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**FINAL REPORT ON THE ARCHAEOLOGICAL MITIGATION WORK  
RELATED TO THE PROPOSED THABA ECO VILLAGE LIFESTYLE ESTATE  
DEVELOPMENT ON THE REMAINDER OF PORTION 2 OF THE FARM  
RIETVLEI 101IR, CITY OF JOHANNESBURG, GAUTENG**

For:

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REPORT: APAC021/74

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A handwritten signature in black ink, appearing to be 'A. Pelser', is centered on the page. The signature is fluid and cursive, with the first letter 'A' being particularly large and stylized.

## SUMMARY

APelser Archaeological Consulting cc (APAC cc) was appointed by Bokamoso Landscape Architects & Environmental Consultants CC, on behalf of Balwin Properties Limited, to undertake mitigation on various archaeological and historical heritage sites related to the proposed Thaba Eco Village Filling Station development on the Remainder of Portion 2 of the farm Rietvlei 101IR. The proposed development and study area is located on the Risipark Agricultural Holdings area to the south of the City of Johannesburg Metropolitan Municipality of Gauteng.

Balwin Properties Limited is proposing to develop the Thaba Eco Village Lifestyle Estate on Rietvlei 101IR. During earlier (2006) heritage assessments in the study area a number of stone-walled Late Iron Age sites as well as recent historical sites (ruins of structures and a cemetery) were identified in the area. Some of these sites were to be impacted on negatively by the proposed development and Phase 2 mitigation measures to negate these impacts were recommended. In light of this APAC cc was appointed to undertake the Phase 2 work in 2020. A permit for the work was issued to APAC cc (**Permit ID#3141 & Case ID#15214**) by SAHRA in August 2020. The University of Pretoria's Department of Anthropology & Archaeology will be the Curating Institute for the cultural material recovered and sampled from the area during the field work.

Fieldwork on Site MHC003 was 1<sup>st</sup> undertaken during September 2020 and comprised the measuring out of formal excavations on the site as well as the digging of a number of Shovel Test Pits (STP's) on the site in order to test the extent and depth of the archaeological deposit and to recover archaeological material. The results of this 1<sup>st</sup> session were discussed in a report submitted to the client in September 2020 (**See Report APAC020/78**).

A 2<sup>nd</sup> report focused (**See Report APAC020/94**) on the final phase of archaeological work on MHC003. Fieldwork was undertaken and completed during October 2020 and consisted of the archaeological investigations on two Excavation blocks (Excavation 1 & 2) on the site. The results of the physical excavations and the analysis of the recovered cultural material and interpretation of the finds were provided in this document while recommendations regarding the way forward were provided at the end as well.

This Final Report includes the results of the mitigation work on Sites MCH004 (Historical) and MHC007 (Late Iron Age) conducted during August 2021. Recommendations regarding the demolition of the sites after the completion of the Phase 2 Archaeological Mitigation work at the Thaba Eco Lifestyle Estate are contained in this report.

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## 1. INTRODUCTION

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This Final Report includes the results of the mitigation work on Sites MCH004 (Historical) and MHC007 (Late Iron Age) conducted during August 2021.

## 2. TERMS OF REFERENCE

The Terms of Reference for the Thaba Eco Village Phase 2 Archaeological Mitigation were to:

1. *The mapping and excavation of the archaeological sites that will be impacted on by the development (Sites MHC003, 004 & 007)*
2. *The analysis of the recovered material in order to reconstruct the time-frame of occupation of these sites; the material economy of their occupants & the possible cultural identity of the occupants for inclusion in a Final Phase 2 Report, and*

3. *The curation of the collected material in a recognized Institution (in this case the University of Pretoria's Anthropology & Archaeology Department Collection)*

### 3. LEGISLATIVE REQUIREMENTS

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

#### 3.1 The National Heritage Resources Act

According to the Act the following is protected as cultural heritage resources:

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

**The National Estate includes the following:**

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. **Historical settlements and townscapes**
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. **Sites of Archaeological and paleontological importance**
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. **Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)**

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

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m<sup>2</sup> or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m<sup>2</sup>

- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

### **Structures**

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

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

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

### **Archaeology, palaeontology and meteorites**

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

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

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

### **Human remains**

Graves and burial grounds are divided into the following:

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

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

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

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

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

### **3.2 The National Environmental Management Act**

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

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



## **4. METHODOLOGY**

### **4.1 Survey of Literature**

A survey of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography.

### **4.2 Mapping & Excavation**

All the sites that will be impacted and that are covered in the SAHRA permit was mapped using a hand-held Garmin GPS and maps produced from this. All visible stone-walled sections and features were included in this mapping. All the excavation blocks and STP's were also mapped in and indicated on the various site maps.

### **4.3 Oral Histories**

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

### **4.4 Documentation**

All sites, objects, features and structures identified are documented according to a general set of minimum standards. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality. The recovered archaeological material will be properly recorded photographically and provided with accession numbers that will be given by the Department of Anthropology & Archaeology at the University of Pretoria for inclusion and curating in their Archaeological Collection.

## **5. BACKGROUND**

During a Phase 1 HIA conducted on Portions of Rietvlei 101IR during 2006 and later updated in 2014 for the so-called Stone River's Arch Development (now the Thaba Eco Village Lifestyle Estate Development) a number of Late Iron Age (LIA) and recent historical sites were identified & recorded (**See Fourie 2006 & 2014**) in the area.

These sites, first identified and recorded in 2006 by Matakoma Heritage Consultants, were numbered as follows, with GPS Coordinates provided:

**MHC001** (LIA)

**MHC002** (LIA)

**MHC003** (LIA)

**MHC004** (LIA)

**MHC005** (Cemetery)

**MHC006** (Historical)

**MHC007** (Historical)

**MHC008** (Historical)

**MHC009** (Historical)

A subsequent re-evaluation of the 2006 report by PGS Heritage confirmed that the two historical house complexes were demolished between 2008 and 2010, while the third structure was confirmed as not being older than 60 years. The 2014 report concluded that of the original 9 sites identified 6 of these were still rated as having heritage significance, while an additional stone walled settlement cluster had been delineated that was not part of the original study but were included in the 2014 study.

