PHASE TWO HERITAGE IMPACT ASSESSMENT OF THE PROPOSED 1.6 MILLION m³ DAM, FARM ASSEGAI HOEK, NO. 1410. FOR THE AUTHORISED BHEKUZULU-EMPANGENI WATER SUPPLY SCHEME, LOCATED NEAR ESTCOURT, UTHUKELA DISTRICT MUNICIPALITY, KWAZULU-NATAL.

For: Green Door Environmental

ACTIVE HERITAGE CC.

Frans E Prins, MA (Archaeology)

P.O. Box 947
Howick
3290

Cell: 0834739657
E-mail: activeheritage@gmail.com
Fax: 086763638
www.activeheritage.webs.co

Contents

LIST OF ABBREVIATIONS AND ACRONYMS

EIA	Early Iron Age
ESA	Early Stone Age
HISTORIC PERIOD	Since the arrival of the white settlers - c. AD 1836 in this part of the country
IRON AGE	Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830
LIA	Late Iron Age
LSA	Late Stone Age
MSA	Middle Stone Age
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998 and associated regulations (2006).
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999) and associated regulations (2000)
SAHRA	South African Heritage Resources Agency
STONE AGE	Early Stone Age 2 000 000 - 250 000 BP Middle Stone Age 250 000 - 25 000 BP Late Stone Age 30 000 - until c. AD 200

EXECUTIVE SUMMARY

A Second Phase Cultural Heritage Survey of the proposed 1.6 million m³ Dam and associated pipeline infrastructure on the Farm Assegai Hoek Location No. 1410, near Loskop, KwaZulu-Natal revisited the remains of abandoned Zulu homesteads to the immediate south and south-west of the proposed dam footprint, and to the immediate east of the associated pipeline. The context of the relevant homesteads were ascertained. All the homestead remains identified have been identified as younger than sixty years old. No graves are visible on the surface and community members maintain that no known graves occur on the area proposed for flooding. The abandoned homesteads and associated structures have been given a low heritage grading. Only one occupied homestead is at great risk of being disturbed should the pipeline trajectory remain at the present proposed position. The co-ordinates of this site are: 28°55'22.03"S, 29°34'47.64"E. There is a vague possibility that construction work may expose historical remains older than 60 years should this happen then all construction work should stop immediately and the local heritage agency be contacted for further evaluation. We would like to draw attention to the South African National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA), and the KwaZulu-Natal Heritage Act (Act No. 4 of 2008), which requires that operations that expose archaeological, or historical remains should cease immediately, pending evaluation by the provincial heritage agency.

1 BACKGROUND INFORMATION ON THE PROJECT

The consultant was approached by Green Door Environmental to conduct a Second Phase Heritage Impact Assessment (HIA) of the proposed establishment of a 1.6 million m³ dam and associated pipeline, for the authorised uThukela District Municipality (Map 1) A Phase One Heritage Impact Assessment identified the remains of Zulu homesteads to the immediate south and south-west of the proposed dam footprint, and to the immediate east of the associated pipeline. However, due to the vegetation cover at the time and absence of local community input it was impossible to place these remains in context (Prins & Hall 2015). A phase two heritage impact assessment was proposed in order to place these remains in context The Applicant has appointed Green Door Environmental to conduct the Basis Assessment Process for the proposed development. Active Heritage cc has been subsequently consulted by

Green Door Environmental Consultants to conduct a Second Phase Heritage Assessment of the proposed dam and associated pipeline.

According to the National Heritage Resources Act, 1999 (NHRA) (Act No. 25 of 1999), the heritage resources of South Africa include:

a. places, buildings, structures and equipment of cultural significance;
b. places to which oral traditions are attached or which are associated with living heritage;
c. historical settlements and townscapes;
d. landscapes and natural features of cultural significance;
e. geological sites of scientific or cultural importance;
f. archaeological and palaeontological sites;
g. graves and burial grounds, including-
i. ancestral graves;
ii. royal graves and graves of traditional leaders;
iii. graves of victims of conflict;
iv. graves of individuals designated by the Minister by notice in the Gazette;
v. historical graves and cemeteries; and
vi. other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
h. sites of significance relating to the history of slavery in South Africa;
i. movable objects, including-
i. objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
ii. objects to which oral traditions are attached or which are associated with living heritage;
iii. ethnographic art and objects;
iv. military objects;
v. objects of decorative or fine art;
vi. objects of scientific or technological interest; and
vii. books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

The newly promulgated KwaZulu-Natal Heritage Act (Act No. 4 of 2008) also makes specific mention to rock art and archaeological sites.

