition of later alterations: The plasterwork and decorated patterns are in a very dilapidated condition.

Additions: There have been no additions to the original building in its life span.

Current heritage status: From the appearance of details and materials used, the date of the Mine office building is set at anything after the arrival of the British in the Orange Free State in the 1840s up till approx 1910. The exact date of erection would probably be around 1905-1906 when the mine was established. The date of alterations and additions from later habitation by indigenous peoples must be ascertained from interviews with mine staff and/or people in the immediate region. The original office enjoys **general** protection under the provision of the NHRA - Section 34(1) of the NHRA applies.

The original building is a fairly unique remaining example of mine buildings.

Authenticity of the remaining original fabric is high, but covered and damaged due to the habitation overlay.

The heritage value is extremely low due to the extreme state of deterioration. Regeneration will prove to be very difficult and costly.

Cultural significance:

Importance in the community or pattern of history

- Importance in terms of the history of diamond mining and industrialisation in the early Republics north of the Cape Colony, with the accompanying internationalisation of the Republics and the eventual incorporation of the Republics into the Union of South Africa, as well as the subsequent mining activity.

Possession of uncommon, rare or endangered aspects of natural or cultural heritage

- This building is a rare example of architecture designed by a mining concern, of the late 19th / early 20th C;

Potential to yield information that will contribute to an understanding of the natural or cultural heritage

- The target area is part of a larger recognisable cultural landscape of diamond mining of the late 19th / early 20th C.

Importance in demonstrating the principal characteristics of a particular class of natural or cultural places or objects

- Explains architecture of mining institutions of the late 19th / early 20th C;

Importance in exhibiting particular aesthetic characteristics valued by a community or cultural group

- Not applicable;

Importance in demonstrating a high degree of creative or technical achievement at a particular period

- Not applicable;

Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons

- Not applicable;

Strong or special association with the life and work of a person, group or organisation of importance in history

- The historic mining company Anglo American, all important in the establishment and evolution of diamond mining;

History of slavery

- Not applicable;

Synoptic evaluation of cultural significance: High

Conservation value: Low – regeneration almost impossible.

Heritage assessment: Due to the high degree of cultural significance, there are good reasons to retain the structure – however, the building has little remaining heritage integrity due to the low conservation value resultant from extreme neglect and loss of authentic material. Reconstruction will be extremely difficult and costly. Even if the mining activity was avoided in this area, and if the building was to be reconstructed, the building (even as a museum), will have little chance of survival on the site due to the lack of people, lack of support activities and the great distance from the N1 as well as the nearest large town (Kroonstad).

Description of impact: See separate HIA report (JCC Pistorius) and Level 2 (Specialist Study) report (Cultmatrix)

Impact assessment: See separate HIA report (JCC Pistorius) and Level 2 (Specialist Study) report (Cultmatrix)

Legal requirements: The client applies for a demolition permit from the PHRA with the necessary documentation (description, drawings and photographs) of the historic building and the *status quo*.

Summary of mitigation measures: The loss of the heritage fabric is permanent and cannot be mitigated in the material sense. The only practical mitigation possible is to proceed with theoretical conservation of the resource: This is proposed in the form of complete documentation and archiving of the records (done), archiving the documentation at the PHRA as well as a reputable institution concerned with architectural heritage conservation, as well as retention of certain elements of the building for use by conservation bodies for use in future conservation work (if practical).

Impact significance

Demolition without mitigation: *medium*
Demolition with mitigation: *low*

3. MAPS AND PLANS

- Plans and elevations (3 sets): Attached
- Location map: See below
- Position map: See below
- Site map of historic building: See below

4. PHOTOGRAPHS

- Printed sample attached
- Remainder of photos available on accompanying CD-ROM



LOCALITY MAP (2527 AC, 2527 AD), indicating position of historic mine village (1) at old Voorspoed diamond mine, the historic building (demolition applied for)(2) and Fraaiuitzicht/Heuningspruit interchange on N 1 (3)



MAP SHOWING POSITIONS OF HISTORIC MINE VILLAGE (3) AND HISTORIC BUILDING (1) WITH SURROUNDING SITE (2) AT OLD VOORSPOED DIAMOND MINE