According to the 2014 report the development foot print of the (then) proposed development were to impact directly on sites **MHC002, MHC003, MHC004 and MHC007**. The impact on the sites was rated as medium to high, but with the recommended mitigation measures this impact was to be reduced. It was also argued that the proposed development would have a positive impact as new data would be generated that could add to the archaeological research already conducted on the Klipriviersberg LIA stonewalling. After an assessment of these sites in April 2020, and in lieu of the final development plans, it was clear that **Sites MHC003, MHC004 & MHC007** were to be impacted and that Archaeological Mitigation would be required for these sites only.

Similar LIA sites have been identified by Pelsler in the adjacent Randwater Nature Reserve Area. The Randwater Nature Reserve area Iron Age sites are most likely related to similar sites in the larger Klipriviersberg Nature Reserve. The Klipriviersberg sites have been extensively researched archaeologically and do provide evidence on their age and origin. The Klipriviersberg Nature Reserve area sites are related to the Sotho-Tswana, who moved into the area from AD1300 onwards (Pelsler 2015: 10-11). Based on Huffman's research the Klipriviersberg sites date to between AD1650 & AD1820, and belongs to the Uitkomst facies of the Urewe Tradition (Huffman 2007: 171). Based on Mason's extensive research of the Klipriviersberg sites, he indicated that they were likely occupied between AD1650 & AD1800, and were built by Sotho-Tswana people associated with the Huruthse group (Mason 1986: 567-602).

The mapping of the sites was undertaken in May 2020. In order to determine the exact extents of these sites within the development footprint, and to facilitate the mapping and better documentation of these sites, it was necessary for extensive site clearing to be undertaken. This work was done by a team of Thaba Eco Hotel under the guidance of the archaeologist who indicated the location of each site and the extent of the areas to be cleared of vegetation. Site clearance consisted mainly of grass cutting, removal of weeds and some shrubs, with no tree cutting and removal undertaken.

Once the site clearance was completed the sites were re-visited and more detailed photographic recording of the sites and features on them undertaken, while the sites were mapped with a handheld GPS. Through this exercise more detailed maps of each site, the individual features on them and the extent of the areas impacted were created. Using a handheld GPS for the mapping is limiting due to the fact that there could be a 1m or 2m difference between the coordinates taken for a point and the actual location on the ground.

### **Site MHC003**

The section of Site MHC003 that was cleared and mapped, and which falls within the development footprint, consisted of a small cluster of LIA stone-walled terraces and smaller enclosures (probably for livestock) as well as some recent historical sections of stone walling and cement remnants. The LIA walling has been fairly extensively impacted in the recent past by these historical structures and agricultural activities and as a result most of the LIA walling is disturbed and not visible in some parts. The archaeological significance of the site was therefore deemed as low, but as part of the larger and better preserved sections of MHC003 and the other LIA sites in the larger area required mitigation work as indicated earlier. Iron Age ceramics (pottery) was found on the site during the clearance work and this indicated the presence of a cultural material deposit on the site that could assist on the dating of and interpretation of the site.

### **Sites MCH004 (LIA) & MHC007 (Historical)**

The LIA site MHC004 consists of 3 stone-walled terraces and enclosures similar to those at MHC003, as well as the remnants of a 4<sup>th</sup> feature that has been extensively disturbed by a dirt road that had cut through it. Limited archaeological investigations were carried out on these features in order to recover cultural material and information on the layout and construction of the site.

Site MHC007 contains 2 individual features rectangular or square in shape. The features consist of the stone-packed foundations of what is most likely farm laborer dwellings and related structures. Although the exact age of these are not known, they likely date to between the late 19th and mid-20th centuries and could be related to the graves found on Site MHC005. The mitigation for Site MHC007 consisted of mapping and drawing and the surface sampling of cultural material.

## **6. DISCUSSION**

Archaeological mitigation work focused on Site MHC003 first, as this is the area where construction work will commence a part of Phase 1 of the development. The 1<sup>st</sup> session of work on the site was undertaken in September 2020, and aimed at measuring out a number of formal excavation blocks, recording their positions on the site and also conducting a number of Shovel Test Pits on one of the stone-walled terraces in order to determine the depth/stratigraphy of the archaeological deposit and to see if there are any cultural material present here.

The 2<sup>nd</sup> session of archaeological investigations on Site MHC003 was conducted in October 2020 and focused on the two Excavation blocks (Excavation 1 & Excavation 2) measured out on the site. The results of this work, as well as the analysis of the cultural material & interpretation of the information gathered during this work, will be discussed further on in this report.

### **Results of the Mapping of Site MHC003**

Detailed knowledge of settlement patterns is of great importance in understanding and reconstructing culture-history and life ways. Many Bantu-speaking groups in southern Africa

organized their settlements according to the principles of the so-called Central Cattle Pattern (CCP), an ethnographically derived model of spatial organization based on Adam Kuper's 1982 analysis of Nguni and Sotho-Tswana settlements. The thousands of stone-walled settlements in the Northwest Province, southern Gauteng and Free State were built by the close ancestors of people living in South Africa today, making them appealing to Iron Age archaeologists (Mason 1986: 317). Also, there are oral traditions about many of these settlements, and in some case they were vividly recorded by the first European travelers and missionaries, such as Campbell (1822) and Broadbent (1865).

