

## Archaeological Mitigation Report

For the Sammy Marks mixed-used development (Ext 49 to 53) located on the Remainder of  
Portion 2 of the Farm Zwartkoppies 364 JR, City of Tshwane Metropolitan Municipality,  
Gauteng Province

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## EXECUTIVE SUMMARY

African Heritage Consultants conducted a Heritage Impact Assessment (Kusel *et al.* 2019) for the proposed Sammy Marx Residential Development located on the Remainder of Portion 2 of the Farm Zwartkoppies 364 JR, City of Tshwane Metropolitan Municipality, Gauteng Province. During the assessment, 70 heritage sites were identified, of which eight sites will be directly impacted on. Only seven of these sites are regarded to be of potential heritage significance by Kusel and HCAC was appointed by Exigent Environmental to undertake the required mitigation measures for these sites prior to development. The ninth site is located on the boundary of the development and this site was further investigated to determine the extent of the site within the development footprint.

The mitigation measures outlined in this report deals with the following sites ZK9, ZK10, ZK65, ZK66, ZK 67; ZK68 and ZK69. what is described in the Kusel *et al.* (2019) report as Late Iron Age Stone Walled sites and sites with variable stone walling identified within the Sammy Marks development Extension 49 to 51. The mitigation measures undertaken comprised the recording of detailed site layout plans, test excavations and a basic description of each site. The layout plans were recorded using standard survey equipment including a total station. Site ZK64, located on the boundary of the development area was investigated to determine the extent of the site within the development footprint, this site was however previously mitigated during the construction of the Rand Water Pipeline.

This document represents a final report on the results of the excavations and mapping conducted on Iron Age Stone walled sites (identified by Kusel *et al.* 2019) that would be affected by the proposed development. Several sites outside of the development footprint will be retained *in-situ* providing samples of the settlement layouts for future generations. The sites were mitigated under SAHRA permit ID 3186 and this report will outline the work conducted during the fieldwork in fulfilment of the Permit Requirements, and the results achieved. It is believed that the archaeological mitigation work conducted was completed successfully and the proposed development should be allowed to continue taking into consideration the recommendations put forward at the end of this document.

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## 1. INTRODUCTION

African Heritage Consultants was contracted to conduct a Heritage Impact Assessment (Kusel *et al.* 2019) for the proposed Sammy Marx Residential Development located on the Remainder of Portion 2 of the Farm Zwartkoppies 364 JR, City of Tshwane Metropolitan Municipality, Gauteng Province (Figure 1). The report was submitted to SAHRA (Case number 14453) and SAHRA subsequently provided final comments on the assessment.

The assessment recorded numerous stone walled sites in four clusters, a possible informal grave, numerous historical sites including farm labourers' houses and homesteads, cemeteries and graves, shale quarries, irrigation features, possible Anglo Boer War trenches, a horse cart track and avenue of trees. Eight sites will be directly impacted on but only seven of these sites are regarded to be of potential heritage significance by Kusel *et al.* (2019). Proposals for mitigation of these sites prior to development are set out in Table 1 in this report. Please refer to the initial heritage report by Kusel *et al.* (2019) that was submitted to SAHRA for a description of the sites.

On the present layout plan archaeological sites ZK9, ZK10, ZK65, ZK66, ZK 67; ZK68 and ZK69 will be directly impacted upon by the proposed development (Figure 2). The sites comprise Iron Age stone walled settlements and sites with variable stone walling and due to the anticipated impact on these sites HCAC was appointed by Exigent Environmental to conduct the necessary mitigation as per the recommendations made in the 2019 HIA (Kusel *et al.* 2019). These sites were mitigated by HCAC under SAHRA permit ID 3186.

Excavations and documentation of the features was conducted from the 15th to 26 March 2021. Mitigation consisted of bush clearing, detailed mapping of the site layout and archaeological features with a Total station and test excavations. The mitigation work was completed successfully.



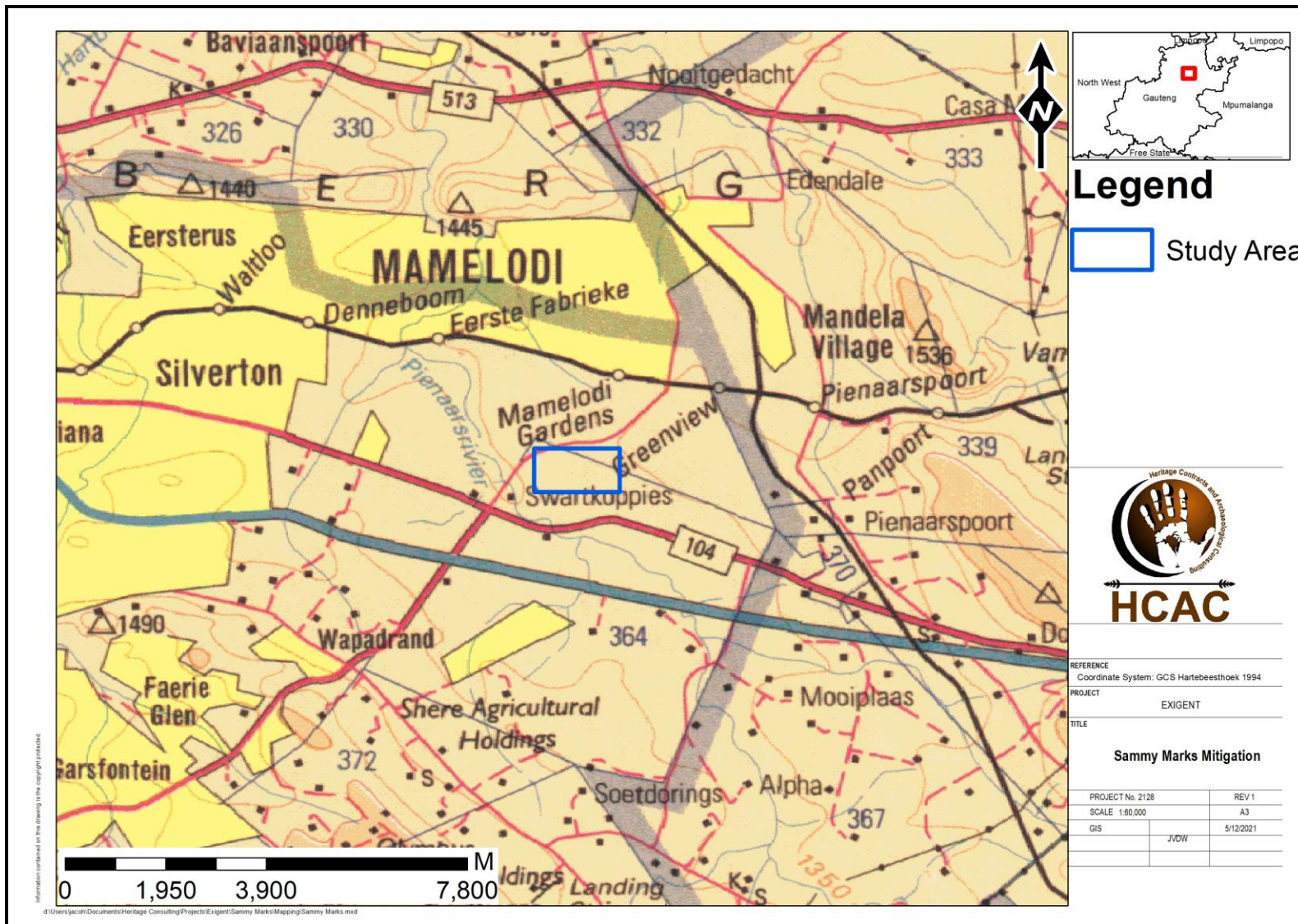


Figure 1. Regional Setting of the project.



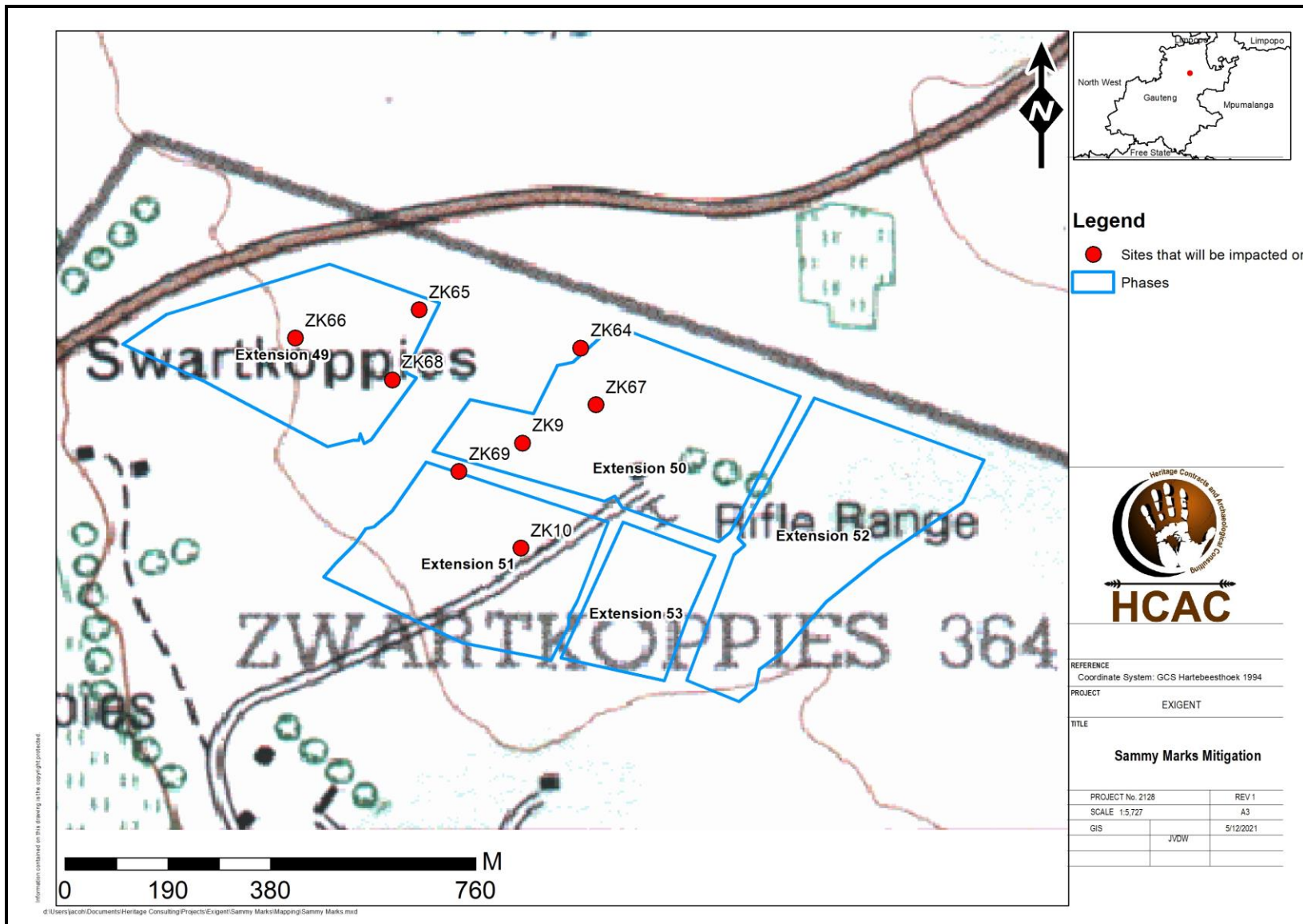


Figure 2: Sites directly impacted on by the proposed development phases.

## 2. BACKGROUND INFORMATION

### Archaeological Context

Based on the Kusel *et al* (2019) study it is evident that stonewalled settlements from the LIA, and the historical period, and unmarked graves of informal cemeteries form a major component of the heritage resources of the study area and adjacent land parcels. Table 1 summarises the sites that will be impacted on and the recommended mitigation from Kusel *et al*. (2019).