It is furthermore stated that:

—(1) No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the KwaZulu-Natal Heritage Council.
(2) Upon discovery of archaeological or palaeontological material or a meteorite by any person, all activity or operations in the general vicinity of such material or meteorite must cease forthwith and a person who made the discovery must submit a written report to the Council without delay.
(3) The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.
(4) No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
(5) No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.
(6) (*a*) The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government.
(*b*) The Council may establish and maintain a provincial repository or repositories for the safekeeping or display of—
(i) archaeological objects;

(ii) palaeontological material;
(iii) ecofacts;
(iv) objects related to battlefield sites;
(v) material cultural artefacts; or
(vi) meteorites.
(7) The Council may, subject to such conditions as the Council may determine, loan any object or material referred to in subsection (6) to a national or provincial museum or institution.
(8) No person may, without the prior written approval of the Council having been obtained on written application to the Council, trade in, export or attempt to export from the Province—
(*a*) any category of archaeological object;
(*b*) any palaeontological material;
(*c*) any ecofact;
(*d*) any object which may reasonably be regarded as having been recovered from a battlefield site;
(*e*) any material cultural artefact; or
(*f*) any meteorite.
(9) (*a*) A person or institution in possession of an object or material referred to in paragraphs (*a*) – (*f*) of subsection (8), must submit full particulars of such object or material, including such information as may be prescribed, to the Council. (*b*) An object or material referred to in paragraph (*a*) must, subject to paragraph (*c*) and the directives of the Council, remain under the control of the person or institution submitting the particulars thereof.
(*c*) The ownership of any object or material referred to in paragraph (*a*) vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government.

This study aims to identify and assess the significance of any heritage and archaeological resources occurring on the site. Based on the significance, the impact of the development on the heritage resources would be determined. Then appropriate actions to reduce the impact on the heritage resources would be put forward. In terms of the NHRA, a place or object is to be considered part of the national estate if it has cultural significance or other special value because of:

a. its importance in the community, or pattern of South Africa's history;
b. its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
c. its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
d. its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
e. its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
f. its importance in demonstrating a high degree of creative or technical achievement at a particular period;
g. its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
h. its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
i. sites of significance relating to the history of slavery in South Africa.

Table 1. Background Information

Consultants:	Frans Prins (Active Heritage cc) for Green Door Environmental
Type of development:	The Applicant, uThukela District Municipality, propose to establish a 1.6 million m³ Dam and associated pipeline, to be located on farm Assegai Hoek Location no. 1410, near Loskop, uThukela District Municipality, KwaZulu-Natal. In terms of the Environmental Impact Assessment (EIA) Regulations under Section 24(5), 24M and 44 of the National Environmental Management Act (Act No 107 of 1998) published in Government Notice No. R. 543 of 2010, the proposed development triggers Listed Activities published in Government Notice No R. 544. The Applicant (authorised Bhekuzulu /Epangweni Community Water Supply Scheme (BECWSS), proposes to build a 1.6 million m³ dam, on the Farm Assegai Hoek Location No. 1410, near Loskop, KwaZulu-Natal. The Applicant will be applying for a Water Use License Application to the Department of Water and Sanitation.
Rezoning or subdivision:	rezoning
Terms of reference	To carry out a Heritage Impact Assessment
Legislative requirements:	The Heritage Impact Assessment was carried out in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and following the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) and the

	KwaZulu Natal Heritage Act (Act No. 4 of 2008)

1.1. Details of the area surveyed:

The project area is situated near Loskop. The GPS coordinates of the footprint is as follows: 28° 55" 14.19' S and 29° 35" 04.79' E. The footprint is situated in the foothills of the central Drakensberg in a communal area. The proposed area identified for the dam is located in a northerly and north-westerly direction to an extended location, and the associated pipeline in a westerly direction to an extended location (Maps 1 and 2).

2 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The greater Drakensberg area is well endowed with cultural heritage, including various wilderness areas within and outside the formal protected area network. Although most literature refers to this heritage mainly in terms of San rock art, the region also contains other categories of cultural heritage features representative of various cultures and time-periods. The cultural heritage of the Drakensberg is diverse and highly fragile. Cultural heritage, unlike natural heritage, is non-renewable and irreplaceable. Once damaged, it is gone forever. San rock paintings and associated Later Stone Age sites, as well as the palaeontology of the area, are unique and have global significance. The remaining categories, however, certainly have national, provincial, and regional significance. The area has had several different cultural groups associated with it, from the San to the southern Sotho, the Zulu-speaking and Xhosa-speaking groups, and, more recently, the Griqua and Anglo-Boer descendants. Each of these groups has its own unique cultural expressions and has related in various ways to the others. These differences are found in the building styles of homes, their way of life as they interact with their environment, traditional dress, and so on. In addition, there are a number of living heritage values associated with all of these groups, many of which are unknown or poorly recorded. The following section is a more detailed description of the various cultural heritage features.

2.1.1 The Early Stone Age

The occurrence of Early Stone Age tools such as hand axes in areas below the 1 800 m contour suggests that the first inhabitants of the area predated modern humans by at least 800 000 years. Sites belonging to this period in the Drakensberg are mostly

characterised by a few surface scatters and individual stone tools – usually in the close vicinity of water. They were most probably manufactured by *Homo erectus*, a predecessor of modern humans.

2.1.2 The Middle Stone Age

Anatomically modern people *(Homo sapiens sapiens)* with a very different economic strategy and more sophisticated stone tool kits moved into the area about 200 000 years ago. Archaeological assemblages left behind by these people have been termed Middle Stone Age. Not only were these societies more effective hunters than their predecessors but Middle Stone Age sites elsewhere in southern Africa also provide convincing evidence for some of the earliest symbolic behaviour in the world. It was Middle Stone Age people from southern and eastern Africa who left the continent roughly between 80 000 – 60 000 years ago to populate the rest of the world. Middle Stone Age sites in the Drakensberg region occur in both Lesotho and South Africa. Sites occur as surface scatters as well as deep cave deposits. Prime archaeological deposits, however, occur in the Eastern Cape and Free State sections of the region. Archaeological excavations at Strathalan Cave in the Eastern Cape Province indicate that the Middle Stone Age persisted in the Eastern Cape Drakensberg until around 22 000 years ago (Mitchell 2002).