Although there are many different classes and types of settlement identified by researchers, they are all variations on the CCP theme. For a basic background we can utilize Mike Taylor's (1979) three Group system. The first, Group I, dates to the 16th century, and these settlements have simple elliptical boundary walls enclosing groups of smaller enclosures in the center. Sheep or goat enclosures were sometime located on the outer boundary walls. Group II, dating to between AD 1650 and AD 1840, and can be divided into Group II & Group IIb. Group IIa settlements consist of continuous semi-circular boundary walls, or scallops, enclosing huts. In the center are both small and large circular enclosures, used for cattle and smaller livestock. Group IIb has discontinuous semi-circular boundary walls made up of scallops containing huts, as well as centrally located enclosures. Group III is an agglomeration of circular enclosures with the outer limit marked by varying lengths of curved walls and small circular enclosures.

Group III, or Klipriviersberg (Mason's Class 2 & 5) walling is more complex in that aggregated settlements are common, the outer wall sometimes includes scallops to mark back courtyards, there are more small stock kraals, and straight walls separate households in the residential zone. Klipriviersberg dates to the eighteenth and nineteenth centuries and, according to Huffman, was built by people in the Fokeng cluster (Huffman 2007: 38).

Although the section of site MHC003 that will be impacted by the development has been extensively impacted by recent farming activities, the Eskom Powerline and the current hiking and mountain bike trails that exist here (making interpreting the settlement layout difficult), there are sections of walling and other settlement units close by that will not be impacted by the development. These are very clearly defined and can be classified as Group III as indicated above.



**Figure 1: Aerial view of stone-walled sites in the area. The arrows show settlement units that will not be impacted by the development & that can be classified as Group III or Klipriviersberg Walling (Google Earth 2020).**



**Figure 2: Map of Site MHC003. The site has been extensively impacted in the recent past and its layout is difficult to reconstruct. It would however have been similar to the sites shown in Figure 1 (Google Earth 2020).**

## **Results of the Archaeological Investigations on Site MCH003**

### ***Excavation 1***

Excavation 1 measured 4m x 3m in size and was measured out on one of the stone-walled terraces. The aim with this excavation (as with the others subsequently) was to recover as much cultural material as possible in order to assist with the interpretation of the sites material economy, time-frame of occupation and possibly the cultural identity of its occupants.





**Figure 3: Excavation 1.**

For Excavation 1 the first 0.10m layer of grass cover and topsoil was initially removed up to a depth of around 0.20m below the Present Surface Level (PSL), exposing a layer of darkish and then lighter brown soil with gravel in between. Pieces of pottery and some stone tools were found in this “2<sup>nd</sup>” layer, but not in large numbers.

A 1m x 1m section of the excavation was selected to be taken down to sterile layers in order to see if more cultural material are found below this 2<sup>nd</sup> layer of soil and gravel. Although some more cultural material was recovered, the deposit was not very rich. Other than pottery no other material such as bone or metal was recovered and no layers of ash and/or remnants of possible hut floors or other features were uncovered. At a depth of around 0.30m below the PSL some larger rocks (original bedrock) started appearing. The excavation was stopped at a depth of 0.50m below the PSL in a layer of hard compacted and dark-brown soil.



**Figure 4: Excavation 1 Layer 1.**



**Figure 5: Excavation 1 showing the 1m x 1m block excavated to sterile levels.**





**Figure 6: Excavation 1 completed.**



**Figure 7: Image showing the stratigraphy in Excavation 1.**

## ***Excavation 2***

Excavation 2 was a 2m x 1m rectangular block on another terrace located slightly to the north and upwards of Excavation 1's terrace.



**Figure 8: Excavation 2.**

The stratigraphy in Excavation 2 consisted of around 0.10m of grass and darkish topsoil, followed by layer of dark & lighter brown soil with gravel in between. Large rocks (part of the original bedrock) started appearing at a depth of between 0.15m and 0.20m below the PSL. Cultural material was found between the topsoil and the rock layer, and included pottery and a small amount of faunal material (bone and teeth). Hardly any material was found below this level and hard compacted sterile soil was found at a depth of approximately 0.50m below the PSL.





**Figure 9: Excavation 2.**



**Figure 10: Excavation 2 completed.**



**Figure 11: Excavation 2 stratigraphy.**

### ***Shovel Test Pits (STP's)***

As suggested these test pits are basically the size of a shovel blade's with (in this case approximately 0.30m x 0.30m) and aimed at determining the depth of the archaeological deposit across a specific feature such as a terrace, while also trying to see if any archaeological material is located in an area. During the 1<sup>st</sup> session of fieldwork three STP's were dug in area south of and below Excavation 1.

The test pits indicated that the stratigraphy consisted of approximately 5cm of a soft brown topsoil and grass cover, followed by a harder, darker brown soil on top of a hard gravel layer that starts appearing at a depth of about 15cm below the Present Surface Level (PSL). No cultural material was found in STP1 & 2, but two potsherds were recovered from STP3. These pieces of ceramic were found at a depth of around 10cm below the PSL and in the 2<sup>nd</sup> layer above the hard gravel.

Although not a large amount of cultural material was found in the test pits, it did show that archaeological deposit exists on site.





**Figure 12: STP1.**



**Figure 13: STP2.**





**Figure 14: STP1 & 2 are both around 15cm deep before a hard gravel layer is reached.**



**Figure 15: STP3. The 2 pieces of pottery were found at a depth of around 10cm below the PSL.**





**Figure 16: General view of MHC003 indicating the location of the 1<sup>st</sup> excavations & Shovel Test Pits (Google Earth 2020).**



**Figure 17: Closer view of MCH003 indicating the Excavations and Shovel Test Pits (Google Earth 2020).**



Evidence from the excavations seems to indicate that in general the stratigraphy on the site consists of between 0.10m and 0.20m of grass and dark-brown soft topsoil, followed by a harder and lighter brown and gravelly soil layer, mixed with a darker brown loam soil of approximately 0.20m. Below that is a rocky layer (bedrock) above a hard compacted sterile soil level. Cultural material is found in the 2<sup>nd</sup> layer and although pieces of pottery were recovered from both excavations the numbers are fairly small. Also – besides the pottery – the cultural deposit is not extensive, rich or varied and only a few stone artifacts and a small amount of faunal remains were recovered. It is also worth noting that the site is located on a slight slope and erosion caused by water flowing from higher up would have removed a fair amount of soil and deposit over the years. That, as well as the possibility that the site might not have been settled for an extended period of time, combined with recent agricultural and other activities could explain the relative lack of cultural material.



