


**PHASE 1 HERITAGE IMPACT ASSESSMENT (HIA) FOR THE PROPOSED
MINING RIGHT ON A PORTION OF PORTION 6 AND A PORTION OF
PORTION 8 OF RONDEVLY 208 IR, AS WELL AS ON A PORTION OF
PORTION 37 AND 38 OF THE FARM DWARSFONTEIN 209 IR**


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For:

Vandasparck Pty Ltd

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Although all possible care is taken to identify/find all sites of cultural importance during the initial survey of the study area, the nature of archaeological and historical sites are as such that it is always possible that hidden or sub-surface sites could be overlooked during the study. Leonie Marais Heritage Practitioner will not be held liable will not be held liable for such oversights or for the costs incurred as a result thereof.

Contents of this report in terms of Regulation GNR 982 of 2014 as amended, Appendix 6	Cross reference section
(a) details of— the specialist who prepared the report; and the expertise of that specialist to compile a specialist report including a curriculum vitae;	Page 1, Appendix 1
(b) a declaration that the specialist is independent in a form as may be specified by the competent authority;	Page 4
(c) an indication of the scope of, and the purpose for which, the report was prepared;	Page 6
(d) the date and season of the site investigation and the relevance of the season to the outcome of the assessment;	Page 17
(e) a description of the methodology adopted in preparing the report or carrying out the specialised process;	Section 1.1
(f) the specific identified sensitivity of the site related to the activity and its associated structures and infrastructure;	Section 4
(g) an identification of any areas to be avoided, including buffers;	Section 4
(h) a map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers;	Section 4
(i) a description of any assumptions made and any uncertainties or gaps in knowledge;	Section 3.2.6
(j) a description of the findings and potential implications of such findings on the impact of the proposed activity, including identified alternatives on the environment;	Section 3.2.7
(k) any mitigation measures for inclusion in the EMPr	Section 4.3
(l) any conditions for inclusion in the environmental authorisation	Section 5
(m) any monitoring requirements for inclusion in the EMPr or EA	Section 5
(n) a reasoned opinion if the activity should be authorised	Section 6
(o) a summary and copies of any comments received during any consultation process and where applicable all responses thereto; and	Not Applicable
(p) a summary and copies of any comments received during any consultation process	Not Applicable
(q) any other information requested by the competent authority	Not Applicable

Declaration of specialist

I, Leonie Marais, compiled this report:

PHASE 1 HERITAGE IMPACT ASSESSMENT (HIA) FOR THE PROPOSED MINING RIGHT ON A PORTION OF PORTION 6 AND A PORTION OF PORTION 8 OF RONDEVLY 208 IR, AS WELL AS ON A PORTION OF PORTION 37 AND 38 OF THE FARM DWARSFONTEIN 209 IR

As a registered Heritage Practitioner and Accredited member: SA Society for Cultural History (CH002).

All information provided in this report is a true reflection of conditions encountered on site.

I further declare that I:

- have no financial interest in the proposed development other than remuneration for work performed
- neither have nor will have any vested or conflicting interests in the proposed development
- Undertake to disclose to the competent authority, any material information that has or may have the potential to influence decisions by the competent authority.



Leonie Marais
Heritage Practitioner
Accredited member: SA Society for Cultural History (CH002)

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ABOUT THIS REPORT

The heritage report must reflect that consideration has been given to the history and heritage significance of the study area and that the proposed activities is sensitive towards the heritage resources and does not significantly alter or destroy the heritage significance of the study area.

The heritage report must refer to the heritage resources currently in the study area.

The opinion of an independent heritage consultant is required to evaluate if the proposed work generally follows a good approach that will ensure the conservation of the heritage resources.

The National Heritage Resources Act, 1999 (Act No. 25 of 1999), the National Environmental Management Act, 1998 (Act No. 107 of 1998), Ordinance on Exhumations, 1980 (No. 12 of 1980) and the Human Tissues Act, 1983 (Act No. 65 of 1983 as amended) are the guideline documents for a report of this nature.

Leonie Marais was appointed by Vandaspark Pty Ltd to carry out a Phase 1 Heritage Impact Assessment (HIA) for the proposed mining right on a portion of Portion 6 and a portion of Portion 8 of Rondevly 208 IR, as well as on a portion of Portion 37 and 38 of the farm Dwarsfontein 209 IR

DEFINITION OF TERMS:

“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 other decoration or any other means.

“archaeological” means—

(a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;

(b) rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;

(c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation; and

(d) features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found.

“conservation”, in relation to heritage resources, includes protection, maintenance, preservation and sustainable use of places or objects so as to safeguard their cultural significance.

“cultural significance” means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

“development” means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including—

(a) construction, alteration, demolition, removal or change of use of a place or a structure at a place;

(b) carrying out any works on or over or under a place;

(c) subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;

(d) constructing or putting up for display signs or hoardings;

(e) any change to the natural or existing condition or topography of land; and
(f) any removal or destruction of trees, or removal of vegetation or topsoil; object that is specifically designated by that state as being of importance.

“grave” means a place of interment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place.

“heritage resource” means any place or object of cultural significance.

“heritage resources authority” means the South African Heritage Resources Agency, or in respect of a province, a provincial heritage resources authority.

“heritage site” means a place declared to be a national heritage site by SAHRA or a place declared to be a provincial heritage site by a provincial heritage resources authority.

“improvement”, in relation to heritage resources, includes the repair, restoration and rehabilitation of a place protected in terms of Act 25 of 1999.

“living heritage” means the intangible aspects of inherited culture, and may include—

- (a) cultural tradition;
- (b) oral history;
- (c) performance;
- (d) ritual;
- (e) popular memory;
- (f) skills and techniques;
- (g) indigenous knowledge systems; and
- (h) the holistic approach to nature, society and social relationships.

“local authority” means a municipality as defined in section 10B of the Local Government Transition Act, 1993 (Act No. 209 of 1993).

“management”, in relation to heritage resources, includes the conservation, presentation and improvement of a place protected in terms of Act 25 of 1999.

“meteorite” means any naturally-occurring object of extraterrestrial origin.

“object” means any movable property of cultural significance which may be protected in terms of any provisions of Act 25 of 1999, including—

- (a) any archaeological artefact;
- (b) palaeontological and rare geological specimens;
- (c) meteorites; and
- (d) other objects.

“palaeontological” means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or traces.

“place” includes—

- (a) a site, area or region;
- (b) a building or other structure which may include equipment, furniture, fittings and articles associated with or connected with such building or other structure;
- (c) a group of buildings or other structures which may include equipment, furniture, fittings and articles associated with or connected with such group of buildings or other structures;
- (d) an open space, including a public square, street or park; and
- (e) in relation to the management of a place, includes the immediate surroundings of a place.

