PHASE I HERITAGE IMPACT ASSESSMENT (INCLUDING PALAEONTOLOGICAL DESKTOP ASSESSMENT) REQUESTED IN TERMS OF SECTION 38 OF THE NATIONAL HERITAGE RESOURCES ACT NO 25/1999 FOR THE PROPOSED MAOKENG HOUSING DEVELOPMENT (KROONSTAD) FREE STATE PROVINCE

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DECLARATION OF INDEPENDENCE

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All possible care was taken to identify and document heritage resources during the survey in accordance with best practices in archaeology and heritage management. However it is always possible that some hidden or subterranean sites are overlooked during a survey. The researcher will not be held liable for such oversights and additional costs thereof.

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ABBREVIATIONS

EIA Environmental Impact Assessment

HIA Heritage Impact Assessment

LIA Late Stone Age
Later Iron Age

PHRA Provincial Heritage Resources Authority

MSA Middle Stone Age

NHRA National Heritage Resources Act

NEMA National Environmental Management Act
SAHRA South African Heritage Resources Agency

Glossary

Archaeological material: remains resulting from human activity left as evidence of their presence which, as proscribed by South African heritage legislation, are older than 100 years, which are in the form of artefacts, food remains and other traces such as rock paintings or engravings, burials, fireplaces and structures.

Artefact/Ecofact: Any movable object that has been used, modified or manufactured by humans.

Catalogue: An inventory or register of artefacts and/or sites.

Conservation: All the processes of looking after a site/heritage place or landscape including maintenance, preservation, restoration, reconstruction and adaptation.

Cultural Heritage Resources: refers to physical cultural properties such as archaeological sites, palaeolontological sites, historic and prehistorical places, buildings, structures and material remains, cultural sites such as places of rituals, burial sites or graves and their associated materials, geological or natural features of cultural importance or scientific significance. This include intangible resources such religion practices, ritual ceremonies, oral histories, memories indigenous knowledge.

Cultural landscape: "the combined works of nature and man" and demonstrate "the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both internal and external".

Cultural Significance: is the aesthetic, historical, scientific and social value for past, present and future generations.

Early Stone Age: Predominantly the Acheulean hand axe industry complex dating to + 2Myr yrs – 250 000 yrs. before present.

Early Iron Age: Refers cultural period of the first millennium AD associated with the introduction of metallurgy and agriculture in Eastern and Southern Africa

Later Iron Age: Refers to the period after 1000AD marked by increasing social and political complexity. Evidence of economic wealth through trade and livestock keeping especially cattle **Excavation:** A method in which archaeological materials are extracted, involving systematic recovery of archaeological remains and their context by removing soil and any other material covering them.

Grave: a place of burial which include materials such as tombstone or other marker such as cross etc.

Historic material: means remains resulting from human activities, which are younger than 100 years and no longer in use, which include artefacts, human remains and artificial features and structures.

Intangible heritage: Something of cultural value that is not primarily expressed in a material form e.g. rituals, knowledge systems, oral traditions, transmitted between people and within communities.

Historical archaeology: the study of material remains from both the remote and recent past in relationship to documentary history and the stratigraphy of the ground in which they are found; or archaeological investigation on sites of the historic period. In South Africa it refers to the immediate pre-colonial period, contact with European colonists and the modern industrial period.

In situ material: means material culture and surrounding deposits in their original location and context, for instance archaeological remains that have not been disturbed.

Later Iron Age: The period from the beginning of the 2nd millennium AD marked by the emergence if complex state society and long-distance trade contacts.

Late Stone Age: The period from \pm 30 000-yr. to the introduction of metals and farming technology

Middle Stone Age: Various stone using industries dating from ± 250 000 yr. - 30 000 yrs. ago **Monuments:** architectural works, buildings, sites, sculpture, elements or structures of an archaeological nature, inscriptions, cave dwellings which are outstanding from the point of view of history, art and science.

Place: means site, area, building or other work, group of buildings or other works, together with pertinent contents, surroundings and historical and archaeological deposits.

Preservation: means protecting and maintaining the fabric of a place in its existing state and retarding deterioration or change, and may include stabilization where necessary.

Sherd: ceramic fragment.

Significance grading: Grading of sites or artefacts according to their historical, cultural or scientific value.

Site: a spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

EXECUTIVE SUMMARY

- This Heritage Impact Assessment (HIA) has been prepared in support of an application for environmental authorisation for the proposed development to provide additional high density housing stock on three land portions in Moakeng Township, Kroonstad, in the Moghaka Local Municipality, Free State Province.
- 2. Kroonstad has a number of historical landmarks three of which have been highlighted, namely the Boer Concentration Camp, the Boer Cemetery of those who died in the Concentration Camp (1900-1902) and the old Kroonstad Power Station. The Black and Coloured townships are significant as landscapes of segregation occupying the north-western fringe of the CBD, while the exclusive white suburbs were located northeast of the town and south of the Valsch River.
- 3. The following is a summary of the findings of the study.
- 4. The Stone Age

No material dating to the Stone Age was found. The area having been located on the outskirts of a residential area for some time, whatever surface evidence existed has been disturbed.