**Figure 18: The impacts of the Eskom Powerlines and pylons, as well as hiking trails on the site is evident here.**



**Figure 19: The slight slope on which the site is situated is evident in this image.**

### *Analysis of Cultural Material from MHC003*

#### **General Surface Sample**

A total of 24 pieces of pottery were recovered from the general surface of the site. Two of the pieces are undecorated body sherds, while one decorated body sherd was also recovered. Two rim pieces (one decorated and one undecorated) were also found on the surface of the site.

The pieces with rims are too small to determine vessel size and shape, but one of these could most likely be from a pot with an upright neck and possibly represent a cooking vessel as traces of black soot is visible on it. The rest of the undecorated body sherds include some with red ochre burnish on the surface, while others also have evidence of being burnt in fires and therefore being part of cooking pots.

The types of decoration found on the surface material include comb stamping (on the one small rim piece) and a band of bangle impressions on one large body sherd. Although complete decoration motifs cannot be determined from such small and fragmented pieces, and because the ceramic sample is way too small to make any definitive conclusions, these types of decorations are typical of the known Klipriviersberg LIA sites that have been studied by Mason and others in the past. Based on Tom Huffman's research and ceramic analysis techniques Klipriviersberg sites and pottery belong to the so-called Uitkomst facies of the Urewe Tradition. Radiocarbon date from these sites dates Klipriviersberg to between AD1650 & 1820 (Huffman 2007: 170-173).

The two pieces of ceramic from STP3 include one undecorated fragment and one sherd with two parallel lines of incised decoration.



**Figure 20: Pottery from the surface of MHC003.**



**Figure 21: Closer view of comb stamping decoration on a small rim fragment.**





**Figure 22: Closer view of the band of bangle impression decoration on one of the sherds from the surface of the site.**



**Figure 23: Closer view of incised lines on the one sherd from STP3.**

### *Excavation 1*

#### **Stone Artifacts**

The stone artifacts from Excavation 1 included a single flake tool that could date to the Middle or Later Stone Age and could therefore not be related to the LIA settlement at the site. The flake tool represents a possible scraper.

The second stone object is represented by a piece of quartz crystal with a deep cut line running through its center. It is not a naturally-caused line and might indicate that there was intention to use the object as part of a necklace.



**Figure 24: The possible MSA/LSA scraper from Excavation 1.**



**Figure 25: The cut quartz crystal from Excavation 1.**





**Figure 26: Close-up of the quartz crystal showing the deep cut line.**

### **Pottery**

A total of 35 pottery pieces were recovered from Excavation 1. All of these were body sherds. Two were decorated with incised lines. Some of the other sherds show signs of being burnt and having been used in cooking fires, while the surfaces of a few have been burnished red or brown. Both thick and thin walled vessels are represented, and over and above cooking this indicates vessels used for water and for storage.

Incised line decorations and blocks of incised line decoration motifs are characteristic of Uitkomst facies pottery – the pottery industry that the Klipriviersberg archaeological sites are related to.



**Figure 27: The pottery from Excavation 1.**



**Figure 28: Close-up of the decorated pottery from Excavation 1.**

### *Excavation 2*

#### **Faunal Remains**

This was the only faunal remains (animal bones) found on the site. It included 3 unidentifiable fragments of bone, 1 unidentifiable enamel (tooth) fragment and 2 identifiable molars. The 2 molars most probably belong to cattle.



**Figure 29: Bone fragments & teeth from Excavation 1.**

### **Pottery**

Twenty-six body sherds were recovered from Excavation 2. Two of these were again decorated with bands of incised lines. The pottery from this excavation is similar to those from Excavation 1 and found on the surface of the site.

One rim fragment was also found. It is undecorated. The piece represents a pot with a slightly everted neck and rounded rim. Evidence of soot from fire indicates that this was a cooking vessel.



**Figure 30: The undecorated body sherds from Excavation 2.**



**Figure 31: The decorated pottery from Excavation 2.**



**Figure 32: Rim fragment from Excavation 2.**

The results of the archaeological investigations conducted on Sites MCH004 & 007 during August 2021 are discussed below.





**Figure 33: The location of Sites MHC004 & 007 within the boundaries of the Thaba Eco Village development footprint (Google Earth 2021).**

#### **Results of the Archaeological Investigations on Site MCH004**

The work consisted of mapping the visible stonewalled remnants of the sites, as well as the collection of material from the surface of the site and doing a number of Shovel Test Pits (STP's) in order to determine the depth of the possible archaeological deposit.

The stone-walling on Site MHC004 is very ephemeral and unclear and consists of mostly low foundations of walling on average less than 0.50m in height. From the mapping done it seems as if the site represents the badly preserved remnants of terracing and some possible enclosures for either livestock or hut bays. Due to the lack of preservation a distinct layout could not be determined, but it is similar to that of Site MHC003 and most likely related to the Klipriviersberg sites known to exist in the larger area.





**Figure 34: View of the location of Site MHC004.**



**Figure 35: Low stone-walling at Site MHC004.**





**Figure 36: Another view of the stone walling foundations at Site MHC004.**





**Figure 37: General view of Site MHC004.**



**Figure 38: Map of Site MHC004. The positions of the STP's are also indicated (Google Earth 2021).**



With no ash midden/s or other cultural features such as hut remains visible on the site, three Shovel Test Pits (STP's) were done across the site to try and determine if any cultural deposit is present, and if it does what the extent and depth of such a deposit would be. A surface collection of cultural material (pottery) was also undertaken to increase the material sample from the site.