SITE MAP (NOT TO SCALE) INDICATING POSITION OF EXISTING BUILDING AT OLD VOORSPOED DIAMOND MINE (drawn by RC de Jong 07.08.2006)

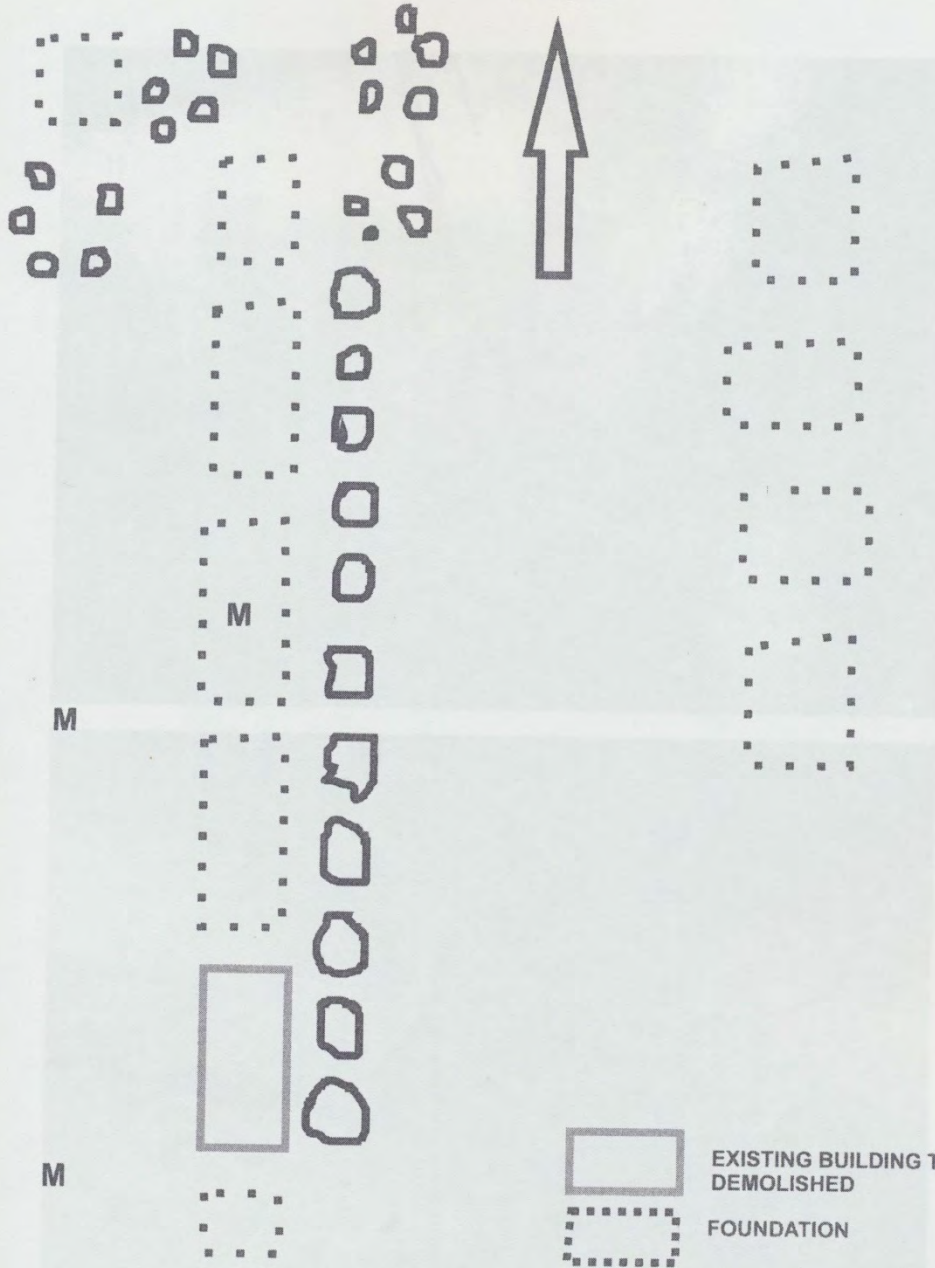
EXISTING BUILDING TO BE DEMOLISHED

FOUNDATION

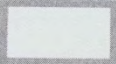
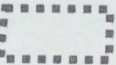