2.1.3. The Later Stone Age

The stone tool assemblages belonging to the immediate ancestors of the San or Bushmen have been termed Later Stone Age. Later Stone Age tools are generally much smaller but also more diversified than the earlier tool kits. It was during this period that the bow and arrow was used extensively, and societies exploited their environments distinctly more intensively and effectively. Literally hundreds of Later Stone Age sites prevail in the Drakensberg region. In addition, most of the rock art in the region was created by the San. The earliest evidence for Later Stone Age occupation of the Maloti Drakensberg comes from Sehonghong Cave in south eastern Lesotho and from Strathalan Cave in the Eastern Cape section of the region. Here a specific Later Stone Age period called the Robberg Industry has been dated to approximately 20 000 years ago. In contrast, evidence from Good Hope shelter 1 near the bottom of Sani Pass suggests that the earliest archaeological evidence for San people in the KwaZulu-Natal portion of the Drakensberg dates back to approximately 8 000 years ago. Whereas most parts of the Maloti Drakensberg were only seasonally

occupied by San hunter gatherers for the larger part of the last 20 000 years, the situation started to change during the later part of the Holocene around 5 000 years ago. This was compounded by the arrival of immigrant black farmers in the region soon after 1600 AD and European colonialism around 1834 AD (Wright & Mazel 2007). During the historical period, the Maloti Drakensberg and adjacent mountainous areas became the last stronghold for various southern San groups such as the Baroa, //Xegwi, !Ga!ne, //Kx'au, and //Ku//ke. Their Later Stone Age way of life finally came to an end during the late 19th century. San descendants still live in the area but for all practical purposes have assimilated with their more powerful neighbours. Many place names within the region still retained their original San pronunciations such as the Inxu, Sehonghong, Qomoqomong and Qhoasing rivers, and the Qeme, Qhuqhu, Qhalasi, and Qholaqhoe mountains. Approximately 1 300 Later Stone Age sites are known within the South African side of the Drakensberg.

2.1.4. Rock Paintings

The Maloti Drakensberg region is particularly well known for the occurrence of some of the finest and most complex prehistoric rock paintings in the world. Depictions of humans dominate, although finely executed animals such as eland and rhebuck are common. Some of the art is executed in various colours and in detailed precision that almost renders it a three dimensional aspect. Most researchers support the theory developed by Professor David Lewis-Williams and his colleagues that the figures represent trance induced visions during San religious rites (Lewis-Williams 2003). According to some researchers, the celebrated Rosetta Panel at Game Pass Shelter, situated approximately 6km from the study area, holds the key to our understanding of all San rock art in the sub-Sahara region of Africa. However, this interpretation is not supported by all rock art researchers. Notable deviations from this approach have been developed by Anne Solomon, and more recently by Thomas Dowson. The Maloti Drakensberg is also one of the areas with the highest density of prehistoric rock art in the world and certainly contains the highest concentration of prehistoric art south of the Sahara in Africa. Although the scientific dating of these paintings is still under researched, recent research suggests that the oldest paintings may date to approximately 4000 years ago (Wright & Mazel 2007). This is much older than previously thought. The chronological uniqueness of the art, however, is not so much in its antiquity as in the fact that the Maloti Drakensberg was the last area in Africa south of the Zambezi River where the San rock art tradition was still actively practised.

Paintings at two sites in the southern portion of the region were created as recently as 1920 (Prins 2009). The communal areas of amaNgwane and amaZizi that is part of the greater Okhombe area contains approximately 300 rock painting sites. These are similar in style and context to the better known art of the Ukhahlamba Drakensberg World Heritage Site.

2.1.5. Iron Age Sites

Around 2 000 years ago the southern African demographic landscape was transformed with the arrival of the first Bantu-speaking agriculturists in the sub-region. These subsistence farmers lived for the most part in the lower altitude, wooded areas of the eastern seaboard. Around 1250 AD certain agriculturists started occupying the higher altitude, grassland areas. Sites belonging to this period in KwaZulu-Natal are referred to as Moor Park settlements and they typically occupy hill tops with a low stone walling effect. Although none occur within the designated Maloti-Drakensberg project area, they can be found at the fringes, at an altitude of approximately 1 200-1 400 m. By 1600 AD, groups such as the amaZizi reached the foothills of the northern Drakensberg near Winterton (Wright and Mazel 2007). Various splinter groups of the amaZizi left KwaZulu Natal and also settled in parts of Lesotho where, over time, they adopted a Sotho identity. The baPhuti of south eastern Lesotho are perhaps the best known of these early immigrants. By the early 1700s various other Sotho and Nguni-speaking groups moved into the area and established chieftaincies in those areas below the 1 800 m contour. Impressive Iron Age sites belonging to this period and built in typical Sotho-style occur near Harrismith and Phuthaditjhaba in the Eastern Free State. Nguni-style sites of this period have also been found in KwaZulu-Natal and the Eastern Cape parts of the Drakensberg. The expansion of the Zulu kingdom around 1818 had a major impact on Iron Age settlement in the region. Various chieftaincies were attacked, and their routed remnants typically traversed the Maloti Drakensberg region in search of better settlement elsewhere. Bandits often hid out in the mountains, and a number allegedly practised cannibalism. Perhaps the most significant development during this period was the founding of the Southern Sotho nation under King Moshoeshoe I. Various sites in Lesotho belong to this period – some of them, like Thaba Bosiu, are typically mountain strongholds. Almost 2 000 Iron-Age sites have been identified in the Maloti Drakensberg region, and most occur in altitudes lower than 1 800 m contour. Some sites belonging to the ancestors of the amaZizi, amaNgwane and amaNgwe, the present ethic groups to live in the study area, have

