Phase 1 Archaeological Survey on Portions 135 and 136 of the farm Marthinus Wesselstroom 121 HT, in respect of the proposed Bezalel Eco Estate, Wakkerstroom, Mpumalanga Province.

Compiled by:

Kudzala Antiquity

For: Project facilitators, KZK Urban Planning Studio

Surveyor: Mr JP Celliers

30 September, 2013

Table of Contents

Executive summary

Site name and location: Portions 135 and 136 of the farm Marthinus Wesselstroom 121 HT located near the town Wakkerstroom, Mpumalanga Province.

Purpose of the study: An Archaeological and historic study was conducted in order to identify heritage resources on the proposed development area (Portions 135 and 136 of Marthinus Wesselstroom 121 HT) where the Bezalel Eco Estate residential development is planned. Extent 353 ha of which the footprint area is approximately 66 ha.

1:50 000 Topographical Map: 2730 AC Wakkerstroom (1987).

EIA Consultant: ETC-Africa.

Client: Nulane Investments 47 (Pty) Ltd.

Heritage Consultant: Kudzala Antiquity CC.
Contact person: Jean-Pierre (JP) Celliers Tel: +27 82 779 3748
E-mail: kudzala@lantic.net

Report date: 30 September 2013

Description and findings:

An Archaeological resource survey was undertaken by Kudzala Antiquity CC in respect of a proposed residential development on portions 135 and 136 of the farm Marthinus Wesselstroom 121 HT in Mpumalanga Province. The study was done with the aim of identifying sites which are of heritage significance on the property and assessing their current preservation condition, significance and possible impact of the proposed development. This forms part of legislative requirements as appears in section 38 of the National Heritage Resources act (25 of 1999) and the NEMA (17 of 1998).

The survey was conducted on foot and with the aid of a motor vehicle in an effort to locate archaeological remains and historic features. A detailed archival study in combination with social consultation formed the basis on which sites were identified, located and assessed.

A total of twelve (12) sites were documented. There is one recorded graveyard site with at least two graves (**WB 6**) which is considered to be of high local social significance (**LS 3A, table 5.1, 5.2**). The remaining sites range from those consisting of the remains of stone-walled kraals and dwellings rated with medium significance (**WB 1-5; 10 GPB; table 5.1, 5.2**) to ruins of dwellings and structures with low significance (**WB 7, 8, 9, 10, 11 and 12; GPB & GPC; table 5.1, 5.2**).

Disclaimer: *Although all possible care is taken to identify all sites of cultural importance during the investigation of study areas, it is always possible that hidden or sub-surface sites could be*

overlooked during the study. Kudzala Antiquity CC will not be held liable for such oversights or for costs incurred as a result of such oversights.

Copyright: Copyright in all documents, drawings and records whether manually or electronically produced, which form part of the submission and any subsequent report or project document shall vest in Kudzala Antiquity CC. None of the documents, drawings or records may be used or applied in any manner, nor may they be reproduced or transmitted in any form or by any means whatsoever for or to any other person, without the prior written consent of Kudzala Antiquity CC. The Client, on acceptance of any submission by Kudzala Antiquity CC and on condition that the Client pays to Kudzala Antiquity CC the full price for the work as agreed, shall be entitled to use for its own benefit and for the specified project only:

- The results of the project;
- The technology described in any report
- Recommendations delivered to the Client.

JP Celliers is a trained Archaeologist and Museum Professional. He holds a Masters Degree from the University of Pretoria with specialisation in Archaeology.

He has been conducting Archaeological Impact Studies and Mitigation in a professional capacity since 2003 and is the Director of Kudzala Antiquity CC, a consulting business specialising in Archaeological and related Heritage work.

He is also a member in good standing of ASAPA (Association of South African Professional Archaeologists) where he is graded as a Field Supervisor in the following disciplines: Iron Age Archaeology, Stone Age Archaeology and Colonial Period Archaeology.

……..

JP CELLIERS, DIRECTOR

1. Introduction

Kudzala Antiquity CC was commissioned to conduct an Archaeological and Heritage resources survey on portions 135 and 136 of Marthinus Wesselstroom 121 HT, Wakkerstroom, Mpumalanga Province. The survey was conducted for Nulane Investments 47 (Pty) Ltd, through KZK Urban Planning Studio.

The National Heritage Resources Act (Act 25, 1999, section 38) and the NEMA (National Environmental Management Act No. 107 of 1998) requires of individuals (engineers, farmers, mines and industry) or institutions to have specialist heritage/ archaeological impact assessment studies undertaken whenever development activities are planned. This is to ensure that heritage features or sites that qualify as part of the national estate are properly managed and not damaged or destroyed.

Heritage resources considered to be part of the national estate include those that are of Cultural, historical significance or have other special value to the present community or future generations.

The national estate may include:

- places, buildings, structures and equipment of cultural significance;
- places to which oral traditions are attached or which are associated with living
- heritage;
- historical settlements and townscapes;
- landscapes and natural features of cultural significance;
- geological sites of scientific or cultural importance;
- archaeological and paleontological sites;
- graves and burial grounds including:

(i) ancestral graves;
(ii) royal graves and graves of traditional leaders;
(iii) graves of victims of conflict;
(iv) graves of individuals designated by the Minister by notice in the *Gazette;*
(v) historical graves and cemeteries; and

other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);

- sites of significance relating to slavery in South Africa;
- movable objects including:

(i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
(ii) objects to which oral traditions are attached or which are associated with living heritage
(iii) ethnographic art and objects;
(iv) military objects
(v) objects of decorative or fine art;
(vi) objects of scientific or technological interest; and

books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

Cultural resources are unique and non-renewable physical phenomena (of natural occurrence or made by humans) that can be associated with human (cultural) activities (Van Vollenhoven 1995:3).

These would be any man-made structure, tool, object of art or waste that was left behind on or beneath the soil surface by historic or pre-historic communities. These remains, when studied in their original context by archaeologists, are interpreted in an attempt to understand, identify and reconstruct the activities and lifestyles of past communities. When these items are disturbed from their original context, any meaningful information they possess is lost, therefore it is important to locate and identify such remains before construction or development activities commence.

An AIA (Archaeological Impact Assessment) consists of three phases, this document deals with the first phase. This (phase 1) investigation is aimed at getting an overview of cultural resources in a given area, thereby assessing the possible impact a proposed development may have on these resources.

When the archaeologist encounters a situation where the planned project will lead to the destruction or alteration of an archaeological site, a second phase in the survey is normally recommended. During a phase two investigation, the impact assessment of development activities on identified cultural resources is intensified and detailed investigation into the nature and origin of the cultural material is undertaken. Often at this stage, archaeological excavation is carried out in order to document and preserve the cultural heritage.

Phase three consists of the compiling of a management plan for the safeguarding, conservation, interpretation and utilization of cultural resources (Van Vollenhoven, 2002).

Continuous communication between the developer and surveyor after the initial report have been compiled may result in the modification of a planned route or development to incorporate into the development or protect existing archaeological sites.

2. Description of surveyed area

The study area falls within the Pixley Ka Seme Local Municipality, Mpumalanga Province.
The survey was carried out on approximately 66 ha of Wakkerstroom Montane Grassland near Wakkerstroom. Limiting factors included the dense nature of the grass and bush (*Leucosidea sericea* or oldwood) and in some areas sandstone ridges which are hard of access. All of which limits the visibility of archaeological and heritage sites and features.
The survey was conducted on foot and with the use of a motor vehicle in an effort to locate cultural remains.

Veld type: The vegetation is classed as Wakkerstroom Montane Grassland which is distributed in areas of both Mpumalanga and KwaZulu-Natal Provinces. It comprises of predominantly short montane grassland on the plateaus and flat areas with short forest and *Leucosidea* thickets along the steep easter facing slopes and drainage areas. *Leucosidea sericea* is the predominant woody pioneer species which invades the area as a result of grazing mismanagement.

Geology: Mudstones, sandstones and shales of the Madzaringwe and Volksrust Formations (Karoo Supergroup) were intruded by voluminous Jurassic dolerite dykes and sills (Mucina and Rutherford, 2009).

3. Methodology

The methodological approach for this study attempts to meet the requirements of relevant heritage legislation. A desktop archival study followed by a physical survey of the proposed development area was conducted. This was done to assess whether graves or features of historical or archaeological value exist on the property.

Social Consultation: During the survey, individuals familiar with the property were consulted to establish whether any graves and other sites of possible heritage significance are located in the area. The informant consulted in this regard was Mr. Sieghard Knöcklein.

Historical maps: Historical maps obtained during the archival search were scrutinized and features that were regarded as important in terms of heritage value were identified and if they were located within the boundaries of the project area they were physically visited in an effort to determine whether they:

(i) still exist
(ii) assess their current condition, and

(iii) significance

SAHRA (South African Heritage Resources Agency) and the relevant legislation (Act 25 of 1999, National Heritage Resources Act) require that the following components be included in an Archaeological impact assessment:

- Archaeology
- Shipwrecks
- Battlefields
- Graves
- Structures older than 60 years
- Living heritage
- Historical settlements
- Landscapes
- Geological sites
- Paleontological sites and objects

All the above-mentioned heritage components are addressed in this report, except shipwrecks, geological sites and paleontological sites and objects.

The *purpose* of the archaeological study is to establish the whereabouts and nature of cultural heritage sites should they occur on the surveyed area. This includes settlements, structures and artifacts which have value for an individual or group of people in terms of historical, archaeological, architectural and human (cultural) development.

The aim of this study is to locate and identify such objects or places in order to assess whether they are of significance and warrant further investigation or protection. This is done by means of foot surveys, a desktop or detailed archival study as well as a study of the results of previous archaeological work in the area.

3.1. Desktop study

The purpose of the desktop study is to compile as much information as possible on the heritage resources of the area. This helps to provide an historical context for located sites. Sources used for this study include published and unpublished documents, archival material and maps. Information obtained from the following institutions or individuals were consulted:

- Lydenburg Museum, Lydenburg
- Published and unpublished archaeological reports and articles
- Published and unpublished historical reports and articles

- Archival documents from the National Archives in Pretoria
- Historical maps

3.1.1. Previous Archaeological studies in the area

SAHRA records indicate that an archaeological impact study was conducted in Wakkerstroom in the year 2000. The study was done by S. Geigher in respect of the erection of a Telkom mast. Two features of historic significance were identified, the remains of a shooting stand at the old military shooting range dating from 1927 and an historic water purification plant which was constructed in 1906.

3.2. Significance of sites

The South African Heritage Resources Agency (SAHRA) formulated guidelines for the conservation of all cultural resources and therefore also divided such sites into three main categories. These categories might be seen as guidelines that suggest the extent of protection a given site might receive. They include sites or features of local (Grade 3) provincial (Grade 2) national (Grade 1) significance, grades of local significance and generally protected sites with a number of degrees of significance **(*Also see table 5.2.Significance rating guidelines for sites*).**

For practical purposes the surveyor uses his own classification for sites or features and divides them into three groups, those of low or no significance, those of medium significance, those of high significance.

Within the establishment of the significance of a site or feature there are certain values or dimensions connected to significance which may be allocated to a site. These include:

- **Types of significance**

The site's scientific, aesthetic and historic significance or a combination of these is established.

- **Degrees of significance**

The archaeological or historic site's rarity and representative value is considered. The condition of the site is also an important consideration.

- **Spheres of significance**

Sites are categorized as being significant in the international, national, provincial, regional or local context. Significance of a site for a specific community is also taken into consideration.

It should be noted that to arrive at the specific allocation of significance of a site or feature, the specialist considers the following:

- Historic context
- Archaeological context or scientific value
- Social value
- Aesthetic value
- Research value

More specific criteria used by the specialist in order to allocate value or significance to a site include:

- The unique nature of a site
- The integrity of the archaeological deposit
- The wider historic, archaeological and geographic context of the site
- The location of the site in relation to other similar sites or features
- The depth of the archaeological deposit (when it can be determined or is known)
- The preservation condition of the site
- Quality of the archaeological or historic material of the site
- Quantity of sites and site features

In short, archaeological and historic sites containing data which may significantly enhance the knowledge that archaeologists currently have about our cultural heritage should be considered highly valuable. In all instances these sites should be preserved and not damaged during construction activities. When development activities do however jeopardize the future of such a site, a second and third phase in the Cultural Resource Management (CRM) process is normally advised which entails the excavation or rescue excavation of cultural material along with a management plan to be drafted for the preservation of the site or sites.