**Table 1: Summary of sites impacted on by the development.**

Site	Description (Kusel et al 2019)	Significance	Recommended Mitigation
ZK 9	Large Number of Units with variable walling and scattered over a large area. Rand Water	Medium Significance Proposed Field Rating/Grade III B Local	This site must be recorded, and appropriate mitigation proposed.
ZK 10	servitude impacts this area. Previously several settlements were investigated in a Phase 2 mitigation (PGS 2014).	Medium Significance Proposed Field Rating/Grade III B Local	This site must be recorded, and appropriate mitigation proposed.
ZK 64. It must be noted that this site is located on the periphery of the proposed development and was investigated to determine the extent of the site within the development footprint	Large number of units, variable walling and scattered over a large area. Rand water servitude impacts this area. A number of graves were relocated from here.	Medium Significance Proposed Field Rating/Grade III B Local	This site must be recorded, and appropriate mitigation proposed.
ZK 65		Medium Significance Proposed Field Rating/Grade	This site must be recorded, and

		IIIB Local	appropriate mitigation proposed.
ZK 66		Medium Significance Proposed Field Rating/Grade IIIB Local	This site must be recorded, and appropriate mitigation proposed.
ZK 67		Medium Significance Proposed Field Rating/Grade IIIB Local	This site must be recorded, and appropriate mitigation proposed.
ZK 68		Medium Significance Proposed Field Rating/Grade IIIB Local	This site must be recorded, and appropriate mitigation proposed.
ZK 69		Medium Significance Proposed Field Rating/Grade IIIB Local	This site must be recorded, and appropriate mitigation proposed.

### 3. METHODOLOGY

The above-mentioned sites were subjected to a Phase 2 investigation which entailed the archaeological documentation of the sites with the following objectives:

- Bush clearing on the site, to expose archaeological features and to determine site layout;
- Detailed mapping of the site layout and archaeological features with a total station;
- Test excavations to determine site extent and subsurface features as well as the depth of the archaeological deposit;
- The main aim of the excavations will be to obtain a representative cultural material sample.

These objectives were achieved by employing the following methodology outlined in Section 3.1 to 3.5 of this report.

### **3.1 Cultural Historical Background**

A brief survey of available literature was conducted to extract data and information on the area in question to provide general heritage context of the study area. This literature search included published material, unpublished commercial reports and online material, including reports sourced from the South African Heritage Resources Information System (SAHRIS).

### **3.2 Mapping**

The main aim with the mapping of the recorded features was to document the settlement layout of the sites that will be impacted on by the proposed development. The documentation of the sites was achieved by means of preparing scaled ground plans of the sites. Main features were also photographed. Excavated layers and features were recorded in plan and section drawings of selected features. True north is indicated on all plans and site photographs. Photographs of the excavations were taken using a 1m scale and close-up photographs with a 10cm scale.

### **3.3 Excavations**

Excavations focused on surface features and were conducted stratigraphically whereby the uppermost deposit was exposed and recorded before excavation. Excavations were terminated when sterile soil were encountered. In selected areas test excavations were conducted through sterile deposits to confirm the lack of underlying cultural deposits. Stone walled structures were cleared of vegetation to record their dimensions and method of construction. Shovel pit testing was conducted within open spaces where no surface features were visible (ZK09, ZK66, ZK 67 and ZK 68). Excavated material was measured in 10 l buckets and screened through a fine (5mm) and course (10mm) screen and all excavations were backfilled. Digital photographs of the excavations were taken together with plan drawings. Where stratigraphy was encountered profile drawings of the excavations were done.

At ZK 10 the area was cleared using slashers/brush cutter to gain access to the site due to the extremely overgrown vegetation. After clearing of the vegetation, a line of test pits was set up in a N-S orientation, each 2m from one another apart from the distance between Square 05 and Square 06 which is only 1m. The test pits were systematically dug by hand in 50cm x 5cm squares.

At Site ZK69 a line of test pits was set up in specifically chosen directions to avoid some of the larger shrubs and trees, each 2m from one another. Test pits were systematically dug with shovels and trowels in 50cm x 5cm squares.

### 3.4 Analysis

All artefacts were retained. Due to the small diagnostic ceramic assemblage recovered from the excavations no further analysis of form, function and style was necessary because this would have been statistically meaningless, and discussion of the artefacts is restricted to short descriptions and photographs. Faunal remains were too fragmented to warrant analysis although all were kept.

### 3.5 Dating

No dateable material was recovered during the excavations.

## 4. IRON AGE BACKGROUND

This section will only focus on the Iron Age period in line with the sites mitigated under the Section 35 permit.

The Iron Age represents the spread of Bantu speaking people and overlaps both the pre-Historic and Historic periods. It can be divided into three distinct periods:

- The Early Iron Age: Most of the first millennium AD.
- The Middle Iron Age: 10th to 13th centuries AD
- The Late Iron Age: 14th century to colonial period.

The Iron Age is characterised by the ability of these early people to manipulate and work Iron ore into implements that assisted them in creating a favourable environment to make a better living. In the greater Pretoria area an Early Stone Age Terrain, known as Wonderboompoort has been identified. This area was also important to Iron Age communities, as it was located within an area where many Late Iron Age terrains were found. (Bergh 1999). Another well-known Iron Age site is the early Iron Age Site of Derdepoort where a small collection of ceramics was uncovered dating back to the 4th to 7<sup>th</sup> century AD (Nienaber et al 1997).

Numerous stone walled settlements were recorded around the study area (Pelser & Van Vollenhoven 2009, Huffman, Birkholtz 2014). These sites are mostly associated with the Southern Ndebele and are found in the area between Wallmannsthal and Roodeplaas Dam and also along the Pienaars River to the south of the N4 Highway (Birkholtz 2009) The Ndebele were most probably among the earliest Nguni-speaking people in the immediate area north of the Magaliesberg range north of Pretoria. During the rule of a chief named Musi, they split into five separate migrating groups, namely the Manala, Ndzuza, Kekana, Mhwaduba and Sibasa sections (Van Schalkwyk *et.al* 1996). According to oral traditions this area was geo-politically divided into three regions. As a result of the destruction caused by Mzilikazi, the Manala underwent a three-fold split leaving three divisions of Ezotshaneni, Embilaneni and KoNonduna (Pelser 2012).

The exact geographical boundaries of the KoNonduna sub-region are not known and might have overlapped with the adjacent Embilaneni. Oral traditions provide the names of farms which formed part of this region, namely Klipkop 396 JR, a section of Zwartkoppies 364 JR, Hatherley 331 JR, a section of Mooiplaats 367 JR and Zwavelpoort 373 JR. It appears that the KoNonduna ward was established at the time of the reign of Mdibane and lasted until the time of the attack by Mzilikazi during Sibindi's reign (Van Schalkwyk *et.al* 1996). The study area and stone walled remains therefore more than likely related to the Manala Ndebele.

The Difaqane (Sotho), or Mfekane ("the crushing" in Nguni) was a time of bloody upheavals in Natal and on the Highveld, which occurred around the early 1820's until the late 1830's. It came about in response to heightened competition for land and trade and caused population groups like gun carrying Griquas and Shaka's Zulus to attack other tribes. At the beginning of the nineteenth century, the predominant tribe in the area north of Pretoria was the Manala-Ndebele. The Kgatla were also present to the north of where Pretoria is located today. It seems that, in 1832, Shaka's Zulu tribe passed by the south of Pretoria from the southeast in a westerly direction (Bergh 1999).

## 5. DOCUMENTATION AND EXCAVATION OF SITES

### 5.1 Introduction

This section of the report refers to the features that were mitigated (Figure 3) and includes discussion on the results of the mitigation. Field notes of the excavation finds are summarised under Annexure A. The spatial distribution of the sites mitigated is illustrated in Figure 3.

Sites ZK09, ZK 10, ZK 65 and ZK 69 are all marked by ephemeral walling no more than 30 cm high, consisting of an outer wall forming an enclosure measuring between 30 and 34 meters with smaller enclosures on the outer wall measuring between 3 and 4 meters. The lack of features such as burned dakha and middens are typical of these sites excavated in the area and the mitigation focussed on mapping the layout and shovel pit tests (not indicated on the layout plans) to determine possible deposits within the different areas. Where sub surface finds warranted it, test pits were extended into test trenches.

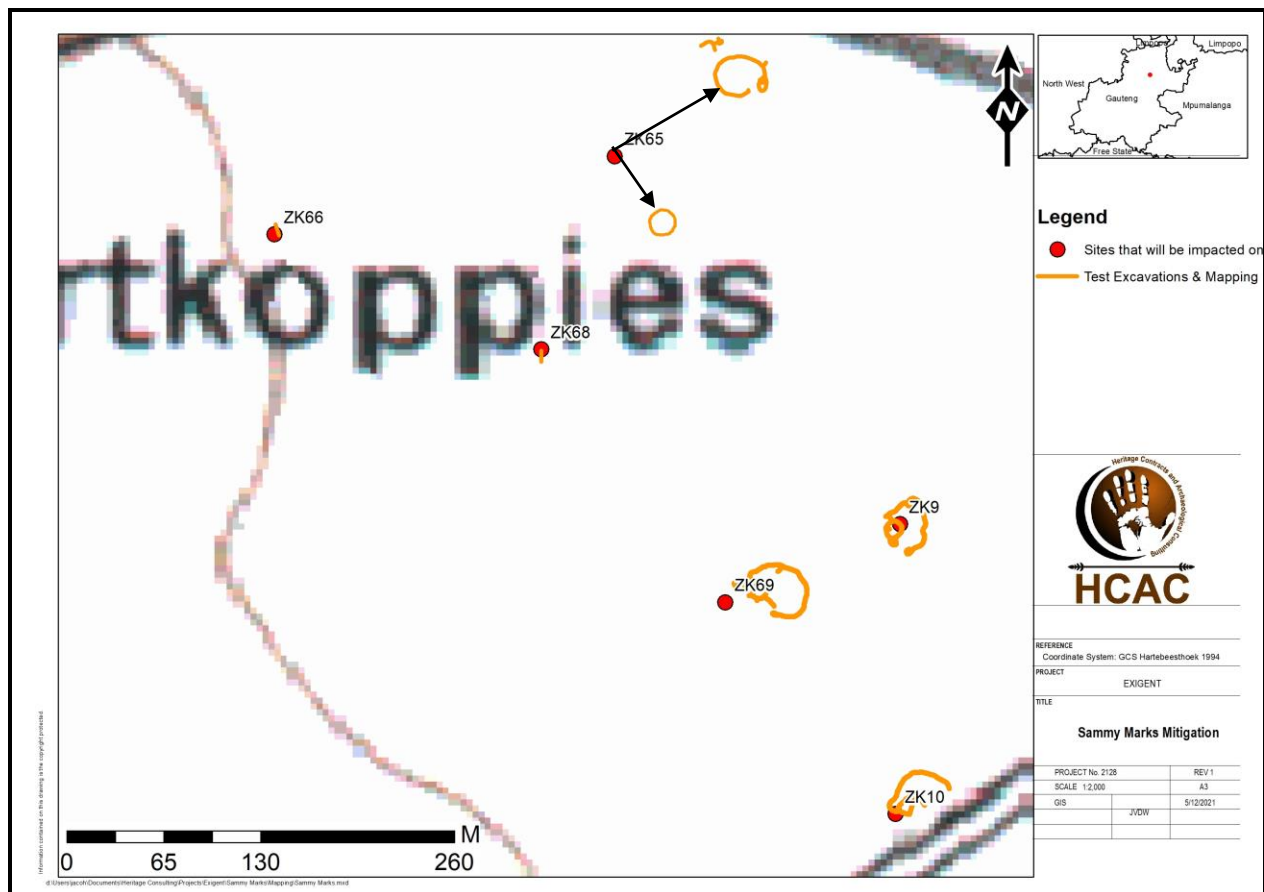


Figure 3. Map of the mitigated features.



### 5.1. ZK 09

The site is covered by a series of overgrown bushes, trees and shrubs along with tall grass that covers the entire area, and the vegetation was cleared by hand to determine the site layout (Figure 4).

Initially a line of shovel test pits was set up over an area suspected of being the general living space as well as an open area, possibly a kraal. The shovel pit tests were allocated as STP-T1, with STP01-04 being the individual test pits, however STP03 and 04 ended up being extended into a test trench due to exposing a concentration of ceramic shards against the wall of a small enclosure (enclosure 2). These ceramics are all body shards without decoration or rims. Fragments of a smeared floor were exposed within the enclosure confirming that these enclosures were used as hut platforms.

