THE REMOVAL OF ROCK ART FROM BEDFORD SHELTER MAIN CAVE AND BEDFORD SHELTER 1, INGULA PUMPED STORAGE SCHEME, BEDFORD DAM SITE

FOR: Eskom Holdings (PTY) Ltd

DATE: 13 AUGUST 2008

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INTRODUCTION

The removal of rock art and engravings is little practiced in southern Africa, and is usually as a last resort in terms of salvaging or for conservation (see Henry 2007; Loubser 1990; Ouzman 1998). The debate in the literature (see Henry 2007; Bednarik 2008) centres around the need for removal and the ability to remove art successfully. In the past, rock art removal has rarely been able to remove the art in one piece, and or safely curate it afterwards. This report discusses the removal of two panels of art at Bedford Shelter Main Cave and one at Bedford Shelter 1.

The shelters are located at the Ingula Pumped Storage Scheme that is situated in the southeastern Free State, ~1km from the KwaZulu-Natal provincial border. The site is on the top of the escarpment and is located in the greater Drakensberg Mountain Range. Figure 1 and 2 locate the Ingula PSS the Bedford Dam and the three shelters.

Umlando undertook archaeological work at the then Braamhoek Pumped Storage Scheme, (PSS) now called the Ingula PSS, from 2004 to 2006 (Anderson and Anderson 2004, 2005, 2006a, 2006b). During the initial excavations and reports, we suggested that the rock art could be removed for the proposed Ingula PSS interpretative centre, for educational purposes. The work at the Bedford Dam would later blast the three rock shelters, and then flood the area. The art and archaeological deposit will be non-recoverable afterwards. The rock art removal occurred in July 2008 and was a joint effort between Eskom Holdings (Pty) Ltd (the client) Umlando cc (the archaeological company) and Amfra Maintenance Services cc (a concrete cutting company). Eskom Holdings (Pty) Ltd decided to pay for the removal of the art so that the images would not be lost with the Bedford Dam: there was no mitigatory factor requiring the removal of the art apart from educational purposes.

Figure 1: Location Of The Ingula PSS

Figure 2: Location of the three shelters

The permit from SAHRA (No. 90/06/08/021/40) was initially given in 2006, and then later extended to September 2008. Appendix A has a copy of the permit. This permit allowed Umlando to manage and supervise the removal of the rock art.

Bedford Shelter Main Cave (BSMC) and Bedford Shelter 1 (BS1) have several historical to recent graffiti: the oldest possibly dating to the 1890s, as well as archaeological deposits. This report discusses the recording of the graffiti and rock art images at the two sites and the process of removing three images. Two of the images were removed intact; however, one small image broke into three fragments.