GPS Coordinates of the STP's: **S26.30538 E28.04436 (STP1); S26.03538 E28.04448 (STP2); S26.30525 E28.04483 (STP3).**

STP 1 was situated directly next to and on the western side of a section of terrace walling. No cultural material or evidence of cultural deposit such as ash was found. The pit was around 0.10m in depth at which level a hard compacted red and gravelly soil was reached.

STP 2 was located approximately 4.50m west of a section of terrace walling and as with STP 1 no evidence of any cultural deposit or material was uncovered. Again, the pit was around 0.10m deep when hard compacted sterile levels were reached.

STP 3 was located 1.50m west of another section of walling, in an area where a fair amount of pottery was visible on the surface of the site. These potsherds are situated downslope from the top of the site and had presumable been washed down and had been trapped against the lower down section of the sites' walling. No cultural material or evidence of cultural deposit (ash) was found in the STP and sterile hard levels were reached between 7cm and 10cm below the Present Surface Level (PSL).



**Figure 39: STP 1 was located directly adjacent to a section of walling at Site MHC004.**



**Figure 40: STP 2.**





**Figure 41: STP 3.**

A number of trenches in the general vicinity of Site MHC004 (dug as part of testing the geology of the area for construction foundations) were also scrutinized for evidence of the possible existence of and extent of any cultural deposit. It is clear from these that there is a general lack of cultural deposit and that the stratigraphy in the area consists of approximately 10cm of grass and loose top soil, followed by hard and weathered sandstone layers. No archaeological material such as pottery could be seen in these trenches and the spoils located next to it.



**Figure 42: The stratigraphy in the general area o MHC004 as seen in one of the test trenches.**

#### **Surface Sample from Site MHC004**

Twenty-one (21) pieces of pottery were collected from the surface of Site MHC004. None of these had any decoration or diagnostic features (such as rims) and using these for detailed classification and a typology was not possible.

The pottery fragments collected were generally very small, although some pieces were larger and were burnished on their outer surfaces with red ocher and grey/black burnish. Some were also burnt black on their outer and inner surfaces and indicates that they formed part of cooking vessels. The smooth burnished fragments most likely represent storage vessels for water and possibly for cereals such as grain or maize. Some of the pieces are also fairly thick-walled indicating a storage function.





**Figure 43: The pottery from the surface of Site MHC004.**

### **Results of the Archaeological Investigations on Site MCH007**

Site MHC007 (recent historical ruins) consist of the stone-packed walls and foundations of two structures (numbered MCH007A & 007B).

MHC007A is a dry stone-packed structure (probably a homestead) with two entrances (one on the south-western and one on its eastern side). The structure is rectangular in shape and measures 7.5m x 4.6m in size. The height of the remaining walls is between 0.30m & 0.40m on average. The construction of the walling consists of a double row of large stones in-filled with smaller stones and gravel. No clay or plaster could be identified in the construction.

MCH007B is situated approximately 32m east of MCH007A and is also rectangular in shape. This structure measures approximately 16.50m x 10.40m in size. Although its function is unclear it was probably used as a livestock enclosure. No clear entrances could be identified. The construction of this structure is similar to that of MHC007A.

GPS Coordinates: **S26.30666 E28.04419 (MHC007A) & S26.30666 E28.04451 (MHC007B).**



**Figure 44: MHC007A.**





**Figure 45: Detail of stone walling of structures MHC007A.**



**Figure 46: The stone-packed walls of MHC007B consists of a double-row of large stones in-filled with smaller stones and gravel.**





**Figure 47: Another view of the stone walling at MHC007A.**



**Figure 48: A view of Site MHC007B after site cleaning. The stone walling (mostly foundations) are not clearly visible.**





