

Archaetnos Culture & Cultural Resource Consultants BK 98 09854/23

A REPORT ON A HERITAGE IMPACT ASSESSMENT FOR THE BUILDING OF AN EDUCATIONAL CENTRE AT THE VOORTREKKER MONUMENT HERITAGE SITE ON THE FARM GROENKLOOF 358 JR, PRETORIA DISTRICT, GAUTENG PROVINCE

For:

The Voortrekker Monument Heritage Site Christo Rabie (christo@vtm.org.za)

REPORT: AE01450V

By:

Dr. A.C. van Vollenhoven (L. Akad. S.A.)

Accredited member of ASAPA Accredited member of SASCH

August 2014

Archaetnos P.O. Box 55 GROENKLOOF 0027 Tel: **083 2916104**

Fax: 086 520 4173 E-mail: antonv@archaetnos.co.za

©Copyright Archaetnos

The information contained in this report is the sole intellectual property of Archaetnos CC. It may only be used for the purposes it was commissioned for by the client.

DISCLAIMER:

Although all possible care is taken to identify all sites of cultural importance during the survey of study areas, the nature of archaeological and historical sites are as such that it always is possible that hidden or subterranean sites could be overlooked during the study. Archaetnos and its personnel will not be held liable for such oversights or for costs incurred as a result thereof.

The South African Heritage Resources Agency (SAHRA) or one of its subsidiary bodies needs to comment on this report and clients are advised not to proceed with any action before receiving these. It is the responsibility of the client to submit this report to the relevant heritage authority.

SUMMARY

Archaetnos cc was appointed by the Voortrekker Monument Heritage Site to conduct a cultural heritage impact assessment (HIA) for the new Educational Centre at the site. The Voortrekker Monument is a well-known national heritage site, located to the south of the city centre of Pretoria in the Gauteng Province.

The fieldwork undertaken revealed no sites of cultural heritage significance. This is due to the extremely disturbed environment at the specific area where the Educational Centre is planned. It is imminent that nothing of a heritage value would be found here.

The only remaining matter would be if the Educational Centre would have a negative visual impact on the Voortrekker Monument itself. It is believed not be the case. Two main reason for this exist. Firstly the monument is built on the top of the hill and therefore elevated to such an extent that the Educational Centre, which lies much lower down the hill, will not create any visual barrier towards the monument. Secondly the high trees existing between the monument and the area where the Educational Centre will be erected create a visual transition between the two buildings.

It also needs to be indicated that the Educational Centre will be placed outside of the boundary of the declared national heritage site. Therefore no mitigation is required.

The applicable social consultation has also been done, consisting of site notices and newspaper advertisements. No comments were received.

Note should also be taken that all archaeological and historical sites may not have been identified as it is possible that subterranean archaeological sites may be found later on. On identification of these it needs to be dealt with by an archaeologist.

CONTENTS

Pa	ige
SUMMARY	. 3
CONTENTS	. 4
1. INTRODUCTION	. 5
2. TERMS OF REFERENCE	. 7
3. CONDITIONS AND ASSUMPTIONS	. 7
4. LEGISLATIVE REQUIREMENTS	. 8
5. METHODOLOGY 1	11
6. HISTORICAL CONTEXT1	12
7. DESCRIPTION OF THE ENVIRONMENT 1	15
8. DISCUSSION1	16
9. SOCIAL CONSULTATION2	22
10.CONCLUSIONS AND RECOMMENDATIONS	24
11.REFERENCES	25
APPENDIX A – DEFENITION OF TERMS	27
APPENDIX B – DEFINITION/ STATEMENT OF SIGNIFICANCE 2	28
APPENDIX C – SIGNIFICANCE AND FIELD RATING 2	29
APPENDIX D – PROTECTION OF HERITAGE RESOURCES 3	30
APPENDIX E – HERITAGE MANAGEMENT IMPACT	
ASSESSMENT PHASES 3	31

1. INTRODUCTION

Archaetnos cc was appointed by the Voortrekker Monument Heritage Site to conduct a cultural heritage impact assessment (HIA) for the new Educational Centre at the site. The Voortrekker Monument is a well-known national heritage site, located to the south of the city centre of Pretoria in the Gauteng Province (Figure 1-3).