Graves are considered very sensitive sites and should never under any circumstances be jeopardized by development activities. Graves are incorporated in the National Heritage Resources Act under section 36 and in all instances where graves are found by the surveyor, the recommendation would be to steer clear of these areas. If this is not possible or if construction activities have for some reason damaged graves, specialized consultants are normally contacted to aid in the process of exhumation and re-interment of the human remains.

4. History and Archaeology

4.1. Historic period

4.1.1. Early History

In Southern Africa the domestication of the environment began only a couple of thousands of years ago, when agriculture and herding were introduced. At some time during the last half of the first millennium BC, people living in the region where Botswana, Zambia and Angola are today, started moving southward, until they reached the Highveld and the Cape in the area of modern South Africa. As time passed and the sub-continent became fully settled, these agro-pastoralists, who spoke Bantu languages, started dominating all those areas which were ecologically suitable for their way of life. This included roughly the eastern half of modern South Africa, the eastern fringe of Botswana and the north of Namibia. Historians agree that the earliest Africans to inhabit in the Lowveld in Mpumalanga were of Sotho, or more particularly Koni-origin.

In J. S. Bergh's source, a map indicates the migration of Swazi tribes from Swaziland in north western and north eastern directions. This took place during the "Difaqane" period, which occurred roughly from the early 1820's to the late 1830's, when many tribes were displaced throughout South Africa. The Difaqane (Sotho), or Mfecane ("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 (Bergh, 1999). During this period, a Ngwane (Swazi) group under chief Matiwane were attacked by Dingiswayo and then Zwide. They fled westwards and fell upon the Hlubi who resided at the upper umZinyathi in the Wakkerstroom area. The Hlubi fled and were widely scattered as a result. The Ngwane were later dislodged from the lands of the Hlubi by Shaka.

The Swazi headman Mthonga, son of the chief Mpande, fled from his father's wrath in around 1854 and he settled in the Wakkerstroom area on the farm Saxony, just west of the town. He also spent a lot of time at Ophondweni between Wakkerstroom and Volksrust. In 1861 the Boers surrendered Mthonga to Cetshwayo in exchange for a land agreement (some info supplied by J. McAllister in a booklet about Wakkerstroom history, 2006).

4.1.2. Historic maps of the farms under investigation

Since the mid 1800's up until the present, South Africa has been divided and re-divided into various different districts. The surveyed property formed part of the Wakkerstroom magisterial district within the larger Wakkerstroom district. This remained unchanged up until 1994 (Bergh, 1999).

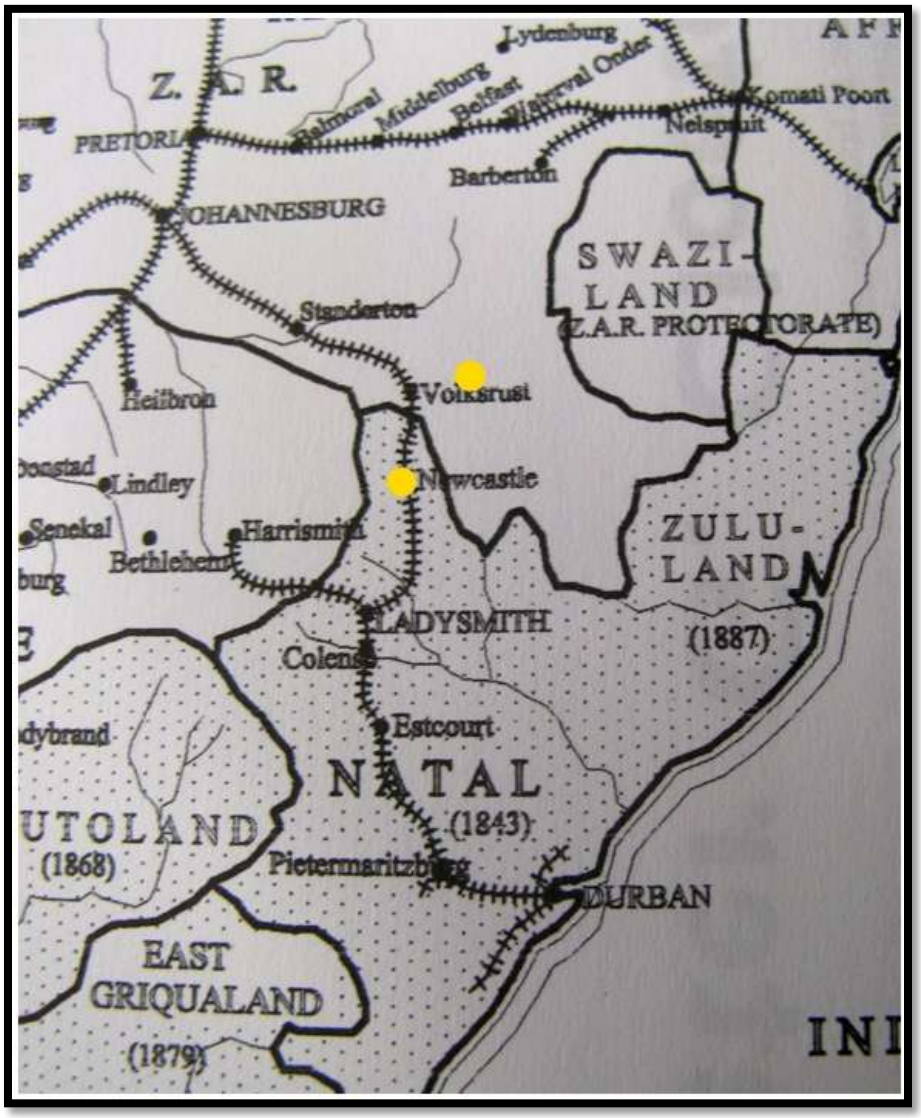


Fig. 4.1. Map showing the British territories (dotted sections) before the Anglo Boer War (1899-1902). Noticeable is the approximate location of Wakkerstroom to the northeast of Newcastle and Volksrust. (Indicated by a yellow dot) This area was therefore not part of the British territories during the Anglo Boer War. Wakkerstroom fell just outside of Natal's jurisdiction (Cloete, 2000).

Fig. 4.2. A 1909 Map of the Town Lands of Wakkerstroom which was originally known as Marthinus Wesselstroom (Major Jackson series, 1909).

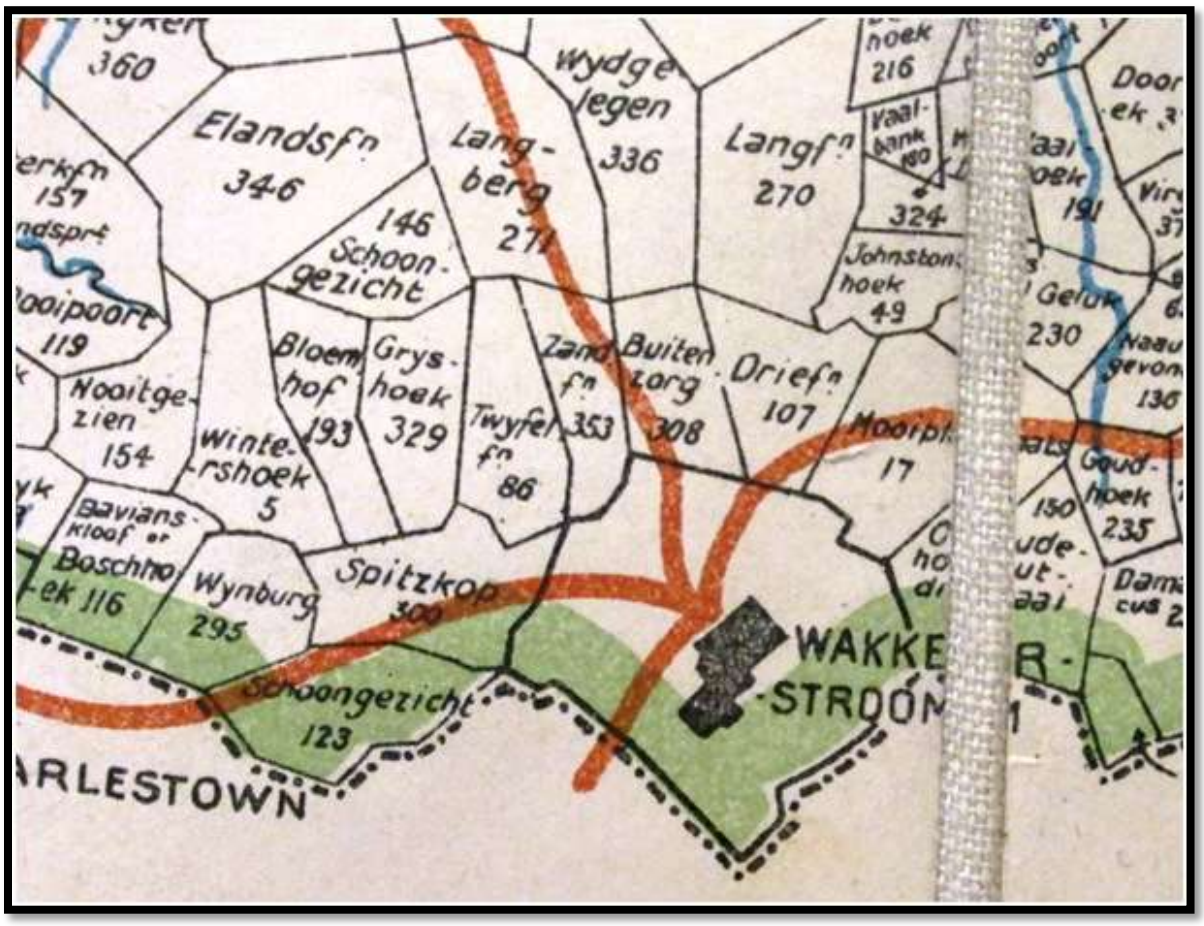


Fig. 4.3. A Map of the Transvaal during the 1920s. Several roads ran through the town lands of Wakkerstroom, located in the Transvaal, on the northern border of the Natal Province. (Anon 1920s).