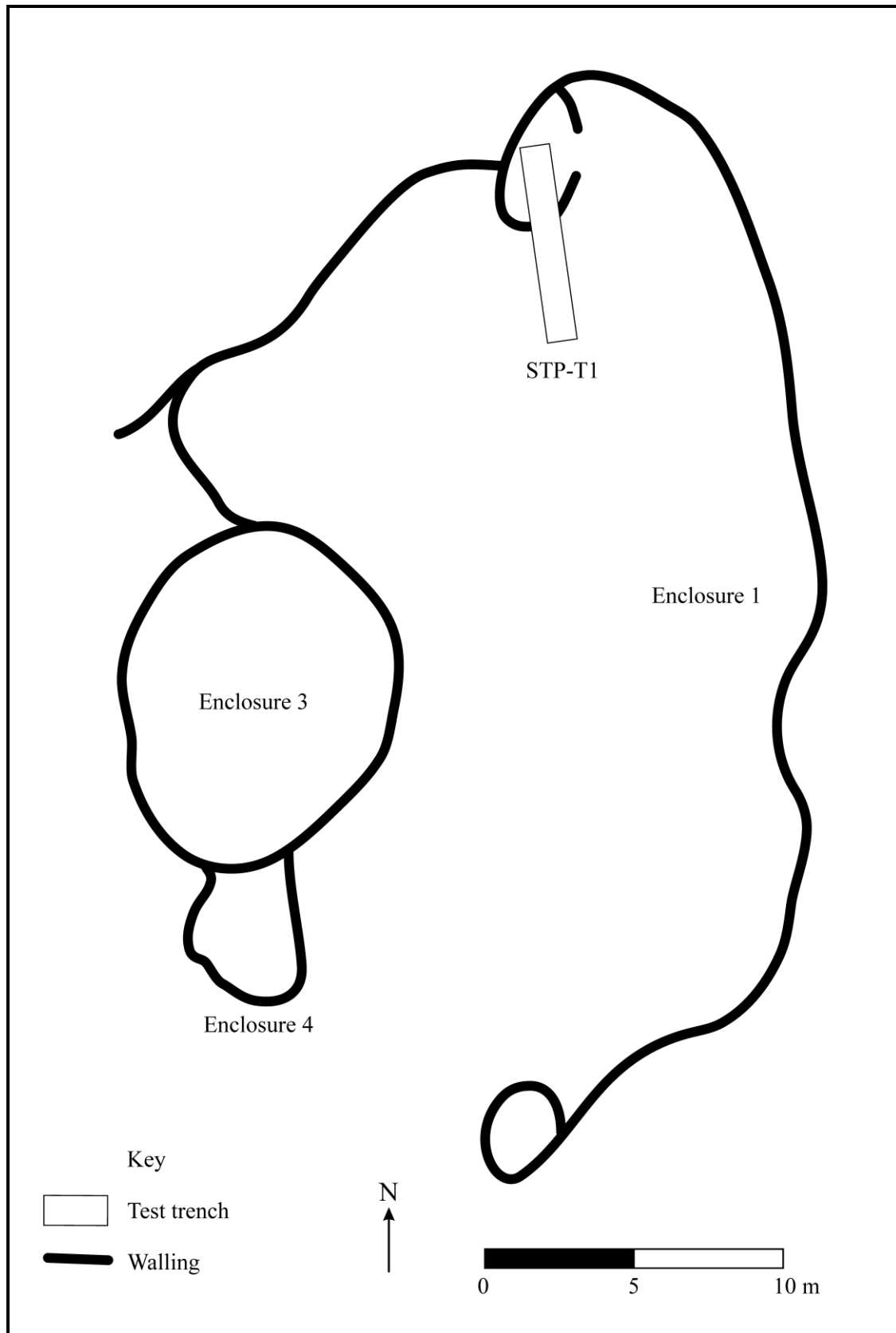


Figure 4: Site layout of ZK 09.



Figure 5. General site conditions at ZK 09



Figure 6. Screening of excavated material.



Figure 7. STP T1 prior to excavation after bush clearing.



Figure 8. Undecorated ceramics in TP 01.



Figure 9. Fragments of a smeared floor within enclosure 2.



Figure 10. Exposed walling in excavation.

## 5.2. ZK 10

Site ZK 10 was extremely overgrown and consists of semi-circular stone walls (Figure 11 to 15). The south-eastern section of the site has been impacted on by a gravel road and the walling in this section has been removed. A line of shovel test pits (not indicated on the layout map) was excavated through the central part of the site, but no artefacts or deposit was uncovered here. A test trench in a N-S orientation was excavated within enclosure 1 to determine the depth of the stone wall and to hopefully uncover remains of a hut here. No finds or deposit was encountered here.

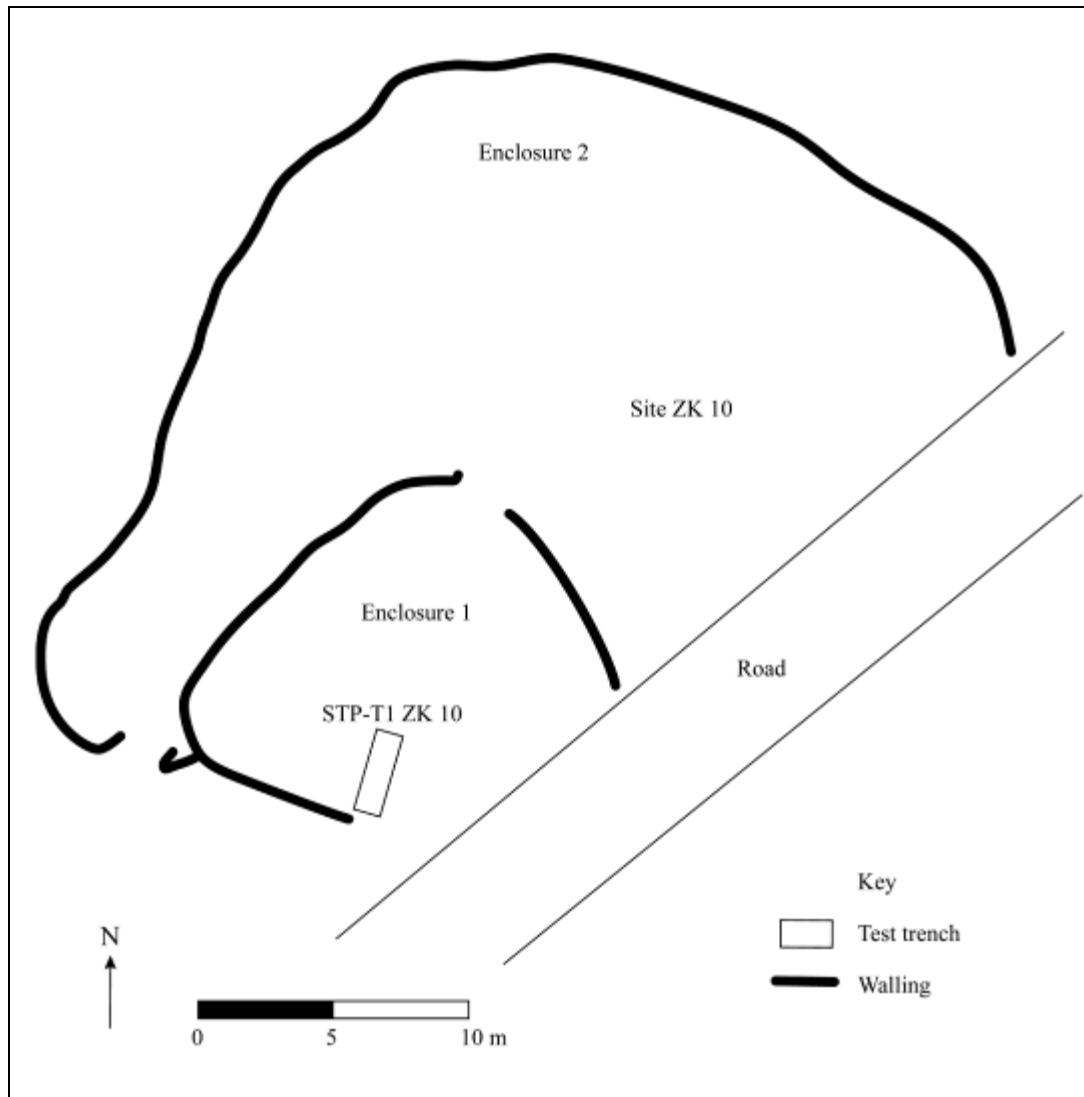


Figure 11. ZK10 plan drawing.





Figure 12. General site conditions at ZK 10



Figure 13. Stone wall foundation at ZK 10



Figure 14. Stone wall foundation at ZK 10



Figure 15. Sterile shovel pit tests at ZK10

### 5.3. ZK 64

No stonewalled settlement was recorded at this location. The site was highly overgrown at the time of the site visit and the grass had to be burned to confirm the lack of any significant walling (Figure 16 – 18). It is assumed that the site was impacted on by the Rand Water servitude and previously mitigated by PGS in 2014. It is further discussed in Section 6 of this report.

No Archaeological material was identified at this location.



Figure 16. General site conditions at ZK64



Figure 17. General site conditions after the site was burned.



Figure 18. General site conditions after the site was burned.



#### 5.4. ZK 65

No site was identified at this location. Two other stone walled sites were identified near the indicated location of ZK65. These sites were not excavated as they are located outside of the development footprint but both sites were mapped (Figure 19 & 20) and added to the overall layout. These sites were recorded by Kusel *et al* (2019) as ZK5 and ZK7. Site ZK5 conforms to the archaeological settlement in the area with ZK7 consisting of only an enclosure possibly being from the recent past.

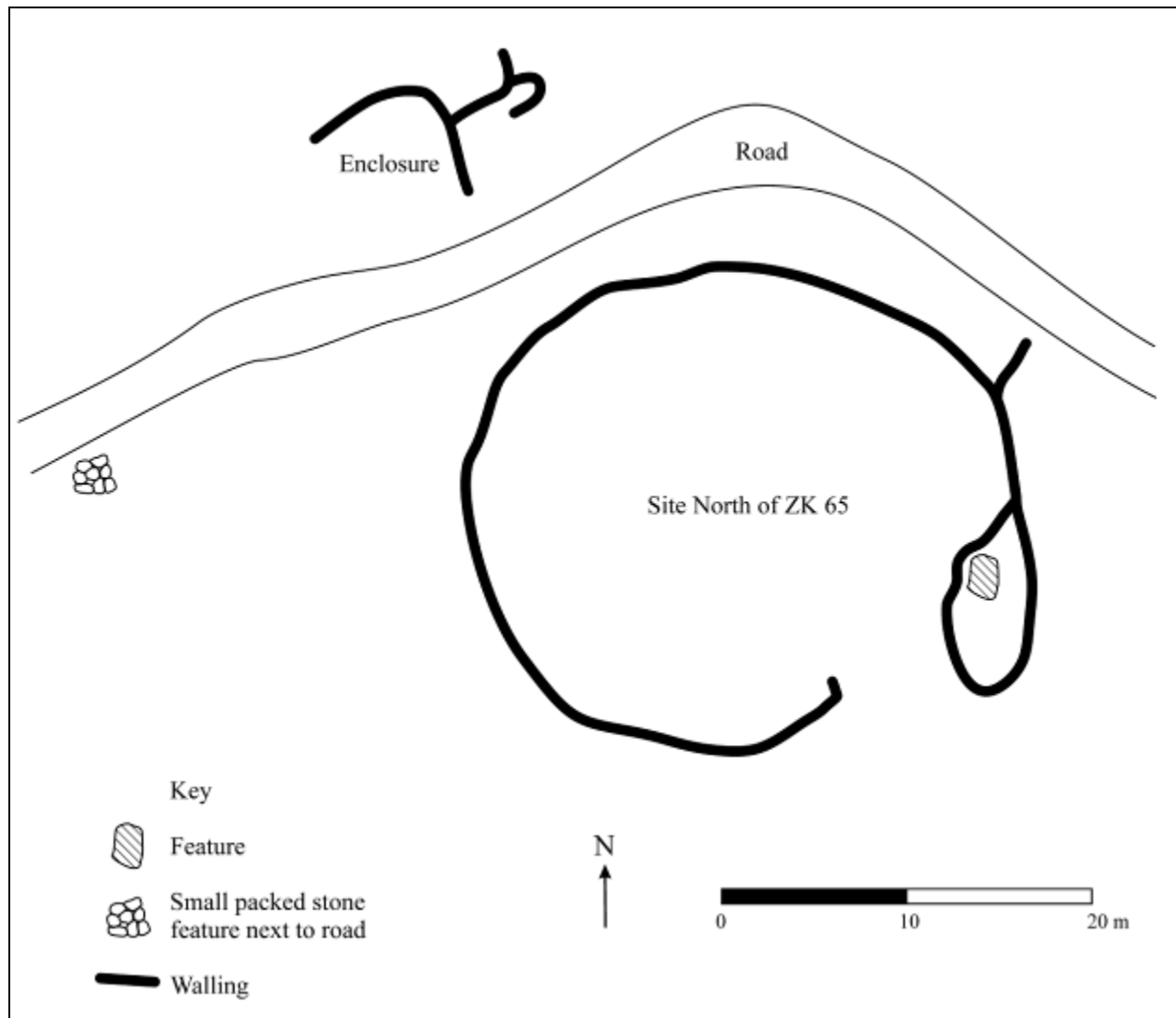


Figure 19. Site ZK5 located north of ZK 65.