been recorded in the nearby Didima Nature Reserve in the south and near Bergville (Maggs 1987). In fact, there is evidence for Later Iron Age occupation in the foothills of the northern Drakensberg, in the near vicinity of the study area, from about 1400 AD (Huffman 2007).

Presently the study area is occupied by the amaNgwe people. Originally hailing from Swaziland the amaNgwe developed close kinship ties with their more numerous neighbours the amaHlubi in the foothills of the Drakensberg. It is not surprising that they aided the amaHlubi in 1974 during the Langalibalele campaign an act that costed them dearly. More than 500 amaNgwe people were killed out of retribution by the Natal colonial authorities and their livestock confiscated. Eventually they allowed again to resettle in the Loskop /Injesuthi area by the colonial authorities.

2.1.6. The Historical period

The historical period spans the era of colonialism that started around 1830 AD when the first missionaries and Dutch immigrants arrived from the Cape Colony in the Maloti Drakensberg region. Sites associated with Voortrekker settlement of the area occur in the eastern Free State and the northern portion of KwaZulu-Natal near Winterton and Bergville. For the most part, these were the places where laagers were formed (with very low archaeological visibility) and old farmsteads with associated grave yards. A particular site worth mentioning is Kerkenberg near Oliviershoek Pass, where Debora Retief painted the initials of her father on a rock before the trekkers descended into KwaZulu Natal. A small memorial to the Voortrekker leader Gerrit Maritz is situated to the immediate south west of the footprint as this area was once a Voortrekker farm. In Lesotho, the rebellion by Chief Moorosi and the resultant action by the Cape Colony government at the southern tip of the country left footprints of forts and associated graves at Moyeni Camp, Fort Hartley, Cutting Camp, and Mount Moorosi. The most important structure relating to the history of Bushman raids is most probably Forth Nottingham, in KwaZulu-Natal, which was built around 1852. Various historical mission stations founded in the mid to late 1800s such as those at Morija and St James in Lesotho and Emmaus, Reichenau, and Mariazell in South Africa, are still in active use. The Ongeluksnek Pass in the Eastern Cape is intimately associated with the epic trek of the Griqua people in 1861, led by Adam Kok. The area associated with the first native uprising against the British colonial government, by the celebrated Hlubi chief

Langalibalele in 1873, is at Giants Castle Nature Reserve in the uKhlahlamba Drakensberg Park World Heritage Site. Various battle sites associated with the Basotho Wars between the Boer Republic of the Orange Free State and the Sotho Kingdom of Moshoeshoe I are to be found in the eastern Free State and adjacent parts of Lesotho. Sites belonging to the period of the Anglo-Boer War (1898-1901) abound in the eastern Free State portion of the project area. These are typically areas where skirmishes took place or where ammunition was destroyed. A few rock engravings belonging to the Anglo-Boer War period have been documented from the Golden Gate Highland Park. However, thorough research is still required to ascertain the meaning and value of these engravings. Many historical sites can be categorised as belonging to the "built environment" as defined in heritage legislation. These are the physical remnants and traces of historical settlements that underpin the cultural value and meaning of the surrounding communities.

2.1.7. Graves

There are various grave sites belonging to different periods and cultural associations in the Drakensberg region. Perhaps the most famous sites are those belonging to the southern Sotho royalty at Botha Bothe in Lesotho; the grave of Nkosi Langalibalele at Giants Castle; KwaZulu Natal graves associated with the royalty of the amaZizi and amaNgwane near Bergville, KwaZulu-Natal; the grave of Adam Kok at Matatiele, Eastern Cape; and various graves in the Free State belonging to the Voortrekker and Anglo-Boer War periods. Interestingly, graves belonging to the prehistoric San inhabitants of the area are markedly absent or, as yet, have not been identified by researchers.

2.1.8. The Living Heritage

The living heritage of the Drakensberg area is varied and as yet little understood. Yet preliminary investigations by the Maloti Drakensberg Project (Anderson 2007) indicate that certain areas, including sites in communal areas close to Underberg, are still frequented by local communities who afford them ritual or sacred significance. Such locales may include archaeological sites with a living heritage component or natural features such as mountains, forests, boulders, caves, pools, or waterfalls with cultural significance. Living heritage is not only site-specific but also relates to oral history, indigenous knowledge systems, and indigenous languages, practices, and beliefs. Oral

history specifically is a rich resource that has been passed down the generations and provides diverse narratives and interpretations concerning places of historical significance. It also provides a window on community perspectives regarding heritage resources, including indigenous names for sites and plant and animal species – all of which are imbued with cultural meaning.