- 5. The Iron Age
 No Iron Age sites were found.
- 6. Modern period
- 7. Findings: Seisoville Extension

Concrete debris including a column of a building which appears to have been standing at the site (Site SSV01). The remains are considered of low heritage significance and no further action is required.

8. Findings: Snake Park Extension

An earth embankment used to trap water creating a small artificial lake, but the dam has been breached and it does not hold water anymore (SPK01). The embankment is rated as of low heritage significance. Furthermore as it lies within a wetland area it will not be affected by the proposed development.

9. Downstream from the dam, the stream bed is paved with perforated square concrete tiles to control erosion (SNP02). The pavement is located in a wetland area and will not be directly affected by the proposed development.

10. Findings: Relebohile Extension

There are foundation remains of a rectangular building marked by stones and an earth mound (RBH01). A disused water concrete water tank lies a short distance outside the area of the proposed development (RBH02). Both structures are considered of low heritage significance and not further action is warranted.

11. Inventory of heritage sites

SITE NO	LATITUDE	LONGITUDE	PERIOD	DESCRIPTION	RANKING
SSV01	27°38'42.40"S	27°12'37.20"E	Modern	Concrete debris including a column of a building which appears to have been standing at the site.	Low
SPK01	27°38'14.20"S	27°11'46.40"E	Modern	A wetland area straddles a stream on which an earth embankment had been erected to trap running water. The embarked is breached in the middle section.	Low
SPK02	27°38'12.30"S	27°11'40.80"E	Modern	Pavement on the bed of a stream done to control erosion. Perforated square concrete tiles used.	Low
RBH01	27°39'24.00"S	27°11'22.10"E	Modern	Foundation remains of a rectangular building marked by stones and an earth mound.	Low
RBH02	27°39'29.70"S	27°11'25.40"	Modern	Disused concrete water tank appears to be in situ. Dimension 2 m high x 3 m wide. Might be evidence of previous commercial farming activity in the area.	Low

12. Significance ranking of findings

The significance ranking (with a colour scheme) refers to the value of the heritage and perceived impacts and risk of the proposed development. Appropriate interventions and mitigation strategies are also proposed.

	RANKING	TYPOLOGY & SIGNIFICANCE	NO OF SITES
1	High	National and Provincial heritage sites (Section 7 of NHRA). All burials including those protected under Section 36 of NHRA. They must be protected.	0
2	Medium A	Substantial archaeological deposits, buildings protected under Section 34 of NHRA. Footprint of early modern mining. These may be protected at the recommendations of a heritage expert.	0
3	Medium B	Sites exhibiting archaeological characteristics of the area, but do not warrant further action after they have been documented.	0
4	Low	Heritage sites which have been recorded, but considered of minor importance relative to the proposed development.	5
		TOTAL	5

13. Conclusions and recommendations

All sites found within and close to the areas of the proposed development during the survey are considered of low heritage significance and can be disposed of. In other words no further action is warranted. The housing projects can therefore be approved subject to the precaution that in the event that other heritage resources are discovered when the development commences SAHRA must be alerted immediately and an archaeologist or heritage expert called to attend

1. INTRODUCTION

This Heritage Impact Assessment (HIA) report fulfils the requirements of Section 38(8) of the National Heritage Resources Act (25 of 1999) for a housing development project in three portions located in Moakeng Township in Kroonstad, Moqhaka Local Municipality in the Fezile Dabi District, Free State Province. The report will form part on an application for environmental authorisation to be lodged by Enviosheq Consultants in fulfilment of the requirements of the National Environmental Management Act (No 107 / 1998). Three portions have been identified for the construction of high density housing units; these are:

- (i) Seisoville Extension 11ha;
- (ii) Snake Park Extension 5.3; and
- (iii) Relebohile Extension 2.4 ha

1.1. Locational details of the receiving environment

AREA	LATITUDE	LONGITUDE	NOTES
Seisoville Extension	27°38'44.75"S	27°12'25.77"E	Approx. centre of the area
Snake Park Extension	27°38'19.05"S	27°11'43.39"E	и
Relebohile Extension	27°39'24.59"S	27°11'20.42"E	tt.

Kroonstad is situated on the N1 highway link between Johannesburg and Bloemfontein about mid distance from the two cities in the Moqhaka Local Municipality, Fezil Dabi District, Free State Province. The central business district is tucked in a loop of one of the meanders of the Valsch River (Afrikaans - *Valsrivier*), a tributary of the Vaal River. The Valsch has a meandered course roughly trending west to its confluence with the Vaal River past Bothaville 75 km distance as the crow flies. The river rises on the western foot of the Drakensberg near Bethelhem. The topography of the area is generally flat to rolling with several brooks running south into the Valsch River. South of Relebohile and to the west of Brent Park, both residential sections of Moakeng, a fairly dense acacia forest thrives, while isolated stands of these trees, much degraded, can be seen between residential areas. Moakeng is the largest residential suburb in Kroonstad (Figure 1). The name, which means place of thorns, is apt reference to the local vegetation and setting of the suburb. The topsoil

overburden appears to be shallow and below it a sandstone horizon exposed in a few places at Seisoville.