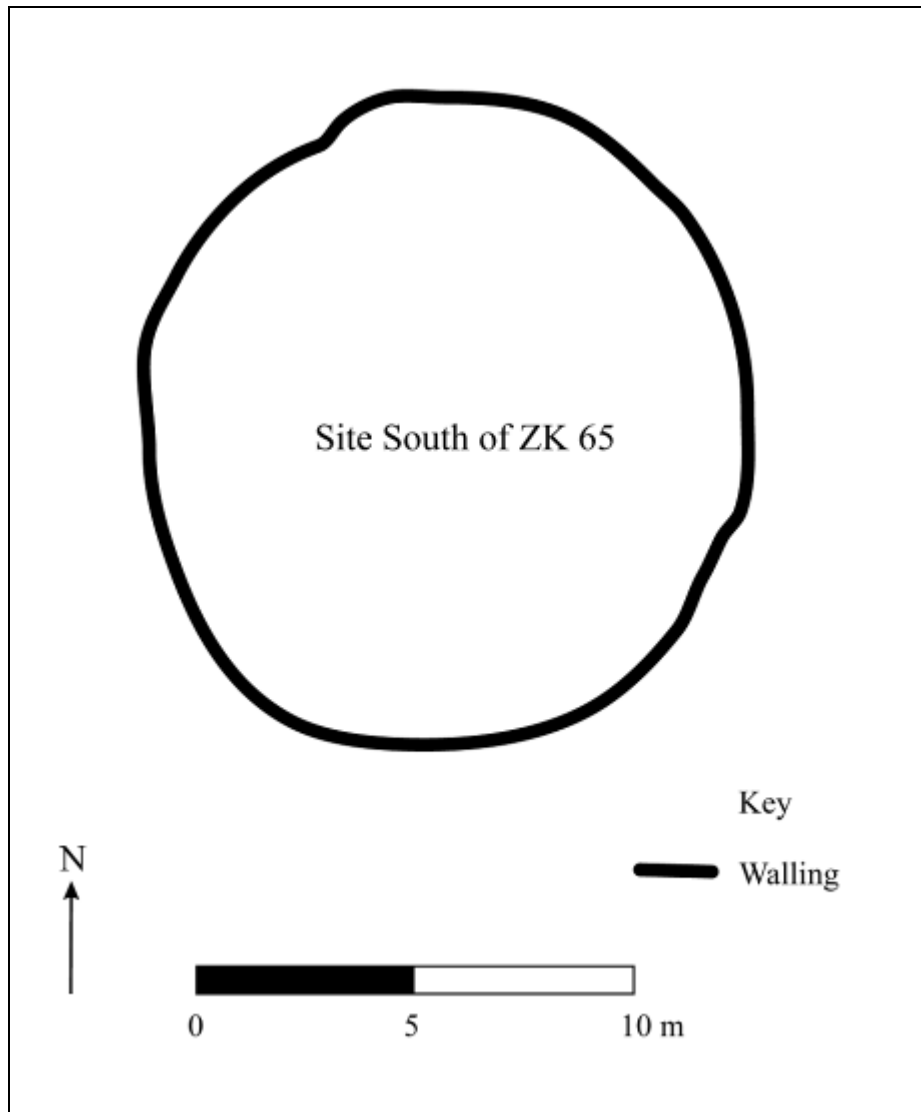


Figure 20. Site ZK 7 located south of ZK65



Figure 21. General site conditions in winter after the site was burned.

### 5.5 ZK 66

No stonewalled settlement was recorded at this location. The site was highly overgrown at the time of the site visit and the grass had to be burned to confirm the lack of any significant walling (Figure 22 – 25). To confirm the lack of archaeological deposit a shovel test trench comprising a 10m test trench with 4 shovel test pits spaced 2m apart was excavated at the area marked as ZK 66. Excavations were terminated in a compacted sterile layer of reddish clay soil approximately 20 cm deep. No cultural deposit was uncovered.



Figure 22. General site conditions at ZK 66.



Figure 23. Shovel pit tests at ZK 66.



Figure 24. General site conditions after the site were burnt.



Figure 25. General site conditions after burning.



## 5.6 ZK 67

No stonewalled settlement was recorded at this location. The site was highly overgrown at the time of the site visit and the grass had to be burned to confirm the lack of any significant walling (Figure 26 – 31). To confirm the lack of archaeological deposit a shovel test trench of 10m with 4 shovel test pits spaced 2m apart was conducted to investigate the general area marked as ZK 67. Excavations were terminated in a compacted sterile layer of reddish clay soil approximately 23 cm deep. No cultural deposit was uncovered.



Figure 26. General site conditions at ZK 66.



Figure 27. Shovel pit tests at ZK 66.



Figure 28. Vegetation after clearing



Figure 29. STP at ZK 67



Figure 30. General site conditions after the site was burned.



Figure 31. General site conditions after the site was burned.



### 5.7 ZK 68

No stonewalled settlement was recorded at this location. The site was highly overgrown at the time of the site visit and the grass had to be manually cleared to confirm the lack of any significant walling (Figure 33). A shovel test trench was conducted to investigate the general area where the site is marked (Figure 32). A 10m test trench was conducted with 4 shovel test pits spaced 2m apart. Excavation of the test trench terminated on a compacted sterile layer of reddish clay soil. During the excavation, an average of 4x 10l buckets per shovel test pit were excavated. After the test excavations the grass was burned increasing visibility and still no stone walling was observed (Figure 34 and 35).



Figure 33. General site conditions at ZK 68.



Figure 32. STP at ZK 68.



Figure 34. Site conditions after the area was burnt.



Figure 35. Site conditions after being burnt.



## 5.8 ZK 69

The site is covered by a series of overgrown bushes, trees and shrubs along with tall grass that covers the entire area, and the vegetation was cleared by hand to determine the site layout (Figure 36 – 38). Initially a line of shovel test pits was set up over an area suspected of being the general living space as well as smaller enclosures where huts were expected. No cultural deposit or heritage features were recorded apart from a few undiagnostic ceramic shards.



Figure 36. General site conditions at ZK69 prior to bush clearing.



Figure 37. Ephemeral walling at ZK69.

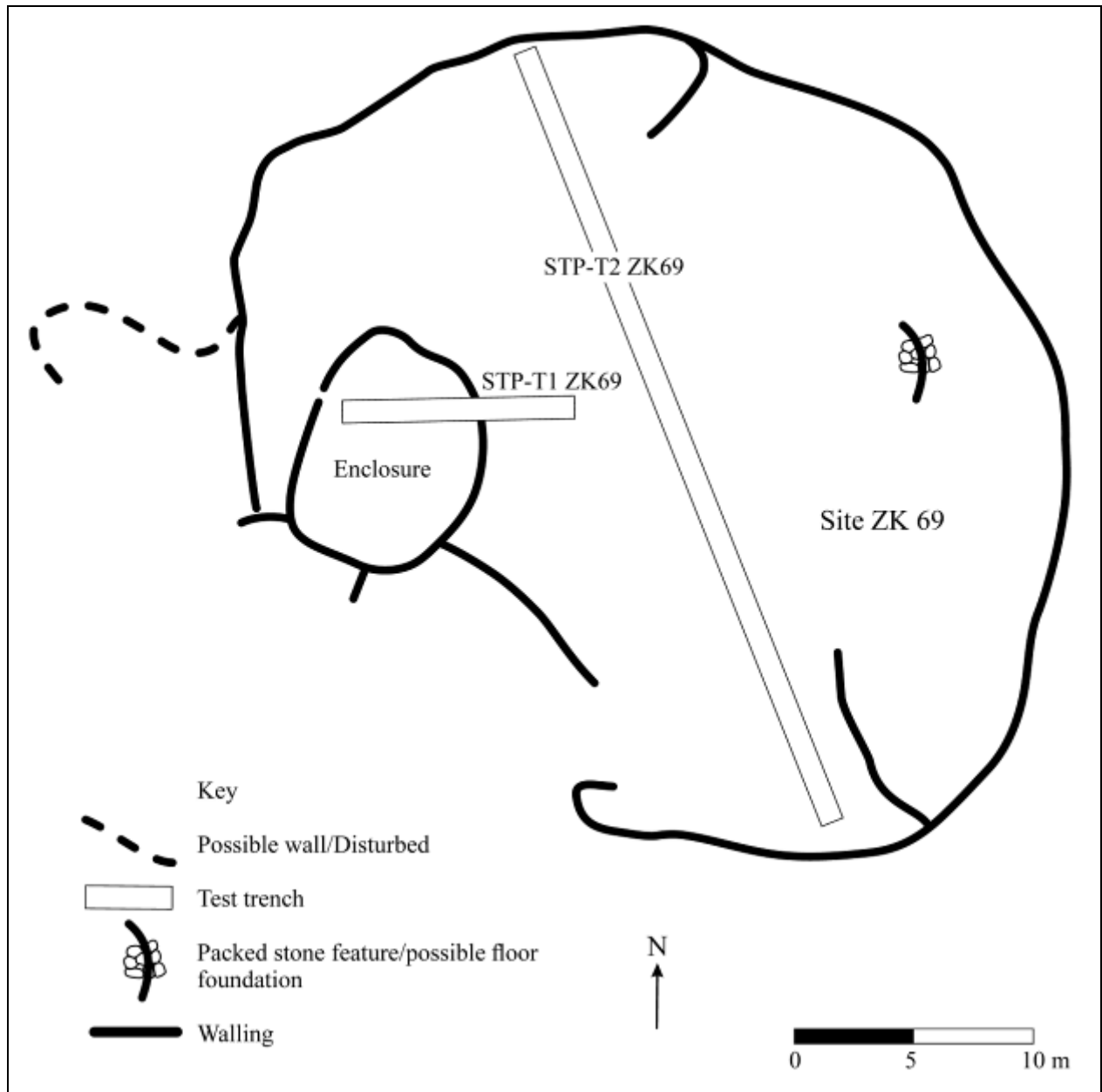


Figure 38. Plan drawing of Site ZK 69

## 6. DISCUSSION

### 6.1 Introduction

While the Late Iron Age of the Pretoria area is associated with both Sotho-Tswana and Nguni groups, the study area and direct surroundings are associated with Ndebele settlements (Birkholtz (2014); Pelsler & Van Vollenhoven (2009) and Van Schalkwyk et al (1996). Based ethnographic information it is known that the study area is essentially associated with the Southern Ndebele and more particularly with the Southern Ndebele group known as the Manala Ndebele.

### 6.2 Ndebele occupation in the area

The oral history of the Southern Ndebele has been extensively recorded by C.J. van Vuuren for his doctoral thesis in Anthropology at the University of Pretoria (Van Vuuren, 1992). The ethnographic data (Table 2) and information obtained from mitigation/research projects (Table 3) in the greater area about the Ndebele and specifically the Manala Ndebele occupation contextualizes the sites in this report.