Indigenous Knowledge Systems (IKS) constitute an integral component of local knowledge, at grass roots level, often associated with traditional methods of land management and use. In this regard, IKS can enhance conservation and sustainable management of cultural heritage to which communities may relate. Conservation should provide an enabling environment for communities to continue with the tradition of transmitting knowledge and skills and of safeguarding their cultural heritage. Traditional ceremonies still performed in the larger Drakensberg region include the *Bale* initiation schools among certain southern Sotho groups, the *amemulo* (coming of age) ceremonies among the amaNgwane, in the near vicinity of the study area, the *Nkubelwana* (planting of the first seed) among Zulu-speakers, rainmaking, and various ceremonies associated with the veneration of the ancestors. Six indigenous languages are still spoken in the area, including siBhaca, which was believed to be almost extinct. Two broad categories of site-specific living heritage sites have been identified:

- Sites of national significance of which nine have been identified in the SA portion of the MDTFCA. These include rock art sites, sandstone shelters without any archaeological remains but used extensively as pilgrimage sites, two sacred forests, and three sacred mountains. All of these sites are frequented by indigenous groups as part of an annual pilgrimage.
- Sites of local significance include various pools, waterfalls, hot springs, kaolin and red ochre deposits, and boulders afforded special significance by traditional healers and sectarian Christian groupings. Seventeen such sites have been identified in the larger Drakensberg area.

<u>Living Heritage – Wilderness</u>

Areas least influenced by human activities are often said to be representative of a “pristine” landscape. Such areas are recognised by the IUCN. In the context of the Drakensberg, only the Ukhahlamba Drakensberg World Heritage Site has any proclaimed wilderness areas, making up about 48% of the Park. In this regard, a specific wilderness management plan has been produced for the World Heritage site,

with the express aim of retaining the integrity of these wilderness areas. In terms of the South African National Environmental Management: Protected Areas Act (no 57 of 2003), a wilderness area is defined as *"an area designated ……for the purpose of retaining an intrinsically wild appearance and character, or capable of being restored to such and which is undeveloped and roadless, without permanent improvements or human habitation*".

In addition, wilderness can be considered as a value of a given area and in this regard can be defined as a *"…largely undeveloped and intrinsically wild character of the area in vast wilderness areas that provide outstanding opportunities to experience solitude and for spiritual renewal*" (EKZNW 2006). There are a number of stakeholders promoting the concept of wilderness, including the Wilderness Action Group and the Wilderness Foundation. From a cultural heritage perspective, the concept is more akin to a western inspired ideal than an academic reality. In this sense the concept of wilderness, as an area where visitors may experience and enjoy pristine nature removed from anthropogenic influence and pollution, is therefore a western expression of living heritage. The wilderness notion, however, finds expression also in the indigenous concepts of cultural landscapes which are usually natural areas with profound cultural significance.

2.1.9. Palaeontology

Given its nature, palaeontology should be a component of geology and biodiversity. Nevertheless, the present heritage legislation in South Africa also covers palaeontology. In fact, the heritage management procedures relating to palaeontology are almost identical to those of archaeology. The palaeontological history of the Maloti Drakensberg area is fascinating as it tells the story of the super southern continent called Gondwanaland and its associated fauna and flora preserved today as fossils (McCarthy & Rubidge 2005). Fossils and footprints belonging to various periods from around 270 million years ago to around 180 million years ago have been recorded and collected in the geological layers beneath the basalts. These layers, amongst other interesting facts, provide evidence of the greatest mass extinction of species in the world around 251 million years ago towards the end of the Permian period. Some species survived this extinction as attested by abundant fossils of certain species such as Lystrosaurus found deep in the Triassic period layers. Many of these occurrences can be found within a 10km radius from the study area. Whereas the majority of

fossilized remains in the area are *therapsids* (mammal-like reptiles, ancestors of most mammal species today), the Maloti Drakensberg also harbours evidence of some of the earliest dinosaurs in the world. Footprints belonging to these early dinosaurs appear in various localities in the Molteno formations of both Lesotho and South Africa.

The most celebrated palaeontological site occurs in the Golden Gate Highlands National Park. Here the earliest known dinosaur eggs in the world and a near intact embryo of an average sized dinosaur, i.e. *Massospondylus,* were located by scientists some thirty years ago. These early eggs, dated to almost 200 million years ago, are almost 100 million years older than other known dinosaur nest egg sites in the world. In adjacent Lesotho the Qomoqomong Dinosaur footprint and museum site has been developed for tourism purposes. The endemic turkey size dinosaur Lesothosaurus is known from various localities within Lesotho.

In 1999 geologist Bradley van Blommenstein discovered fossil deposits at Injesuthi approximately 10 km from the project area. Interest in the findings at the site led to an approach for guidance to world-renowned paleontologist Dr Bruce Rubidge of the Witwatersrand University. He studied the fossil find and confirmed it was of the Dicynodont period – a period that preceded the dinosaur era. He also declared that his findings led him to the belief that there were most likely further species of that period to be found in the area. It has been proposed to develop the area as a community tourism initiative.