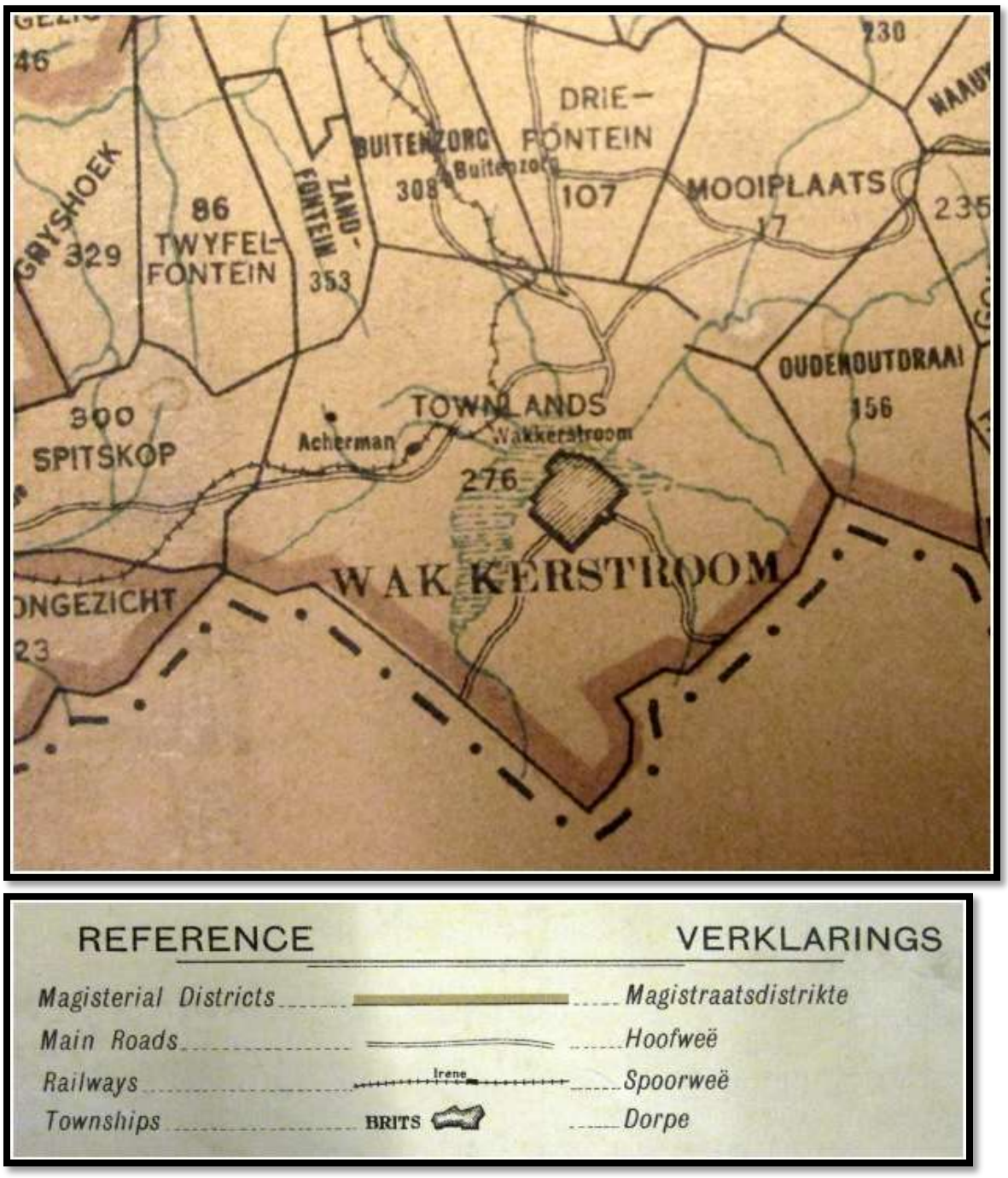


Fig. 4.4. A Map of the Transvaal in 1931. By this time the property was known as the Townlands of Wakkerstroom No. 276. A number of roads run into the town, and a railway line intersected the property from the eastern to the northern border. The site of Acherman can be seen to the northeast of the town of Wakkerstroom (Surveyor-General's Office, 1931).

4.1.3. History of the Boer Wars (1880-1881; 1899-1902) in the area

After the annexation of the Transvaal on 12 April 1877 by Sir Theophilus Shepstone, all ZAR towns, including Wakkerstroom were occupied by the British. The citizens of Wakkerstroom played a leading role in the outbreak of war when 116 of them undersigned an advertisement which appeared in *De Volkstem* newspaper. The advertisement stated that they will not tolerate British presence on their lands and not pay exorbitant taxes as were demanded by Britich officials. This advertisement helped bring matters to a head, after a Republican meeting held at Paardekraal on 8 December 1880, it was decided to resist the British. Thus the Transvaal First War of Independence started on 16 December 1880.

The Anglo-Boer War, which took place between 1899 and 1902 in South Africa, was one of the most turbulent times in South Africa's history. Even before the outbreak of war in October 1899 British politicians, including Sir Alfred Milner and Mr Chamberlain, had declared that should Britain's differences with the Z.A.R. result in violence, it would mean the end of republican independence. This decision was not immediately publicized, and as a consequence republican leaders based their assessment of British intentions on the more moderate public utterances of British leaders. Consequently, in March 1900, they asked Lord Salisbury to agree to peace on the basis of the status quo ante bellum. Salisbury's reply was, however, a clear statement of British war aims (Du Preez 1977). To the northwest of Wakkerstroom, a black concentration camp and railway station was established at Paardekop during the War. This concentration camp was strategically situated near the railway line from Natal to the Transvaal (Bergh, 1999).

Ossewa kop, near the town, was occupied by General N.G. Lyttleton and the South Staffordshire Regiment on 13 June 1900.

In an effort to restrict Boer movement during the phase of the War when Boer forces relied on guerrilla war tactics, the British constructed a series of strategically located block houses which consisted of three basic types:

1. Single- double or multi-storeyed stone structures
2. The Sangar-type which consisted on stone foundations and corrugated iron walls, and
3. Rice-type block houses which were completely constructed of corrugated iron

More than 130 of these block houses were constructed between Volkstrust and Swaziland they were of both Sangar and Rice type.

4.1.4. History of human settlement and interaction in the Wakkerstroom area

During the time of the Difaqane (1820's) a northwards migration of white settlers from the Cape was also taking place. Some travellers, missionaries and adventurers had gone on expeditions to the northern areas in South Africa – some as early as in the 1720's. None of these travellers however seemed to have passed close by the Wakkerstroom area (Bergh, 1999).

By the late 1820's, a mass-movement of Dutch speaking people in the Cape Colony started advancing into the northern areas. This was due to feelings of mounting dissatisfaction caused by economical and other circumstances in the Cape. This movement later became known as the Great Trek. This migration resulted in a massive increase in the extent of that proportion of modern South Africa dominated by people of European descent. As can be expected, the movement of whites into the northern provinces would have a significant impact on the black people who populated the land. By 1860, the population of whites in the central Transvaal was already very dense and the administrative machinery of their leaders was firmly in place. Many of the policies that would later be entrenched as legislation during the period of apartheid had already been developed. (Ross 2002, Bergh,1999).

According to Raper's dictionary of South African place names, Wakkerstroom was laid out on the farm Gryshoek, proclaimed in 1859, and administered by a village council from 1910. The town was originally named Marthinus-Wesselstroom, later became known as Wesselstroom and then Wakkerstroom. The latter means 'lively stream', after the river, which also gave its name to the district, namely the Mzinyati (Raper 1983).

In 1912 Pixley ka Isaka Seme, a founder member and the first Treasurer of the South African Native National Congress (later to become the African National Congress), founded the Native Farmers' Association of Africa Limited. He was President of the ANC from 1930 to 1937 and is commemorated in the name of the Seme Municipality which includes the towns of Wakkerstroom, Volksrust, Daggakraal, Amersfoort and Perdekop.
The 2011 South African census indicated that Wakkerstroom measured 87. 68 km² at the time and that it had a population of 6852 (Census 2011).

4.2. Archaeology

4.2.1. Stone Age

In Mpumalanga Province the Drakensberg separates the interior plateau also known as the Highveld from the low-lying subtropical Lowveld which stretches to the Indian Ocean. A number of rivers amalgamate into two main river systems, the Olifants River and the Komati River in the Lowveld and mainly the Vaal on the Higveld. This fertile landscape has provided resources for humans and their predecessors for more than 1,7million years (Esterhuizen & Smith in Delius, 2007).

The initial attraction of abundant foods in the form of animals and plants eventually also led to the discovery of and utilisation of various minerals including ochre, iron and copper. People also obtained foreign resources by means of trade from the coast. From 900AD this included objects which were brought across the ocean from foreign shores.

The Early Stone Age (ESA)

In South Africa the ESA dates from about 2 million to 250 000 thousand years ago in other words from the early to middle Pleistocene. The archaeological record shows that as the early ancestors progressed physically, mentally and socially, bone and stone tools were developed. One of the most influential advances was their control of fire and diversifying their diet by exploitation of the natural environment (Esterhuizen & Smith in Delius, 2007).

The earliest tools date to around 2, 5 million years ago from the site of Gona in Ethiopia. Stone tools from this site shows that early hominids had to cognitive ability to select raw material and shape it for a specific application. Many bones found in association with stone tools like these have cut marks which lead scientists to believe that early hominids purposefully chipped cobblestones to produce flakes with a sharp edge capable of cutting and butchering animals carcasses. This supplementary diet of higher protein quantities ensured that brain development of hominids took place more rapidly.

Mary Leaky discovered tools like these in the Olduwai Gorge in Tanzania during the 1960s. The tools are named after this gorge and is known as the Oldowan industry. These tools, only found in Africa, are mainly simple flakes which were struck from cobbles. This method of manufacture remained for about 1,5 million years. Although there is continuing debate about who made these tools, two hominids may have been responsible. The first of these was an early form of *Homo* and the second was *Parathropus robustus*, which became extinct about 1 million years ago (Esterhuizen & Smith in Delius, 2007).

Some time later, around 1, 7 million years ago more specialised tools known as Acheulean tools, appeared. These are named after tools from a site in France by the name of Saint Acheul, where they were first discovered in the 1800s. It is argued that these tools had their origin in Africa and

then spread towards Europe and Asia with the movement of hominids out of Africa. These tools had longer and sharper edges and shapes which suggest that they could be used for a larger range of activities which included the butchering of animals, chopping of wood, digging roots and cracking bone. *Homo ergaster* was probably responsible for the manufacture of Acheulean tools in South Africa. This physical type was arguably physically similar to modern humans, a larger brain and modern face, body height and proportion are all characteristics which are very similar to us. *Homo ergaster* was able to flourish in a variety of habitats in part because they were dependent on tools. They adapted to drier, more open grassland settings. Because these early people were often associated with water sources such as rivers and lakes, sites where they left evidence of their occupation are very rare. Most tools of these people have been washed into caves, eroded out of riverbanks and washed downriver. An example in Mpumalanga is Maleoskop on the farm Rietkloof where ESA tools have been found. This is one of only a handful of such sites in Mpumalanga.

Middle Stone Age (MSA)

A greater variety of tools with diverse sizes and shapes appeared by 250 000 BP. These replaced the large hand axes and cleavers of the ESA. This technological advancement introduces the Middle Stone Age (MSA). This period is characterised by tools which are smaller in size but different in manufacturing technique (Esterhuizen & Smith in Delius, 2007).

In contrast to the ESA technology of removing flakes from a core, MSA tools were flakes to start with. They were of a predetermined size and shape and were made by preparing a core of suitable material and striking off the flake so that it was flaked according to a shape which the toolmaker desired. Elongated, parallel-sided blades, as well as triangular flakes are common finds in these assemblages. Mounting of stone tools onto wood or bone to produce spears, knives and axes became popular during the MSA. These early humans not only settled close to water sources but also occupied caves and shelters. The MSA represents the transition of more archaic physical type (*Homo)* to anatomically modern humans, *Homo sapiens.*

The MSA has not been extensively studied in Mpumalanga but evidence of this period has been excavated at Bushman Rock Shelter, a well-known site on the farm Klipfonteinhoek in the Ohrigstad district. This cave was excavated twice in the 1960s by Louw and later by Eloff. The MSA layers show that the cave was repeatedly visited over a long period. Lower layers have been dated to over 40 000 BP while the top layers date to approximately 27 000 BP (Esterhuizen & Smith in Delius, 2007; Bergh, 1998).

Later Stone Age (LSA)

Early hunter gatherer societies were responsible for a number of technological innovations and social transformations during this period starting at around 20 000 years BP. Hunting of animals

proved more successful with the innovation of the bow and link-shaft arrow. These arrows were made up of a bone tip which was poisoned and loosely linked to the main shaft of the arrow. Upon impact, the tip and shaft separated leaving the poisoned arrow-tip imbedded in the prey animal. Additional innovations include bored stones used as digging stick weights to uproot tubers and roots; small stone tools, mostly less than 25mm long, used for cutting of meat and scraping of hides; polished bone tools such as needles; twine made from plant fibres and leather; tortoiseshell bowls; ostrich eggshell beads; as well as other ornaments and artwork (Esterhuizen & Smith in Delius, 2007).