“presentation” includes—

- (a) the exhibition or display of;
- (b) the provision of access and guidance to;
- (c) the provision, publication or display of information in relation to; and
- (d) performances or oral presentations related to, heritage resources protected in terms of Act 25 of 1999.

“public monuments and memorials” means all monuments and memorials—

- (a) erected on land belonging to any branch of central, provincial or local government, or on land belonging to any organisation funded by or established in terms of the legislation of such a branch of government; or
- (b) which were paid for by public subscription, government funds, or a public-spirited or military organisation, and are on land belonging to any private individual.

“site” means any area of land, including land covered by water, and including any structures or objects thereon.

“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.

“victims of conflict” means—

(a) certain persons who died in any area now included in the Republic as a direct result of any war or conflict as specified in the regulations, but excluding victims of conflict covered by the Commonwealth War Graves

Act, 1992 (Act No. 8 of 1992);

(b) members of the forces of Great Britain and the former British Empire who died in active service in any area now included in the Republic prior to 4 August 1914;

(c) persons who, during the Anglo-Boer War (1899-1902) were removed as prisoners of war from any place now included in the Republic to any place outside South Africa and who died there; and

(d) certain categories of persons who died in the "liberation struggle" as defined in the regulations, and in areas included in the Republic as well as outside the Republic.

EXECUTIVE SUMMARY

Leonie Marais Heritage Practitioner was requested by REC SERVICES (PTY) LTD (trading as Rock Environmental Consulting) to carry out a Phase 1 Heritage Impact Assessment (HIA) for the proposed mining right on a portion of Portion 6 and a portion of Portion 8 of the Farm Rondevly 208-IR, and a portion of Portion 37 and 38 of the Farm Dwarsfontein 209 IR, Mpumalanga Province.

A field survey was conducted after which a survey of literature was undertaken. Graves are situated in the mining area and within 100m from the proposed mining area. Any mining planned closer than 100m from the graves have to be authorised by the Provincial Heritage Resources Agency (PHRA) of Mpumalanga. Any relocation of graves have to be authorised and the process be undertaken by a suitable specialist after permission was granted from the PHRA.

It should be noted that the sub-surface archaeological and/or historical deposits and graves are always a possibility. Care should be taken during any work in the entire area and if any of the above is discovered, an archaeologist/heritage practitioner should be commissioned to investigate.

1. INTRODUCTION

Based on the results obtained from the prospecting right conducted on the same pieces of land, Vandasark Pty (Ltd) is proposing to upgrade the existing prospecting area to a mining right. The project is known as the Rondevly Colliery Mining Right project. The mining right application to be applied for will be for the mining of coal using the box cut method in the area illustrated in Figure 1.



Figure 1: Mining Right area illustrated in red.

The box cut method aims to reach the coal seam, and entails an initial cut given for the development of a mine (the cut generally resembles a box having walls on all sides). After the box cut is made benches are developed that will widen or extend the initial cut. To form additional benches new cuts are made to reach the next bench's floor level. Infrastructure planned for the site will include and not be limited to waste rock dumps, power lines, access roads, offices, parking and a truck loading area.

1.1 WHY A PHASE 1 HERITAGE IMPACT ASSESSMENT IS REQUIRED?

This project may potentially impact on any types and ranges of heritage resources that are outlined in Section 3 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999). Subsequently a Phase 1 Heritage Impact Assessment (HIA) was commissioned by REC SERVICES (PTY) LTD (trading as Rock Environmental Consulting) and conducted by Leonie Marais.

1.1.1 METHOD

The objective of this Phase 1 Heritage Impact Assessment (HIA) was to gain an overall understanding of the heritage sensitivities of the area and indicate how they may be impacted on through development activities. The site survey took place on 4 October 2018.

In order to establish heritage significance the following method was followed:

- Investigation of primary resources (archival information)
- Investigation of secondary resources (literature and maps)
- Physical evidence (site investigation)
- Determining Heritage Significance.

1.2 BRIEF BACKGORUND HISTORY OF THE GREATER STUDY AREA

The Stone Age

Stone Age sites are marked by stone artefacts that are found scattered on the surface or as parts of deposits in caves and rock shelters. The Stone Age is divided into the Early Stone Age (ESA) (covers the period from approximately 2.5 million years ago to 250 000 years ago), the Middle Stone Age (MSA) (refers to the period approximately from 250 000 years ago to 22 000 years ago) and the Late Stone Age (LSA) (the period from approximately 22 000 years ago to 200 years ago).

Dongas and eroded areas at Maleoskop near Groblersdal is one of only a few places in Mpumalanga where ESA Olduwan and Acheulian artefacts have been found. Evidence for the MSA has been excavated at the Bushman Rock Shelter near Ohrigstad. This cave was repeatedly visited over a prolonged period. The oldest layers date back to 40 000 years BP and the youngest to 27 000 BP.

LSA occupation of the Mpumalanga Province also has been researched at Bushman Rock Shelter where it dates back 12 000 BP to 9 000 BP and at Höningnestkrans near Badfontein where a LSA site dates back to 4 870 BP to 200 BP.

The LSA is also associated with rock paintings and engravings which were done by San hunter-gatherers and Khoi Khoi herders. Rock paintings were also done by Early Iron Age (EIA) farmers. Approximately 400 rock art sites are distributed throughout Mpumalanga, notably in the northern and eastern regions at places such as Emalaheni (Witbank) (4), Lydenburg (Mashishing) (2), White River and the southern Kruger National Park (76), Nelspruit (Mbombela) and the Nsikazi District (250). The Ermelo area holds eight rock paintings.

The rock art of the Mpumalanga Province can be divided into San rock art which is the most widely spread, herder or KhoeKhoe paintings (thin scattering from the Limpopo Valley) through the Lydenburg district into the Nelspruit area) and localised late white farmer paintings. Farmer paintings can be divided into Sotho-Tswana finger paintings and Nguni engravings (Only 20 engravings occur at Boomplaats, north-west of Lydenburg). Farmer paintings are more localised than San or herder paintings and were mainly used by the painters for instructional purposes.

During the LSA and Historical Period, San people called the Batwa lived in sandstone caves and rock shelters near Lake Chrissie in the Ermelo area. The Batwa are descendants of the San, the majority of which intermarried with Bantu-Negroid people such as the Nhlapo from Swazi-descend and Sotho-Tswana clans such as the Pai and Pulana. Significant intermarriages and cultural exchanges occurred between these groups. The Batwa were hunter-gatherers who lived from food which they collected from the veldt as well as from the pans and swamps in the area. During times of unrest, such as the difaqane in the early nineteenth century, the San would converge on Lake Chrissie for food and sanctuary. The caves, lakes, water pans and swamps provided relative security and camouflage. Here, some of the San lived on the surfaces of the water bodies by establishing platforms with reeds. With the arrival of the first colonists in the nineteenth century many of the local Batwa family groups were employed as farm labourers.