The client indicated the area where the proposed development is to take place. The field survey was confined to this area.

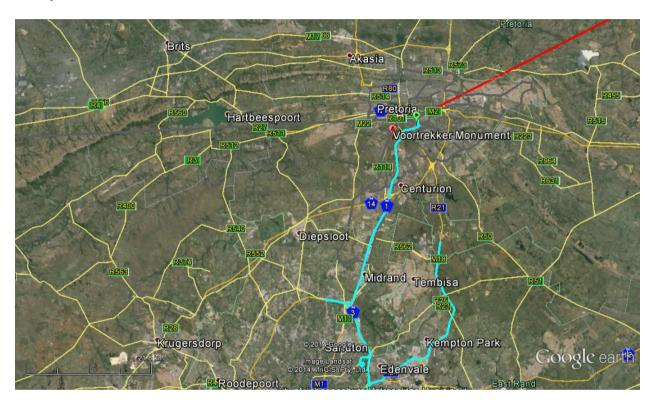


Figure 1: Location of the Voortrekker Monument and Pretoria in the Gauteng Province. North reference is to the top.

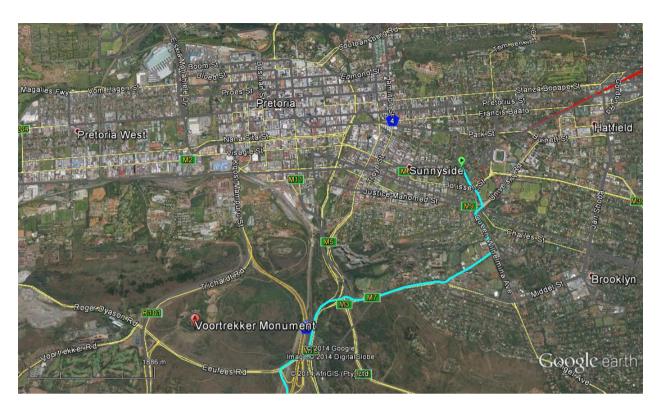


Figure 2: Location of the Voortrekker Monument in relation to Pretoria. North reference is to the top.

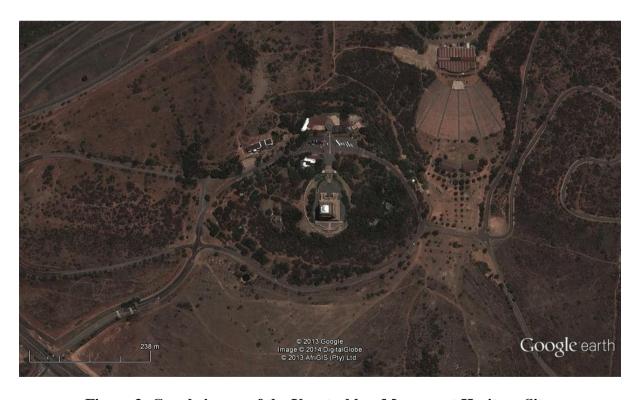


Figure 3: Google image of the Voortrekker Monument Heritage Site.

2. TERMS OF REFERENCE

- **2.1** The Terms of Reference for the study were to:
- 1. Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A).
- 2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
- 3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
- 4. Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources by the proposed development.
- 5. Review applicable legislative requirements.
- 6. Investigate the impact of the development on the Voortrekker Monument.
- 7. Do the necessary social consultation;
- 8. Do a report on the findings of the study.