At Bushman Rock Shelter the MSA is also represented and starts at around 12 000 BP but only lasted for some 3 000 years. The LSA is of importance in geological terms as it marks the transition from the Pleistocene to the Holocene which was accompanied by a gradual shift from cooler to warmer temperatures. This change had its greatest influence on the higher lying areas of South Africa. Both Bushman Rock Shelter and a nearby site, Heuningneskrans, have revealed a greater use in plant foods and fruit during this period (Esterhuizen & Smith in Delius, 2007; Bergh, 1998).

Faunal evidence suggests that LSA hunter-gatherers trapped and hunted zebra, warthog and bovids of various sizes. They also diversified their protein diet by gathering tortoises and land snails *(Achatina*) in large quantities.

Ostrich eggshell beads were found in most of the levels at these two sites. It appears that there is a gap of approximately 4 000 years in the Mpumalanga LSA record between 9 000 BP and 5 000 BP. This may be a result of generally little Stone Age research being conducted in the province. It is, however, also a period known for rapid warming and major climate fluctuation which may have led people to seek out protected environments in this area. The Mpumalanga Stone Age sequence is visible again during the mid-Holocene at the farm Honingklip near Badplaas in the Carolina district (Esterhuizen & Smith in Delius, 2007; Bergh, 1998).

At this location, two LSA sites were located on opposite sides of the Nhlazatshe River, about one kilometre west of its confluence with the Teespruit. These two sites are located on the foothills of the Drakensberg where the climate is warmer than the Highveld but also cooler than the lowveld (Esterhuizen & Smith in Delius, 2007; Bergh, 1998).

Nearby the sites, dated to between 4 870 BP and 200 BP are four panels which contain rock art. Colouring material is present in all the excavated layers of the site which makes it difficult to determine whether the rock art was painted during the mid- or later Holocene. Stone walls at both sites date from the last 250 years of hunter gatherer occupation and they may have served as protection from predators and intruders (Esterhuizen & Smith in Delius, 2007; Bergh, 1998). Bergh's source indicates that some San Rock Art do occur in the Wakkerstroom area.

4.2.2. Early Iron Age

The period referred to as the Early Iron Age (AD 200-1500 approx.) started when presumably Karanga (north-east African) herder groups moved into the north eastern parts of South Africa. It is believed that these people may have been responsible for making of the famous Lydenburg Heads, ceramic masks dating to approximately 600AD.

Ludwig von Bezing was a boy of more or less 10 years of age when he first saw pieces of the now famous Lydenburg heads in 1957 while playing in the veld on his father's farm near Lydenburg. Five years later von Bezing developed an interest in archaeology and went back to where he first saw the shards. Between 1962 and 1966 he frequently visited the Sterkspruit valley to collect pieces of the seven clay heads. Von Bezing joined the archaeological club of the University of Cape Town when he studied medicine at this institution.

He took his finds to the university at the insistence of the club. He had not only found the heads, but potsherds, iron beads, copper beads, ostrich eggshell beads, pieces of bones and millstones. Archaeologists of the University of Cape Town and WITS Prof. Ray Innskeep and Dr Mike Evers excavated the site where von Bezing found the remains. This site and in particular its unique finds (heads, clay masks) instantly became internationally famous and was henceforth known as the Lydenburg Heads site.

Two of the clay masks are large enough to probably fit over the head of a child, the other five are approximately half that size. The masks have both human and animal features, a characteristic that may explain that they had symbolic use during initiation- and other religious ceremonies. Carbon dating proved that the heads date to approximately 600 AD and were made by Early Iron Age people. These people were Bantu herders and agriculturists and probably populated Southern Africa from areas north-east of the Limpopo river. Similar ceramics were later found in the Gustav Klingbiel Nature Reserve and researchers believe that they are related to the ceramic wares (pottery) of the Lydenburg Heads site in form, function and decorative motive. This sequence of pottery is formally known as the Klingbiel type pottery. No clay masks were found in similar context to this pottery sequence.

Two larger heads and five smaller ones make up the Lydenburg find. The heads are made of the same clay used in making household pottery. It is also made with the same technique used in the manufacture of household pottery. The smaller heads display the modeling of a curved forehead and the back neck as it curves into the skull. Around the neck of each of the heads, two or three rings are engraved horizontally and are filled in with hatching marks to form a pattern. A ridge of clay over the forehead and above the ears indicates the hairline. On the two larger heads a few rows of small clay balls indicate hair decorations. The mouth consists of lips – the smaller heads also have teeth. The seventh head has the snout of an animal and is the only head that represents an animal.

Some archaeological research was done during the 1970's at sites belonging to the EIA (Early Iron Age), location Plaston, a settlement close to White River (Evers, 1977). This site is located on a spur between the White River and a small tributary. It is situated on holding 119 at Plaston.

The site was discovered during house building operations when a collection of pottery shards was excavated. The finds consisted of pottery shards both on the surface and excavated.

Some of the pottery vessels were decorated with a red ochre wash. Two major decoration motifs occurred on the pots:

- Punctuation, using a single stylus and
- Broadline incision, the more common motif

A number of Early Iron Age pottery collections from Mpumalanga and Limpopo may be compared to the Plaston sample. They include Silver Leaves, Eiland, Matola, Klingbiel and the Lydenburg Heads site. The Plaston sample is distinguished from samples of these sites in terms of rim morphology, the majority of rims from Plaston are rounded and very few beveled. Rims from the other sites show more beveled rims (Evers, 1977:176).

Early Iron Age pottery was also excavated by archaeologist, Prof. Tom Huffman during 1997 on location where the Riverside Government complex is currently situated (Huffman, 1998). This site known as the Riverside site is situated a few kilometers north of Nelspruit next to the confluence of the Nelspruit and Crocodile River. It was discovered during the course of an environmental impact assessment for the new Mpumalanga Government complex/ offices. A bulldozer cutting exposed storage pits, cattle byres, a burial and midden on the crest of a gentle slope. Salvage excavations conducted during December 1997 and March 1998 recovered the burial and contents of several pits.

One of the pits contained among other items, pottery dating to the eleventh century (AD 1070 ± 40 BP) this relates the pottery to the Mzonjani and Broederstroom phases. The early assemblage belongs to the Kwale branch of the Urewe tradition.

During the early 1970's Dr Mike Evers of the University of the Witwatersrand conducted fieldwork and excavations in the Eastern Transvaal. Two areas were studied, the Letaba area south of the Groot Letaba River, west of the Lebombo Mountains, east of the great escarpment and north of the Olifants River. The second area was the Eastern Transvaal escarpment area between Lydenburg and Machadodorp.

These two areas are referred to as the Lowveld and escarpment respectively. The earliest work on Iron Age archaeology was conducted by Trevor and Hall in 1912. This revealed prehistoric copper-, gold- and iron mines. Schwelinus (1937) reported smelting furnaces, a salt factory and

terraces near Phalaborwa. In the same year D.S. van der Merwe located ruins, graves, furnaces, terraces and soapstone objects in the Letaba area.

Mason (1964, 1965, 1967, 1968) started the first scientific excavation in the Lowveld which was followed by N.J. van der Merwe and Scully. M. Klapwijk (1973, 1974) also excavated an Early Iron Age (EIA) site at Silverleaves and Evers and van den Berg (1974) excavated at Harmony and Eiland, both EIA sites.

Recent research by the National Cultural History Museum resulted in the excavation of an Early Iron Age site in Sekhukuneland, known as Mototolong (Van Schalkwyk, 2007). The site is characterized by four large cattle kraals containing ceramics which may be attributed to the Mzonjani and Doornkop occupational phases.

4.2.3. Late Iron Age

The later phases of the Iron Age (AD 1600-1800's) in the Wakkerstroom area are represented by various tribes including Nguni and Sotho groups. The Sotho's presence is marked by stonewalled settlements found throughout the southern and eastern Highveld.

These stone-walled settlements largely consisted of a primary central circular enclosure. Each settlement is made up of a number of settlement units which are built to a consistent pattern. The circular structures are the first to be built and include both huts and livestock pens, serving as shelter for both man and his domestic animals (Maggs, 1975). In all the different types of settlement patterns, the large primary enclosures, built as stock pens, forms the nucleus of the settlement unit. The presence of a single large enclosure or several smaller enclosures clustered together at the centre of the unit, are patterns which reflect the social and economic importance of stock, especially cattle, in Southern Bantu societies. The huts and other structures associated with domestic life are all placed around the nucleus and sometimes form a ring. This is commonly referred to as the Southern Bantu Cattle Pattern. Walls which abut against primary structures are called secondary walls and they form secondary enclosures (Maggs, 1975). This is characteristic of Iron Age construction and enables the sequence of construction to be re-established during fieldwork. Primary and secondary structures together, form a settlement unit. With the help of ethnological evidence, this represents the basic social and economic subdivision of the settlement as a whole (Maggs, 1975).

In the Wakkertstroom and Newcastle area, the stone-walled settlements are classes as "Type N" by Late Iron Age researchers (Maggs, 1975). These are the oldest type of settlements, dates from excavated sites date to the 15th century AD. The type N settlement unit consisted of a group of primary enclosures arranged in a ring and linked by secondary walling, so forms a large secondary enclosure in the middle, into which entrances opened. Huts were placed outside of this ring and the whole settlement unit was enclosed by an encircling wall which sometimes had one or two small primary enclosures attached. This arrangement allowed livestock in the centre of the

unit and this keeps them away from the living areas around the huts. Only one entrance opened to the central group of enclosures and it was normally funnel shaped. The living area was enclosed between the central inner ring and the outer wall (Maggs, 1975).

Type N sites also have different pottery than other Late Iron Age industries, the vessels are spherical to bag-shaped pots and open bowls, necks are absent and poorly developed. Decoration occurs on a small proportion of vessels and dominated by coarse comb stamping in a horizontal band or a row of pendant triangles (Maggs, 1975). Around the sixteenth or seventeenth century, a significant change took place in this eastern zone of settlement. Population density increased with the development of many new settlements in between the older ones. They continued to be occupied and were also re-occupied but the Type N settlements were largely converted into the new Type V pattern (Maggs, 1975). The essential difference between the two types is that now (Type V) there is no longer an outer surrounding wall, the huts scattered around the central ring is now in the open.

5. Located sites, description and suggested mitigation

Twelve (12) sites were documented. Significance ratings for the sites vary from high significance (site WB 6) through medium (sites WB 1-5; 10) and low (sites WB 8, 9, 11, 12) significance.

Table 5.1. Summary of located sites and their significance

Type of site	Identified sites	Significance
Graves and graveyards	WB 6	LS 3A
Late Iron Age	WB 3-5	Medium, GPB
Early Iron Age	None	N/A
Historical buildings	WB 1, 2, 7, 10, 11, 12	Medium, GPA and GPB
Historical features	WB 8, 9	Low, GPC
Stone Age sites	None	N/A

Table 5.2. Significance rating guidelines for sites

Field Rating	Grade	Significance	Recommended Mitigation
National Significance (NS)	Grade 1		Conservation, nomination as national site
Provincial Significance (PS)	Grade 2		Conservation; Provincial site nomination
Local significance (LS 3A)	Grade 3A	High Significance	Conservation, No mitigation advised
Local Significance (LS 3B)	Grade 3B	High Significance	Mitigation but at least part of site should be retained
Generally Protected A (GPA)		High/ Medium Significance	Mitigation before destruction
Generally Protected B (GPB)		Medium Significance	Recording before destruction
Generally Protected C (GPC)		Low Significance	Destruction

5.2. Description of located sites

5.2.1. Site WB 1.

Location: See Appendix B and D (fig. 1-4).

Description: This site is characterised by both a historic stone-built dwelling and a circular stone-walled enclosure probably used for small livestock. The rectangular stone-walled dwelling is distinctively western in nature. There are no secondary or associated circular stone walling adjoining this structure, it is therefore believed that the structure probably dates from the late 19th or early 20th century. Both structures are considered to be of medium significance and generally protected in terms of Section 34 (structures) and 35 (archaeology) of the NHRA, Act 25 of 1999 (**GPA** table 5.2).

Impact of the proposed development/ activity:

The ruin will possibly be impacted upon during the proposed development activity.