Iron Age

The Iron Age is associated with the first agro-pastoralists or farming communities who lived in semi-permanent villages and who practised metal working during the last two millennia. The Iron Age is usually divided into the Early Iron Age (covers the 1st millennium AD) and the Later Iron Age (LIA) (covers the first 880 years of the 2nd millennium AD).

Evidence for the first farming communities in the Mpumalanga Province is derived from a few EIA potsherds which occur in association with the LSA occupation of the Höningnest Shelter near Badfontein. The co-existence of EIA potsherds and LSA stone tools suggest some form of 'symbiotic relationship' between the Stone Age huntergatherers who lived in the cave and EIA farmers in the area (also note Batwa andSwazi/Sotho Tswana relationship). The Welgelegen Shelter on the banks of the Vaal River near Ermelo also reflects some relationship between EIA

farmers who lived in this shelter and hunter-gatherers who manufactured stone tools and who occupied a less favourable overhang nearby during AD1200. EIA sites were also investigated at Sterkspruit near Lydenburg (AD720) and in Nelspruit where the provincial governmental offices were constructed. The most infamous EIA site in South Africa is the Lydenburg head site which provided two occupation dates, namely during AD600 and from AD900 to AD1100. At this site the Lydenburg terracotta heads were brought to light. Doornkop, located south of Lydenburg, dates from AD740 and AD810 (Evers, 1981; Whitelaw, 1996). The Late Iron Age is well represented in Mpumalanga and stretches from AD1500 well into the nineteenth century and the Historical Period. Several spheres of influence, mostly associated with stone walled sites, can be distinguished in the region. Some of the historically well-known spheres of influence include the following:

- Early arrivals in the Mpumalanga Province such as Bakone clans who lived between Lydenburg, Badfontein and Machadodorp and Eastern Sotho clans such as the Pai, Pulana and Kutswe who established themselves in the eastern parts of the province.
- Swazi expansion into the Highveld and Lowveld of the Mpumalanga Province occurred during the reign of Sobhuza (AD1815 to 1836/39) and Mswati (AD1845 to 1868) while Shangaan clans entered the province across the Lembombo Mountains in the east during the second half of the nineteenth century.
- The Bakgatla (Pedi) chiefdom in the Steelpoort Valley rose to prominence under Thulare during the early 1800's and was later ruled by Sekwati and Sekhukune from the village of Tsjate in the Leolo Mountains. The Pedi maintained an extended sphere of influence across the Limpopo and Mpumalanga Provinces during the nineteenth century.
- The Ndzundza-Ndebele established settlements at the foot of the Bothasberge (KwaMaza and Esikhunjini) in the 1700's and lived at Erholweni from AD1839 to AD1883 where the Ndzundza-Ndebele's sphere of influence known as KoNomthjarhelo stretched across the Steenkampsberge.
- The Bakopa lived at Maleoskop (1840 to 1864) where they were massacred by the Swazi, while the Bantwane live in the greater Groblersdal and Marble Hall areas.
- Corbelled stone huts which are associated with ancestors of the Sotho on Tafelkop near Davel which date from the AD 1700's into the nineteenth century.

- Stone walled settlements spread out along the eastern edge of the Groot Dwarsriver Valley served as the early abode for smaller clans such as the Choma and Phetla communities which date from the nineteenth century.

The Historical Period

Historical towns in the vicinity of the area earmarked for development include Emalahleni (Witbank) and Middelburg. Witbank came into being as the railway line between Pretoria and Lourenço Marques which was built in 1894 passed close to where Emalahleni (Witbank) is located today. The first Europeans who came to the area observed the abundance of coal, which was evident on the surface or in the beds of streams. A stage post for wagons close to a large outcrop of whitish stones (a 'white ridge') gave the town its name. Witbank was established in 1903 on a farm known as Swartbos which belonged to Jacob Taljaard.

Middelburg is one of the oldest towns that were established by the Voortrekkers in the previous Transvaal. The town was established on the farms of Klipfontein and Keerom on the banks of the Klein Olifants River in 1859. It is generally accepted that Middelburg's name is derived from the fact that the Transvaal Republic established the town midway between Pretoria and Lydenburg. The choice for Middelburg's location was not well accepted by the inhabitants and it was moved to the farm Sterkfontein. Here, a town was established and named Nasaret (Nazareth). However, the name did not appeal to the local community and its original name was reinstated. Middelburg temporarily served as the seat of the Transvaal Republic after the siege of Pretoria during the South African War (1899-1902).

Today Middelburg and Emalahleni (Witbank) are important centres where coal is mined and transported to Richards Bay from where it is exported all over the world. The 20th century also saw the introduction of large-scale irrigation and dry land farming on the Eastern Highveld. Today the economic activities of the area include diamond and coal mining, light and heavy industries as well as steel and vanadium operations¹.

¹ J.C.C. Pistorius, A Phase 1 Heritage Impact Assessment (HIA) Study For The Proposed Landau Colliery Navigation Section Umlalazi South Block Extension Near Emahlaleni (Witbank) On The Eastern Highveld of the Mpumalanga Province, March 2014. (Unpublished Report)

1.3 LOCATION AND PHOTOGRAPHIC RECORD OF STUDY AREA

The mining area extends over a portion of Portion 6 and Portion 8 of Rondevly 208 IR, and over a portion of Portion 37 and 38 of the Farm Dwarsfontein 209 IR. The mining right area is situated 4km northwest of Argent, 15km northeast of Delmas, 17km southwest of Kusile Power Station and around 50 km from Emalahleni. It is bordered by old mining works to the south and surrounded by agricultural land.



Figure 2: Locality Map

A site visit was conducted on 4 October 2018. The season and date of the site visit does not have any effect on the study outcome. Photographic evidence of attributes on site is presented in Figure 3 and in Photograph 1- 8.