Table 2. Timeline of the Ndebele (Van Vuuren, 1992, Birkholtz 2014)

Group	Time	Area and context	Leader/ Group
<b>Southern or Manala Ndebele</b>	1558	Emhlangeni (the place of reeds) close to present day Randfontein	Mafana, later succeeded by his son Mhlanga.
	At least 26 years between 1610 and 1636 (or possibly 1644)	KwaMnyamana (the place of black hills) near Bon Accord (the settlement extended over a wide area including present-day farms De Onderstepoort 300-JR and Doornpoort 295-JR)	Mhlanga later succeeded by his son Musi Musi had many sons including Manala (the rightful heir) and Nzundza who became Musi's successor.
<b>Ndzundza Ndebele</b>	1636 - 1688	it seems that due to conflict between Manala and Nzundza, Ndzundza and his followers moved eastward toward the Cullinan area, then towards Bronkhorstspuit, to eventually settle at KwaSimkhulu on the Steelpoort River. Skirmishes took place between the brothers, at the farm Brandbach and on farm Renosterkop further to the	Ndzunza

		north. They made peace at KoQoli close to Loskop Dam, and Ndzundza and his followers moved to KwaSimkhulu. Manala and his followers returned to KwaManyamana.	
<b>Manala Ndebele</b>	1677 to 1717.	Manala (or his son Ngacu) with his followers returned to the Pretoria area. While some versions of the recorded oral history indicate that they returned to their settlement at KwaManyamana, other studies indicate they established a new settlement (Ezotshaneni) in the vicinity of Donkerhoek. Ezotshaneni extended from Kleinsonderhout 519-JR over numerous farms such as Rhenosterfontein 7514-JR, Rietvlei 513-JR, Witfontein 521-JR, Puntlyf 520-JR, Boschkop 543-JR, Roodekoppies 546-JR, Kameel-zijnkraal 547-JR, Onbekend 398-JR, Witpoort 551-JR, Knoppiesfontein 549-JR, Vlakfontein 548-JR and Boschkop 369-JR. The Ezotshaneni area lies east of Pretoria between the N14 highway and the Delmas road (R50).	Manala or Ngacu
<b>Nzundza Ndebele</b>	1688	The Ndzundza Ndebele moved to KwaMaza in the Stoffberg area.	
<b>Manala Ndebele</b>	1717 to 1747	The Manala Ndebele moved from Ezotshaneni to a place known as Embilaneni (place of dassies). This settlement included several present-day farms including Rietfontein 395-JR, Tweedracht 516-JR, Tiegerpoort 371-JR, Kleinfontein 368-JR,	Unconfirmed

		Mooiplaats 367-JR, Donkerhoek 365-JR and Zwavelpoort 373-JR. The Embilaneni area extended further to the west than Ezotshaneni,.	
<b>Manala Ndebele</b>	1747 to 1825	The Manala Ndebele moved from Embilaneni to KoNonduna (place of the king). It seems likely that while the areas defined during the previous two settlements were still occupied by the Manala Ndebele, their capital now moved to the present-day farm Klipkop 396-JR.	A praise poem for one of the Manala Ndebele rulers, Matshaba refers to EmaKhopana (the present-day Hatherley railway station) as a possible settlement area for him.
<b>Nzundza Ndebele</b>	1822 or according to some sources 1845	Ndzundza moved further north to settle at KoNomtjarhelo in the Roosenekal area.	Unconfirmed
<b>Manala Ndebele</b>	1825	The Manala Ndebele were attacked by the Khumalo Ndebele of Mzilikazi. Small groups of Manala survivors established themselves in smaller settlements and many were forced to work as farm labourers during the late 1830s and early 1840s. The Manala Ndebele splintered into three groups.	Mavula, Mgibe and Silamba
<b>Manala Ndebele</b>	Post 1825	Silamba stayed behind in the area southeast of Pretoria. He was forced to leave this area by the white farmers who came to settle here was sent to the missionaries along the Pienaars River. Silamba and his followers ended up with Reverend Knothe at Wallmannsthal. When they settled there on 1 September 1873 a group of Northern Ndebele under Jan Kekana was already there. The Manala Ndebele settlement at Wallmannstahl was known as	Silamba

		KoMjekejeke, and their occupation lasted 53 years during which five of their rulers were buried. The Manala Ndebele moved away from KoMjekejeke between 1919 and 1926, but it remained significant to them. In 1986 the <i>Silamba Trust for the Manala</i> bought the land (Van Vuuren, 1992)	
<b>Manala Ndebele</b>	Post 1825	Mgibe and Mavula left the areas South east of Pretoria	Mavula and Mgibe
<b>Ndzundza Ndebele</b>	1882	The Mapoch war took place between the <i>Zuid-Afrikaanshe Republiek</i> and the Ndzundza Ndebele which resulted in the defeat of the latter. Nyabela was arrested and taken to jail.	Nyabela Mahlangu (who became regent for the three-year-old heir to the throne ( Fene Mahlangu) in 1879)
<b>Nzundza Ndebele</b>	1897	the Ndzundza Ndebele were moved from their ancestral land and in some cases went to settle as farm workers on land owned by white farmers or alternatively to settle on farms owned by the Manala Ndebele. In 1897 the Ndzundza Ndebele was indicated to be living on 18 farms to the east, south-east and south of Pretoria, including Doornrandjes, Witkoppies, Rietfontein, Olifantsfontein, Nietgedacht, Tygerpoort, Boschkop and Olievenpoort	Unconfirmed
<b>Nzundza Ndebele</b>	1898	In 1898 Nyabela was released from prison after which he went to stay at Fene Mahlangu's settlement known as KwaMkhina or Emlalaganye (place where one will sleep only once) on the farm Derdepoort 320-JR	Nyabela Mahlangu
<b>Nzundza</b>	1902 Nyabela	Nyabela died at KwaMkhina and	Nyabela Mahlangu

<b>Ndebele</b>	Mahlangu	Fene Mahlangu became the new ruler of the Ndzundza Ndebele.	
<b>Nzundza Ndebele</b>	1904	Settled on the farm Welgelegen 221-IR in the vicinity of Delmas	Fene Mahlangu

Table 3. Previous work in the area.

<b>Group</b>	<b>Archaeologists</b>	<b>Year</b>	<b>Key findings</b>
<b>Ndzundza Ndebele</b>	M H Schoeman	1990's	Two sites were excavated and interpreted namely KwaMaza A and B. A was a settlement site attributed to the rulers due to its elevated location and exclusive walling. It was well preserved. The site included homesteads of headman, an assembly area for men and the homestead of the ruler. Each homestead surrounding the central enclosure comprised a central cattle kraal with associated domestic areas, middens and in some cases grain bin bases and two floors in one of the homesteads. Artefacts recovered from the excavations at KwaMaza A include 1,019 ceramic fragments (of which only 70 or 6.8% were decorated), a metal spear shaft, broken clay spoons, upper grinders, an ostrich eggshell fragment and glass beads. Kwa Maza B comprised stone walled enclosures that were not well preserved and were interpreted as homesteads and a cattle kraal. Artefacts recovered from the excavations at KwaMaza B include 239 ceramic fragments (of which only 22 or 9.2% were decorated), Middle Stone Age lithics, ostrich eggshell fragments and upper grinders (Schoeman, 1998).
<b>Manala Ndebele</b>	Van Schalkwyk, J.	1996	The archaeological research on Hatherley 331 JR has revealed a three-tiered classification of settlements. Firstly, homesteads of headmen ( <i>induna</i> or <i>ikosana</i> ), then multi-component sites that were occupied at different times by single family units. The third settlement type can be



			<p>associated with agricultural activities.</p> <p>The features documented on the first two settlement types include central circular cattle enclosures with clusters of homesteads or living units (<i>izindlu</i>) spaced around it. As hut structures of the Ndebele at the time were of the grass beehive type, the only evidence for homesteads which remained preserved were the small (4m x 2m) circular structures which had been built as perimeter walls (<i>isirhodlo</i>) around each homestead. Court areas where visitors were received, and men gathered were also identified</p>
<b>Late Iron Age Sites</b>	Pelser A, J and Van Vollenhoven, A, C.	2009	<p>Site 1 included 2 -3 settlement units or homesteads with domestic space surrounding a central livestock area.</p> <p>Site 2 in turn was a single homestead with a perimeter wall and central livestock enclosure surrounded by five possible huts.</p> <p>Site 3 comprised small sections of walling, an open area with surrounding wall and large granary stands and several upper and lower grinders (Pelser &amp; Van Vollenhoven, 2009). A total of four excavations were undertaken - two excavations at Site 1 and two at Site 3. Finds included total of 71 undecorated and 20 decorated ceramic fragments (some possibly belonging to the Olifantspoort facies) were recovered from the first excavation at Site 1, with no faunal remains or other cultural material identified. The other excavations yielded undecorated ceramics and a possible hammerstone.</p>
<b>Manala Ndebele</b>	Birkholtz, P.	2014	<p>Residential and agricultural sites with small sections of stone walling and stone heaps similar to the finds of Van Schalkwyk <i>et al</i> (1996) and Pelser and Van Vollenhoven (2009) the sites relate to the Manala Ndebele and in all</p>

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			likelihood dates to the KoNonduna phase
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### 6.3 Southern Ndebele site layout

#### 6.3.1 KwaMaza Ndebele

The archaeological excavations by Schoeman (1998) focussed on two stonewalled clusters approximately 80m apart named KwaMaza A and KwaMaza B (Figure 39). Based on the preservation of the stone walling from these sites was seen as evidence for the fact that KwaMaza B was older and that stone from its walls were 'used to construct KwaMaza A. The archaeological evidence also supported the argument that Ndzundza Ndebele settlements were divided in a right-hand side (ubene) which is the male and more senior side and a left-hand side (ikohlo) which is the female and lower status side. The house is furthermore also divided into a front and back area, with the front the public space and the back more used for storing important items such as beer and ritual items such as the ancestral spear. In general, the back is more associated with the ancestors (umbundu).

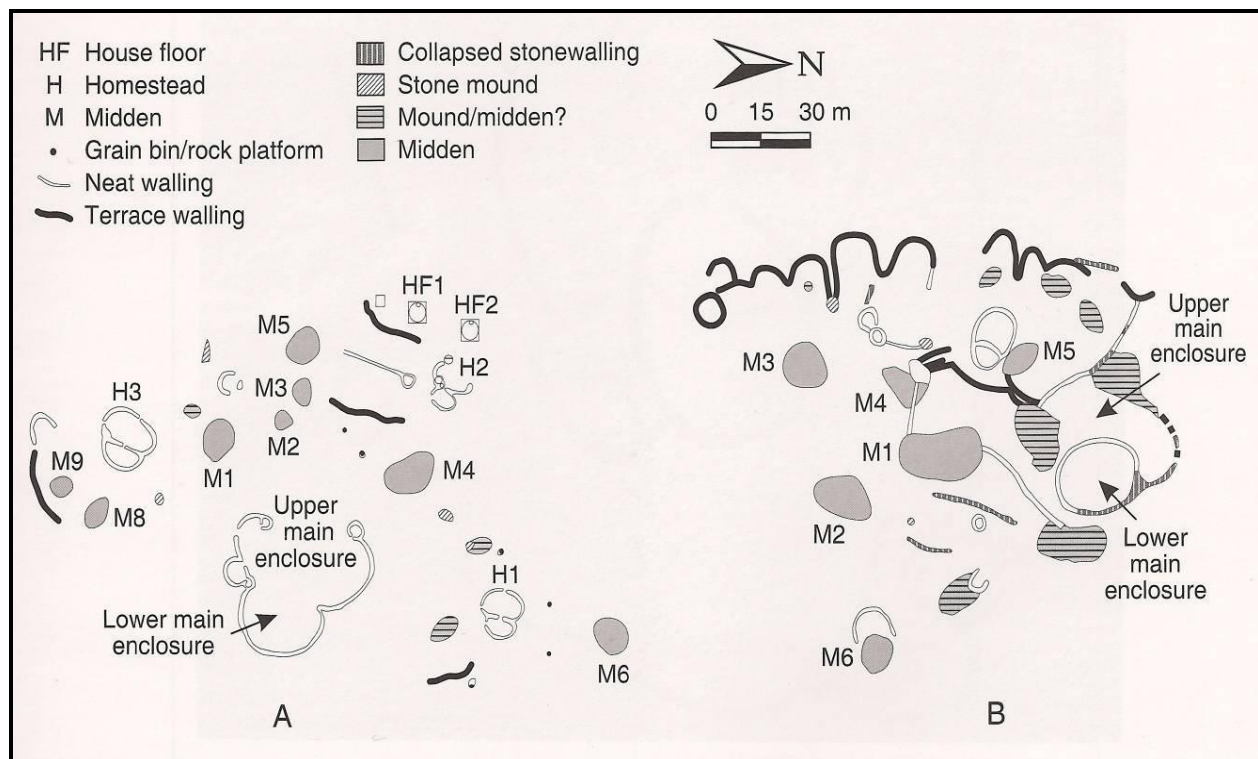


Figure 39: Site layout plan of KwaMaza A and KwaMaza B (Huffman 2007).

### 6.3.2 Manala Ndebele

Archaeological excavations conducted in 1996 on the farm Hatherley 331-JR by the National Cultural History Museum recorded Manala Ndebele sites. The site layout consisted of a three-tiered classification of settlements. The first consist of homesteads of headmen (*induna* or *ikosana*), the second is multi-component sites that were occupied at various times by single family units. The third settlement type is associated with agricultural activities.

The layout of the first two settlement types (Figure 40) includes central circular cattle enclosures with clusters of homesteads or living units (*izindlu*) spaced around it. Huts were of the grass beehive type and the only evidence for homesteads were small (4m x 2m) circular structures which had been built as perimeter walls (*isirhodlo*) around each homestead. Court areas where visitors were received, and men gathered were also identified. The agricultural activity sites (Figure 41) comprise large concentrations of stone heaps associated with small insignificant sections of stonewalling. The stone heaps are seen as the result of clearing of fields for cultivation.