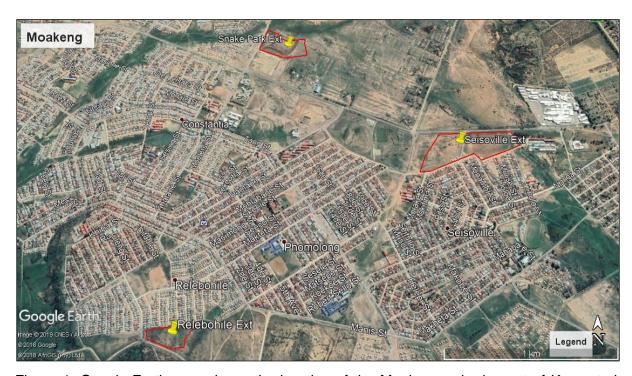


Figure 1: Google-Earth map shows the location of the Moakeng suburb west of Kroonstad CBD



Figure 2: Acacia forest occupies a valley to the south of Relebohile Township.



Figure 3: Acacia stand. View southeast towards Brent Park from the site of proposed development (Relebohile Extension).

1.2. Nature of the proposed development

The Moakeng Local Municipality intends to provide additional high density housing stock in three infill areas been identified in Seisoville, Snake Park and Relebohile in Moakeng Township. The total sizes of these infills is 18.7 ha.

The development of housing entail civil works for

- Water and sew reticulation system
- Development of roads and streets
- Constriction of the housing units
- Electrical supply with overhead and/or underground cables

The nature and scale of the proposed activities require a pre-development impact assessment to be undertaken to pre-empt potential disturbance or destruction of heritage resources if they exist in and around the footprint of the proposed development.

2. LEGAL FRAMEWORK

2.1. Section 38(3) of the National Heritage Resources Act (25/1999)

Under Section 38 of the National Heritage Resources Act (No 25 1999), the terms and conditions of an HIA are stated as follows:

- 38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as—
- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of a site—
- (i) exceeding 5 000m² in extent; or
- (ii) involving three or more existing erven or subdivisions thereof; or
- (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
- (iv) the costs of which will exceed a sum set in terms of regulations by
- SAHRA or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000 m2 in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority.

2.2. Definition of Heritage (National Estate)

Section 3 lists a wide range of cultural phenomena which could be defined as heritage, or the *National Estate*. Section 3(3) outlines criteria upon which heritage value is ascribed. This Section is useful as a field checklist for the identification of heritage resources.

2.3. Protection of Buildings and Structures Older than 60 years

Section 34 provides for provisional protection of buildings and structures more than 60 years old:

(1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

2.4. Protection of Archaeological Sites

Section 35 (4) of the NHRA prohibits the destruction of archaeological, palaeontological and meteorite sites:

No person may, without a permit issued by the responsible heritage resources authority—

- (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological 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 palaeontological material or object, or any meteorite; or (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

2.5. Protection of graves and burial grounds

Section 36 of the NHRA gives priority for the protection of Graves and Burial Grounds of victims of conflict and graves and burial grounds more than 60 years old. Cautious approaches are considered including managed exhumations and re-interment to pave way for development. International ethical standards as set out in the World Archaeological Congress Vermillion Accord (USA, Dakota, 1989) favor this approach and recommend decisions informed by consultation with communities who by

association might have strong feelings for protection *in situ* and may argue that a development project is better moved to an alternative site.

2.6. The Burra Charter on Conservation of Places of Cultural Significance

Some generic principles and standards for the protection of heritage resources in South Africa are drawn from international charters and conventions. In particular South Africa has adopted the Australia Charter for the Conservation of Places of Cultural Significance (the Burra Charter 1999) as a benchmark best practice in heritage management.

2.7. Concept of cultural landscapes

Cultural landscapes are defined in Paragraph 47 of the *Operational Guidelines for the Implementation of the World Heritage Convention (2015 edition)* as "cultural properties that represent the combined works of nature and of man" They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.

Annex 3 of the *Operational Guidelines for the Implementation of the World Heritage Convention* recognises three types of Cultural Landscapes:

- (i) Landscapes designed and created intentionally by man, e.g. parks, gardens, constructed for aesthetic reasons;
- (ii) Organically evolved landscape arising from an initial social, economic, administrative, and/or religious imperative and has developed its present form by association with and in response to its natural environment. Two subcategories are recognised: (i) a relict (or fossil) landscape and (ii) a continuing landscape which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress.
- (iii) Associative cultural landscape whose character is determined by natural elements upon which social, cultural or religious significance is associated.

2.8. The National Environmental Management Act (107/1998)

This environmental Act states that a survey and evaluation of cultural resources must be done in areas where development projects that will affect 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 is a much broader undertaking to cater for cultural and social needs of people. 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.