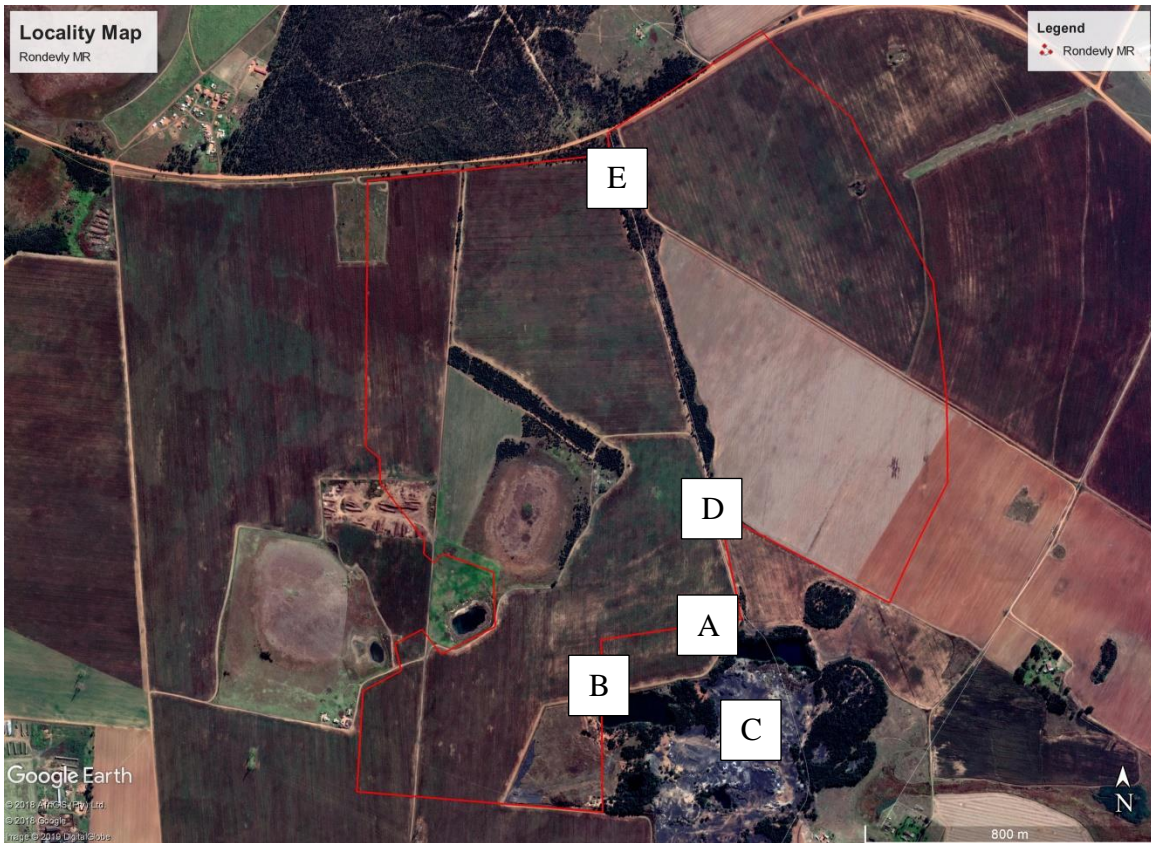


Figure 3: Photograph positions



Photograph 1: Site characteristics



Photograph 2: Site characteristics



Photograph 3: Site characteristics



Photograph 4: Graves situated in the greater study area



Photograph 5: Graves situated close to the mining area at E



Photograph 6: Graves situated close to the mining area at E



Photograph 7: Graves situated close to the mining area at E



Photograph 8: Graves situated close to the mining area at E

2. FINDINGS

2.1 PRE-COLONIAL HERITAGE SITES

Possibilities: Greater study area taken into account.

Stone Age

The Stone Age is the period in human history when stone material was mainly used to produce tools². In South Africa the Stone Age can be divided in three periods³;

- Early Stone Age 2 000 000 – 150 000 years ago
- Middle Stone Age 150 000 – 30 000 years ago
- Late Stone Age 40 000 years ago - +/- 1850 AD

Iron Age

The Iron Age is the period in human history when metal was mainly used to produce artefacts⁴. In South Africa the Iron Age can be divided in three periods;

² P. J. Coertze & R.D. Coertze, Verklarende vakwoordeboek vir Antropologie en Argeologie.

³ S.A. Korsman & A. Meyer, *Die Steentydperk en rotskuns* in J.S. Bergh (red) Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.

⁴ P.J. Coertze & R.D. Coertze, Verklarende vakwoordeboek vir Antropologie en Argeologie.

- Early Iron Age 250-900 AD
- Middle Iron Age 900-1300 AD
- Late Iron Age 1300-1840 AD⁵

There are no pre-colonial heritage sites evident in the study area. This can be attributed to previous farming and mining activities in the study area.

2.2 HISTORICAL PERIOD HERITAGE SITES

Possibilities: Greater study area taken into account.

- Pioneer sites;
- Sites associated with early mining;
- Structures older than 60 years;
- Graves (Graves younger than 60 years, graves older than 60 years, but younger than 100 years, graves older than 100 years, graves of victims of conflict or of individuals of royal descent).

Graves are situated within 100m from the proposed mining area

2.3 ORIGINAL LANDSCAPE

Previous farming and mining activities have altered the original landscape in the greater study area.

2.4 INTANGIBLE HERITAGE

The intangible heritage of the greater study area can be found in the stories of past and present inhabitants.

3. CATEGORIES OF HERITAGE VALUE (ACT 25 OF 1999)

The National Heritage Resources Act (Act 25 of 1999) identifies the following categories of value under section 3(1) and (2) of the Act under the heading “National Estate”:

“3 (1) For the purpose of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future

⁵ M.M. van der Ryst & A Meyer. *Die Ystertydperk* in J.S. Bergh (red) Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies and T.N Huffman, A Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa.

generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.

- (2) Without limiting the generality of subsection (1), the national estate may include-
- (a) places, buildings, structures and equipment of cultural significance;
 - (b) places 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);
 - (h) sites of significance relating to the history in South Africa;
 - (i) 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 interests; 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 I (xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).
- (3) Without limiting the generality of the subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of-
- (a) It is 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 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 and 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."

3.1 HERITAGE VALUE WEIGHED AGAINST CULTURAL SIGNIFICANCE CATEGORIES

3.1.1 Spiritual value

During the site visit/field work no indication of any spiritual activity was observed on the proposed site. Thus no sites of spiritual value will be impacted on by the proposed project.

3.1.2 Scientific value

No sites of scientific value were observed on or near the site earmarked for development.

3.1.3 Historical value

No historical value associated with the site could be found in primary and secondary sources.

3.1.4 Aesthetic value

No heritage item with exceptional aesthetic (architectural) value was identified in the study area.

3.1.5 Social value

Social value is attributed to sites that are used by the community for recreation and formal and informal meetings regarding matters that are important to the community. These sites include parks, community halls, sport fields etc. None of the said evident in the study area.

3.2 SPECIFIC CATEGORIES INVESTIGATED AS PER SECTION 3 (1) AND (2) OF THE NATIONAL HERITAGE LEGISLATION (ACT 25 OF 1999)

3.2.1 Does the site/s provide the context for a wider number of places, buildings, structures and equipment of cultural significance?

The study area does not provide context for a wider number of places, buildings, structures and equipment of cultural significance. The reason being the low density of heritage items in the study area.