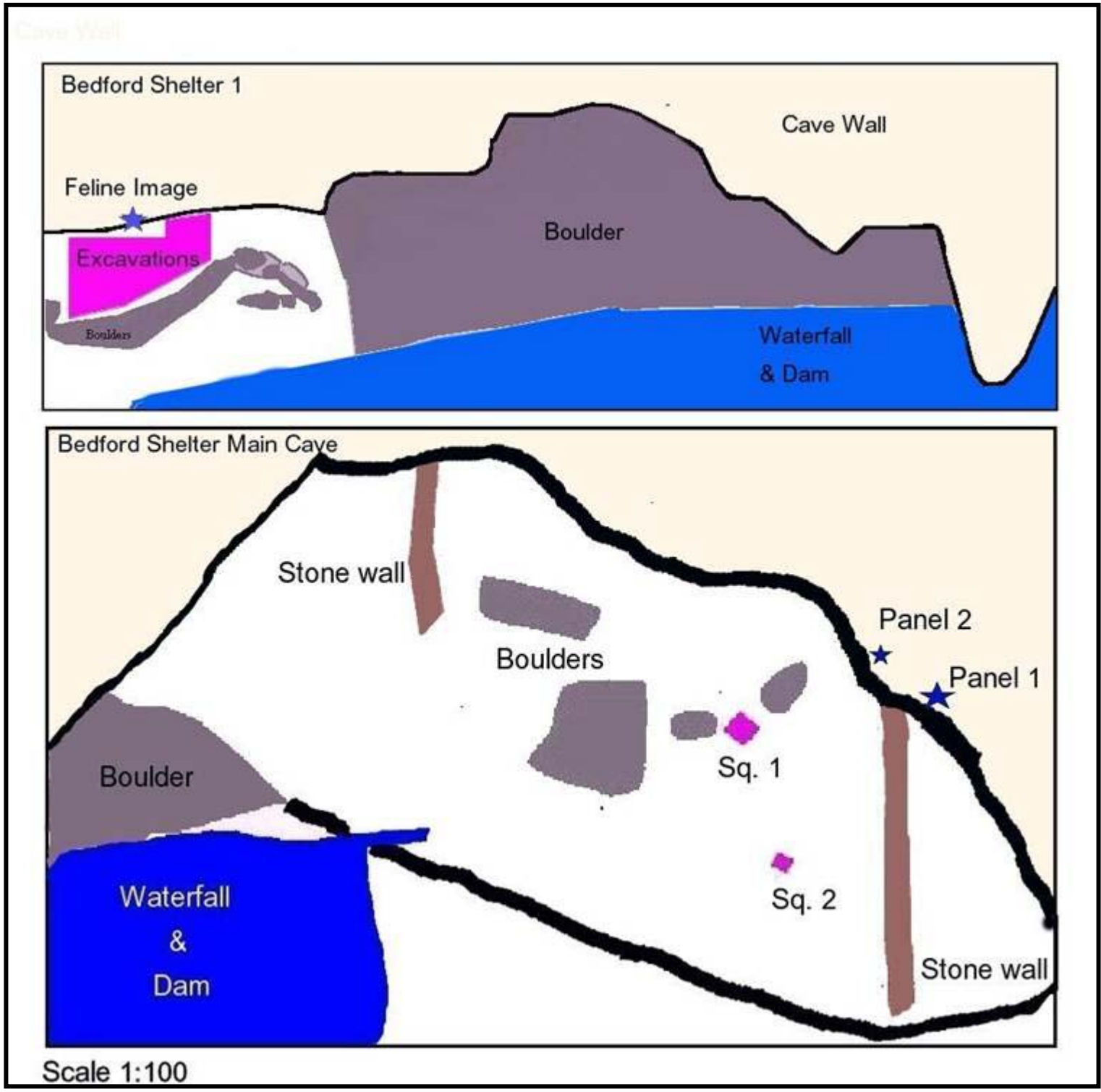
METHOD

ROCK ART RECORDING

We traced the rock art during the second phase of work at Bedford Shelter Main Cave (BSMC). In addition to this, we had also removed pigment from selected images for future analyses. The locality of the (traced) images in relationship to the cave were recorded, as well as photographed. The areas of pigment removal were photographed as a 'before:after', and then demarcated on the rock art tracings. Figure 3 is the locality map of the painted areas rock art.

The art and graffiti was recorded with digital camera in 2004, vidcam in 2005, and again with a digital camera in 2008. The progress of digital cameras over three years made it justifiable to re-record the images. We used a 2-mega pixel camera in 2005, followed by an 8-mega pixel camera in 2008. The process of rock art removal was recorded on a vidcam (with DVD quality) and photographed. The entire process was not recorded, as it would have been repetitive, e.g., the cutting of one line into the cave wall took 30 – 60 minutes. Instead, we recorded with a vidcam during selective stages.

Figure 3: Location of the art at BSMC and BS1



ROCK ART REMOVAL

An on-site inspection was held by Eskom Holdings (Pty) Ltd, Umlando cc and Amfra Maintenance cc one month prior to the cutting. This was to determine the type of material required for the cutting, the nature of the rock face, and safety standards.