**Figure 49: A view of Site MHC007B in August 2021. The remnants of the stone-walling are visible.**

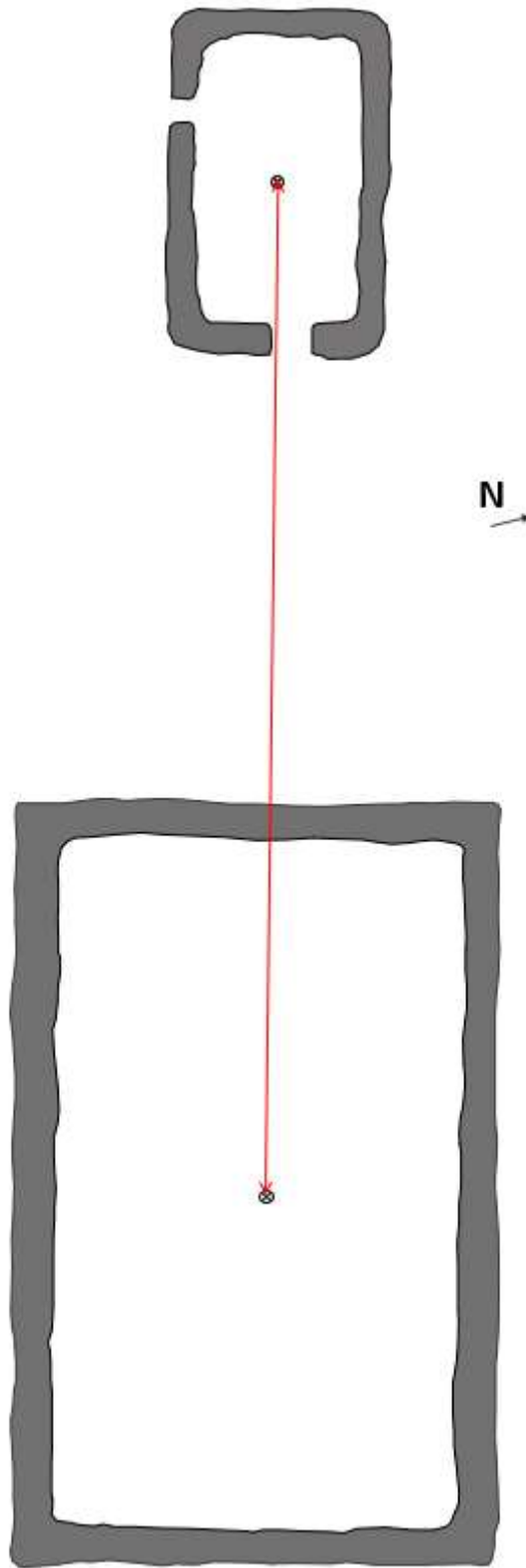


**Figure 50: A section of stone-walling at MHC007B that are better preserved.**

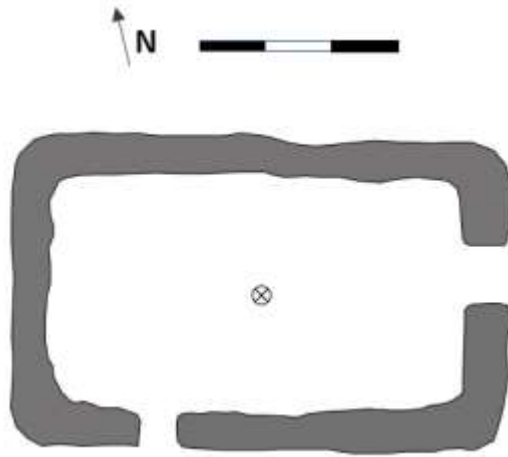




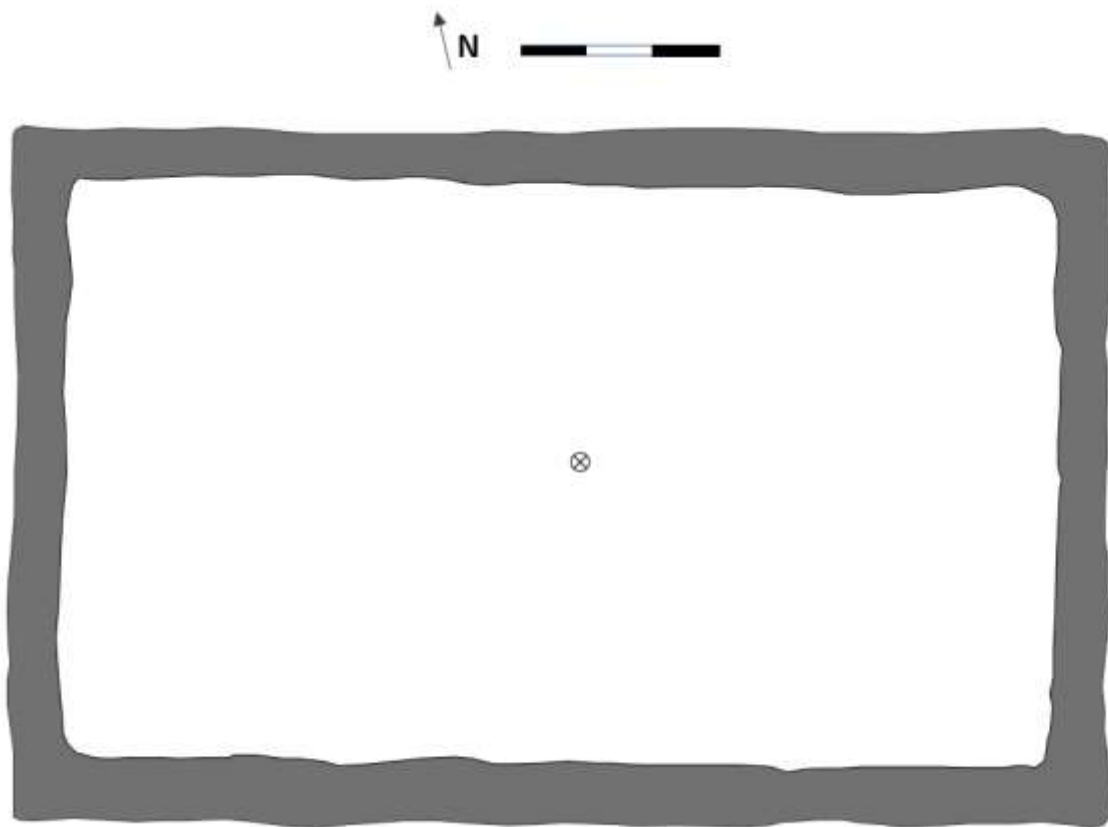
**Figure 51: Soil heap (the result of clearing for the road in recent times) next to MHC007B. Some cultural material was recovered from here.**



**Figure 51: Drawing of Site MCH007 showing both structures (007A & 007B) in relation to each other on the site with the center points of both where GPS coordinates were taken indicated.**



**Figure 51: Scale drawing of Structure MHC007A.**



**Figure 52: Scale drawing of Structure MHC007B.**

Besides a soil heap (the result of recent cleaning of the area and the road associated with the hiking and mountain bike trail on the property) no refuse middens (rubbish dumps) could be identified on site MHC007. It was therefore decided to undertake a surface collection of material at and close to the two structures associated with it and to use the collected material to try and date the use and occupation of the site.



Some modern/recent refuse was also found on the site, including electric light bulbs, modern beer bottle pieces, metal wire pieces and strips of corrugated iron sheeting. This material was not collected and sampled.

Cultural material that was sampled – and thought to be associated with the use and occupation of Site MHC007 – includes fragments of metal objects, glass and ceramics (porcelain and stone-ware). Although dating the site through these artifacts is difficult, it provides a relative date of between the late 19<sup>th</sup> to mid-20<sup>th</sup> centuries.

The metal from the site includes pieces of corrugated iron sheeting that could be the remains of roofing, fragments of food tins and strips of metal that could have been hoops around barrels.