3.2.2 Does the site/s contain places to which oral traditions are attached or which are associated with living heritage?

Places to which oral traditions are attached or associated with living heritage are usually find in conjunction with traditional settlements and villages which still practises age old traditions. None of these are evident near or on the proposed site.

3.2.3 Does the site/s contain historical settlements?

No historical settlements are located on or near the proposed site.

3.2.4 Does the site/s contain landscapes and natural features of cultural significance?

Due to previous agricultural activities and infrastructure development the original character of the landscape has been altered significantly in the study area. Therefore the site does not contain natural features of cultural significance.

3.2.5 Does the site/s contain geological sites of cultural importance?

Geological sites of cultural importance include meteorite sites (such as Tswaing Crater and Vredefort Dome), fossil sites (such as the Karoo and Krugersdorp area), important mountain ranges or ridges (such as the Magaliesburg, Drakensberg etc.). The proposed site is not located in an area known for sites of this importance.

3.2.6 Does the site/s contain a wide range of archaeological sites?

The proposed site does not contain any surface archaeological deposits, possibly due to previous agricultural and mining activities in the greater study area having destroyed any surface archaeological deposits.

The possibility of sub-surface findings always exists and should be taken into consideration in the Environmental Management Programme. If sub-surface archaeological material is discovered, work must stop and a heritage practitioner preferably an archaeologist contacted to assess the find and make recommendations.

3.2.7 Does the site/s contain any marked graves and burial grounds?

The specific site earmarked for development does not contain any marked graves or burial grounds, ***but graves are situated within 100m from the mining area, thus in the greater study area.***

The possibility of graves not visible to the human eye always exists and this should be taken into consideration in the Environmental Management Plan.

It is important to note that all graves and cemeteries are of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage Resources Act, 1999 (Act No. 25 of 1999) whenever graves are 60 years and older. Other legislation with regard to graves includes those when graves are exhumed and relocated, namely the Ordinance on Exhumations (no 12 of 1980) and the Human Tissues Act, 1983 (Act 65 No. of 1983 as amended).

If sub-surface graves are discovered, work should stop and a professional preferably an archaeologist contacted to assess the age of the grave/graves and to advice on the way forward.

3.2.8 Does the site/s contain aspects that relate to the history of slavery?

This is not an area associated with the history of slavery like the Western Cape Province.

3.2.9 Can the place be considered as a place that is important to the community or in the pattern of South African history?

In primary and secondary source material the proposed site is not described as important to the community or in the pattern of South African history.⁶

⁶ D.J. Potgieter (Editor-in-Chief), Standard Encyclopaedia of Southern Africa and the TAB database at the National Archives of South Africa.

3.2.10 Does the site/s embody the quality of a place possessing uncommon or rare endangered aspects of South Africa's natural and cultural heritage?

The proposed site does not possess uncommon, rare or endangered aspects of South Africa's natural and cultural heritage. These sites are usually regarded as Grade 1 or World Heritage Sites.

3.2.11 Does the site/s demonstrate the principal characteristics of South Africa's natural or cultural places?

The proposed site does not demonstrate the principal characteristics of South Africa's natural or cultural places. These characteristics are usually associated with aesthetic significance.

3.2.12 Does the site/s exhibit particular aesthetic characteristics valued by the community or cultural groups?

This part of the greater study area does not exhibit particular aesthetic characteristics valued by the community or cultural groups. The reason being the low density of heritage buildings and structures located in the greater study area.

3.2.13 Does the site/s contain elements, which are important in demonstrating a high degree of creative technical achievement?

The site does not contain elements which are important in demonstrating a high degree of creative technical achievement. Reason being none of the above from 3.2.1 to 3.2.12 is evident on site.

3.2.14 Does the site/s have strong and special associations with particular communities and cultural groups for social, cultural and spiritual reasons?

The proposed site does not have a strong or special association with particular communities and cultural groups for social, cultural and spiritual reasons. No comment in this regard was received up to date during the public participation period.

3.2.15 Does the site/s have a strong and special association with the life or work of a person, group or organisation?

No indication of the above could be found in primary and secondary research sources.⁷

⁷ C.J. Beyers (Editor-in-Chief), Dictionary of South African Biography (vol I-V) and the TAB database at the National Archives of South Africa

4. IMPACT ASSESSMENTS

4.1 Methodology

The impact assessment methodology (as defined below) whereby the Significance of a potential impact is determined through the assessment of the relevant temporal and spatial scales determined of the Extent, Magnitude and Duration criteria associated with a particular impact. This method does not explicitly define each of the criteria but rather combines them and results in an indication of the overall significance.

The impact assessment methodology used to determine the significance of impacts prior and after mitigation is presented below.

Extent of the impact

The EXTENT of an impact is the physical extent/area of impact or influence.

Score	Extent	Description
1	Footprint	The impacted area extends only as far as the actual footprint of the activity.
2	Site	The impact will affect the entire or substantial portion of the site/property.
3	Local	The impact could affect the area including neighbouring properties and transport routes.
4	Region	Impact could be widespread with regional implication.
5	National	Impact could have a widespread national level implication.

Duration of the impact

The DURATION of an impact is the expected period of time the impact will have an effect.

Score	Duration	Description
1	Short term	The impact is quickly reversible within a period of less than 12 months, limited to the construction phase, or immediate

		commencement of floods.
2	Short to medium term	The impact will have a short term lifespan (2–5 years).
3	Medium term	The impact will have a medium term lifespan (6 – 10 years)
4	Long term	The impact will have a medium term lifespan (10 – 25 years)
5	Permanent	The impact will be permanent beyond the lifespan of the development

Intensity of the impact

The INTENSITY of an impact is the expected amplitude of the impact.

Score	Intensity	Description
1	Minor	The activity will only have a minor impact on the affected environment such a way that the natural processes or functions are not affected.
2	Low	The activity will have a low impact on the affected environment.
3	Medium	The activity will have a medium impact on the affected environment function and process continue, albeit in a modified way.
4	High	The activity will have a high impact on the affected environment may be disturbed to the extent where it temporarily or permanently ceases.
5	Very High	The activity will have a very high impact on the affected environment which may be disturbed to the extent where it temporarily or permanently ceases.

Reversibility of the impact

The REVERSIBILITY of an impact is the severity of the impact on the ecosystem structure

Score	Reversibility	Description
1	Completely reversible	The impact is reversible without any mitigation or management measures

2	Nearly completely reversible	The impact is reversible without any significant mitigation and management measures. Some time and resources required.
3	Partly reversible	The impact is only reversible with the implantation of mitigation and management measures. Substantial time and resources required.
4	Nearly irreversible	The impact is can only marginally be reversed with the implantation of significant mitigation and management measures. Significant time and resources required to ensure impact is on a controllable level.
5	Irreversible	The impact is irreversible.