Two types of rock art removal methods were used at the site. The first was with large blades (at BSMC), and the second with hand-held circular saws (at BS1).

BSMC removal was as follows:

1. The art was covered with cotton sheets that were fixed to the wall (fig. 4). This was to prevent excessive water and dust onto the art.
2. A stand for the blades was erected behind the art and supported with jacks, and a 'rail' for the saw was attached to this stand (fig. 5). The stand also gave support to the rock face.
3. The base of the art had the potential to crack or flake of during the cutting process. To counter this three – four 25mm holes were drilled from the base of, and behind, the art. This hole went through the fragile area of the rock and into the more stable rock (fig. 6). These holes were then filled with a type of cement (Sika Anchorfix®). This cemented the loose base to the main art (fig. 7).
4. The next support stand was placed below the art and in front of the blade. On top of this stand was a large bag of sand that would follow the contours of the rock slab, and thus not add extra stress by creating uneven surfaces (fig. 8). This stand was also supported by several jacks.
5. The first cutting was a horizontal cutting ~20cm behind the rock face (figs 9 a-d). The cutting extended above the art panel. A tungsten-

diamond circular saw was used for the cuttings. The cuttings were undertaken gradually and cooled with water (from the nearby stream).

6. The next two sets of cuts were shorter vertical cuts along the width of the art panel. These cuttings were also at an angle to allow for an easier break (figs 10 a-c).
7. Once these last cuttings had been made, the jacks were lowered slowly, and the first art panel literally slipped out under the support of the jacks (fig. 11).
8. The art was covered in cotton sheets, placed on a wider wooden plank, and secured with rope – the planks taking the "strain" of the rope, not the art slab.
9. A slight variation occurred for the second art panel at BSMC. Steps 1 – 5 were followed, but then a different method was used. The two vertical cuts were drilled with a 50mm drill/auger and then cut with a hand held circular saw (fig 12 a-b). This was undertaken as a variation of the method.
10. The larger art panels were lifted by a crane out of the shelter (fig. 13)

The removal of the art at BS1 was very different. The art was on a panel that was in the process of exfoliating from the top. The head of the (presumed) cheetah had already flaked of in the past. Close inspection of the panel indicated that there were already two small cracks on each side of the image. The aim was to cut two vertical and a horizontal rows near the image and then utilise the natural cracks as part of the removal process.

The process was as follows:

1. We could not cover the art, as we needed to be constantly aware of when/if the art began to crack. The upper part of the panel was less than 1cm thick.
2. Two vertical and one horizontal line were cut into the rock face (fig. 14).