3. CONDITIONS & ASSUMPTIONS

The following conditions and assumptions have a direct bearing on the survey and the resulting report:

- 1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity (Appendix A). These include all sites, structure and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development. Graves and cemeteries are included in this.
- 2. The significance of the sites, structures and artifacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. The various aspects are not mutually exclusive, and the evaluation of any site is done with reference to any number of these aspects.
- 3. Cultural significance is site-specific and relates to the content and context of the site. Sites regarded as having low cultural significance have already been recorded in full and require no further mitigation. Sites with medium cultural significance may or may not require mitigation depending on other factors such as the significance of impact on the site. Sites with a high cultural significance require further mitigation (see Appendix C).

- 4. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public.
- 5. All recommendations are made with full cognizance of the relevant legislation.
- 6. It has to be mentioned that it is almost impossible to locate all the cultural resources in a given area, as it will be very time consuming. Developers should however note that the report should make it clear how to handle any other finds that might occur. In this case the vegetation cover in certain areas is reasonably dense making archaeological visibility difficult.

4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

4.1 The National Heritage Resources Act

According to the above-mentioned act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites or scientific or technological value.

The national estate (see Appendix D) includes the following:

- 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 features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Archaeological and paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment only looks at archaeological resources. The different phases during the HIA process are described in Appendix E. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of this act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial):

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or paleontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations** (**Ordinance no. 12 of 1980**) (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated) before exhumation can take place. Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act** (**Act 65 of 1983 as amended**).

4.2 The National Environmental Management Act

This act (Act 107 of 1998) states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

5. METHODOLOGY

5.1 Survey of literature

A survey of literature was undertaken in order to obtain background information regarding the area. Sources consulted in this regard are indicated in the bibliography.

5.2 Field survey

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development. If required, the location/position of any site was determined by means of a Global Positioning System (GPS)¹, while photographs were also taken where needed.

The survey was undertaken by a physical survey via off-road vehicle and on foot (Figure 4).



Figure 4: Track route of the surveyed area.

-

¹ A Garmin Oregon 550 with an accuracy factor of a few meters.

5.3 Oral histories

People from local communities are interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

5.4 Documentation

All sites, objects features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities were determined by means of the Global Positioning System (GPS). The information was added to the description in order to facilitate the identification of each locality.

5.5 Evaluation of Heritage sites

The evaluation of heritage sites is done by giving a field rating of each (see Appendix C) using the following criteria:

- The unique nature of a site
- The integrity of the archaeological deposit
- The wider historic, archaeological and geographic context of the site
- The location of the site in relation to other similar sites or features
- The depth of the archaeological deposit (when it can be determined or is known)
- The preservation condition of the site
- Uniqueness of the site and
- Potential to answer present research questions.

6. HISTORICAL CONTEXT

6.1 Stone Age

The Stone Age is the period in human history when lithic material was mainly used to produce tools (Coertze & Coertze 1996: 293). In South Africa the Stone Age can be divided in three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. The division for the Stone Age according to Korsman & Meyer (1999: 93-94) is as follows:

Early Stone Age (ESA) 2 million – 150 000 years ago Middle Stone Age (MSA) 150 000 – 30 000 years ago Late Stone Age (LSA) 40 000 years ago – 1850 - A.D.

It is important to note that some of the oldest humanoid fossils have been found close to Pretoria, namely at Kromdraai, Sterkfontein, Swartkrans, Gladysvale and Drimolen (in the Krugersdorp area). These hominids include Australopithecus Africanus, Australopithecus Robustus and Homo Habilis and can be as old as 3 million years. These early people were the first to make stone tools (Van Vollenhoven 2000a: 146). These sites are also associated with Early Stone Age artifacts.

Middle Stone Age material was identified at Erasmusrand and the Groenkloof Nature Reserve (Van Vollenhoven 2006: 183). At the Erasmusrand cave some Late Stone Age tools were also identified as well as at Groenkloof (Van Vollenhoven 2006: 184). LSA material was also found at Zwartkops and Hennops River (Bergh 1999: 4). This last phase of the Stone Age is associated with the San people.