Probability of the impact

The PROBABILITY of an impact is the severity of the impact on the ecosystem structure


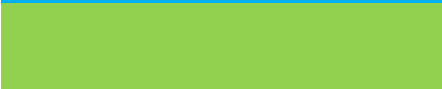



Score	Probability	Description
1	Improbable	The possibility of the impact occurring is highly improbable (le. of impact occurring).
2	Low	The possibility of the impact occurring is very low, due eitl circumstances, design or experience (5% to 30% of impact occu
3	Medium	There is a possibility that the impact will occur to the e provision must be made therefore (30% to 60% of impact occu
4	High	There is a high possibility that the impact will occur to the e provision must be made therefore (60% to 90% of impact occu
5	Definite	The impact will definitely take place regardless of any preven and there can only be relied on migratory actions or contingen contain the effect (90% to 100% of impact occurring).

Calculation of Impacts – Significance Rating of Impact

- Significance is determined through a synthesis of the various impact characteristics and represents the combined effect of the Irreplaceability (Magnitude, Extent, Duration, and Intensity) multiplied by the Probability of the impact. The significance of an impact is rated according the scores a presented below

Equation 1:

$$\text{Significance} = \text{Irreplaceability (Reversibility + Intensity + Duration + Extent)} \times \text{Probability}$$

Significance Rating		
Score	Significance	Colour Code
1 to 20	Very low	
21 to 40	Low	
41 to 60	Medium	
61 to 80	High	
81 to 100	Very high	

Degree to which the impact can be mitigated: *The effect of mitigation measures on the impact and its degree of effectiveness:*

Equation 2:

$$\text{Significance Rating (WM)} = \text{Significance Rating (WOM)} \times \text{Mitigation Efficiency}$$

Mitigation Efficiency (ME)	
High	0,2
Medium to High	0,4
Medium	0,6
Low to Medium	0,8

Low

1,0

Confidence rating: *Level of certainty of the impact occurring.*

- **Certain**
- **Sure**
- **Unsure**

Cumulative impacts: *The effect the combination of past, present and “reasonably foreseeable” future actions have on aspects.*

- Very Low cumulative impact
- Low cumulative impact
- Medium cumulative impact
- High cumulative impact

4.2 Impact Assessment

The table below illustrates the impact assessment of impacts in the various phases of the project.

Aspect	Nature of Impact	Phase	Impact Status	Extent	Duration	Intensity	Reversibility	Irreplaceability	Probability	Significance	Mitigation Potential	Significance	Confidence Rating	Cumulative Impact
										Pre-Mitigation		Post-Mitigation		
Heritage	Impact on existing Graves	C, O, D	Potential	1	5	4	5	15	5	75	1	50	Certain	Medium
	Impacts on potential subsurface archaeological and/or historical material	C, O, D	Potential	1	5	3	5	14	3	42	1	39	Certain	Medium

4.3 Mitigation measures to be implemented

- Graves are situated within 100m from the proposed mining area and should preferably conserved *in situ*.
- A buffer of 100m will need to be implemented from the closest graves to the mining area. No mining is allowed within 100m from graves without approval from SAHRA.
- Mining activities are not allowed to isolate the graves present as the said graves need to be accessible for family and relatives.
- Graves could be relocated if the mining activity will isolate graves and such relocations are subject to a formal relocation process by a suitable and qualified heritage specialist.
- Fencing of the existing graveyards and an indication of the 100m buffer.
- The discovery of subsurface archaeological and/or historical material as well as graves must be considered in the Environmental Management Programme

5. RECOMMENDATIONS

- Graves are situated within 100m from the proposed mining area and should preferably be conserved *in situ*.
- A buffer of 100m will need to be implemented from the closest graves to the mining area. No mining is allowed within 100m from graves without approval from SAHRA.
- Mining activities are not allowed to isolate the graves present as the said graves need to be accessible for family and relatives.
- Graves could be relocated if the mining activity will isolate graves and such relocations are subject to a formal relocation process by a suitable and qualified heritage specialist.
- Fencing of the existing graveyards.
- The discovery of subsurface archaeological and/or historical material as well as graves must be considered in the Environmental Management Programme. See 3.2.6 and 3.2.7.
- 100m buffer for graves are illustrated in Figure below:

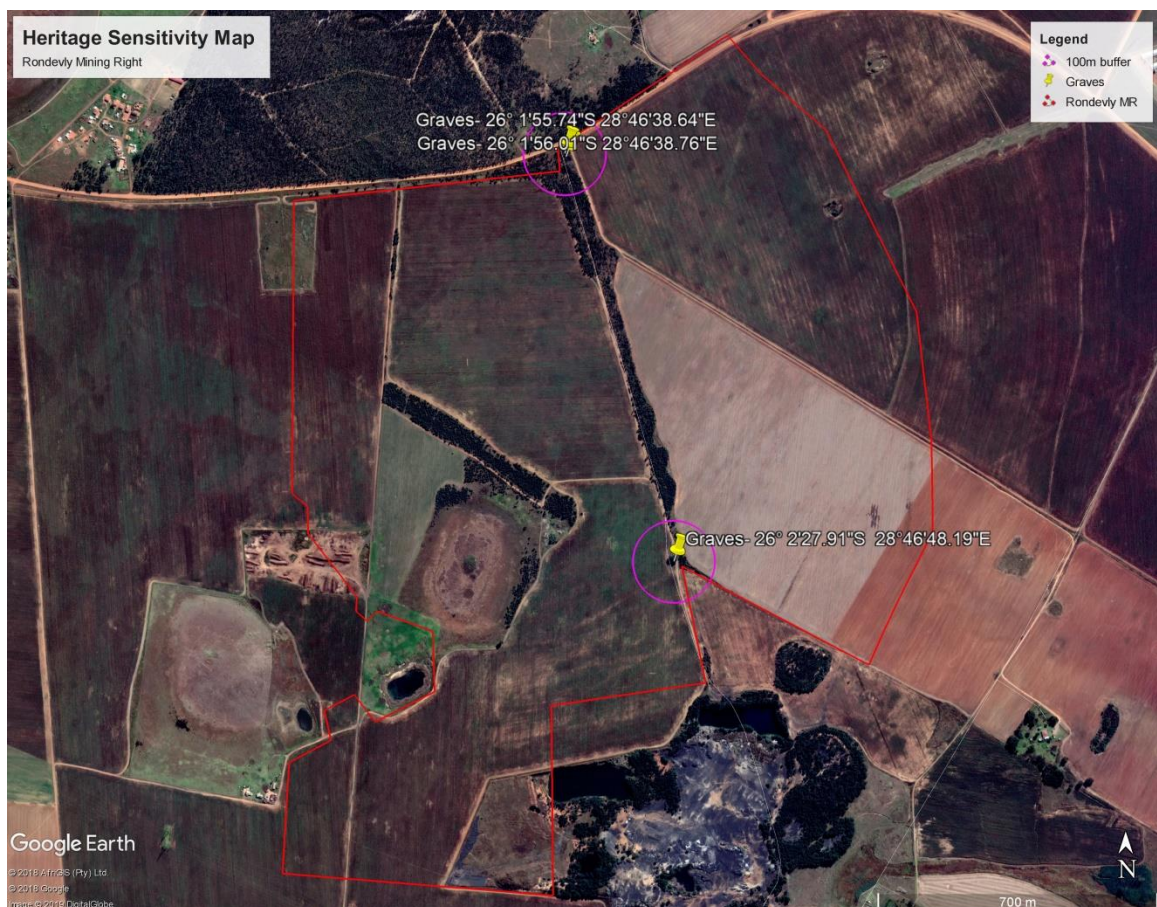


Figure4: Heritage sensitivity map

6. WAY FORWARD

- Submit this report as a Section 38 Application in term of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) to the Provincial Heritage Resources Authority of Mpumalanga for comment/approval. The basis of such an application would include the graves present within 100m from the site will be protected by a 100m buffer.
- Indicate by means of the EIA process if graves will be relocated. This process will need to be undertaken by means of the correct processes and by a suitable qualified heritage practitioner.
- Fencing of the graveyards, still providing access.
- If the graves will be conserved in situ, monitoring of compliance in terms of the 100m buffer needs to be undertaken throughout the lifespan of the project.

7. RECOMMENDATION BY THE SPECIALIST

It is the opinion of the specialist that with proper mitigation of impacts and the implementation of the 100m buffer pending authorization from the PHRA, the activity should be allowed to continue as it will not impact on heritage resources. This is subject to the recommendations and mitigation measures included in this report.

ACKNOWLEDGEMENTS

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Pistorius, J.C.C. A Phase 1 Heritage Impact Assessment (HIA) Study For The Proposed Landau Colliery Navigation Section Umlalazi South Block Extension Near Emahlaleni (Witbank) On The Eastern Highveld of the Mpumalanga Province, March 2014. (Unpublished).

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Rosenthal E. (Editor) Encyclopaedia of Southern Africa, London and New York 1973

The National Archives of South Africa databases.

Appendix 1_ CV of specialist

Curriculum Vitae



Name: Leonie Marais

Address: 868 Endemann Street
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PRETORIA
0084

Contact Numbers: Mobile: +27 82 576 6253

E-mail: leoniembotes@gmail.com

Identity number: 7003040010081

Home language: Afrikaans

Other language skills: English

Health: Excellent

Computer literate: Yes

1. Education

1.1 Tertiary

Institution	Qualification	Year completed	Majors
University of Pretoria	BA	1991	Cultural History Archaeology Biblical Studies
University of Pretoria	BA (Hons)	1993	Cultural History
University of Pretoria	Post Grad. Diploma in Museum Science	1996	
Damein Management School	Diploma in Basic Principles of Public Relations	1998	
University of Canberra	Cert Conservation of Traditional Buildings	2001	
University of Pretoria Management School	Management Development Programme	2004	
University of the Witwatersrand	Post Grad Dip (Heritage)	2009	

Short courses attended

Institution	Course
KwaZulu-Natal Provincial Museum Service	Conservation and Restoration
SAMADOC	Documentation of museum collections
KwaZulu-Natal Provincial Museum Service	Architectural Conservation
Southern Africa Museums Association	Collection and documentation of contemporary collections
OWL Education	Writing English for the Workplace
Cultural Heritage Research Centre, University of Canberra, Australia	Conservation of Traditional Buildings
South African Management Development Institute	Hearing procedures
Conservation Management Plan Study Tour, UK	Conservation Management Plan development and management
University of Pretoria	PFMA Course
International Quality and Productivity Centre	Environmental Impact Assessment Regulations

2. Work experience

Institution	Position	Responsibilities	Period	Experience
Independent Heritage Consultant (Leonie Marais-Botes Heritage Consultant)			1 July 2012 – present	<ul style="list-style-type: none"> Section 38 (Heritage Impact Assessment) applications to Heritage Authorities Section 34 applications to Heritage Authorities General heritage management Project Management Financial Management Public and Client Relations
Heritage Foundation	Senior Manager: Projects	South African Heritage Resources Agency (SAHRA) graves project Fund Generating projects	8 November 2010 to 31 July 2012	<ul style="list-style-type: none"> Project Management Budget and expenditure management Personnel management Contractor appointments and quality control of work
Council for Geoscience	Curator: Geoscience Museum	Supervision of the Geoscience Museum's education programme, displays, collections and exhibitions, supervise the day-to-day running of the museum, including marketing and advertisement of the Museum's activities, lobbying for grants, donations and	1 November 2008 to 7 November 2010	<ul style="list-style-type: none"> Understanding of museum and heritage sector Strategic, analytical and financial skills Organisational and planning skills Negotiation and conflict resolution skills

		external funding, financial and admin aspects of the museum and supervision of museum staff			<ul style="list-style-type: none"> Ability to work with a broad range of people at all levels Ability to provide effective leadership and to inspire and motivate
PBAI (International) SA	Heritage practitioner/Environmental Practitioner	<ul style="list-style-type: none"> Project manager: Environmental Impact Assessments Heritage Impact Assessments 	1 August 2007 to 31 October 2008		<ul style="list-style-type: none"> Environmental legislation Public participation Heritage site management Project Finance Management
National Department of Public Works	Assistant Director: Heritage Conservation	<ul style="list-style-type: none"> General office administration Project information and analysis in terms of heritage Planning and coordination of Conservation Management Plan (CMP) Projects Planning and coordination of heritage training sessions, workshops and information sessions Research Internal and external public relations processes Drafting of in-house Conservation 	(01/01/1999►31 July 2007)		<ul style="list-style-type: none"> Office administration Writing of reports, official letters, internal memoranda, agendas, minutes, faxes, filing. <u>Project Management</u> Developing concept briefs, briefing consultants, programme meetings, consultant accounts, 1st to final delivery <u>Research</u> Background research for projects and enquiries <u>National Heritage Legislation and international heritage principles</u>