3. METHODOLOGY

3.1. Literature Review

A literature review was necessary as background study. General literature relates to the cultural sequence, location and physical setting of the property. It was necessary to locate and review reports of Heritage Impact Assessments undertaken in the broader area to form a picture of the heritage potential of the area. This author has undertaken a heritage impact study on the farm Blaauwboshfontein 229 near Boshof 190 km southeast of Kroonstad:

Matenga, E. 2019: Phase I Heritage Impact Assessment (including palaeontological assessment) requested in terms of Section 38 of the National Heritage Resources Act no 25/1999 for a Mining Right on Portion 4 of the Farm Blaauwboschfontein 229, Boshof District, Free State Province. The study reported a burial ground exposed during mining operations.

Stone Age lithics were found in the same area during a study by PGS heritage:
PGS Heritage 2018. Catherine's Fancy 831, which forms part of the Blaauwbosch
Mine, Boshof District, Free State Province. Heritage Impact Assessment.

Orton, J. 2016. Heritage Impact Assessment: Scoping and Environmental Impact Assessment for the proposed development of the Edison PV 100 MW Photovoltaic Facility near Dealesville, Free State: In this study sparse occurrences of Stone Age

artefacts were noted. Historical ruins, graves and graveyards were found. The locale exhibited cultural landscape features exemplifying commercial farming.

Closer to Kroonstad reference is made to an HIA study by *De Bruyn, C. 2019. Basic Assessment for the Amendment of an Existing Prospecting Right and Environmental Authorisation for Bothaville NE Ext A, situated in the Free State Province:* In spite of the large size of the area surveyed no archaeological or other heritage relics/sites were found.

3.2. Fieldwork

A site visit was made on 10 June 2019 and a ground survey undertaken by a professional archaeologist. All three areas being relatively small random walking surveys were undertaken and the surface examined for any exposed relics and features.

3.3. Significance Ranking of findings

The significance ranking (with a colour scheme) refers to value of the heritage weighed against perceived impacts and risks of the proposed development. Appropriate interventions and mitigation strategies are also proposed.

	RANKING	TYPOLOGY & SIGNIFICANCE	No of sites
1	High	National and Provincial heritage sites (Section 7 of	
		NHRA). All burials including those protected under	
		Section 36 of NHRA.	
2	Medium A	Substantial archaeological deposits, buildings protected	
		under Section 34 of NHRA. These may be protected at	
		the recommendations of a heritage expert.	
3	Medium B	Sites exhibiting archaeological and historical	
		characteristics of the area, but do not warrant further	
		action after they have been documented.	
4	Low	Heritage sites which have been recorded, but	
		considered of minor importance relative to the proposed	
		development.	
		TOTAL	

4. ARCHAEOLOGICAL AND HISTORICAL CONTEXT

It is necessary to give an outline of the cultural sequence in South Africa as a theoretical framework for the identification of features / structures and objects of archaeological, historical and cultural interest.

4.1. Cultural sequence summary¹

PERIOD	EPOCH	ASSOCIATED CULTURAL GROUPS	TYPICAL MATERIAL EXPRESSIONS
Early Stone Age 2.5m - 250 000 YCE	Pleistocene	Early Hominids: Australopithecines Homo habilis Homo erectus	Typically large stone tools such as hand axes, choppers and cleavers.
Middle Stone Age 250 000 – 25 000 YCE	Pleistocene	First Homo sapiens species	Typically smaller stone tools such as scrapers, blades and points.
Late Stone Age 20 000 BC – present	Pleistocene / Holocene	Homo sapiens including San people	Typically small to minute stone tools such as arrow heads, points and bladelets.
Early Iron Age / Early Farmer Period c300 – 900 AD (or earlier)	Holocene	Iron Age Farmers	Typically distinct ceramics, bead ware, iron objects, grinding stones.
Later Iron Age 900ADff	Holocene	Iron Age Farmers, emergence of complex state systems	Typically distinct ceramics, evidence of long distance trade and contacts
(ii) Mapungubwe (K2)	1350AD		Metals including gold, long distance exchanges
(ii) Historical period	Tswana / Sotho, Nguni people	Iron Age Farmers	Stone walls Mfecance / Difaqane
(iii) Colonial period	19 th Century	European settlers / farmers / missionaries/ industrialisation	Buildings, Missions, Mines, metals, glass, ceramics

-

¹ Adapted from Exigo Consultancy. 2015. Frances Baard District Municipality: Proposed Nkandla Extension 2 Township Establishment, Erf 258 Nkandla, Hartswater, Northern Cape Province.

4.2. Appearance of hominids

The appearance of hominids marks the beginning of the cultural sequence for which a good fossil record exists in South Africa. Hominids were proto-humans which existed more than 3million years ago. Three famous sites in Gauteng, Limpopo and Northwest Provinces collectively represent the Cradle of Humankind inscribed as UNESCO World Heritage Site in a serial nomination.² Both Maropeng in Gauteng and Taung in the Northwest are c 250 km from the study area. To our knowledge despite a good fossil record, no hominids have been reported in the Free State Province.