6.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in three separate phases according to Huffman (2007: xiii) namely:

Early Iron Age (EIA) 250 – 900 A.D. Middle Iron Age (MIA) 900 – 1300 A.D. Late Iron Age (LIA) 1300 – 1840 A.D.

Early and Late Iron Age sites have been identified close to the Groenkloof area. Bergh (1999: 7) indicates that 125 sites are known in the Pretoria area, but this is under-estimation. According to Delius (1983: 12) and Horn (1996: 23) LIA people moved into the Pretoria area since 1600 A.D. The closest LIA sites to the reserve are those found at Groenkloof and Erasmusrand (Van Vollenhoven 2006: 188).

6.3 Historical Age

The Historical Age started with the first historical sources which can be used to learn more about people of the past. In South Africa it can be divided into two phases. The first includes oral histories as well as the recorded oral histories of past societies. The latter were usually written by people who contact with such a community for a short time. This is followed by the second phase which includes the moving into the area of people that were able to read and write (Van Vollenhoven 2006: 189).

Early travelers have moved through the area that later became known as Pretoria as early as 1829. This was when the first white people visited the area, namely Robert Schoon and William McLuckie. During the same year the well-known missionary Dr. Robert Moffat also visited the area (Rasmussen 1978: 69). In October 1829 the missionary James Archbell and the trader David Hume traveled through this part of the country (Changuion 1999: 119).

The first Bantu language speakers in the area were the so-called Transvaal Ndebele, specifically the southern group. Their history goes back to Chief Msi (Musi) and the genealogy of the Manala (Mahbena) clan, the Ndzundza (Mapoch) clan, the Mathombeni (Kekana) clan and the Hwanda clan (Horn 1996: 23).

Chief Msi lived in the Pretoria area somewhere between 1600 and 1700 A.D. His sons divided the tribe in three groups, namely the Hwaduba, Manala and Ndzundza (Horn 1996: 23).

The largest group of Bantu speaking people in the Pretoria area is the Northern Sotho, but Southern Sotho's and Tswanas are also present. These groups have a typical building

tradition consisting of large building complexes and round huts with conical roofs (Bergh 1999: 106).

It seems as if all these groups fled from the area during the Difaquane when Mzilikazi came here in 1827. He killed the men, burned down their villages, confiscated the livestock and took the women to marry members of his impi (Van Vollenhoven 2000a: 156).

The missionary Jean-Pierre Pellissier even visited Mzilikazi in March 1932. In June/ July of that year he was attacked by the impi of Dingane, the Zulu chief. As a result he left the area during that year (Bergh 1999: 112). This left an area described as being deserted by the missionary Robert Moffat. Sotho groups however started moving back into the area after Mzilikazi left (Junod 1955: 68).

The first white people also came to the Pretoria area during this time (Coetzee 1992: 11). In 1839 JGS Bronkhorst settled on the farm Elandspoort. He was the first permanent white settler in the area (Van Vollenhoven 2005: 17-45). His brother Lucas C Bronkhorst arrived shortly after him and settled on the farm Groenkloof (NAD, TAD, RAK 2750:2; RAK 2711; RAK 2991:631; RAK 3005:457). The Voortrekker Monument is situated on a portion of this farm.

Shortly after the proclamation of the town of Pretoria in 1855, the water coming from the fountains on the farm became very important. This water fed the Apies River. It was used for irrigation farming and also for drinking water for the town. As the town grew larger a more constant water supply was needed. The Government of the Transvaal Republic (ZAR) therefore bought the land where the dam and water plant was built from Bronkhorst in August 1863 (Van Schalkwyk et.al. 1992:2-4).

Shortly before the Anglo-Boer War (1899-1902) the Government of the South African Republic (also known as the Transvaal or ZAR) decided to safeguard the capital city, Pretoria, by building a number of forts. The plan was to build eight forts, but a lack of funds resulted in only four being completed. These are Fort Schanskop, Fort Wonderboompoort, Fort Klapperkop and Fort Daspoortrand (Van Vollenhoven 2000b: 2).