Summary

The cultural heritage of the greater Drakensberg region (including the Loskop area) is rich, diverse, and fragile. The area contains a high density of prehistoric rock art that parallels the well known Upper-Palaeolithic rock art of Western Europe in artistic execution and symbolism. In addition, it harbours a rich and diverse record of palaeontological fossils that, for the most part, pre-date the Jurassic period of popular imagination. The mountains are also the heartland of the *Difaqane* – a period of tribal turmoil that developed as a direct response to the expansion of the Zulu state of Shaka in the 1820s. Many Iron Age sites in the area belong to this period, including significant sites associated with the founding of the Basotho Kingdom under King Moshoeshoe I. It was also the area traversed by some of the most dramatic diasporas

documented in southern African history, including the Great Trek of the Voortrekkers, The Griqua trek via Ongeluksnek, the wanderings of the amaHlubi, amaNgwane, amaZizi, and amaBhaca tribal entities, and the lesser-known but equally dramatic trek of the //Xegwi San in 1879 – the last rock artists of the region. Sites related to these historical events abound in the Drakensberg and are windows into a significant period of the history and culture of southern Africa. That some of these cultural expressions are still alive is witnessed by the occurrence of significant living heritage sites in the region. Most of these are used as sites of pilgrimage by visitors from South Africa, Lesotho, and even further abroad.

3 BACKGROUND INFORMATION OF THE SURVEY

3.1 Methodology

This survey followed on from a phase one heritage impact assessment. Potential heritage sites located during the first phase were revisited. A ground survey following standard and accepted archaeological procedures was conducted. Community members were also interviewed, where relevant. A particular concern was that "invisible" graves may occur in the area demarcated for flooding. Potential graves sites were visited and local community members asked as to the significance of the visible structures on the ground.

3.2 Restrictions encountered during the survey

3.2.1 Visibility

As noted in the Phase One Heritage Impact Assessment Report vegetation and the undulation of the ground somewhat obscured visibility of abandoned homesteads. Erosion and age has affected the layout of the settlement from the ground. Structures observed was made from earth walling, and not stones, hence the poor visibility and preservation. In addition, these structural remains were covered in short grass and were often not visible. Google aerial photographs also indicate features no longer visible from the ground (Figs. 1 & 2).

3.2.2 Disturbance.

No disturbance of Heritage sites were noticed. However, the remains of homesteads younger than 60 years have been looted for building material in the recent past.

3.3 Details of equipment used in the survey

GPS: Garmin Etrek
Digital cameras: Canon Powershot A460
All readings were taken using the GPS. Accuracy was to a level of 5 m.

4 DESCRIPTION OF SITES AND MATERIAL OBSERVED

4.1 Locational data

Province: KwaZulu-Natal
Municipality: uThukela District Municipality
Towns: Estcourt/Loskop

4.2 Description of the general area surveyed

Although known important archaeological and palaeontological sites occur in the adjacent Ukhahlamba Drakensberg World Heritage Site, including the adjacent communal area, none were recorded on the actual footprint. A memorial dedicated to the Voortrekker leader Gerrit Maritz, who farmed in this area in the 1840's, is located approximately 2km to the south-west of the footprint. However, this site is not threatened by the proposed development.

The footprint is situated adjacent to the Little Tugela River, and the pipeline runs through a rural peri-urban landscape (Figs 5 & 6). There are no confirmed heritage sites or artefacts on the footprint. However, there is an extensive abandoned settlement located within and close to the footprint. And, although there are no apparent graves associated with the apparent abandoned homesteads due to age and erosion, it is entirely possible that graves are associated with these extensive clusters

of homesteads, both within and close to, the proposed dam footprint and associated pipeline. The area is not part of any known Cultural Landscape.

4.3 Dating the findings

The age of the apparent abandoned homesteads within, and close to, the footprint are difficult to ascertain without excavation and extensive community input and consultation.

4.4 Description and distribution of heritage material found

The Phase One Heritage Impact Assessment identified the remains of an apparent abandoned homestead that lies within the trajectory of the proposed pipeline (GPS coordinates are 28°55'22.03"S, 29°34'47.64"E). This feature is about 21 metres in width together with its erosion scarring (Polygon 1 on Map 2) (Fig 1). According to local residents, however, this feature is younger than 60 years old and it merits no further investigation.

The Phase One investigation identified a further 29 features with similar structural attributes within the larger polygon on Map 2. The remains of more structures were identified within the additional 6 polygons as indicated on Map 2 (Table 2). However, it is not clear if all these features will be flooded by the proposed dam. Nevertheless, all these features were revisited and a thorough ground survey conducted in order to determine their provenance and context. The survey indicated that these structures, as seen on Google Earth imagery, are often invisible on the ground. Where structures are visible it is clear that these are the remains of former homesteads and associated buildings (Figs 1 – 4). However, all these structures have been damaged by stone and brick robbing in the recent past. It is also evident that the majority of former walling was built with sod and clay and that these have now all but disappeared due to the anthropogenic forces and natural decay. Randomly spaced soil heaps covered in grass cover is all what remains of former homesteads. Due to the bad preservation of these former structures they are rated as of low priority (Table 2) In addition, local villagers interviewed maintain that these former homesteads are younger than 60 years old and that they were abandoned some twenty to fourty years ago.