Recommendation:

To minimise impact on these historic features it is recommended that the ruins be incorporated into the proposed development with a buffer zone of at least 20 metres. This will add historic value to the proposed development. If this is not possible, heritage legislation guides alternative options (section 34, 35 of NHRA Act 25 of 1999). The ruins are older than 60 years and they are protected by heritage legislation. Therefore, a permit must be obtained from the local heritage authority known as the PHRA (Provincial Heritage resources Agency) before the structures may be altered or demolished.

5.2.2. Site WB 2.

Location: See Appendix B and D (fig. 7).

Description: A ground-level linear feature which suggests that a kraal wall built of logs was located here. It is situated a few metres to the east of the stone-walled dwelling and kraal at site WB 1. The wall extends in a north/south orientation and is parallel to the stone-walled site with a gentle curve towards the east, suggesting that it served as an additional larger kraal wall intended for cattle perhaps. The feature is associated with the stone-walled site and therefore considered to be of medium significance and generally protected in terms of Section 34 and 35 of the NHRA, Act 25 of 1999 (**GPA** table 5.2).

Impact of the proposed development/ activity:

The ruin will possibly be impacted upon during the proposed development activity.

Recommendation:

To minimise impact on this feature and taking into consideration that it forms part of site WB 1, it is recommended that it be incorporated into the proposed development as an historic feature and adding value thereto. If this is not possible, heritage legislation guides alternative options (section 34, 35 of NHRA Act 25 of 1999). Therefore, a permit must be obtained from the local heritage authority known as the PHRA (Provincial Heritage resources Agency) before the feature is altered or demolished.

5.2.3. Site WB 3.

Location: See Appendix B and D (fig. 8,9).

Description: A circular stone-walled enclosure of medium size, located on a gentle east facing slope. Mostly overgrown with *Leucosidea sericea.* The walls have collapsed and in some instances were robbed for use elsewhere. They are approximately 400mm wide and an entrance is situated on the south western side. The enclosure measures approximately 9m across. The structure is regarded as being of medium significance (GPB table 5.2). It is believed that the structure is associated with Late Iron Age (17^{th} -19^{th} cent) Sotho occupation and probably the *difaqane* period (1820's) as it is not extensive and possibly occupied for a short time. It is associated with two similar structures, sites WB 4 and WB 5.

Impact of the proposed development/ activity:

The structure will possibly be impacted upon during the proposed development activity.

Recommendation:

To minimise impact on this structure it is recommended that it be incorporated into the proposed development, with a buffer zone of at least 20 metres. If this is not possible, heritage legislation guides alternative options (section 35 of NHRA Act 25 of 1999). A permit must be obtained from the local heritage authority known as the PHRA (Provincial Heritage resources Agency) before the structure is altered or demolished.

5.2.4. Site WB 4.

Location: See Appendix B and D (fig. 10).

Description: A small circular stone-walled enclosure, located on a gentle east facing slope. The walls have partially collapsed. A possible entrance is situated on the north western side. The enclosure measures approximately 4m across. The structure is regarded as being of medium significance (GPB table 5.2). It is believed that the structure is associated with Late Iron Age (17^{th}

-19th cent) Sotho occupation and probably the *difaqane* period (1820's) as it is not extensive and possibly occupied for a short time. It is associated with two similar structures, sites WB 3 and WB5.

Impact of the proposed development/ activity:

The site will possibly be impacted upon during the proposed development activity.

Recommendation:

To minimise impact on the structure it is recommended that it be incorporated into the proposed development with a 20 metre buffer zone. If this is not possible, heritage legislation guides alternative options (section 35, NHRA Act 25 of 1999). A permit must be obtained from the local heritage authority known as the PHRA (Provincial Heritage resources Agency) before the structure is altered or demolished.

5.2.5. Site WB 5.

Location: See Appendix B and D (fig.11, 12).

Description: A circular stone-walled enclosure of medium size, located on a gentle east facing slope. Mostly overgrown with *Leucosidea sericea.* The walls have collapsed and were extensively robbed for use elsewhere. They are approximately 400mm wide and an entrance is situated on the north western side. The enclosure measures approximately 11m across. It was probably used as livestock enclosure. The structure is regarded as being of medium significance (GPB table 5.2). It is believed that the structure is associated with Late Iron Age (17th -19th cent) Sotho occupation and probably the *difaqane* period (1820's) as it is not extensive and possibly occupied for a short time. It is associated with two similar structures, sites WB 3 and WB 4.

Impact of the proposed development/ activity:

The site will possibly be impacted upon during the proposed development activity.

Recommendation:

To minimise impact on the structure it is recommended that it be incorporated into the proposed development with a 20 metre buffer zone. If this is not possible, heritage legislation guides alternative options (section 35, NHRA Act 25 of 1999). A permit must be obtained from the local heritage authority known as the PHRA (Provincial Heritage resources Agency) before the structure is altered or demolished.

5.2.6. Site WB 6.

Location: See Appendix B and D (fig.13, 14).

Description: At least two graves are located here. They are unmarked but one has a headstone on the western side. Sisal plants have encroached on the grave dressings and the area is densely populated by *Leucosidea sericea.* The graves are probably associated with the ruined remains of a rectangular dwelling at site WB 7.

Impact of the proposed development/ activity:

The site will possibly be impacted upon during the proposed development activity.

Recommendation:

To minimise possible impact on the graves it is recommended that the graveyard be fenced and any surviving relatives be aloowed access. If this is not possible, heritage legislation guides alternative options (section 36, NHRA Act 25 of 1999) for relocation of the human remains.

5.2.7. Site WB 7.

Location: See Appendix B and D (fig. 15,16).

Description: The foundation remains of a stone-built rectangular structure which probably served as a dwelling. It is associated with the graves at site WB 6 which is located a short distance away.

Impact of the proposed development/ activity:

The structure will possibly be impacted upon during the proposed development activity.

Recommendation:

The structure is regarded as being of medium (GPB table 5.2) significance and a permit must be obtained from the provincial heritage resources agency before the ruin is altered or demolished. This is in terms of section 34 of the NHRA, 25 of 1999.

5.2.8. Site WB 8.

Location: See Appendix B and D (fig. 17,18).

Description: A small, possibly historic crossing over a non-perennial stream. The crossover is regarded as being of low significance (GPC, table 5.2) as it is not original anymore. Old railway sleeper remains suggest that the structure, in its original construction, probably exclusively consisted of railway sleepers. This is no longer the case.

Impact of the proposed development/ activity:

The crossing will possibly be impacted upon during the proposed development activity.

Recommendation:

No conservation recommendations.

5.2.9. Site WB 9.

Location: See Appendix B and D (fig.19).

Description: A railway sleeper embedded in the soil surface of a motor vehicle track leading towards a crossing at site WB 8. It is probably part of the original construction of the crossover at site WB 8. It is regarded as being of low significance (GPC, table 5.2).

Impact of the proposed development/ activity:

The feature will possibly be impacted upon during the proposed development activity.

Recommendation:

No conservation recommendations.

5.2.10. Site WB 10.

Location: See Appendix B and D (fig. 20-23).

Description: A large rectangular stone-walled structure. The walls are dry-packed stone and approximately 400mm thick. The north-south orientated walls are approximately 20m long and east- west walls some 10m. The structure was probably used as a livestock enclosure during the late 19th or early 20th cent. The walls have collapsed but there seems to have been an entrance on the western side. The brass face of a padlock of Bramah (est. 1784) manufacture was found nearby. Medium significance (GPB, table 5.2).

Impact of the proposed development/ activity:

The structure will possibly be impacted upon during the proposed development activity.

Recommendation:

To minimise impact on this historic structure it is recommended that it be incorporated into the proposed development with a buffer zone of at least 20 metres. This will add historic value to the proposed development. If this is not possible, heritage legislation guides alternative options (section 34, 35 of NHRA Act 25 of 1999). The ruins are older than 60 years and they are protected by heritage legislation. Therefore, a permit must be obtained from the local heritage

authority known as the PHRA (Provincial Heritage resources Agency) before the structures may be altered or demolished.

5.2.11. Site WB 11.

Location: See Appendix B and D (fig. 24).

Description: A square stone-packed feature. It was probably a stone wall at some stage but only the bottom section remains. Because of its poor condition it is uncertain what the function of the structure may have been. The only discernible section of wall is approximately 10m long and oriented in a north south direction. Medium-Low significance (GPB, GPC, table 5.2).

Impact of the proposed development/ activity:

The structure will possibly be impacted upon during the proposed development activity.

Recommendation:

No conservation recommendations.

5.2.12. Site WB 12.

Location: See Appendix B and D (fig. 25).

Description: Ruins of unidentifiable structures. A large scatter of rusted metal, bricks, concrete pieces and broken glass among small earth mounds suggest that this was the location of a structure which has been demolished at some stage. It is of low significance (GPC, table 5.2).

Impact of the proposed development/ activity:

The site will possibly be impacted upon during the proposed development activity.

Recommendation:

No conservation recommendations.

TABLE 5.1. General Significance of located sites and field rating.

Site No.	Description	Type of significance	Degree of significance	Sphere of significance and rating
WB 1	Historic ruin	Historic	Archaeological: Medium Historic: Medium	Marthinus Wesselstroom 121 HT. Generally Protected GPA.
WB 2	Historic ruin/ wall foundation	Historic	Archaeological: Medium Historic: Medium	Marthinus Wesselstroom 121 HT. Generally Protected GPA.
WB 3	LIA enclosure	Historic and archaeological	Archaeological: Medium Historic: Medium	Marthinus Wesselstroom 121 HT. Generally Protected GPB.
WB 4	LIA enclosure	Historic and archaeological	Archaeological: Medium Historic: Medium	Marthinus Wesselstroom 121 HT. Generally Protected GPB.
WB 5	LIA enclosure	Historic and archaeological	Archaeological: Medium Historic: Medium	Marthinus Wesselstroom 121 HT. Generally Protected GPB.
WB 6	Gravesite	Historic and social	Archaeological: Medium Historic: High	Marthinus Wesselstroom 121 HT. Local significance 3A.
WB 7	Historic ruin	Historic	Archaeological: Medium Historic: Medium	Marthinus Wesselstroom 121 HT. Generally Protected GPB.
WB 8	Bridge	Historic	Archaeological: Low Historic: Low	Marthinus Wesselstroom 121 HT. Low. Generally Protected GPC.
WB 9	Feature	Historic	Archaeological: Low Historic: Low	Marthinus Wesselstroom 121 HT. Low. Generally Protected GPC.
WB 10	Historic ruin	Historic	Archaeological: Medium Historic: Medium	Marthinus Wesselstroom 121 HT. Generally Protected GPB.
WB 11	Historic ruin	Historic	Archaeological: Low Historic: Low	Marthinus Wesselstroom 121 HT. Low. Generally Protected GPC.
WB 12	Ruins	Not known	Archaeological: Low Historic: Low	Marthinus Wesselstroom 121 HT. Low. Generally Protected GPC.