Figure 4: Covering the art prior to cutting

Figure 5: Support for circular saw and rock face

Figure 6: Drilling underneath the art to provide support for weaker areas

Figure 7: Cementing the drilled areas

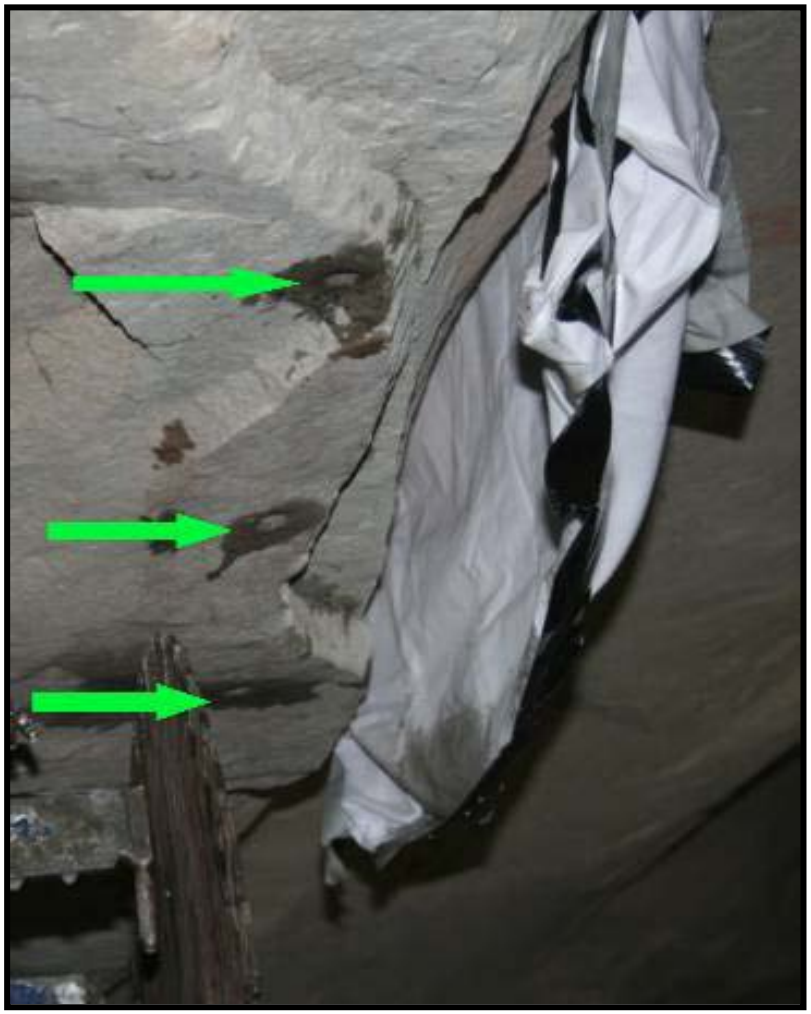


Figure 8: Sand bag used for support of the art

Figure 9 a Horizontal cuttings behind the rock face

Figure 9b : Horizontal cuttings behind the rock face

Figure 9c : Horizontal cuttings behind the rock face

Figure 9c : Horizontal cuttings behind the rock face

Figure 10 a: Vertical cuttings besides the art

Figure 10b: Vertical cuttings besides the art

Figure 10c: Vertical cuttings besides the art

Figure 11: Rock art slab sliding out of the rock face

Figure 12a - b: Vertical drilling at BSMC: Panel 2

Figure 13: Lifting the art by means of a crane

3. A small wedge was placed in the horizontal cut and we slowly attempted to connect our cutting with the natural cracks (fig. 15).
4. This did not work so a deeper horizontal cut was made, to cut behind the crack and create another weak spot along this panel (figures 16 a-c).
5. Once this was completed, the panel was gently tapped to remove the art.
6. The art was enclosed in cotton sheets and reinforced with cardboard, and then fitted into a plastic holder.

RESULTS

Two of the three rock art panels were successfully removed. The larger panels at BSMC did not break, due to the fragile areas that were cemented. The smaller panel at BS1 cracked into three smaller panels during the removal phase (fig.17). The cracks occurred in areas just behind the rock face, and in areas where we could not observe them during the course of cutting the art. Our aim was to cut, create weak spots along and behind the art so that the natural cracks would 'move' towards our cuttings. Unfortunately, the art had already exfoliated along its own lines, and cracked during our tapping of the art.

The use of the cotton sheet over the art during the removal process saved the art from being wet and covered in dust (fig 18). The non-use of the sheet over the art at BS1 resulted in significant amounts of dust resting on the art. However, this was necessary as we would not be able to see any immediate breaks if it was covered. A plastic covering could have been used, but we were afraid of water build up behind the plastic that could damage the art. This did not happen when we used a cotton sheet, and the art remained dry. In hindsight, we should have cemented (as described above) the rock face to the section behind the art, as this may have prevented cracking. The only problem with this was that access/space for the bottom horizontal cut was very limited.