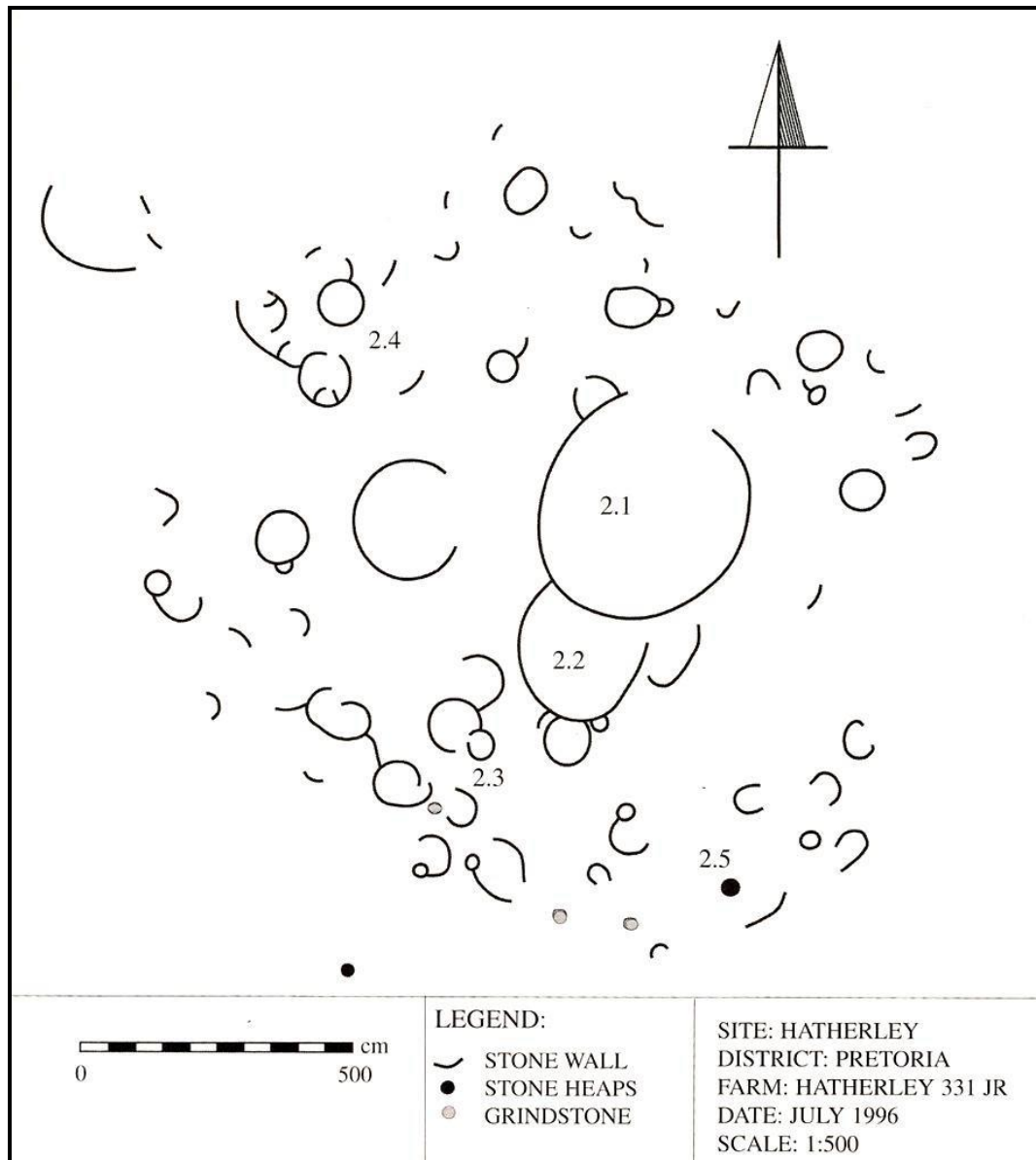


Figure 40: Site layout plan of Manala Ndebele headman settlements on the farm Hatherley 331 JR (Van Schalkwyk *et al.* 1996).



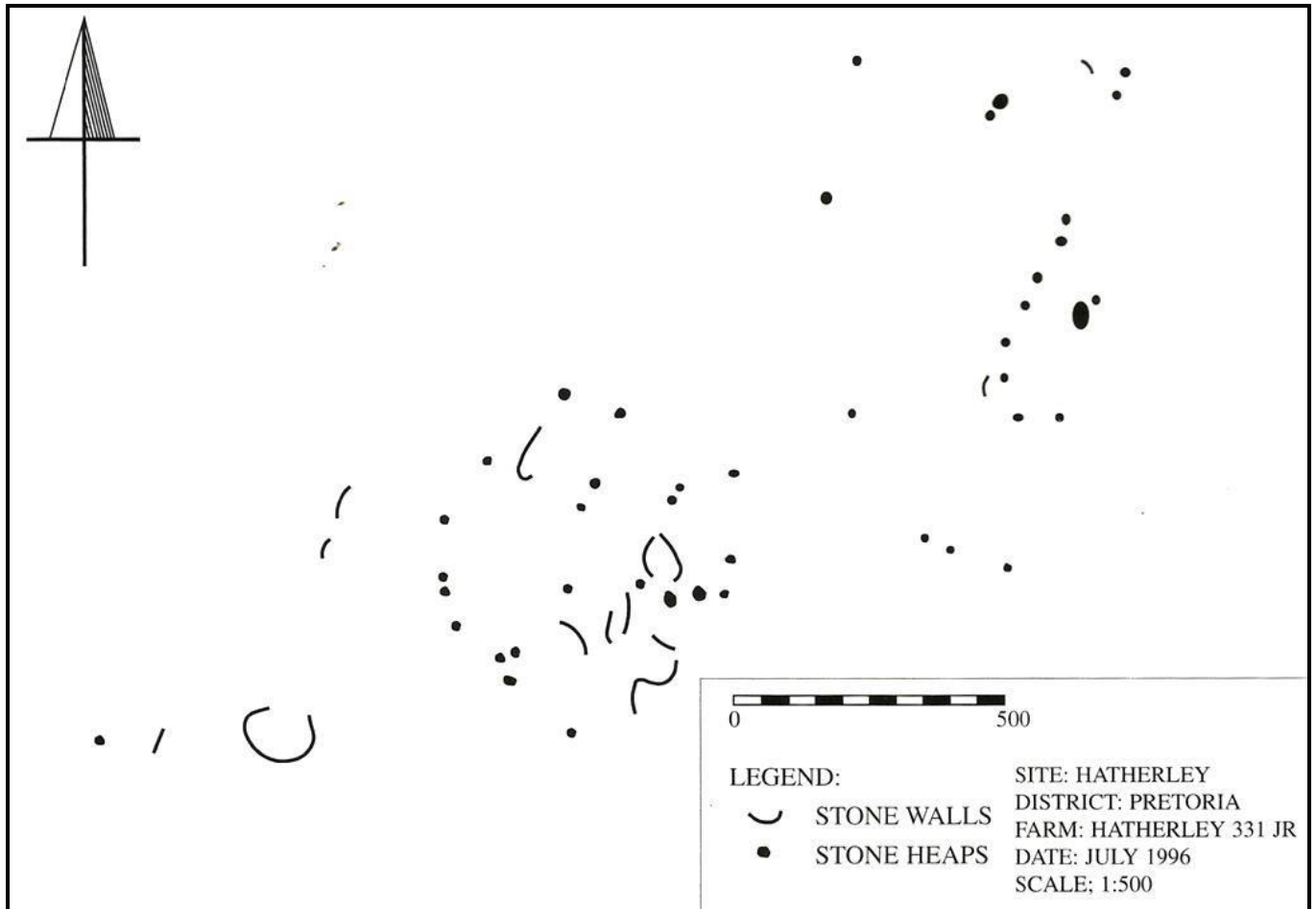


Figure 41: Site layout plan of one of the Manala Ndebele agricultural settlements on the farm Hatherley 331 JR (Van Schalkwyk *et al.* 1996).

## 7. CONCLUSION

HCAC was appointed to mitigate sites ZK9, ZK10, ZK65, ZK66, ZK 67; ZK68 and ZK69 recorded by Kusel *et al* (2019). These sites were described by Kusel as Late Iron Age Stone Walled sites and sites with variable stone walling. These sites will be impacted on by the proposed Sammy Marks development Extension 49 to 51. The mitigation measures undertaken comprised the recording of detailed site layout plans, test excavations and a basic description of each site. The layout plans were recorded using standard survey equipment including a total station. Site ZK64, located on the boundary of the development area was investigated to determine the extent of the site within the development footprint, this site was however previously mitigated during the construction of the Rand Water Pipeline and does not extend into the proposed development.

Previous work in the area (Kusel 2019, Birkholtz (2014); Pelser & Van Vollenhoven (2009) and Van Schalkwyk *et al* (1996) highlighted the fact that the study area is essentially associated with the Southern

Ndebele and more particularly with the Southern Ndebele group known as the Manala Ndebele. Like the current project, excavations in the area also recorded limited number of artefacts and almost no cultural deposit and results are mostly related to mapping of the settlement layout. Settlements within the Sammy Marks development conform to the central cattle pattern, consisting of a residential homestead site as outlined by van Schalkwysk *et al* (1996). The organisation of Southern Ndebele settlements emphasized a front-back axis first seen at Moor Park (Davies 1974) beehive huts stood on low hut platforms (evident at Site ZK9, ZK 10 and 69). At KwaMaza the central courtyard and cattle kraals were constructed to look the same and included two lobes, one for cattle and the other for calves (Schoeman 1997) similar to site ZK9.

The lack of cultural material (i.e., ceramics or datable material) attest to a short occupation period. The mitigated features are likely related to the sites mitigated by Birkholtz (2014) located between the sites currently investigated and date to the KoNonduna phase of the Manala Ndebele (around 1747 to 1825). This is in line with the findings made by Birkholtz (2014); Pelsler & Van Vollenhoven (2009) and Van Schalkwysk *et al* (1996) in the area. Table 4 provides a summary of the mitigation work conducted under the current project and Figure 42 illustrate the site layout of the Ndebele settlement in this area including the site layout recorded by Birkholtz 2014.

Table 4: Summary of mitigation conducted.

Site	Description	Mitigation Conducted
ZK 9	Manala Ndebele Homestead	Site mapped and excavated
ZK 10	Manala Ndebele Homestead	Site mapped and excavated
ZK 64.		No stone wall settlement recorded. Site was mitigated as Site P3-1 for the Rand Water Servitude (Birkholtz 2014).
ZK 65	No stone wall settlement recorded.	Grass burned to enhance visibility and test pits excavated to search for subsurface deposit
ZK 66	No stone wall settlement recorded.	Grass burned to enhance visibility and test pits excavated to search for subsurface deposit
ZK 67		No stone wall settlement recorded. Site was mitigated as Site P3-1 for the Rand Water Servitude (Birkholtz 2014).
ZK 68	No stone wall settlement recorded.	Grass burned to enhance visibility

		and test pits excavated to search for subsurface deposit
ZK 69	Manala Ndebele Homestead	Site mapped and excavated