TABLE 5.2. Significance allocation of located sites

Site no.	Unique nature	Integrity of archaeo-logical deposit	Wider context	Relative location	Depth of deposit	Quality of archaeological/ historic material	Quantity of site features	Preservation condition of site
WB1	Unique to study area	Poor	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	N/A	Archaeologically: Fair Historically: Medium	2	Good
WB2	Site specific	Poor	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	shallow	Archaeologically: Poor Historically: Poor	1	Poor
WB3	LIA, difaqane	Not known	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	Not known	Archaeologically: Fair Historically: Medium	1	Fair
WB4	LIA, difaqane	Not known	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	Not known	Archaeologically: N/A Historically: Medium	1	Good
WB5	LIA, difaqane	Not known	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	Not known	Archaeologically: N/A Historically: Medium	1	Good
WB6	Graves	Not known	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	Not known	Archaeologically: Not known Historically: Poor	2	Fair
WB7	No	Not known	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	N/A	Archaeologically: Poor Historically: Poor	1	Poor

WB8	No	N/A	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	N/A	Archaeologically: Poor Historically: Poor	1	Poor
WB9	No	N/A	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	N/A	Archaeologically: Poor Historically: Poor	1	Poor
WB10	Unique to study area	Not known	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	Not known	Archaeologically: Fair Historically: Fair	1	Fair
WB11	No	Not known	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	Not known	Archaeologically: Poor Historically: Poor	1	Poor
WB12	No	Not known	History of Wakkerstroom	Marthinus Wesselstroom 121 HT. Portion 136	N/A	Archaeologically: Poor Historically: Poor	1	Poor

6. Findings and recommendations

Mitigation measures were allocated to each site as discussed in section 5: **Located sites and their description, tables 5.1 and 5.2.** Twelve (12) sites were documented, one of these is a graveyard site with at least two graves (**WB 6**) which is considered to be of high local and social significance (**LS 3A, table 5.1, 5.2**). The remaining sites range from those consisting of the remains of stone-walled kraals and dwellings rated with medium significance (**WB 1-5; 10; GPB, table 5.1, 5.2**) to ruins of dwellings and structures with medium and low significance (**WB 7, 8, 9, 10, 11 and 12; GPB & GPC; table 5.1, 5.2**).

A ***Heritage Management Plan*** is recommended as a tool for the landowner to effectively manage the heritage aspect of the landscape in accordance with relevant Heritage Legislation.

When any earth-moving activities are planned for this study area it is recommended that at least a desktop palaeontology (fossil remains) study is undertaken and that a qualified archaeologist be present to monitor proceedings.

The bulk of archaeological remains are normally located beneath the soil surface. It is therefore possible that some significant cultural material or remains were not located during this survey and will only be revealed when the soil is disturbed. Should excavation or large scale earth moving activities reveal any human skeletal remains, broken pieces of ceramic pottery, large quantities of sub-surface charcoal or any material that can be associated with previous occupation, a qualified archaeologist should be notified immediately. This will also temporarily halt such activities until an archaeologist have assessed the situation. It should be noted that if such a situation occurs it may have further financial implications.

7. Bibliography

1. Amery, L.S. (ed),1909.***The times history of the war in South Africa 1899-1902*****,** Vol VI. London,

2. Barnard, C. 1975**. *Die Transvaalse Laeveld. Komee van 'n Kontrei.***

3. Bergh, J.S. (ed.) 1998. ***Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies***. (J.L. van Schaik, Pretoria).

4. Bornman, H. 1995. ***Pioneers of the Lowveld***.

5. Bornman, H. (red.) 1979. ***Nelspruit: 75 in '80***. Stadsraad van Nelspruit.

6. Breutz, P.L. 1985. ***Pre-Colonial Africa: The South-Eastern Bantu Cultural Province.***

7. Cloete, P.G. 2000. ***The Anglo-Boer War, A Chronology.*** Pretoria, J.P. van der Walt & Son (Pty) Ltd.

8. Delius, P. 2007. ***Mpumalanga History and Heritage.*** University of KwaZulu-Natal Press.

9. Du Preez, S. J. ***Peace attempts during the Anglo Boer War until March 1901.*** Magister Artium thesis in History. Pretoria: University of Pretoria.

10. Evers, T.M. in Voight, E.A. 1981. ***Guide to Archaeological Sites in the Northern and Eastern Transvaal.*** Transvaal Museum, Pretoria.

11. Giliomee, H. 2003. ***The Afrikaners – biography of a people***. Tafelberg, Cape Town & Charlottsville.

12. Hall, H.L. 1938 (1990). ***I Have Reaped my Mealies. An Autobiography***. Whitnall Simonsen.

13. Huyser, J. D. ***Die Naturelle-Politiek van die Suid-Afrikaanse Republiek.*** D. LITT. Verhandeling, Universiteit van Pretoria.

14. Huffman, T. N. 2007. ***Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa***. Kwa-Zulu Natal Press.

15. Jones, H. M. & Jones G. M. 1999. ***A Gazetteer of the Second Anglo-Boer War. 1899-1902.*** Buckinghamshire: The Military Press.

16. Maggs, T.M. 1975. **Iron Age patterns and Sotho history on the southern Highveld: South Africa.** World Archaeology, Vol. 7, No. 3.

17. Mason, R. 1962. ***Prehistory of the Transvaal: a record of human activity.*** Witwatersrand University Press, Johannesburg.

18. Massie, R.H. 1905. **The Native tribes of Transvaal. Prepared for the general staff war office.** Harrison and Sons, London.

19. Myburgh, A.C. 1956. ***Die Stamme van die Distrik Carolin*a.** Staatsdrukker. Pretoria.

20. Packard, P. 2001. ***"Malaria blocks development" revisited: the role of disease in the history of agricultural development in the Eastern and Northern Transvaal Lowveld. 1890-1960.*** *Journal of Southern African Studies* 27 (3), September 2001.

21. Raper, P. E. 1983. ***Dictionary of Southern African Place Names.***

22. Ross, R. 2002. **A Concise History of South Africa.** Cambridge.

23. Van Vollenhoven, A.C. 2002. ***Die Metodiek van Kultuurhulpbronbestuur (KHB).*** S.A. Tydskrif vir Kultuurgeskiedenis 16(2).

24. Van Vollenhoven, A.C. 1995. ***Die bydrae van Argeologie tot Kultuurhulpbronbestuur.*** Referaat gelewer voor die Suid-Afrikaanse Vereniging vir Kultuurgeskiedenis, Transvaal Streektak, Sunnyside.

25. Union of South Africa. 1918. ***Majority Report of the Eastern Transvaal Natives Land Committee.*** Cape Town.

Primary Sources:

<u>ARCHIVAL SOURCES (National Archive, Pretoria):</u>

1. National Archives of South Africa. 1928. *SAB, NTS: 4188 38/313. Wakkerstroom Municipality. Establishment of locations and hostels.*
2. National Archives of South Africa. 1904-1916. *SAB, LDE: 439 5009/9 (Part 2). Wakkerstroom. Settlement on Townlands. Reserves for various purposes.*
3. National Archives of South Africa. 1916-1944. *SAB, RAK: 3055. Wakkerstroom*.
4. National Archives of South Africa. 1919. *SAB, MNW: 487 MM2619/19. Wakkerstroom Townlands. Village Council, Wakkerstroom. Forwards Draft Prospecting Agreement.*
5. National Archives of South Africa. 1926. *SAB, URU: 814 436. Grant to Village management Board of Wakkerstroom of Portion A of farm town and Townlands of Marthinus Wessel Stroom No 276, Wakkerstroom.*

6. National Archives of South Africa. 1943. *SAB, URU: 2094 1158. Reservation for the purposes of the Transvaal Provincial Administration of portion of Erf No 146, Township of Marthinus Wessel Stroom, Wakkerstroom.*
7. National Archives of South Africa. 1928. *SAB, NTS: 4188 38/313. Wakkerstroom Municipality. Establishment of locations and hostels.*

MAPS:

Anon. 1920s. *The Standard Map of the Transvaal. Compiled from registered diagrams and information supplied by the various landowners and from other authentic sources.* Johannesburg: The Map Office.

Major Jackson, H. M. 1909. *Transvaal Official Maps. Degree Sheets (Second Revised Series). Utrecht.* Pretoria: Surveyor-General's Office.

Surveyor-General's Office. 1931. *Map of the Transvaal Province. Union of South Africa.* Pretoria: Surveyor General's Office.

Topographical Map. 1987. *South Africa. 1:50 000 Sheet. 2730AC Wakkerstroom. Second Edition.* Pretoria: Government Printer.

ELECTRONIC SOURCES:

Census 2011. 2011. *Wakkerstroom*. [Online]. Available: http://census2011.adrianfrith.com/place/863007. [Cited 12 September 2013]

eGGSA Library. 2007. *Mpumalanga, Wakkerstroom, Main cemetery*. [Online]. Available: http://www.eggsa.org/library/main.php?g2_itemId=232459. [Cited 13 September 2013]

Google Earth. 2013. 27°20'10.02 S 30°*06'25.47" E elev 1929 m.* [Online]. [Cited 11 September 2013].

Google Earth. 2013. 27°32'46.30 S 30°*16'11.93" E elev 1377 m.* [Online]. [Cited 11 September 2013].

Appendix A

Terminology

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

"Archaeological" means –

- Material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artifacts, human and hominid remains and artificial features or structures;
- Rock Art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
- Wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artifacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation; and
- Features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found;

"Conservation", in relation to heritage resources, includes protection, maintenance, preservation and sustainable use of places or objects so as to safeguard their cultural significance;

"Cultural significance" means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance;

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

- construction, alteration, demolition, removal or change of use of a place or a structure at a place;
- carrying out any works on or over or under a place;

- subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;
- constructing or putting up for display signs or hoardings;
- any change to the natural or existing condition or topography of land; and
- any removal or destruction of trees, or removal of vegetation or topsoil;

"Expropriate" means the process as determined by the terms of and according to procedures described in the Expropriation Act, 1975 (Act No. 63 of 1975);

"Foreign cultural property", in relation to a reciprocating state, means any object that is specifically designated by that state as being of importance for archaeology, history, literature, art or science;

"Grave" means a place of internment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place;

"Heritage resource" means any place or object of cultural significance;

"Heritage register" means a list of heritage resources in a province;

"Heritage resources authority" means the South African Heritage Resources Agency, established in terms of section 11, or, insofar as this Act (25 of 1999) is applicable in or in respect of a province, a provincial heritage resources authority (PHRA);

"Heritage site" means a place declared to be a national heritage site by SAHRA or a place declared to be a provincial heritage site by a provincial heritage resources authority;

"Improvement" in relation to heritage resources, includes the repair, restoration and rehabilitation of a place protected in terms of this Act (25 of 1999);

"Land" includes land covered by water and the air space above the land;

"Living heritage" means the intangible aspects of inherited culture, and may include –

- cultural tradition;
- oral history;
- performance;
- ritual;
- popular memory;
- skills and techniques;

- indigenous knowledge systems; and
- the holistic approach to nature, society and social relationships;

"Management" in relation to heritage resources, includes the conservation, presentation and improvement of a place protected in terms of the Act;

"Object" means any moveable property of cultural significance which may be protected in terms of any provisions of the Act, including –

- any archaeological artifact;
- palaeontological and rare geological specimens;
- meteorites;
- other objects referred to in section 3 of the Act;

"Owner" includes the owner's authorized agent and any person with a real interest in the property and –

- in the case of a place owned by the State or State-aided institutions, the Minister or any other person or body of persons responsible for the care, management or control of that place;
- in the case of tribal trust land, the recognized traditional authority;

"Place" includes –

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

"Site" means any area of land, including land covered by water, and including any structures or objects thereon;

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

Appendix B

List of located sites

A total of twelve (12) sites were located on the surveyed area and numbered WB 1-12. The initials “WB” represent “Wakkerstroom (town) and Bezalel (the name of the proposed development), followed by the number of the site. A spatial location with the aid of a GPS (Global Positioning System) was added to each site.

9.1. Site name: WB 1 (Site 1)

Date of compilation: 21/09/2013

GPS reading: S27°20'01.22" E030°05'33.11"

Photo: Fig. 1-4.

9.2. Site name: WB 2 (Site 2)

Date of compilation: 21/09/2013

GPS reading: S27°19'59.97" E030°05'33.63"

Photo: Fig. 7.

9.3. Site name: WB 3 (Site 3)

Date of compilation: 21/09/2013

GPS reading: S27°20'16.26" E030°05'11.71"

Photo: Fig. 8,9.

9.4. Site name: WB 4 (Site 4)

Date of compilation: 21/09/2013

GPS reading: S27°20'16.88" E030°05'11.27"

Photo: Fig. 10.

9.5. Site name: WB 5 (Site 5)

Date of compilation: 21/09/2013

GPS reading: S27°20'16.32" E030°05'10.70"

Photo: Fig. 11, 12.