The glass fragment from the site represents a liquor or non-alcoholic beverage although the type of bottle could not be determined. One piece of a green-colored glazed tile was also recovered.

The porcelain found on the site are mostly too fragmented and small to make any deductions from, although a few pieces had small sections of decoration and diagnostic features such as rims and bases. From these it is possible to say that the porcelain pieces from the site represents vessels such as plates, saucers, possible serving dishes and cups. The decorations are similar to some found on late 19<sup>th</sup> to mid-20<sup>th</sup> century porcelain found at other sites by the author (Pelser 1998; 2013).

It can be concluded that Site MHC007 probably dates to between the late 19<sup>th</sup> and mid-20<sup>th</sup> centuries. The structures on the site have been fairly extensively impacted on damaged over recent years, with mostly just foundations remaining. Extensive historical-archaeological deposits (refuse middens) were not identified on the site and in its vicinity, with recent clearing of the area also having an impact on the material culture at the site. It is possible that these structures were used and occupied by farm laborers and that MHC007A was a homestead and MHC007B a livestock enclosure.



**Figure 53: Modern rubbish on Site MCH007.**



**Figure 54: Corrugated iron on the site.**





**Figure 55: Pieces of corrugated iron roofing, barrel hoops and possible food tins.**



**Figure 56: Unidentified brass/copper object from the site.**



**Figure 57: Late 19<sup>th</sup> to mid-20<sup>th</sup> century porcelain, stone-ware and glass from MHC007.**

## **7. CONCLUSIONS AND RECOMMENDATIONS**

APelser Archaeological Consulting cc (APAC cc) was appointed by Bokamoso Landscape Architects & Environmental Consultants CC, on behalf of Balwin Properties Limited, to undertake mitigation on various archaeological and historical heritage sites related to the proposed Thaba Eco Village Filling Station development on the Remainder of Portion 2 of the farm Rietvlei 101IR. The proposed development and study area is located on the Risipark Agricultural Holdings area to the south of the City of Johannesburg Metropolitan Municipality of Gauteng.

Balwin Properties Limited is proposing to develop the Thaba Eco Village Lifestyle Estate on Rietvlei 101IR. During earlier (2006) heritage assessments in the study area a number of stone-walled Late Iron Age sites as well as recent historical sites (ruins of structures and a cemetery) were identified in the area. Some of these sites were to be impacted on negatively by the proposed development and Phase 2 mitigation measures to negate these impacts were recommended. In light of this APAC cc was appointed to undertake the Phase 2 work in 2020. A permit for the work was issued to APAC cc (Permit ID#3141 & Case ID#15214) by SAHRA in August 2020. The University of Pretoria's Department of Anthropology &



Archaeology will be the Curating Institute for the cultural material recovered and sampled from the area during the field work.

Fieldwork on Site MHC003 was 1st undertaken during September 2020 and comprised the measuring out of formal excavations on the site as well as the digging of a number of Shovel Test Pits (STP's) on the site in order to test the extent and depth of the archaeological deposit and to recover archaeological material. A 2nd report focused on the final phase of archaeological work on MHC003. Fieldwork was undertaken and completed during October 2020 and consisted of the archaeological investigations on two Excavation blocks (Excavation 1 & 2) on the site.

This Final Report includes the results of the mitigation work on Sites MCH004 (Historical) and MHC007 (Late Iron Age) conducted during August 2021.

Mapping sites MCH003 & 004 and determining the settlement layout was one of the aims of the archaeological mitigation work. Although these sites that will be impacted by the development has been extensively altered by recent farming activities, the Eskom Powerline and the current hiking and mountain bike trails that exist here, there are sections of walling and other settlement units close by that will not be impacted by the development. These are very clearly defined and can be classified as Group III. Group III is an agglomeration of circular enclosures with the outer limit marked by varying lengths of curved walls and small circular enclosures. Group III, or Klipriviersberg (Mason's Class 2 & 5) walling is more complex in that aggregated settlements are common, the outer wall sometimes includes scallops to mark back courtyards, there are more small stock kraal, and straight walls separate households in the residential zone. Klipriviersberg dates to the eighteenth and nineteenth centuries and, according to Huffman, was built by people in the Fokeng cluster.

Although some cultural material was found in the excavations and on the surface of the sites, the amount is relatively small and besides mostly pottery only 2 stone artifacts and a small amount of faunal remains were recovered. Only a few decorated pieces of pottery were recovered. To reconstruct material economy from this is not possible.

The types of decoration found include comb stamping, bangle impressions and line incisions. Although complete decoration motifs cannot be determined from such small and fragmented pieces, and because the ceramic sample is way too small to make any definitive conclusions, these types of decorations are typical of the known Klipriviersberg LIA sites that have been studied by Mason and others in the past. Based on Tom Huffman's research and ceramic analysis techniques Klipriviersberg sites and pottery belong to the so-called Uitkomst facies of the Urewe Tradition. Radiocarbon date from these sites dates Klipriviersberg to between AD1650 & 1820 (Huffman 2007: 170-173).

Evidence from the excavations seems to indicate that in general the stratigraphy on the site consists of between 0.10m and 0.20m of grass and dark-brown soft topsoil, followed by a harder and lighter brown and gravelly soil layer, mixed with a darker brown loam soil of approximately 0.20m. Below that is a rocky layer (bedrock) above a hard compacted sterile soil level. Cultural material is found in the 2nd layer and although pieces of pottery were recovered from both excavations the numbers are fairly small. It is also worth noting that the sites are located on a slight slope and erosion caused by water flowing from higher up would have removed a fair amount of soil and deposit over the years. That, as well as the possibility

that the sites might not have been settled for an extended period of time, combined with recent agricultural and other activities could explain the relative lack of cultural material.