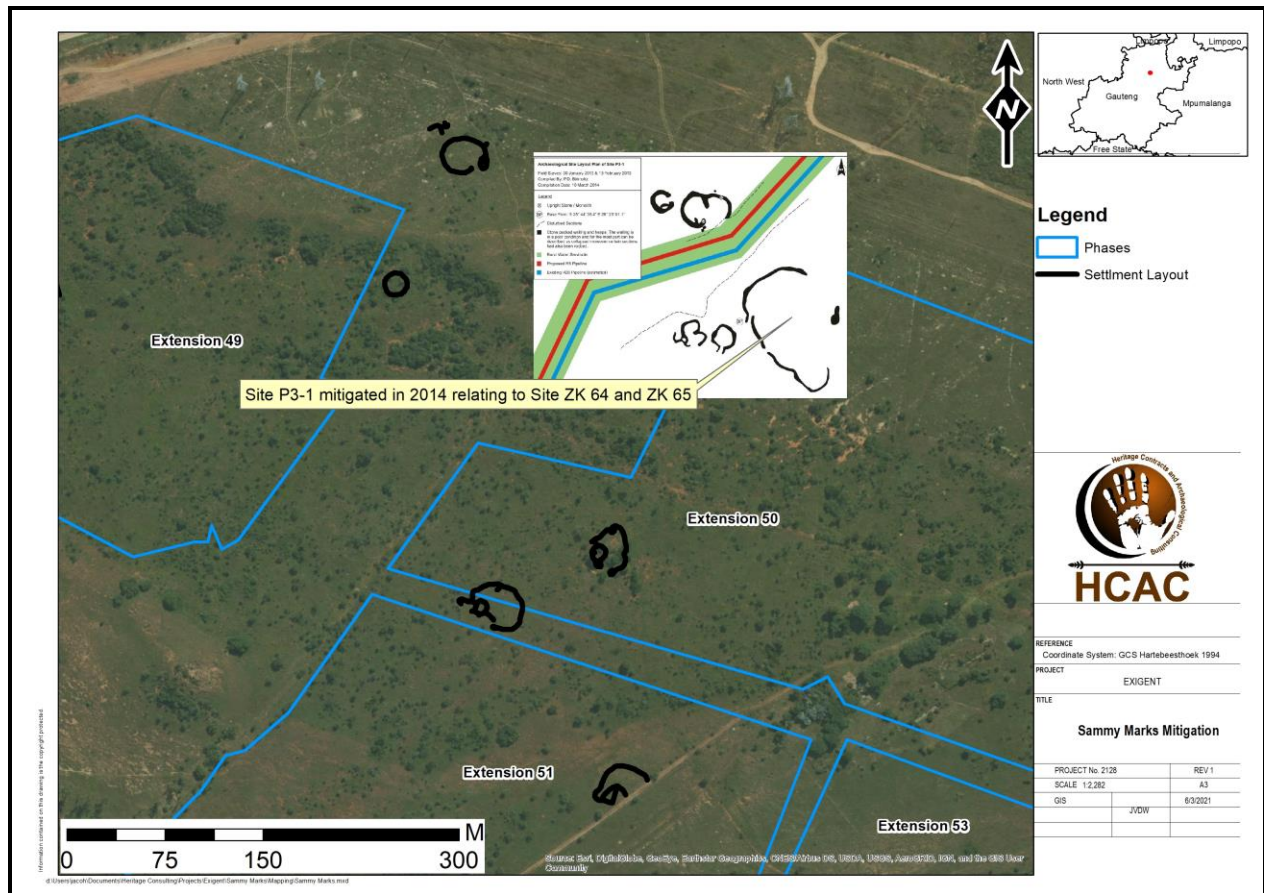


Figure 42: Combined site layout map of sites mitigated. The insert shows the sites and location of features mitigated by Birkholtz 2014.

### 8. RECOMMENDATION

It must be kept in mind that sites like these might still yield unmarked graves or subsurface cultural material and the sites must be monitored during construction as part of the management plan for the project. It is therefore recommended that the sites can be destroyed based on the approval of a destruction permit by SAHRA.

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**ANNEXURE A: FIELD NOTES ON EXCAVATIONS**

**ZK 09**

The site is covered by a series of overgrown bushes, trees and shrubs along with tall grass that covers the entire area and consists of a complex series of semi-circular packed stone enclosures.

Initially a line of shovel test pits was set up over an area suspected of being the general living space as well as an open area, possibly a kraal. The shovel pit tests were allocated as STP-T1, with STP01-04 being the individual test pits (illustrated below), however STP03 and 04 ended up being extended into test trenches due to exposing a concentration of ceramic shards against the section of wall that runs along this area. A description of the results from the excavations are provided in Table 5.

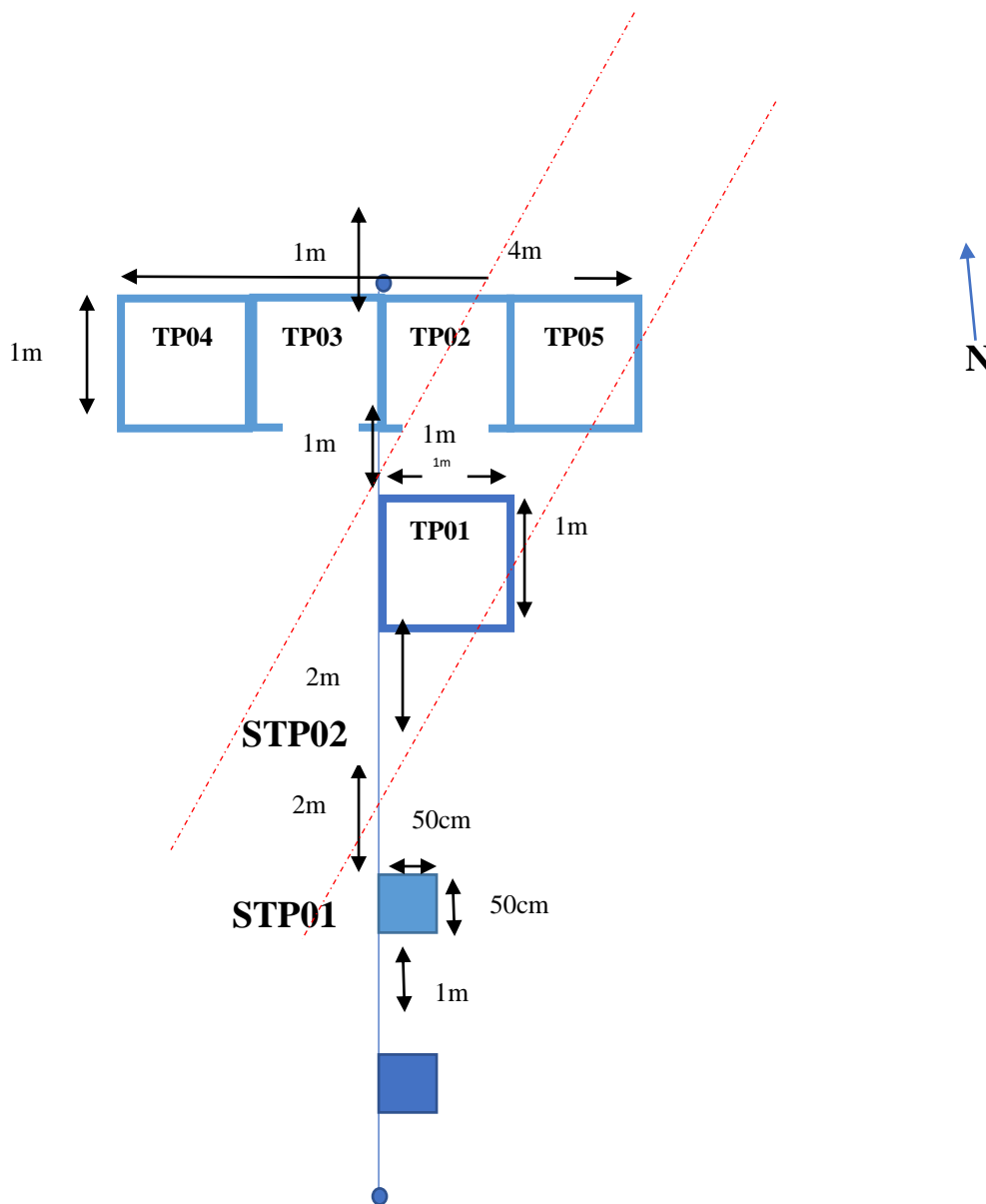




Table 5. Results of excavations at Site ZK 09

Provenience:	Date excavated:	Nr of Buckets (10L)	Description:
STP01	25/03/2021	4	<ul style="list-style-type: none"> <li>• 50cm x50cm test pits excavated in a N-S orientation.</li> <li>• Excavation starts through a soft loamy soil, reddish in colour as opposed to the STPs from the other sites, with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> </ul>
STP02	25/03/2021	3½	<ul style="list-style-type: none"> <li>• 50cm x50cm test pits excavated in a N-S orientation.</li> <li>• Excavation starts through a soft loamy soil, reddish in colour as opposed to the STPs from the other sites, with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> </ul>
TP01	25/03/2021	11	<ul style="list-style-type: none"> <li>• 1m x 1m Test Pit</li> <li>• Situated against a section of walling that was thought to be the outer section of a living space or hut foundation/prepared surface.</li> <li>• Excavation starts through a soft loamy soil, reddish in colour as opposed to the STPs from the other sites, with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Interface layer between the softer clayey layer and the compacted layer of sterile clay yielded high amounts of ceramic sherds. These sherds were mostly non-diagnostic with 1 or 2 sherds having a rim section.</li> <li>• 90 % of the artefacts recovered were situated right up against the section of wall foundation. These seem to have been</li> </ul>

			<p>somewhat protected against runoff/downwash by the wall section and collapsed rocks on top.</p> <ul style="list-style-type: none"> <li>Excavation of this test pit ended on the compacted sterile layer of reddish clay soil.</li> <li>The foundation stones of the wall section are situated on top of this layer.</li> </ul>
TP02	25/03/2021	7	<ul style="list-style-type: none"> <li>1m x 1m Test Pit</li> <li>Situated on top of a section of walling that was thought to be the outer section of a living space or hut foundation/prepared surface.</li> <li>Excavation starts through a soft loamy soil, reddish in colour as opposed to the STPs from the other sites, with high amounts of organic material.</li> <li>Soil fairly wet due to consistent raining.</li> <li>Excavation extends through a soft reddish loamy soil that is moderately compacted into the layer that sits on top of the wall section.</li> <li>High concentration of ceramic sherds was discovered within/on the rocks</li> <li>These ceramic pieces are large compared to the sherds situated in TP01.</li> <li>The excavation was stopped when the foundation stones of the wall section was reached. These rocks (as seen in TP01) sit on top of the compacted sterile layer of reddish clay soil.</li> </ul>
TP03	25/03/2021	12	<ul style="list-style-type: none"> <li>1m x 1m Test Pit</li> <li>Situated against a section of walling that was thought to be the inner section of a living space or hut foundation/prepared surface.</li> <li>Excavation starts through a soft loamy soil, reddish in colour as opposed to the STPs from the other sites, with high amounts of organic material.</li> <li>Upon removal of the soft loamy soil it was noted that some remnants of formal flooring was visible although fairly degraded.</li> <li>Some ceramic material was identified, however these were all non-Diagnostic and not as concentrated as with TP01 and TP02</li> <li>The ceramic material was fairly spread out over the square.</li> <li>Excavation of this test pit ended on the compacted layer of reddish clay soil on top of which was located the pieces of hut floor.</li> </ul>

TP04	26/03/2021	9½	<ul style="list-style-type: none"> <li>• 1m x 1m Test Pit</li> <li>• Situated against a section of walling that was thought to be the inner section of a living space or hut foundation/prepared surface.</li> <li>• Excavation starts through a soft loamy soil, reddish in colour as opposed to the STPs from the other sites, with high amounts of organic material.</li> <li>• Upon removal of the soft loamy soil, it was noted that some remnants of formal flooring were visible although fairly degraded. This is the same layer of flooring as in TP03.</li> <li>• TP03 and TP04 sits within an enclosed space which could possibly be a prepared surface for a hut.</li> <li>• Some ceramic material was identified; however, these were all non-Diagnostic and not as concentrated as with TP01 and TP02</li> <li>• The ceramic material was fairly spread out over the square.</li> <li>• Excavation of this test pit ended on the compacted layer of reddish clay soil on top of which was located the pieces of hut floor.</li> </ul>
TP05	26/03/2021	15	<ul style="list-style-type: none"> <li>• 1m x 1m Test Pit</li> <li>• Situated against a section of walling that was thought to be the outer section of a living space or hut foundation/prepared surface.</li> <li>• Excavation starts through a soft loamy soil, reddish in colour as opposed to the STPs from the other sites, with high amounts of organic material.</li> <li>• TP05 was designated in an effort to establish whether the layer of compacted ceramic material that was identified against the section of wall in TP01 continues along the outer section of the small enclosed space thought to be a hut/living space (TP02-TP04)</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Interface layer between the softer clayey layer and the compacted layer of sterile clay yielded high amounts of ceramic sherds. These sherds were mostly non-diagnostic with 1 or 2 sherds having a rim section. This meant that the layer of concentrated</li> </ul>

			<p>ceramics continues along the outer edge of the small, enclosed space.</p> <ul style="list-style-type: none"> <li>• Excavation of this test pit ended on the compacted sterile layer of reddish clay soil.</li> <li>• The foundation stones of the wall section are situated on top of this layer.</li> </ul>
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### ZK 10

Site ZK 10 was extremely overgrown and consists of multiple semi-circular packed stone walls. The south-eastern section of the site has been impacted on by an old gravel road. A line of shovel test pits was excavated through the central part of the site from waypoints 009 to 015.