Prior to our rock art removal, someone had removed two slabs of graffiti,

Figure 14: Vertical and Horizontal cuttings at BS1

Figure 15: Using a wedge to gently crack the art

Figure 16a: Deeper Horizontal cuttings at BS1

Figure 16b: Deeper Horizontal cuttings at BS1

Figure 17: Cracking of art at BS1[1]

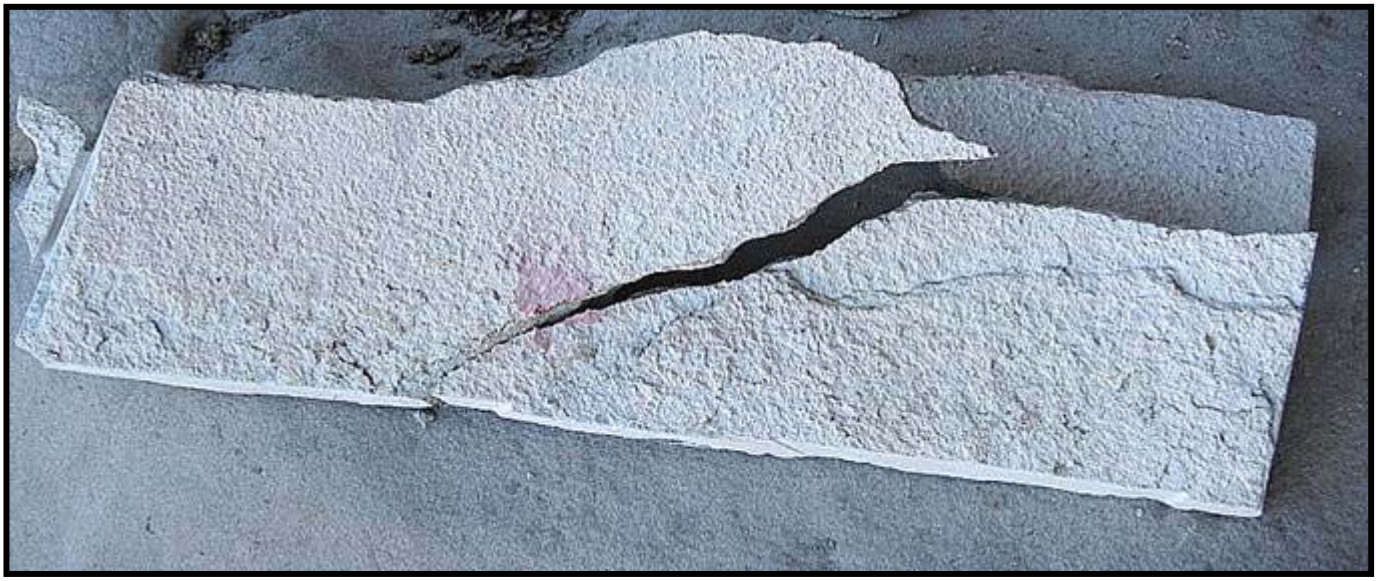


Figure 18: Rock art cover removed showing its preservation directly after cutting

[1] Art is faint due to the dust from the saw.

We went through our 2004 photographs to note which images had been removed (figs. 19 a - b).). They are as follows:

- Far Left: P.M. Nel Nov 22 1916
- Far Right: D.J. de V 18/10/16

This could have been an illegal removal if there was any rock art underneath these images, or if the names were older than 100 years. Nonetheless, the removal of the historical names, by presumed amateurs, without the approval of SAHRA cannot be condoned. These images should be returned if they are integral to the history of the area. These two images were removed by someone, or some party, as a living heritage “claim” to the art. This “claim” would better be promulgated at the interpretative centre than in a private display. Moreover, the “claim:” could have fallen under living heritage and thus given a more prominent profile.