9.6. Site name: WB 6 (Site 6)

Date of compilation: 21/09/2013

GPS reading: S27°20'27.27" E030°05'20.73"

Photo: Fig. 13, 14.

9.7. Site name: WB 7 (Site 7)

Date of compilation: 21/09/2013

GPS reading: S27°20'26.73" E030°05'22.09"

Photo: Fig. 15, 16.

9.8. Site name: WB 8 (Site 8)

Date of compilation: 21/09/2013

GPS reading: S27°20'16.39" E030°05'00.01"

Photo: Fig. 17, 18.

9.9. Site name: WB 9 (Site 9)

Date of compilation: 21/09/2013

GPS reading: S27°20'18.50" E030°04'56.72"

Photo: Fig. 19.

9.10. Site name: WB 10 (Site 10)

Date of compilation: 21/09/2013

GPS reading: S27°20'19.92" E030°04'56.65"

Photo: Fig. 20-23.

9.11. Site name: WB 11 (Site 11)

Date of compilation: 21/09/2013

GPS reading: S27°20'18.76" E030°04'57.13"

Photo: Fig. 24.

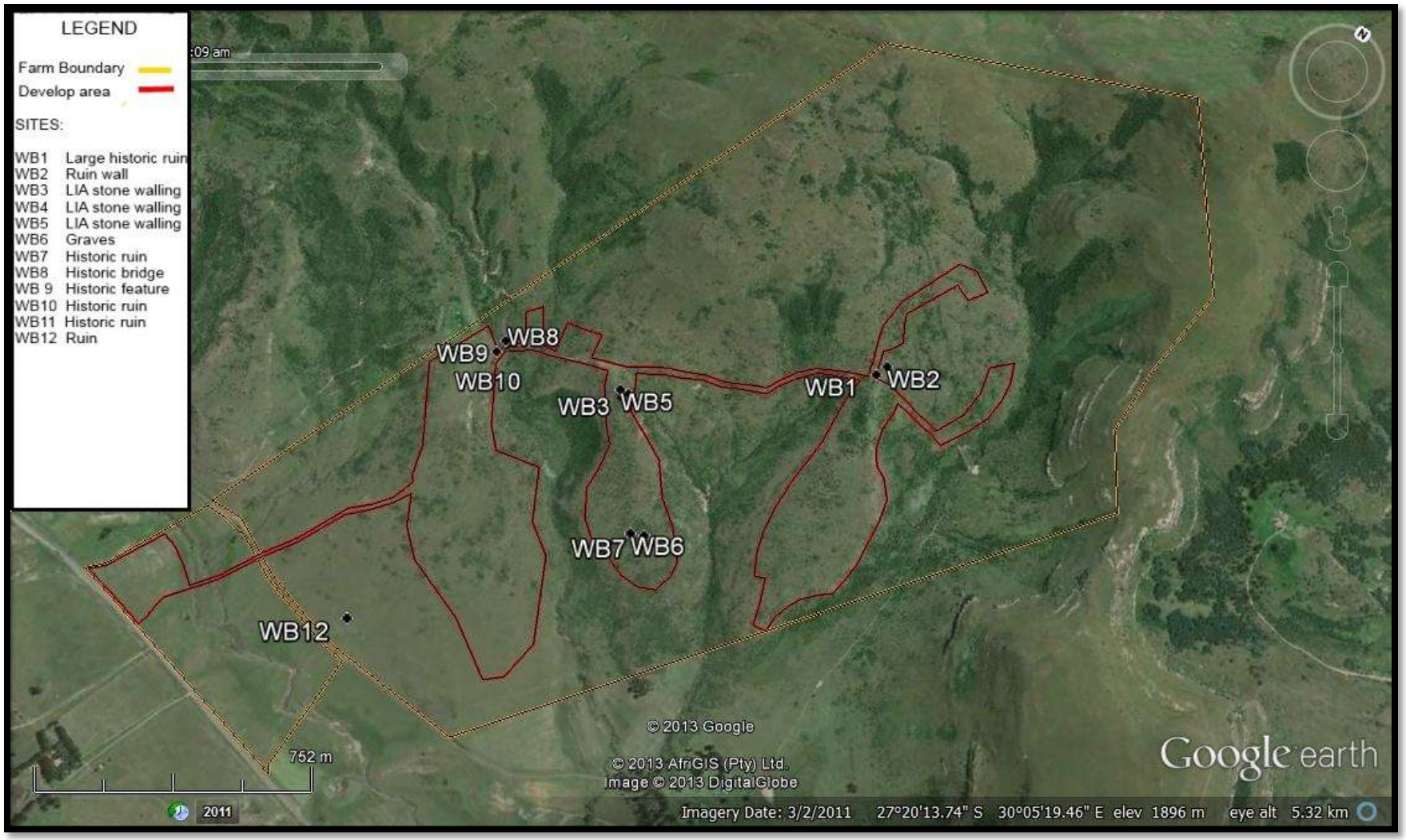
9.12. Site name: WB 12 (Site 12)

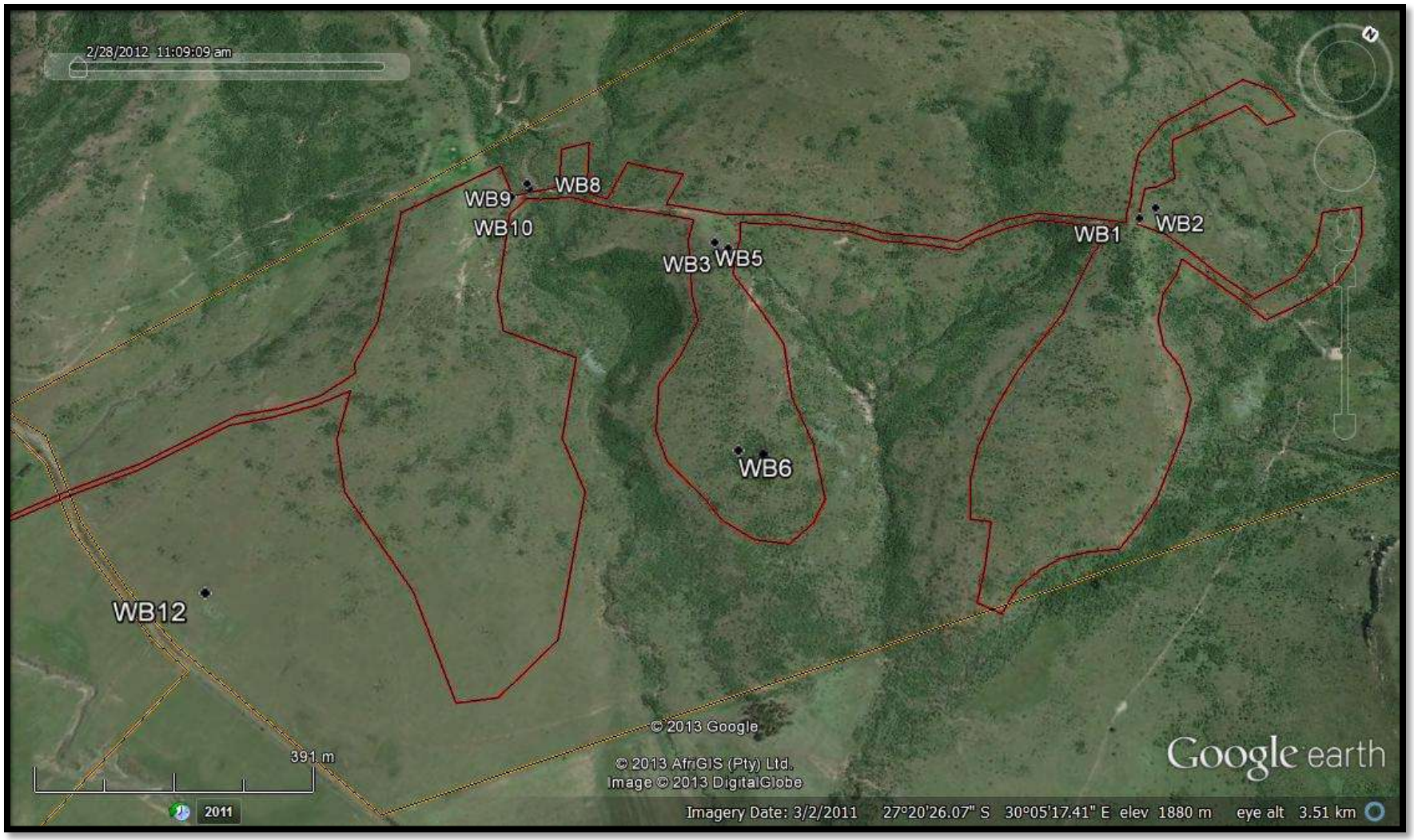
Date of compilation: 21/09/2013

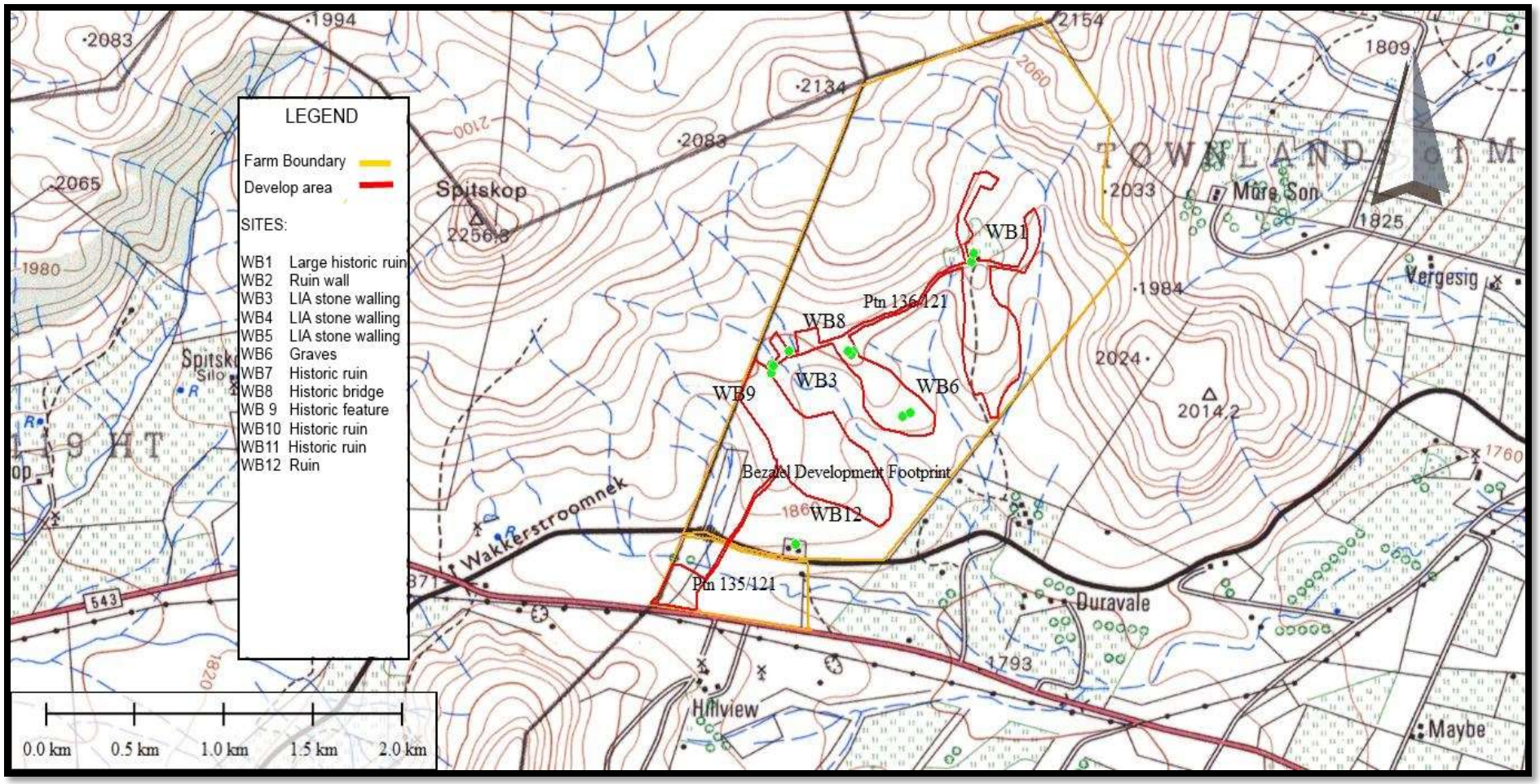
GPS reading: S27°20'48.70" E030°05'01.16"