EUCALYPTUS TREES

MIDDEN

20 DEG NE

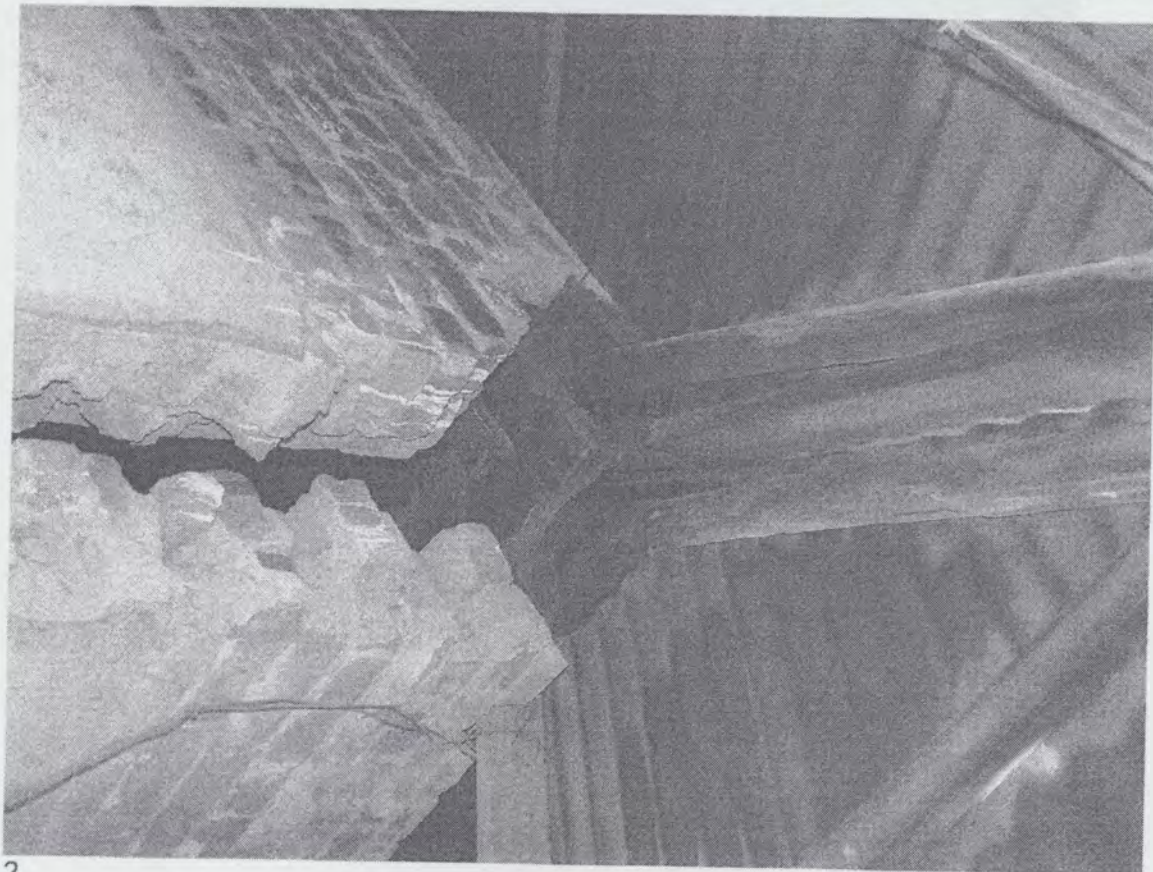


SITE MAP (NOT TO SCALE) INDICATING POSITION OF EXISTING BUILDING AT OLD VOORSPOED DIAMOND MINE (drawn by RC de Jong 07.08.2005)

-  EXISTING BUILDING TO BE DEMOLISHED
-  FOUNDATION
-  EUCALYPTUS TREES
-  MIDDEN



1



2