4.3. The Stone Age

4.3.1. The Early Stone Age (2 million to 250 000 years BP)

The Stone Age commenced more than 2 million years before present (BP) representing a more explicit record of the cultural sequence divided into three epochs, the Early, Middle and Late Stone Ages. These Early Stone Age people made stone and bone implements. Material evidence is found in caves, rock-shelters and on river sides and edges of streams, and very rarely seen in open country.³ Archetypal tools include the pear-shaped handaxe, cleavers and cores from which tools were flaked. These tool industries have been called Oldowan and Acheulean and were probably used to butcher large animals such as elephants, rhinoceros and hippopotamus. Acheulean artefacts are usually found near sites where they were manufactured and thus in close proximity to the raw material or at kill sites. The early hunters were still hominids meaning that they had not evolved to the present human form. Locales along and adjacent to the Orange – Vaal River systems have yielded evidence of great interest for this early period.⁴

² Deacon, J. and N. Lancaster. 1986. *Later Quaternary Palaeo-environments of Southern Africa*. Oxford: Oxford University Press.

³ http://archaeology.about/od/bterms/g/bordercave.htm

⁴ Morris, D. 2009. Phase 1 Archaeological Impact Assessment at Bucklands Settlement near Douglas, Northern Cape, p3.

4.3.2. Middle Stone Age (MSA) [250 000 yrs – 30 000 yrs BP]

The Middle Stone Age (MSA appeared 250 000 years ago marking the introduction of a new tool kit which included prepared cores, parallel-sided blades and triangular points hafted to make spears. By then humans had become skilful hunters, especially of large grazers such as wildebeest, hartebeest and eland. By then humans had evolved significantly to become anatomically modern. Caves were used for shelter suggesting permanent or semi-permanent settlement. Furthermore there is archaeological evidence from some of the caves indicating that people had mastered the art of making fire. The coverage west of Kimberley is good with a number of field surveys have been carried out along the Vaal and Orange Rivers confirming significant hunter gatherer activity in the area from the MSA onwards. This author has encountered lithics of the MSA/LSA in the broader area to the west and northwest of the study area.

Florisbad located 170 km to the southeast is a famous fossil site which has yielded among other finds a pre-modern human skull dating back to the transition from the ESA to the MSA 260 000 years BP.⁶

4.3.3. Later Stone Age (LSA)[40 000 yrs to ca2000 yrs BP]

Homo sapiens, which refers to modern humans, appeared 50 000 years BP. Several behavioural traits are exhibited, such as rock art and purposeful burials with ornaments, became a regular practice. LSA technology is characterised by microlithic scrapers and segments made from very fine-grained rock. Spear hunting continued, but LSA people also hunted small game with bows and poisoned arrows. Because of poor preservation, open sites become of less value compared to rock shelters. The practitioners of the Late Stone Age as with Rock Art are ancestors of the Khoisan.⁷

⁵ Deacon, J & H. Deacon. 1999. *Human Beginnings in South Africa*. Cape Town: David Philip.

⁶ Florisbad. Found at: http://www.nasmus.co.za/museum/satellite-museums/florisbad. Consulted March 2019.

⁷ Gaigher, S. 2012. Heritage Impact Assessment Report for the proposed establishment of the Prieska Solar Energy facility located east of Prieska on Portion 3 of the Farm Holsoot 47, Northern Cape Province, p15.

4.4. The Iron Age Culture [ca. 2000 years BP]

The Iron Age culture supplanted the Stone Age at least 2000 years ago, associated with the introduction of farming and use of several metals and pottery. The Iron Age has been synonymous speakers of Bantu languages practicing agriculture and keeping domestic animals such as cattle, sheep, goat and chickens. This correlation is a subject on ongoing debate. There is increasing evidence that sheep and probably cattle as well might have moved into the area much earlier than the Iron Age.⁸

4.4.1. Early Iron Age

Early Iron Age was a gradual spread or expansion of settlement of different groups of people indigenous to the continent which took place over a long period of time, rather than a migration in the strict sense of the word. Generally, however, the EIA is rendered in terms of two migration streams seen as converging in South Africa, one originating in eastern Africa, which has been called the *Urewe-Kwale Tradition* (the eastern stream) and another from the west, spreading through Zambia and Angola, which he termed the *Kalundu Tradition* (western stream). There are few if any sites attributed to the EIA in the central and western parts of the country. Most EIA settlements are concentrated in the woodland zone in the eastern part of the country preferred for settlement, although there is strong possibility that transhumant pastoralism was practiced and seasonal hunting camps were established in the inhospitable western regions of the country.

4.4.2. The Later Iron Age

The Later Iron Age (LIA) is generally associated with the footprint of the Sotho and Tswana which archaeologists have divided into a number of facies on the basis of ceramic studies (Huffman 2007). Extensive stonewalled settlements have been found in the Kroonstad area (Dreyer 2006, cited in De Bruyn 2019, p40). These sites could date from the 16th century. A LIA stonewalled settlement has been recorded on the

⁸ Evers, T. M. 1988. *Recognition of Groups in the Iron Age of Southern Africa*. Unpublished PhD Thesis, University of Witwatersrand. Huffman 2007. *A Handbook on the Iron Age*. Scottsville: UKZN Press

farm Middenspruit 151 northwest of Kroonstad. The stonewalled sites in the Vrede Fort Dome have been associated with the Fokeng (de Bruyn 2019, p40).