The forts were however unarmed even before it was completely armed as the Boers later on decided not to defend the city. On 5 June 1900 the British took over Pretoria and with it the forts (Van Vollenhoven 1995: 70-71). In order to strengthen Pretoria, the British now erected a network of blockhouses in around the town (Van Vollenhoven 2000b: 7).

After the War the forts became ruins. Fort Schanskop, which is situated close to the Voortrekker Monument, was restored in 1978 by the former SA Defence Force and it was opened as a military museum. It now is managed by the latter.

The Voortrekker Monument was erected between 1937 and 1949. The corner stone was laid on 16 December 1838 and the monument was inaugurated in 1949 (Grobler 2001: 18-20). The monument was built to commemorate the Voortrekkers (Heymans 1986: 6) and is the most important symbol of Afrikaner history.

7. DESCRIPTION OF THE ENVIRONMENT

During the fieldwork undertaken it was noted that the entire environment where the Educational Centre is planned is extremely disturbed – no natural environment exists (Figure 5-7). It therefore is imminent that nothing of a heritage value would be found here. It also is most likely that all possible signs of earlier human activities have been demolished.

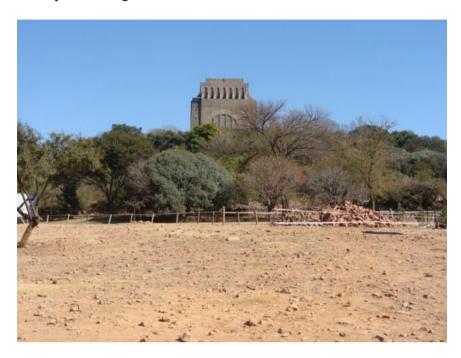


Figure 5: General view of the area where the Educational Centre will be built.



Figure 6: Area where the Educational Centre will be built. It is facing the Monument, which is not visible behind the trees from this angle.



Figure 7: Area surrounding the impacted site. Note the disturbance of the area.

8. DISCUSSION

The only remaining matter would be if the Educational Centre would have a negative visual impact on the Voortrekker Monument itself. It is believed not be the case. Two main reason for this exist. Firstly the monument is built on the top of the hill and therefore elevated to such an extent that the Educational Centre, which lies much lower down the hill, will not create any visual barrier towards the monument.

Secondly the high trees existing between the monument and the area where the Educational Centre will be erected create a visual transition between the two buildings (Figure 8). It also needs to be indicated that the education centre will be placed outside of the boundary of the declared national heritage site.

Therefore no mitigation is required. It would however be necessary to keep the trees in tact in order to maintain the current barrier.



Figure 8: Note the visual transition and elevation difference between the surveyed area and the Voortrekker Monument.

This can be summarized as follows:

- 1. A specific section of the site was declared a National Heritage site. This however only includes the monument and a small area surrounding it. The position of the proposed Educational Centre is outside of the boundary of the National Heritage site.
- 2. An ROD was issued by the Gauteng Department of Agriculture, Conservation and Environment in 2008, stating that the developments planned on site may continue. However, it did indicate that the necessary approval should be obtained from the heritage authorities on specific development, such as the one being planned now.
- 3. A locality plan (Figure 9-10) and site plan of the Educational Centre (Figure 11) is included, indicating that impact will be non-existent.
- 4. A photograph taken on site (Figure 12) clearly indicates that the height of the Educational Centre is such that it will not affect the view to the Monument. It also is bordered by trees which will be kept ensuring this aspect remain as such.
- 5. An elevation plan (Figure 13) and a plan indicating the view towards the Monument (Figure 14) is included, confirming the above.
- 6. The development will be less than 5 000 m². Therefore an HIA is not really needed, but since it is in close proximity to a National Heritage Site, it was deemed appropriate to follow this process.