In addition, the area was surveyed for graves. None were observed in association with former homesteads on the footprint. However, graves do occur in association with some modern homesteads but these occur adjacent to the footprint and will not be affected by the proposed flooding of the area (Fig 6). Local villagers also maintain that no known graves occur on the footprint.

Table 2. List of Polygons depicted on Map 2 with associated co-ordinates and rating. Polygons enclose abandoned homestead clusters.

Polygon	GPS Co-ordinates	Date	Rating
1	28°55'23.78"S 29°34'51.04"E	Younger than 60 years	Low
2	28°55'19.76"S 29°34'49.42"E	Younger than 60 years	Low
3	28°55'17.63"S 29°34'55.16"E	Younger than 60 years	Low
4	28°55'35.25"S 29°35'7.29"E	Younger than 60 years	Low
5	28°55'26.18"S 29°35'22.77"E	Younger than 60 years	Low
6	28°55'22.99"S 29°35'31.91"E	Younger than 60 years	Low

4.5 Recommendations

Although the remains of various homesteads and associated structures occur on the footprint none of the identifiable features have any heritage value. The proposed development may therefore proceed as planned.

However, there is a vague possibility than some heritage features and "invisible" graves occur below surface. The KwaZulu-Natal Heritage Act requires that operations exposing archaeological and historical residues should cease immediately pending an evaluation by the heritage authorities

5 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

5.1 Field Rating

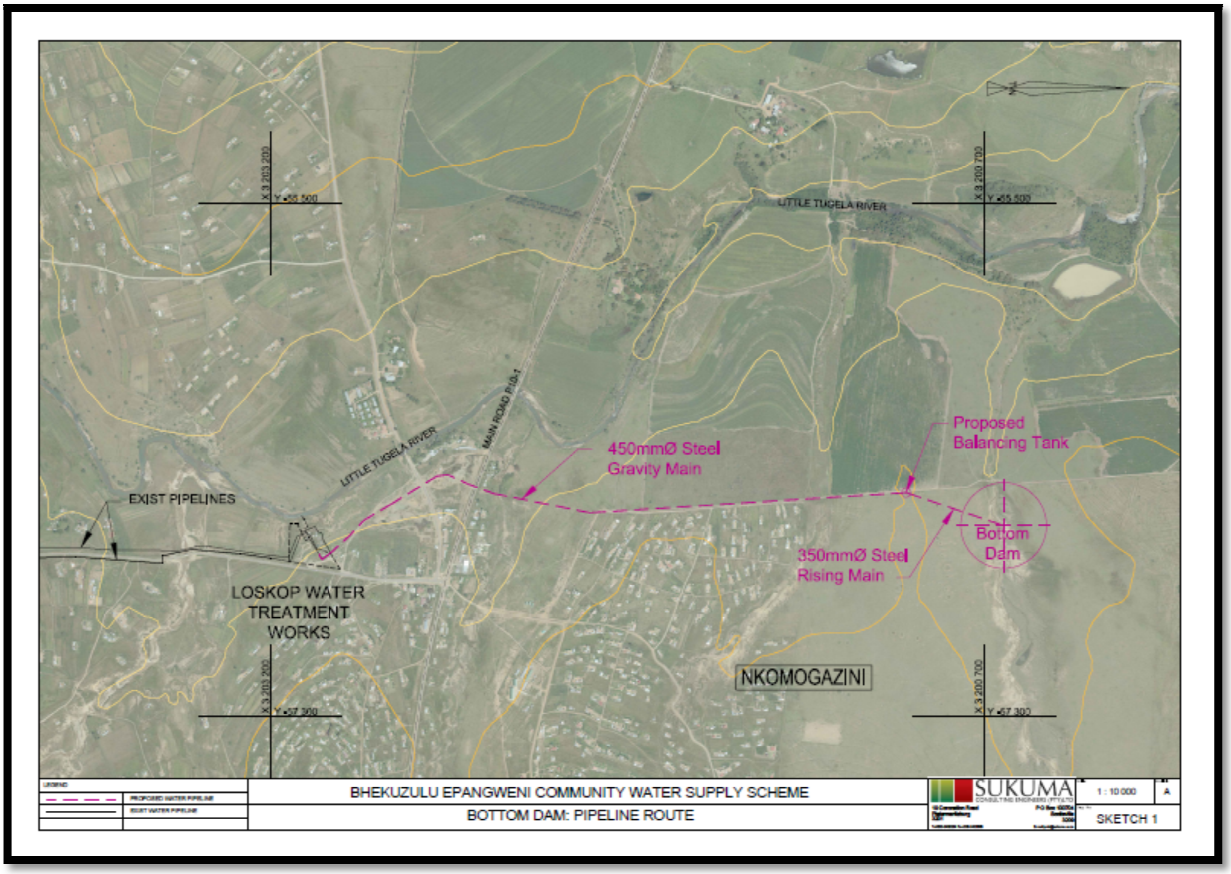
The SAHRA system of field rating (Table 3). The abandoned homesteads and associated features in this project area are rated as low.