4.5. The Historical Period

Two important phenomena have dominated the recent history of South Africa, namely the Difaqane/Mfecane and the Great Trek. The Difaqane is generally seen as a violent episode connected with the unification wars waged by Tshaka of the Zulu Kingdom. This triggered migrations from the eastern seaboard onto the High Veld. One of the major events is the flight of Mzilikazi, one of Tshaka's generals, who broke away and formed the Ndebele nation. They entered the Highveld in the late 1820s and mounted raids against the Sotho and Tswana and in the process occupied the Vaal area for close to a decade. While the Difaqane was unfolding there were also population shifts from the southwest beginning with the entry of the Griquas and the Koranas into the area. In the mid-1830s the Boer Trek was in motion exacerbating the competition for land. In the ensuing confrontations Mzilikazi and the Ndebele were forced to leave the region in 1837 settling north of the Limpopo River.

Kroonstad was established in 1855 as the first town after the foundation of the Orange Free State Republic by the Orange River Convention (1854). The name which in Afrikaans translate to Crown City is reported to have been named after a horse which drowned at a drift across the Valsch River. The ford where the incident happened is also known as Kroondrift.

The town was the site of one of the most notorious concentration camps established by the British forces in 1900 to receive Boer women and children from the surrounding farms Figures 4-5). The British army employing scotched earth tactics had burnt the farmsteads and destroyed the local economy. Due to poor administration conditions in the concentration camps deteriorated causing sickness. The railway line supplied goods and transported soldiers and this is thought to have exacerbated the deteriorating social conditions in the town. Towards the end of the war conditions

improved and when it ended the camp inmates were repatriated. ⁹ The Concentration Camp is a historical site located at the nowrhwest corner of Marais St and Beyer Street (Lat: 27°39'4.99"S; Long: 27°14'19.35"E). A cemetery is located on 10de Rd in Industria south of the area of the development and close to the old power station (Lat: 27°40'18.04"S; Long: 27°12'23.36"E).

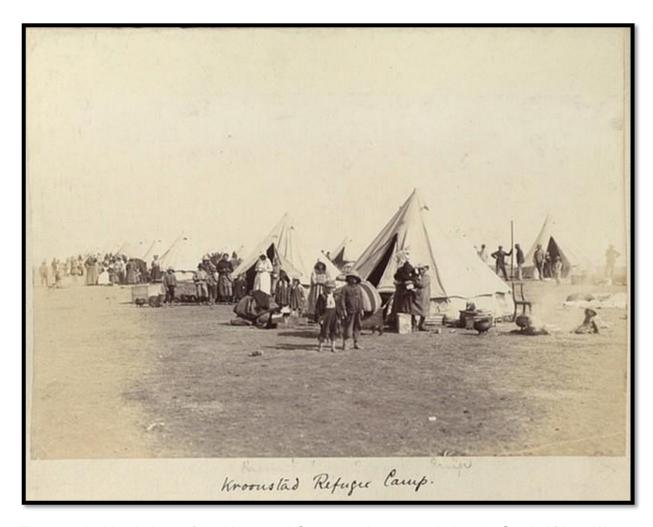


Figure 4: Archived photo of the Kroonstad Concentration camp during the South African War 1899-1902.

⁹ https://www2.lib.uct.ac.za/mss/bccd/Histories/Kroonstad/ In this article the following important references are cited: E.H. Hobhouse, *The Brunt of the War and Where it Fell* (London, Methuen, 1902).

E.H. Hobhouse, War Without Glamour (Bloemfontein, Nasionale Pers, 1924).

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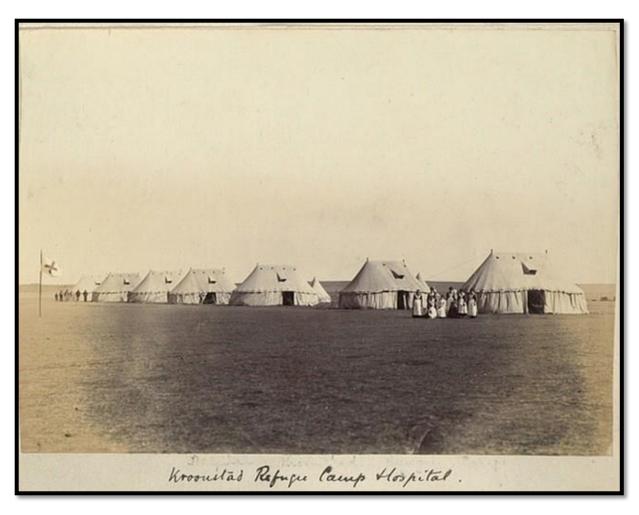


Figure 5: Another archived photo of the Kroonstad Concentration camp during the South African War 1899-1902¹⁰

The town boasted its own power station, and although it was decommissioned in the 1980s the town has retained its power generation licence (Figure 6). Like most towns in South Africa the town exhibited a landscape of segregation which was later formalised into apartheid. Marabastad also known as Kroonstad Location is the oldest black township dating back to the 19th century to which Seisoville is an extension. Therein can be seen a few oldest residential buildings of un-plastered fired earthen bricks.