		<p>Management Plans and Heritage Impact Assessments</p> <ul style="list-style-type: none"> • Conservation management of Public Works items and sites • Loan agreements • Museums: 2nd phase development Nelson Mandela Museum, Mthatha, • Steering Committee new Woman's Museum, East London (DAC), • Site development Ncome Museum, Vryheid 		<p>Extensive experience in running projects within the framework of the National Heritage Legislation (Act 25 of 1999) and international policy documents i.e. Venice Charter, Burra Charter</p> <ul style="list-style-type: none"> • ICOM International Museum Standards knowledge and application
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Institution	Position	Responsibilities	Period	Experience
				<ul style="list-style-type: none"> • <u>Public Relations Skills</u> Extensive internal and external client service experience, co-ordination of seminars, workshops and training sessions. Contributions to in-house journal. Presentations and talks. • <u>Managerial Experience</u> Knowledge of organisation's long-and-short term goals and plans; awareness of various roles and inter-departmental relationships. <p>Relevant professional knowledge, thus an understanding of and proficiency in the methods, processes, procedures and techniques associated with heritage conservation.</p> <p>Analytical, problem-solving decision making skills.</p> <p>Social skills includes: interpersonal communication, delegation, negotiation, conflict resolution and dealing with authority and</p>

<p>National Monuments Council (NMC)</p>	<p>Assistant-Manager: War Graves and Victims of Conflict Division</p>	<ul style="list-style-type: none"> • Assist the manager with the caring and restoration of all war graves (1795 to July 1914) in South Africa • Research • Manage archives and library • Manage administration staff • Co-ordinator of Victims of the Liberation Struggle information • Function planner and co-ordinator 	<p>1 Dec 1997 ▶ 31 December 1998</p>	<p>power. Stress control Proactive Creative</p> <ul style="list-style-type: none"> • <u>Office Administration</u> Writing of reports, letters, internal memoranda, agendas, minutes and faxes. Data base use. • <u>Research</u> Background research for reports and enquiries. • <u>Managerial Experience</u> Manager for administration staff and research assistant
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Institution	Position	Responsibilities	Period	Experience
National Monuments Council	Professional Officer: War Graves Division	<ul style="list-style-type: none"> Assist the Manager with the caring and restoration of all war graves (1795 ▶ July 1914) Research Liaison 	1 April 1996 ▶ 30 November 1997	
Voortreker Museum, Pietermaritzburg	Museum Human Scientist	<ul style="list-style-type: none"> Collection Management Conservation Restoration Research Museum Education Public Relations 	1 September 1994 ▶ 31 March 1996	
University of Pretoria		<ul style="list-style-type: none"> Adaptation of the Aschenborn Collection to museum standards 	April 1994	
National Cultural History Museum	Assistant	<ul style="list-style-type: none"> Documentation of newly acquired museum objects 	December 1992	
Lydenburg Museum	Assistant	<ul style="list-style-type: none"> Documentation of museum collection 	December 1991	

3. References

<p>Ms Cecilia Kruger Supervisor Heritage Foundation + 27 83 417 4411</p> <p>Dekha Katenga Director: Facilities Management Department of Correctional Services Private Bag X 136 PRETORIA 0001 + 27 82 564 0580</p> <p>Michelle Bouwer Deputy Director: Key Account Management Department of Public Works Private Bag X 65 PRETORIA + 27 84 580 3799</p> <p>Mr Rod Matcham Chief QS KZN Department of Works + 27 84 588 4081</p>	<p>Prof Anton van Vollenhoven Archaeinos Research + 27 83 291 6104</p> <p>Mr Danie Barnardo Supervisor Council for Geoscience + 27 084 588 6668</p> <p>Mapatha Ramphele Director: Heritage Provincial Government Gauteng Dept of Sport, Recreation, Arts and Culture Cell: + 27 83 554 1975</p> <p>Ms J.L. Beater PBA International (SA) Supervisor + 27 84 404 1118</p>
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4.1 Organisational involvement

South African Society for Cultural History (SASCH)

- Student member – 1992-1993
- Professional member – 1994-current
- Treasurer 2005 – current
- Vice Chair 2013 – 2014
- Chairperson 2014-2016
- Ad hoc duties: Editor of the society's newsletter when required, Serve on Northern Region conference organising committee when required.

SA Museums Association (SAMA)

- Individual member

Tshwane Building Heritage Association

- Chairperson 2013-2014

Council member

- SA Society for Cultural History (SASCH) (Treasurer and Chairperson)
- Gauteng Provincial Heritage Authority (PHRA-G) (member of the Built Environment and Permit Committee (2009-2012) (2012-2015) (2015-2018), Convenor of the Heritage Impact Adjudication Committee(2009-2012))
- Voortrekker/Mzunduzi Museum, Pietermaritzburg (2011-2014) (2015-2018)

4.2 Committee involvement

- Secretary of the War Graves Committees of the National Monuments Council (1996▶1998)
- Served as adviser on the planning committee for the community driven Victims of the Liberation Struggle Memorial in Thokoza
- Re-imaging of Government Buildings Committee, National Department of Public Works
- Served on the Heritage Sub-Committee for Constitution Hill and assisted the South African Heritage Resources Agency (SAHRA) – Northern Regional Office with developing the initial Conservation Management Plan for the said site
- Military Graves and Heritage Committee, Department of Defence
- Served as Heritage Advisor on the Presidential Inauguration Project Team of the National Department of Public Works (2004)

4.3 Contributions to in-house publication WORX NEWS (National Department of Public Works)

- September 2001, *It's a damp shame*
- October 2001, *"Some days are diamond..."*
- February/March 2002, *Fresh Air and Open Spaces*
- September/October 2003, *Heritage Conservation in Post-Apartheid South Africa*
- January 2006, *The Union Buildings*
- February/March 2006, *The history of Tuynhuis, Cape Town*
- April/May 2006, *History of King's House*
- May/June 2006, *Castle of Good Hope*
- July/Aug 2006, *The Value of Heritage Conservation*
- Sept/Oct, *Conservation of Heritage Buildings*
- Nov/Dec, *Did you know that heritage buildings and sites are protected by law?*
- March/April 2007, *SAND +STONE=SANDSTONE=DO NOT CLEAN*

4.4 Contributions to PBAI publications

- 2 articles for PBAI publications (international)
Electricity shortage in South Africa
Heritage Sites with special reference to the Rand Steam Laundries

4.5 Workshops and information sessions arranged, co-ordinated and facilitated

- September 1999: Management of Heritage Sites seminar (international speakers)
- September 2001: Conservation course focussing on Masonry (international course leader)
- National Department of Public Works Heritage Road Show (March 2002 ► December 2002)
- Documentation workshops for officials dealing with heritage items in presidential and ministerial residences (Durban and Cape Town Regional Offices)
- Guide training (literature and practical sessions) for Presidency staff at Union Buildings
- November 2006: Conservation of Heritage Buildings. Nederlandse Monumente Commissie

5 Project Involvement

A list of projects which include Heritage Impact Assessments (HIA's), Section 34 applications and Conservation Plans can be forwarded if required.