Table 3. Field rating and recommended grading of sites (SAHRA 2005)

Level	Details	Action
National (Grade I)	The site is considered to be of National Significance	Nominated to be declared by SAHRA
Provincial (Grade II)	This site is considered to be of Provincial significance	Nominated to be declared by Provincial Heritage Authority
Local Grade IIIA	This site is considered to be of HIGH significance locally	The site should be retained as a heritage site
Local Grade IIIB	This site is considered to be of HIGH significance locally	The site should be mitigated, and part retained as a heritage site
Generally Protected A	High to medium significance	Mitigation necessary before destruction
Generally Protected B	Medium significance	The site needs to be recorded before destruction
Generally Protected C	Low significance	No further recording is required before destruction

.

6 MAPS AND PHOTOGRAPHS



Map 1. Arial photograph showing the location of the proposed 1.6 million m³ dam and associated pipeline, and study area near Loskop, KwaZulu-Natal (Source: Green Door).

Map 2. Google Image of the study area and polygons enclosing sensitive extended abandoned Zulu homesteads, Farm Assegai Hoek, Loskop.

Figure 1. Photo of old abandoned homestead foundation at polygon 4. Extensive stone and brick robbing has occurred here in the recent past. The area has a low heritage rating.

Figure 2. Soil heaps covered in grass indicate the former location of a homestead at polygon 1. The area has a low heritage rating.

Figure 3. Soil heaps and undulating surfaces indicating the remains of homesteads at polygon 2. The area has a low heritage rating

Figure 4. Undulating surface and soil heaps covered in grass indicating former homesteads in polygon 5. The area has a low heritage rating.

Figure 5. Little Tugela River that feeds into the proposed dam.

Figure 6. Contemporary homesteads on the edges of the footprint. These structures are not threatened by the proposed development.

9 REFERENCES

Anderson, G. 2007. Living Heritage Survey of the Ukhahlamba Drakensberg World Heritage Site. *Unpublished report conducted for the Maloti Drakensberg Transfrontier Project:* Howick.

Lewis-Williams, J. D. 2003. *Images of Mystery: Rock Art of the Drakensberg*. Double Storey Books: Cape Town

Lewis-Williams, J. D. & Dowson, T. 1992. Rock Paintings of the Natal Drakensberg. *Ukhahlamba Series, Number 5*. University of Natal Press: Pietermaritzburg

Mazel, A. 1989. People making history, the last ten thousand years of hunter-gatherer communities in the Thukela Basin. *Natal Museum Journal of Humanities*. 1: 1-168

McCarthy, T. & Rubidge, B. 2005. *The Story of Earth and Life: A Southern African Perspective on a 4.6 billion year journey. Struik* Publishers: Cape Town

McKenzie, P. 1946. *Pioneers of Underberg*: Teeanem Printers, Pietermaritzburg

Mitchell, P. 2002. *The Archaeology of Southern Africa*. University Press: Cambridge

Nagy, D. F. 2007 (ed). *The First Hundred Years of the Underberg-Himeville District* (1887-1987). Himeville Museum. Himeville.

Prins, F. E. 2009. Secret San of the Drakensberg and their rock art legacy. *Critical Arts*. 23 (2): 190-208

SAHRA, 2005. Minimum Standards for the Archaeological and the Palaeontological Components of Impact Assessment Reports, Draft version 1.4.

Wright, J. B. & A. Mazel 2007. *Tracks in a Mountain Range: Exploring the History of the Ukhahlamba-Drakensberg Wits* University Press: Johannesburg.

APPENDIX 1

RELOCATION OF GRAVES

Burial grounds and graves are dealt with in Article 36 of the NHR Act, no 25 of 1999. Below follows a broad summary of how to deal with grave in the event of proposed development.

- If the graves are younger than 60 years, an undertaker can be contracted to deal with the exhumation and reburial. This will include public participation, organising cemeteries, coffins, etc. They need permits and have their own requirements that must be adhered to.
- If the graves are older than 60 years old or of undetermined age, an archaeologist must be in attendance to assist with the exhumation and documentation of the graves. This is a requirement by law.

Once it has been decided to relocate particular graves, the following steps should be taken:

- Notices of the intention to relocate the graves need to be put up at the burial site for a period of 60 days. This should contain information where communities and family members can contact the developer/archaeologist/public-relations officer/undertaker. All information pertaining to the identification of the graves needs to be documented for the application of a SAHRA permit. The notices need to be in at least 3 languages, English, and two other languages. This is a requirement by law.

- Notices of the intention needs to be placed in at least two local newspapers and have the same information as the above point. This is a requirement by law.

- Local radio stations can also be used to try contact family members. This is not required by law, but is helpful in trying to contact family members.

- During this time (60 days) a suitable cemetery need to be identified close to the development area or otherwise one specified by the family of the deceased.

- An open day for family members should be arranged after the period of 60 days so that they can gather to discuss the way forward, and to sort out any problems. The developer needs to take the families requirements into account. This is a requirement by law.

- Once the 60 days has passed and all the information from the family members have been received, a permit can be requested from SAHRA. This is a requirement by law.

- Once the permit has been received, the graves may be exhumed and relocated.

- All headstones must be relocated with the graves as well as any items found in the grave