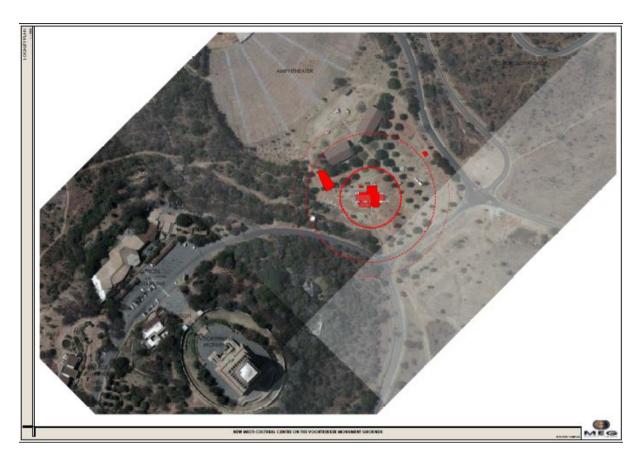


Figure 9: Locality plan, indicating the position of the Educational Centre (in red).



Figure 10 Specific location of the proposed development on the opposite side of the ring road around the Voortrekker Monument.

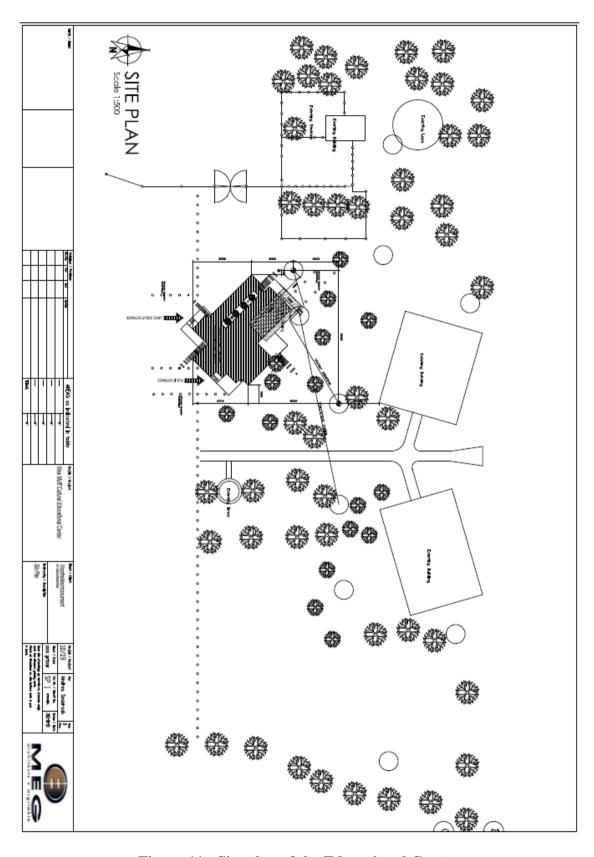


Figure 11: Site plan of the Educational Centre.

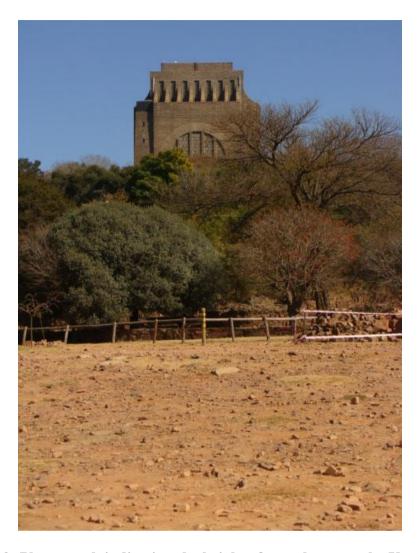


Figure 12: Photograph indicating the height of trees between the Voortrekker Monument and the area where the Educational Centre will be located. Also note the elevation difference between the two sites.



Figure 13: Elevations of the Educational Centre.



Figure 14: Proposed view of the Educational Centre towards the Voortrekker Monument indicating an almost non-existent visual impact.