 $^{^{\}rm 10}$ Anglo Boere Oorlog/Boer War (1899-1902) KROONSTAD Camp/Kamp. Found at: https://www.geni.com/photo/view/-

^{1?}album_type=project&end=&photo_id=6000000022948175500&project_id=14062&start=&tagged_profiles=



Figure 6: The Old Kroonstad Power Station is a historical landmark located in Industrial east of Brent Park.

Further west of Seisoville, Brentpark was reserved for the Coloureds under the same segregation scheme. Relebohile, the site of the proposed second housing development was established in 1998-9. Snake Park, where the third housing development is located started informally in 1991 and sprouted in 1994 – 1995 after the attainment of freedom.

All later settlements are an extension westwards of Marabad, with Brent Park reserved for Coloured residents and has come to be historically associated with them. The residential areas falle under Moakeng Township, which means place of thorns, an apt reference to the beautiful forest of acacia growing along the Valsch River.

5. FINDINGS OF THE HERITAGE SURVEY

5.1. Heritage sensitivity of the broader area

Kroonstad has a number of historical landmarks three of which have been highlighted, namely the Boer Concentration Camp, the Boer Cemetery where those who died in the Concentration Camp were interred, and the old Kroonstad Power Station. The Black and Coloured townships are significant as landscapes of segregation occupying the north-western fringe of the CBD, while the exclusive white suburbs were located northeast of the town and south of the Valsch River.



Figure 7: Google map of Kroonstad shows the location in Kroonstad of the Boer Concentration Camp. Boer Cemetery and Old Power Station.

Reference is made to the cultural sequence as a checklist to determine the heritage sensitivity of the area.

5.2. The Stone Age

No material dating to the Stone Age was found. The area having been located on the outskirts of a residential area for some time, whatever surface evidence existed has been disturbed.

5.3. The Iron Age

No Iron Age sites were found.

5.4. Modern period

5.4.1. Seisoville Extension

The area of the proposed development measuring 11 ha in extent lies immediately to the north of Seisoville and is bounded on the north side by an unnamed but major through road which offsets west from the R76 road and passes between Bodibeng Secondary School on the south side and Boitumelo Regional Hospital to the north. To the east the area is bounded by a dry channel beyond which is situated Bodibeng Secondary School. Vegetation is largely degraded acacia.



Figure 8. View southwest of the development area from the unnamed main road shows a strip with acacia bushes and beyond open space and houses in Seisoville.



Figure 10: Open space, part of the development area and existing houses in the background.

Finds

Concrete debris including a column of a building which appears to have been standing at the site (Site SSV01). The remains are considered of low heritage significance and no further action is required.



Figure 11: Google map shows the Seisoville Extension and the location of the remains of a building.

5.4.2. Snake Park Extension

The piece of land measuring 5.3 ha in extent is tucked between Snake Park Township to the north and west side and a developing industrial area to the south. On the southern margins of Snake Park and between it and the proposed site is a wetland that straddles a stream.



Figure 12: Wetland land and dammed stream located between the development area and Snake Park Extension.



Figure 13: Area of proposed housing development and Snake Park houses in the background.

Finds

An earth embankment used to trap water creating a small artificial lake, but the dam has been breached and it does not hold water anymore (SPK01). The embankment is rated as of low heritage significance. Furthermore as it lies within a wetland area, it will not be affected by the proposed development.

Downstream from the dam, the stream bed is paved with perforated square concrete tiles to control erosion (SNP02). The pavement is located in a wetland area and will not be directly affected by the proposed development.



Figure 14: Google map shows the Snakepark Extension and the location of the dam and stream pavement.

5.4.3. Relebohile Extension

This piece of land measuring 2.4 ha in extent situated south of Relebohile Township and is bounded on the south side by Daan Rooskrans Rd. A number of topsoil discard mounds can be seen, evidence of earth dumping in the recent past. Vegetation is largely degraded (Figures 15-16). Drainage points south along which exposed sewerage is running. The area is littered with plastic disposal.



Figure 15: View northwest of the area of the proposed development called Relebohile Extension.



Figure 16: Topsoil discard piles appear to date to a recent past.

Finds

There are foundation remains of a rectangular building marked by stones and an earth mound (RBH01). A disused water concrete water tank lies a short distance outside the area of the proposed development (RBH02). Both structures are considered of low heritage significance and not further action is warranted.



Figure 16: Google map shows the Relebohile Extension and the location of a disused water tank southeast of the area.

5.5. Significance ranking of findings

The significance ranking (with a colour scheme) refers to the value of the heritage and perceived impacts and risk of the proposed development. Appropriate interventions and mitigation strategies are also proposed.