In conclusion it can be said that the archaeological investigation of Sites MHC003 & MHC004 was conducted successfully. The sites had been impacted on in the recent past through various activities and was therefore not in a pristine state of preservation. However, as part of the larger Klipriviersberg LIA Settlement Complex, and as part of the sites close to the development area that will not be impacted, it was deemed significant and mitigation measures were recommended before the site could be demolished. The work carried out by APAC cc on these sites was in fulfillment of these recommendations.

MHC007 is the historical-archaeological site that will be impacted by the development. The site consists of two separate structures (007A & 007B). MHC007A is a dry stone-packed structure (probably a homestead) with two entrances (one on the south-western and one on its eastern side). MHC007B is situated approximately 32m east of MHC007A and is also rectangular in shape. Although its function is unclear it was probably used as a livestock enclosure. No clear entrances could be identified. The mitigation work on MHC007 consisted of mapping and drawing the structures, as well the sampling of cultural from the site.

Some modern/recent refuse was also found on the site, including electric light bulbs, modern beer bottle pieces, metal wire pieces and strips of corrugated iron sheeting. This material was not collected and sampled. Cultural material that was sampled – and thought to be associated with the use and occupation of Site MHC007 – includes fragments of metal objects, glass and ceramics (porcelain and stone-ware).

It can be concluded that Site MHC007 probably dates to between the late 19th and mid-20th centuries. The structures on the site have been fairly extensively impacted on damaged over recent years, with mostly just foundations remaining. Extensive historical-archaeological deposits (refuse middens) were not identified on the site and in its vicinity, with recent clearing of the area also having an impact on the material culture at the site. It is possible that these structures were used and occupied by farm laborers and that MHC007A was a homestead and MHC007B a livestock enclosure.

Finally, based on the Phase 2 Archaeological Mitigation work conducted on sites MHC003, MHC004 & MHC007, it is recommended that development work in the area where the sites are located can be completed and that these sites can be demolished. Care should however be taken that should any archaeological material or features (such as hut floors or unmarked burial pits) be uncovered that the archaeologist be called in to investigate.

## **8. REFERENCES**

1. General & Closer Views of Study Area location, footprint and Sites recorded: Google Earth 2020 & 2021.
2. Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies**. Pretoria: J.L. van Schaik.
3. Fourie, W. 2006. **Heritage Assessment. Stone River Arch Development, Rietvlei 101, Johannesburg, Gauteng**. Matakoma Heritage Consultants (Pty) Ltd.

4. Fourie, W. 2014. **Heritage Impact Assessment for the Proposed Mixed-Use Development to be known as Stone River's Arch on the Remaining Extent of 112 and the Remaining Extent of Portion 2 of the farm Rietvlei 101IR, City of Johannesburg Metropolitan Municipality, Gauteng Province.** Unpublished Report PGS Heritage. For: GladAfrica Environmental Management. August 2014.
5. Huffman, T.N. 2007. **Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa.** Scottsville: University of KwaZulu-Natal Press.
6. Lombard, M., L. Wadley, J. Deacon, S. Wurz, I. Parsons, M. Mohapi, J. Swart & P. Mitchell. 2012. South African and Lesotho Stone Age Sequence Updated (I). **South African Archaeological Bulletin 67 (195): 120–144, 2012.**
7. Mason, Revil. 1986. Origins of Black People of Johannesburg and the Southern Western Central Transvaal AD350-1880. **Occasional Paper No.16 of the Archaeological Research Unit. Archaeological Research Unit. University of the Witwatersrand.**
8. Pelser, A, van Schalkwyk J. & F.Teichert. 1998. **Excavation of a Late 19th/Early 20th Century Rubbish Dump in Minnaar Street, Pretoria.** Research by the National Cultural History Museum. Vol.7 1998. pp. 93-119.
9. Pelser, A.J. 2013. **A Report on a Desktop Study and site assessment of a Historic Ash Dump associated with the Modderfontein (AECI) Dynamite Factory, located on Modderfontein 35 IR to be impacted by the Westlake View Development.** Unpublished Report APAC013/06. For: IMPROVON. February 2013.
10. Pelser, A.J. 2015. **A Report on the Investigation of Stone Walled Sites & other Features related to the Bakwena Ba Mare A Phogole Land Claim, Gauteng.** Unpublished Report APAC015/13. APelser Archaeological Consulting cc. For: Mr. At Fischer. March 2015.
11. Pelser, A.J. 2020. **1st Report on the Archaeological Mitigation Work related to the Proposed Thaba Eco Village Lifestyle Estate Development on the Remainder of Portion 2 of the farm Rietvlei 101IR, City of Johannesburg, Gauteng.** Unpublished Report. APelser Archaeological Consulting cc APAC020/78. For: Bokamoso Landscape Architects & Environmental Consultants CC. September 2020.
12. Pelser, A.J. 2020. **2nd Report on the Archaeological Mitigation Work related to the Proposed Thaba Eco Village Lifestyle Estate Development on the Remainder of Portion 2 of the farm Rietvlei 101IR, City of Johannesburg, Gauteng.** Unpublished Report. APelser Archaeological Consulting cc APAC020/94. For: Bokamoso Landscape Architects & Environmental Consultants CC. November 2020.
13. Republic of South Africa. 1999. National Heritage Resources Act (No 25 of 1999). Pretoria: the Government Printer.



14. Republic of South Africa. 1998. National Environmental Management Act (no 107 of 1998). Pretoria: The Government Printer.
15. Taylor, M.O.V. 1979. **Late Iron Age settlements on the northern edge of the Vredefort Dome**. Unpublished M.A. Dissertation. Johannesburg: University of the Witwatersrand.
16. Van Schalkwyk, J.A. 2012. **Heritage impact assessment for the Proposed Fort West Phase 1 1 Development, Pretoria Magisterial District, Gauteng Province**. Unpublished Report 2012/JvS/004. For: Seedcracker Environmental Consulting. January 2012.