9. SOCIAL CONSULTATION

A site notice was placed on site (Figure 15). This was done on 30 June 2014 and will stay on site until 31 July. It invites Interested and Affected parties to contact the heritage specialist should they have any enquiries/ comments.



Figure 15: Site notice.

An advertisement was also placed in two newspapers. One was placed in the Afrikaans paper, Beeld on 25 June 2014 (Figure 16). The second was placed in the English paper, The Pretoria News, on 25June (Figure 17). Again it invites Interested and Affected parties to contact the heritage specialist should they have any enquiries. The social consultation ended on 31 July 2014.



Figure 16: Advertisement in Beeld, 25 June 2014, p. 30.



Figure 17: Advertisement in Pretoria News, 25 June 2014, p. 2.

10. CONCLUSIONS AND RECOMMENDATIONS

It is concluded that that it is clear that even if the buildings were already erected, the chances of finding any cultural historical significant features are extremely slim. The HIA of the area was conducted successfully. In the surveyed area no sites of cultural significance have been found.

No comments were received during the social consultation process.

The final recommendations are as follows:

- The erection of the Educational Centre at the Voortrekker Monument Heritage Site can be approved.
- No further action is necessary.
- The barrier of trees between the Voortrekker Monument and the new Educational Centre needs to be maintained.
- Although highly unlikely it always is possible that archaeological and/or historical sites, features or artifacts may be encountered on site. Care should therefore be taken when development work commences that, if any artifacts are uncovered, a qualified archaeologist be called in to investigate.

11. REFERENCES

Bergh, J.S. (red.). 1999. Geskiedenisatlas van Suid-Afrika. Die vier noordelike

- provinsies. Pretoria: J.L. van Schaik.
- Changuion, L. 1999. Blanke vestiging noord van die Vaalrivier. Vroeë blanke reisigers en besoekers, 1723-ca.1845. Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.
- Coertze, P.J. & Coertze, R.D. 1996. Verklarende vakwoordeboek vir Antropologie en Argeologie. Pretoria: R.D. Coertze.
- Coetzee, N.A. 1992. Die plase van Pretoria. Stadsraad van Pretoria, 1999. **Pretoria Fonteinedal. Lewensbron van Pretoria**. Pretoria: Stadsraad van Pretoria.
- Delius, P. 1983. The land belongs to us. Johannesburg: Ravan Press.
- Grobler, J. 2001. Discover the Voortrekker Monument. Pretoria: Grourie Entrepeneurs.
- Heymans, R. 1986. Voortrekker Monument Pretoria: Business Print Centre.
- Horn, A.C. 1996. Okkupasie van die Bankeveld voor 1840 n.C.: 'n sintese. **Suid-Afrikaanse Tydskrif vir Etnologie**, 19(1).
- Huffman, T.N. 2007. Handbook to the Iron Age. **The archaeology of pre-colonial farming societies in Southern Africa.** Cape Town: CTP Book Printers.
- Junod, H.P. 1955. The Bantu population of Pretoria. Engelbrecht, S.P., Agar-Hamilton,
 J.A.I., Pelzer, A.N. & Behrens, H.P.H. (reds.). 1955. Pretoria (1855-1955)
 Geskiedenis van die stad Pretoria. Pretoria: Stadsraad van Pretoria.
- Knudson, S.J. 1978. **Culture in retrospect.** Chicago: Rand McNally College Publishing Company.
- Korsman, S.A. & Meyer, A. 1999. Die Steentydperk en rotskuns. Bergh, J.S. (red.). **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.
- National Archives Depot, Pretoria. Transvaal Archives Depot. Archive of the Registrar of deeds, Inspection report, Pretoria 1841-1864, RAK 2750, p.2.
- National Archives Depot, Pretoria. Transvaal Archives Depot. Archive of the Registrar of deeds, Transfer records II, Pretoria 348-482, RAK 2991, p. 631.
- Rasmussen, R.K. 1978. **Migrant kingdom. Mzilikazi's Ndebele in South Africa**. London: Rex Collings.
- Republic of South Africa. 1983. **Human Tissue Act** (No 65 of 1983). Pretoria: The Government Printer.
- Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.
- Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.
- Republic of South Africa. 1980. **Ordinance on Excavations** (Ordinance no. 12 of 1980). Pretoria: The Government Printer.
- Van Schalkwyk, J.A., Van Vollenhoven, A.C. & Naudé, M. 1992. 'n Argeologiese ondersoek van die bouvalle bekend as die Lukas Bronkhorsthuis in die Fonteinedal, Pretoria. (Unpublished report, Sunnyside: National Cultural History Museum.
- Van Vollenhoven, A.C., 1995. **Die Militêre fortifikasies van Pretoria** (**1880-1902**). 'n **Studie in die historiese argeologie.** Pretoria: Heinekor.
- Van Vollenhoven, A.C. 2000a. 'n Voorgestelde paradigma vir navorsing op historiesargeologiese erfenishulpbronne in Suid-Afrika aan die hand van gevallestudies in noordelike Gauteng. (Unpublished D.Phil. thesis, Pretoria: University of Pretoria).
- Van Vollenhoven, A.C., 2000b. Die forte van Pretoria. **Pretoriana**. (113), pp. 2-10.
- Van Vollenhoven, A.C. 2005. Die eerste blanke bewoner van die Pretoria-omgewing. **Suid-Afrikaanse Tydskrif vir Kultuurgeskiedenis**, 19(2).