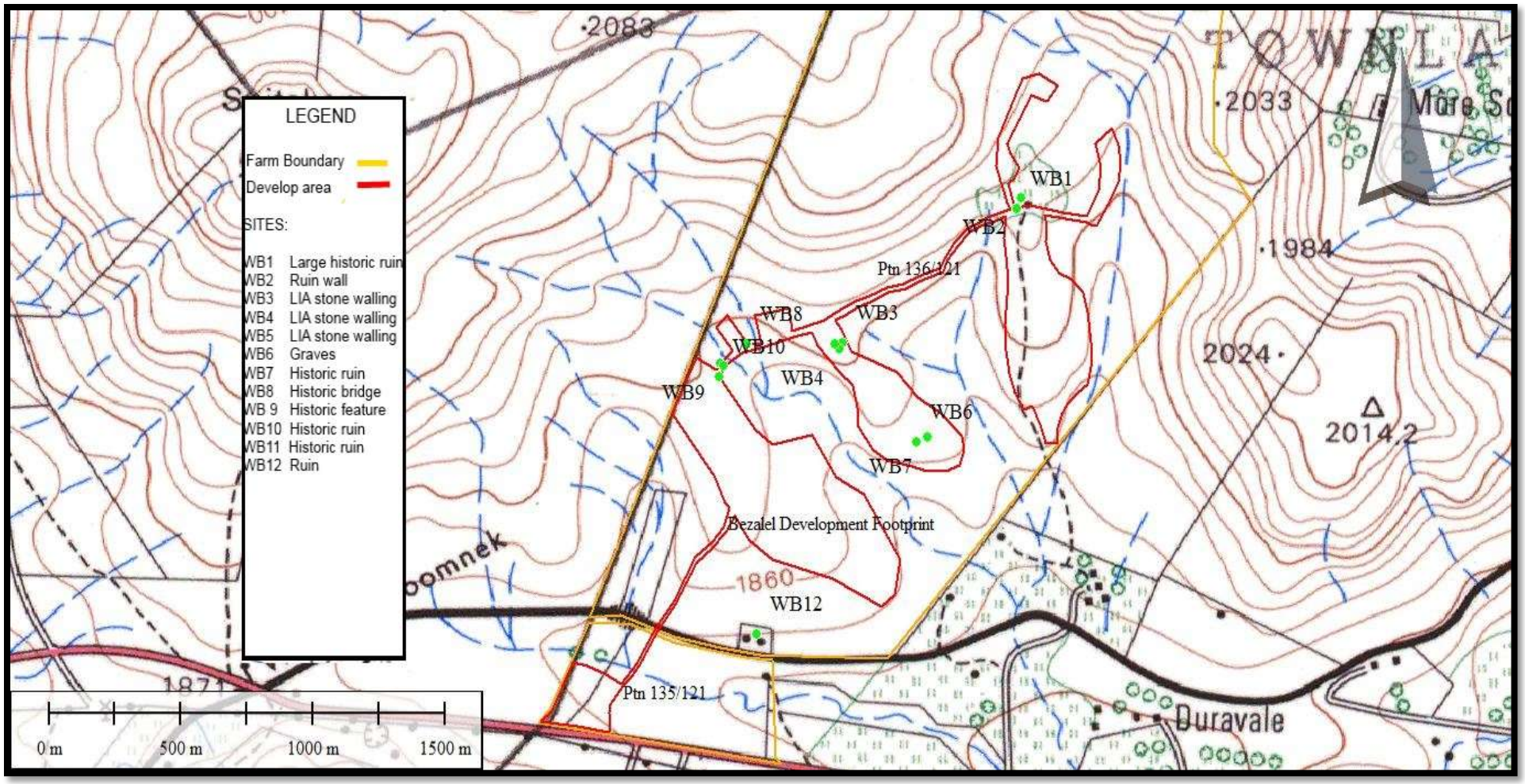
Photo: Fig. 25.

Appendix C


LEGEND
Farm Boundary
Develop area
SITES:
WB1 Large historic ruin
WB2 Ruin wall
WB3 LIA stone walling
WB4 LIA stone walling
WB5 LIA stone walling
WB6 Graves
WB7 Historic ruin
WB8 Historic bridge
WB 9 Historic feature
WB10 Historic ruin
WB11 Historic ruin
WB12 Ruin
WB1
WB2
WB3
WB5
WB6
WB7
WB8
WB9
WB10
WB12
752 m
© 2013 Google
© 2013 AfriGIS (Pty) Ltd.
Image © 2013 DigitalGlobe
Google earth
2011
Imagery Date: 3/2/2011 27°20'13.74" S 30°05'19.46" E elev 1896 m eye alt 5.32 km


2/28/2012 11:09:09 am
WB8
WB9
WB10
WB3
WB5
WB1
WB2
WB6
WB12
391 m
© 2013 Google
© 2013 AfriGIS (Pty) Ltd.
Image © 2013 DigitalGlobe
Google earth
2011
Imagery Date: 3/2/2011 27°20'26.07" S 30°05'17.41" E elev 1880 m eye alt 3.51 km


LEGEND
Farm Boundary
Develop area
SITES:
WB1 Large historic ruin
WB2 Ruin wall
WB3 LIA stone walling
WB4 LIA stone walling
WB5 LIA stone walling
WB6 Graves
WB7 Historic ruin
WB8 Historic bridge
WB 9 Historic feature
WB10 Historic ruin
WB11 Historic ruin
WB12 Ruin
0.0 km
0.5 km
1.0 km
1.5 km
2.0 km
Spitskop
2256.3
Mare Son
Vergesig
Ptn 136/121
Ptn 135/121
Bezalel Development Footprint
Wakkerstroomnek
Duravale
Hillview
Maybe
543
WB1
WB8
WB3
WB6
WB9
WB12


LEGEND
Farm Boundary
Develop area
SITES:
WB1 Large historic ruin
WB2 Ruin wall
WB3 LIA stone walling
WB4 LIA stone walling
WB5 LIA stone walling
WB6 Graves
WB7 Historic ruin
WB8 Historic bridge
WB 9 Historic feature
WB10 Historic ruin
WB11 Historic ruin
WB12 Ruin
0 m
500 m
1000 m
1500 m
2083
2033
1984
2024
2014.2
1860
1871
WB1
WB2
Ptn 136/121
WB8
WB3
WB10
WB4
WB9
WB6
WB7
Bezalel Development Footprint
WB12
Ptn 135/121
Duravale

Appendix D

Photos of located sites

Fig. 1. Site WB 1. The rectangular dry-packed stone-walled structure. Photo taken in eastern direction.

Fig. 2. Site WB 1. The entrance to the rectangular dwelling is located on the eastern side.

Fig. 3. Site WB 1. A photo of the circular kraal. In the foreground is the entrance located on the western side.

Fig. 4. Site WB 1. The kraal viewed from the north.

Fig. 5. A general view of the surveyed area.

Fig. 6. A general view of the surveyed area, photo taken in south-western direction.

Fig. 7. Site WB 2. Arrows show the where the larger kraal wall, constructed of wooden poles, were located. It is located east of site WB 1 and oriented in a north/ south direction with a gentle curve towards site WB 1.

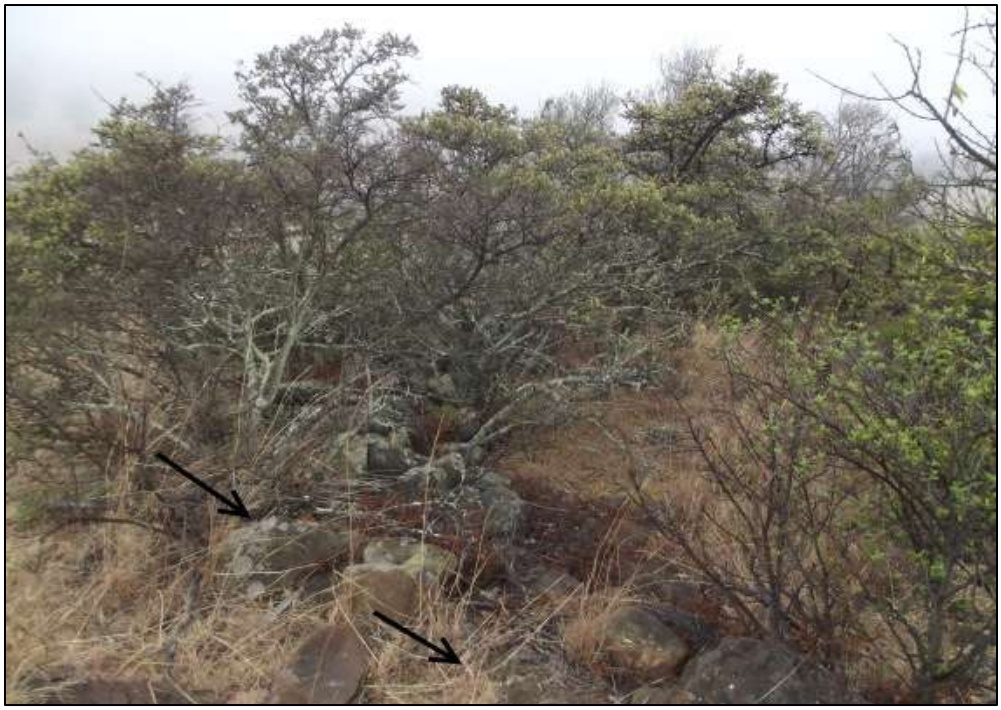


Fig. 8. Site WB 3. A LIA stone-walled enclosure. The arrows show where the remains of the collapsed walls are.

Fig. 9. The walls of site WB 3 on the southern side.

Fig. 10. Site WB 4. A small enclosure (4m across) located a few metres south west of site WB 3.

Fig. 11. Site WB 5. A stone-walled enclosure (11m across) associated with the LIA and sites WB 3 and 4. Photo taken in northern direction. Arrows show where the stone wall is located.

Fig 12. Site WB 5. A photo taken in a eastern direction. Note the growth of the “ouhout” along the wall.

Fig. 13. Site WB 6. One of the graves at this site. A headstone is visible on the western side.

Fig. 14. Site WB 6. A general view of the gravesite towards the north.

Fig. 15. Site WB 7. A rectangular stone-built dwelling. The arrows indicate where the remains of the walls can be seen. It is probably associated with the graves at site WB 6.

Fig. 16. Site WB 7. Another view of the site. Photo taken in north-eastern direction and the arrows indicate the remains of the walls.

Fig. 17. Site WB 8. An historic bridge or crossover. Note the railway sleeper at the bottom, it was probably part of the original structure.

Fig. 18. Site WB 8. A general view of the small bridge. Photo taken in northern direction.

Fig. 19. Site WB 9. Ageneral view of the railway sleeper located in the motor track. It is probably associated with site WB 8.

Fig. 20. Site WB 10. A large (20m x 10m) rectangular stone-walled enclosure. Photo taken in eastern direction.

Fig. 21. Site WB 10. The face section of a brass padlock manufactured by the English lock-making company, Bramah (ext. 1784). The age of the piece is uncertain but indications are that it dates from the early 20th cent.

Fig. 22. Site WB 10. A photo of the 20 m long southern wall of the enclosure. Photo taken in eastern direction.

Fig. 23. Site WB 10. The eastern wall of the structure.

Fig. 24. Site WB 11. The remains of a stone wall. The function of the structure is uncertain as very little remains thereof.

Fig. 25. Site WB 12. The site of a demolished structure near the railway.