CONCLUSION

This report dealt with the removal of three rock art panels that would have been destroyed and flooded if not salvaged. The aim of the removal project is to provide material for an interpretative center that is planned at the Ingula PSS . The art was not unique or special, but rather a standard representation of eland in the KwaZulu-Natal region. The one set of two eland (with only torsos visible) has been graffitied and we intend to have the graffiti removed (with approval of SAHRA) at a later stage prior to display.

The rock art was systematically recorded by site mapping, digital photography (and Vidcam), and tracing. Those areas that had had pigment removed have also been noted. Pigment was initially removed (in 2004), as there had been no discussion about rock art removal at that stage.

Two of the three panels were removed successfully, and one small panel cracked during the removal process. All three panels are currently stored at the National Museum, Bloemfontein. They will be loaned to Eskom Holdings (Pty) Ltd at a later stage and under strict conditions, as set out by the SAHRA's permit.

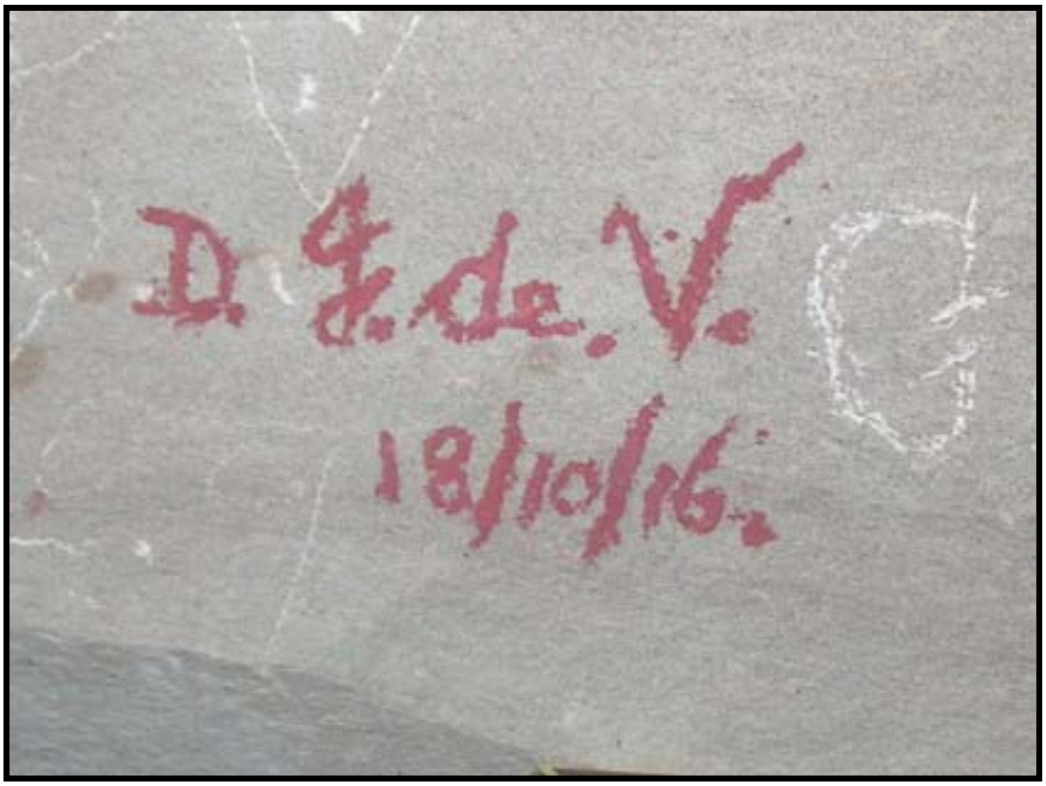
The permit from SAHRA states that the art may be displayed "only if the conditions in the display area conform to SAMA and ICOM humidity and temperature control standards." These standards mean that the following would need to be applied:

- Glass cases, with locks, where the art may be stored for visual display. This will stop people from touching the art and provide a stable environment within the case.
- A means of tracking and controlling the humidity of the room
- A means of tracking and controlling the temperature of the room

The panels need to be curated and accessioned by the National Museum. It is important to note that Eskom Holdings (Pty) Ltd does not own the art. They may loan the art panels from the National Museum on a long-term basis. The National Museum would reserve the right to inspect and withdraw the loan items if they were being damaged or incorrectly curated. The National Museum should also be credited for any material that is displayed.