Van Vollenhoven, A.C. 2006. Die prehistoriese en vroeë historiese tydvak in Pretoria. **Suid-Afrikaanse Tydskrif vir Kultuurgeskiedenis**, 20 (2).

APPENDIX A

DEFINITION OF TERMS:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B

DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE:

Historic value: Important in the community or pattern of history or has an association

with the life or work of a person, group or organization of importance in

history.

Aesthetic value: Important in exhibiting particular aesthetic characteristics valued by a

community or cultural group.

Scientific value: Potential to yield information that will contribute to an understanding of

natural or cultural history or is important in demonstrating a high degree

of creative or technical achievement of a particular period

Social value: Have a strong or special association with a particular community or

cultural group for social, cultural or spiritual reasons.

Rarity: Does it possess uncommon, rare or endangered aspects of natural or

cultural heritage.

Representivity: Important in demonstrating the principal characteristics of a particular

class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C

SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.

- Medium Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.

- High Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

Heritage significance:

- Grade I Heritage resources with exceptional qualities to the extent that they are of national significance

- Grade II Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate

- Grade III Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

- National Grade I significance should be managed as part of the national estate - Provincial Grade II significance should be managed as part of the provincial estate should be included in the heritage register and not be - Local Grade IIIA mitigated (high significance) should be included in the heritage register and may be - Local Grade IIIB mitigated (high/ medium significance) site should be mitigated before destruction (high/ - General protection A (IV A) medium significance) - General protection B (IV B) site should be recorded before destruction (medium significance) - General protection C (IV C) phase 1 is seen as sufficient recording and it may be demolished (low significance)

APPENDIX D

PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – grade I and II

Protected areas - an area surrounding a heritage site

Provisional protection – for a maximum period of two years

Heritage registers – listing grades II and III

Heritage areas – areas with more than one heritage site included

Heritage objects – e.g. archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

Objects protected by the laws of foreign states Structures – older than 60 years Archaeology, palaeontology and meteorites Burial grounds and graves Public monuments and memorials

APPENDIX E

HERITAGE IMPACT ASSESSMENT PHASES

- 1. Pre-assessment or scoping phase establishment of the scope of the project and terms of reference.
- 2. Baseline assessment establishment of a broad framework of the potential heritage of an area.
- 3. Phase I impact assessment identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
- 4. Letter of recommendation for exemption if there is no likelihood that any sites will be impacted.
- 5. Phase II mitigation or rescue planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost
- 6. Phase III management plan for rare cases where sites are so important that development cannot be allowed.