The test trench consists of 5 shovel test pits, namely SQ1 to SQ5. SQ 1 – 4 are 50cm x 50cm in size, SQ5 was made 250cm by 50cm in a N-S orientation over a section of a wall to investigate the wall foundation. Results are represented in Table 6.

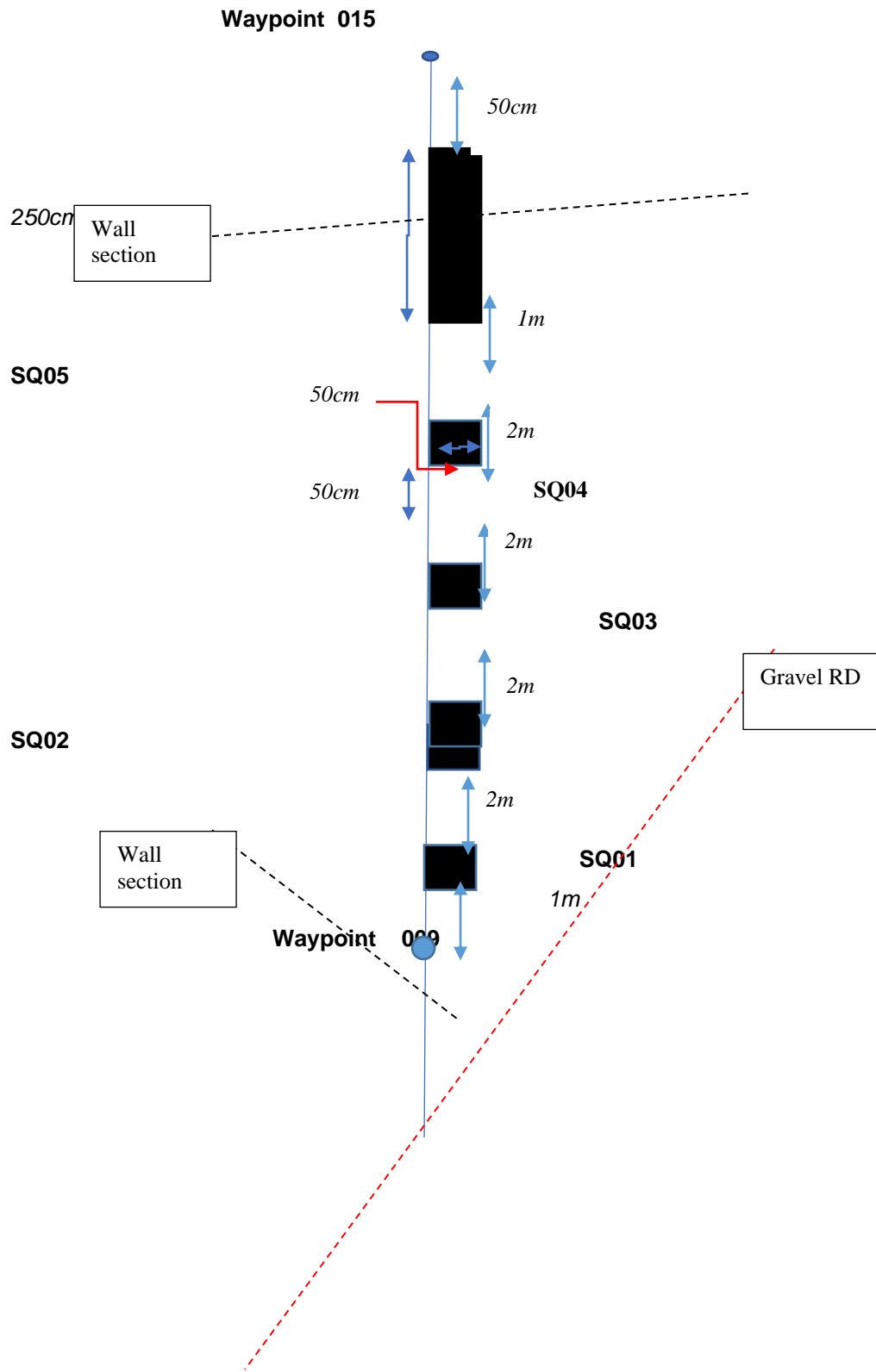
**Table 6. Finds at ZK10**

Provenience:	Date excavated:	Nr of Buckets (10L)	Description:
SQ01	18/03/21	5	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Some larger rocks are located within this square probably due to the collapsed and disturbed wall at waypoint 009.</li> <li>• Roughly 17 cm were excavated ending on a gravelly layer of sterile soil. High in shale material.</li> <li>• No material culture recovered.</li> </ul>
SQ02	18/03/21	5	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Some larger rocks are located within this square probably due to the collapsed and disturbed wall at waypoint 009.</li> </ul>

			<ul style="list-style-type: none"> <li>• Roughly 13 cm were excavated ending on a gravelly layer of sterile that contains high amounts of shale material.</li> <li>• No material culture recovered.</li> </ul>
SQ03	18/03/21	6	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• No rocks were located within this square due to being in a central location. This square is situated towards the centre of the enclosure.</li> <li>• The excavation ended roughly 13cm below the surface on a compacted layer of gravel that contains high amounts of shale flakes.</li> </ul>
SQ04	18/03/21	7 1/2	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• SQ04 was excavated deeper than the rest of TT01 in an effort to establish the stratigraphic sequence of the site.</li> <li>• Roughly 30cm were excavated. The excavation went through the sterile compacted gravel layer and ended on a compacted layer of soil mixed with large chunks of shale.</li> <li>• No material culture was identified.</li> </ul>
SQ05	18/03/21	5	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Some larger rocks are located within this square probably due to the collapsed and disturbed wall at waypoint 015.</li> <li>• Roughly 13 cm were excavated ending on a gravelly layer of sterile that contains high</li> </ul>

			<p>amounts of shale material.</p> <ul style="list-style-type: none"> <li>No material culture recovered.</li> </ul>
SQ06	18/03/21	8	<ul style="list-style-type: none"> <li>250cm x50cm</li> <li>N-S Orientation</li> <li>Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>SQ05 was extended into a 250cm x 50cm square in an effort to establish the relationship of the stratigraphy on the inside of a wall to the outside.</li> <li>SQ05 is situated over a section of the inner enclosure wall of ZK10 close to waypoint 015</li> <li>Roughly 15cm were excavated ending on the compacted gravel layer similar to that of SQ01 – SQ04. The large foundation stones for the wall section were confirmed to sit on top of this sterile gravel layer with a large amount of rocks scattered across the area due to disturbance or collapse.</li> <li>No Material culture was identified.</li> </ul>





**ZK 69**

Site is situated about 50m east of the existing pipeline construction and consists of a series of stone walled enclosures. The site was extremely overgrown making site visibility very low. Two lines of shovel test pits were dug across the site.

- Line 1: STP-T1 from waypoint 71, STP1 –STP4 ending at waypoint 72

STP-T1 was aligned over a section of stone walling between two enclosed areas. This was done in an effort to investigate the relationship between the two spaces.

- Line 2: STP-T2 from waypoint 73, STP5- STP20 ending at Waypoint 76

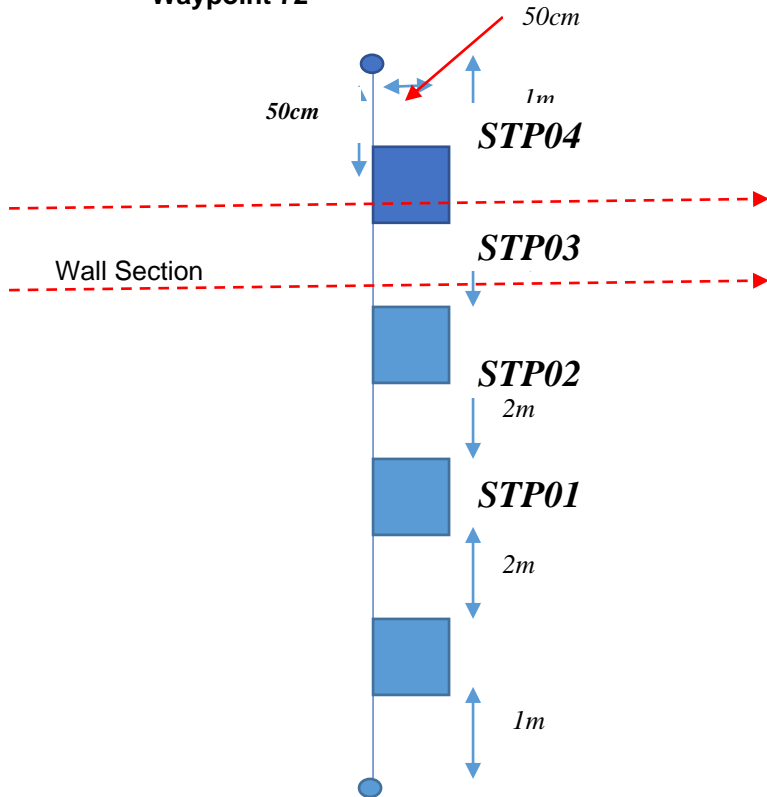
STP-T2 was set up along the length of the larger enclosed space to investigate the significance of this space.

**STP-T1**

**N**



**Waypoint 72**





**STP05**

Table 7. finds at ZK 69

<b>Provenience:</b>	<b>Date excavated:</b>	<b>No of Buckets (10L)</b>	<b>Description:</b>
STP01	20/03/2021	7	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• START OF STP-T1</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Some Non-Diagnostic potsherds identified.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> </ul>
STP02	20/03/2021	6½	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of sterile soil. Foundation stones of wall situated on top of this layer.</li> <li>• STP02 is situated right next to a section of wall with high amounts of rocks present probably due to the collapsed wall section.</li> </ul>
STP03	20/03/2021	2	<ul style="list-style-type: none"> <li>• Situated right on top of the wall section.</li> <li>• Soft loamy/organic rich soil located among rocks that form part of the collapsed wall section.</li> <li>• No Deposit</li> <li>• Excavation ended on top of wall between rocks.</li> </ul>

STP04	20/03/2021	6	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• STP04 is situated on the eastern side of the wall section within the larger enclosure.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> </ul>
STP05	20/03/2021	5	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• START OF STP-T2</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> </ul>
STP06	20/03/2021	6	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> </ul>
STP07	20/03/2021	6	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> </ul>



			<ul style="list-style-type: none"> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> <li>• Some Non-diagnostic potsherds identified</li> </ul>
STP08	20/03/2021	3	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> <li>• Some Non-diagnostic potsherds identified</li> </ul>
STP09	23/03/2021	6½	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> <li>• Some Non-diagnostic potsherds identified</li> </ul>
STP10	23/03/2021	6	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation purposefully taken deeper through the sterile layer of compacted reddish clay soil in an</li> </ul>

			<p>effort to investigate the deeper stratigraphic elements.</p> <ul style="list-style-type: none"> <li>• Reddish compacted sterile clay soil does not change.</li> <li>• Some Non-diagnostic potsherds identified</li> </ul>
STP11	23/03/2021	4	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> </ul>
<b>NOTE:</b>	The non-diagnostic pottery sherds that were located were all identified within the interface layer between the loamy soft topsoil and the fairly compacted reddish soil underneath.		
STP12	23/03/2021	3	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> </ul>
STP13	23/03/2021	3½	
STP14	23/03/2021	3½	
STP15	23/03/2021	5	
STP16	23/03/2021	3	
STP17	23/03/2021	3	
STP18	23/03/2021	2	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey</li> </ul>

			<p>layer of Sterile soil</p> <ul style="list-style-type: none"> <li>• Some Non-diagnostic potsherds identified</li> <li>• The soft loamy layer above the reddish clayey layer is much shallower at this end of STP-T2</li> </ul>
STP19	23/03/2021	4	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> <li>• The soft loamy layer above the reddish clayey layer is much shallower at this end of STP-T2</li> </ul>
STP20	23/03/2021	2	<ul style="list-style-type: none"> <li>• 50cm x50cm</li> <li>• N-S Orientation</li> <li>• Excavation starts through a soft loamy soil with high amounts of organic material.</li> <li>• Soil fairly wet due to consistent raining.</li> <li>• Excavation extends through a soft reddish loamy soil that is moderately compacted and ends on a compacted clay layer that might be the remnants of a prepared surface.</li> <li>• Some Non-diagnostic potsherds identified With a higher density than that of the other test pits.</li> <li>• Excavation ends on a compacted reddish clayey layer of Sterile soil</li> <li>• The soft loamy layer above the reddish clayey layer is much shallower at this end of STP-T2</li> </ul>