Figure 19a: Before: after pictures of graffiti removal

Figure 19b: Before: after pictures of graffiti removal



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Any display regarding the art should have an interpretation of the art. In this case, the interpretation would be relatively straightforward where the real and spiritual role of the eland and leopard in San life are stated. A scale model of the shelters, and indicators of the position of the art, should be made. This would be in conjunction with the display of the artefacts and features from the three excavations. This allows the display to contextualise the art and not leave it as an 'object of display'.

In summary, the general rock art display should include the following items:

- Before and after pictures of the art

- Copies of the tracings
- Pictures and/or video footage of the removal process, and an explanation of why the art was removed.
- Explanation as to the relevance and meaning of the art.
- Explanation and/or pictures of the graffiti removal

REFERENCES

Anderson, G. and Anderson L. 2004. *The Archaeological Survey Of The Braamhoek Pumped Storage Scheme.* Report to Eskom Holdings (Pty) Ltd.

Anderson, G. and Anderson L. 2005. *The Archaeological Excavations Of Bedford Shelter Main Cave And Bedford Shelter 1 & 2.* Report to Eskom Holdings (Pty) Ltd.

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APPENDIX A

PERMIT FOR ROCK ART REMOVAL

SOUTH AFRICAN HERITAGE RESOURCES AGENCY
111 HARRINGTON STREET, CAPE TOWN, 8000 POBOX 4637, CAPE TOWN, 8000
TEL: (021) 462 4502 FAX: (021) 462 4509

9/2/316/0018

PERMIT
No.80/08/05/003/40
Extension of permit No. 80/06/08/021/40

Issued under Section 35(4) of the National Heritage Resources Act, Act No. 25 of 1999. Permission is hereby given:

to: Mr G Anderson (ID: 6902225189084),
of: PO Box 102532, Meerensee, 3901,
for: the removal and relocation to the National Museum of a panel of rock art from the Bedford Shelter / Braamhoek 2 shelter that is to be flooded by a dam,
at: Bedford Shelter, at approximately 28 14.210 E, 29 35.433 S,
on: the farm Bedford 389,
in: the Harrismith District, Free State Province.

The following conditions apply:

1. The permit holder is to be present on the site during the removal of the rock art.
2. An accurate recording of the rock paintings must be made, including a full photographic record of the site before and after removal of the slab.
3. Care must be taken to keep the rock and painting dry and protected from abrasion during transportation, and to store the block under acceptable conservation conditions with temperature and humidity control.
4. The slab will be curated by the National Museum. It must be labelled with an accession number, and the accession register should record the name and location of the site, the date on which it was removed, the permit number and other relevant details.
5. Copies of the records and a condition report must be lodged with the National Museum and SAHRA.
6. The painting may be on public display only if conditions in the display area conform to SAMA and ICOM humidity and temperature control standards.
7. Reprints of all published papers, or copies of theses or reports resulting from this work must be lodged with SAHRA on or before 1 June 2009.
8. SAHRA shall not be liable for any losses, damages or injuries to persons or properties as a result of any activities in connection with this permit.
9. SAHRA reserves the right to cancel this permit by notice to the permit holder.
10. This permit is subject to a general appeal and may be suspended should an appeal against the decisions be received by SAHRA within 14 days from the date of the permit. SAHRA may not be held responsible for any costs or losses incurred in the event of the suspension or retraction of this permit.

This permit is valid until 1 June 2009.
for CHIEF EXECUTIVE OFFICER .....
Date: 27 May 2008 Place: Cape Town