	RANKING	TYPOLOGY & SIGNIFICANCE	NO OF SITES
1	High	National and Provincial heritage sites (Section 7 of NHRA). All burials including those protected under	0
		Section 36 of NHRA. They must be protected.	
2	Medium A	Substantial archaeological deposits, buildings protected under Section 34 of NHRA. Footprint of early modern mining. These may be protected at the recommendations of a heritage expert.	0
3	Medium B	Sites exhibiting archaeological characteristics of the area, but do not warrant further action after they have been documented.	0
4	Low	Heritage sites which have been recorded, but considered of minor importance relative to the proposed development.	4
		TOTAL	4

6. CONCLUSIONS AND RECOMMENDATIONS

All sites found within and close to the areas of the proposed development during the survey are considered of low heritage significance and can be disposed of. In other words no further action is warranted. The housing projects can therefore be approved subject to the precaution that in the event that other heritage resources are discovered when the development commences SAHRA must be alerted immediately and an archaeologist or heritage expert called to attend

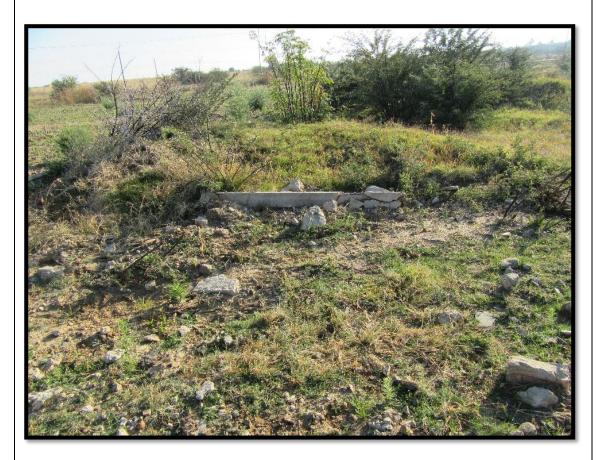
7. CATALOGUE OF HERITAGE SITES

7.1. Inventory

SITE NO	LATITUDE	LONGITUDE	PERIOD	DESCRIPTION	RANKING
SSV01	27°38'42.40"S	27°12'37.20"E	Modern	Concrete debris including a column of a building which appears to have been standing at the site.	Low
SPK01	27°38'14.20"S	27°11'46.40"E	Modern	A wetland area straddles a stream on which an earth embankment had been erected to trap running water. The embarked is breached in the middle section.	Low
SPK02	27°38'12.30"S	27°11'40.80"E	Modern	Pavement on the bed of a stream done to control erosion. Perforated square concrete tiles used.	Low
RBH01	27°39'24.00"S	27°11'22.10"E	Modern	Foundation remains of a rectangular building marked by stones and an earth mound.	Low
RBH02	27°39'29.70"S	27°11'25.40"	Modern	Disused concrete water tank appears to be in situ. Dimension 2 m high x 3 m wide. Might be evidence of previous commercial farming activity in the area.	Low

7.2. Seisoville Extension

SITE NO	COORDINATES	PERIOD	
SSV01	27°38'42.40"S	27°12'37.20"E	Modern



OBSERVATIONS: Concrete debris including a column of a building which appears to have been standing at the site.

HERITAGE STATUS	Low s	ignificance
POTENTIAL IMPACTS &		No further action required
PROPOSED MITIGATION		

7.3. Snake Park Extension

SITE NO	COORDINATES	PERIOD	
SPK01	27°38'14.20"S	27°11'46.40"E	Modern



OBSERVATIONS: A wetland area straddles a stream on which an earth embankment had been erected to trap running water. The embarked is breached in the middle section.

HERITAGE STATUS	Low significance

POTENTIAL		
PROPOSED	MITIGATION	1

Located in a wetland area, will not be directly affected by the proposed development.

SITE NO	COORDINATES	PERIOD	
SPK02	27°38'12.30"S	27°11'40.80"E	Modern





OBSERVATIONS: Pavement on the bed of a stream done to control erosion. Perforated square concrete tiles used.

HERITAGE STATUS Lo	ow si	gnificance
POTENTIAL IMPACTS	&	Located in a wetland area, will not be directly affected by
PROPOSED MITIGATION		the proposed development.

7.4. Relebohile Extension

SITE NO	COORDINATES	PERIOD	
RBH01	27°39'24.00"S	27°11'22.10"E	Modern



OBSERVATIONS: Foundation remains of a rectangular building marked by stones and an earth mound.

HERITAGE STATUS	Low significance.
HEIGHAGE STATUS	LOW SIGNIFICATION.

POTENTIAL IMPACTS &

No further action required.

PROPOSED MITIGATION

SITE NO	COORDINATES	PERIOD	
RBH02	27°39'29.70"S	27°11'25.40"	



OBSERVATIONS: Disused concrete water tank appears to be in situ. Dimension 2 m high x 3 m wide. Might be evidence of previous commercial farming activity in the area.

HERITAGE STATUS

POTENTIAL IMPACTS & PROPOSED MITIGATION

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Consulted June 2019.

Legislation and Policies

National Heritage Resources Act (No 25: 1999)

National Environmental Management Act (No 107/1998)

ICOMOS Australia Charter for the Conservation of Places of Cultural Significance (the Burra Charter 1999

9. ACKNOWLEDGEMENTS

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