

HERITAGE IMPACT ASSESSMENT

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Bow Inn Eco Estate
Loskop Noord 12JS Portions 822 to 825
Map Reference (1:50000): 2429CD
S: 24°55'20.6" - E: 29°23'14.1"

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1...Executive Summary

The authors of this Heritage Impact Assessment Report were contracted by ARK Environmental Consultants to undertake a Phase 1 *Heritage Impact Assessment* of the demarcated surface areas on the farm Loskop Noord 12JS Portions 822 - 825 (Map Reference 1:50000 - 2429CD, S24°55'20.6", E29°23'14.1") for the devolvement of residential units along the banks of the Olifants River. The aim was to determine the presence of heritage resources such as archaeological and historical sites and features, graves and places of religious and cultural significance; to consider the impact of the proposed project on such heritage resources, and to submit appropriate recommendations with regard to the cultural resources management measures that may be required at affected sites / features.

In terms of the Environmental Conservation Act (Act No. 73 of 1989), it is by law required of developers to carry out Environmental Impact Assessment Studies. In order to comply with the requirements of the List of Activities and Regulation for Environmental Impact Assessments (EIA) published in the government Notice No. R1183 EIA's should, in all cases, include a Heritage Impact Assessment Segment. The heritage component of the EIA is provided for in Section 26 of the Environmental Conservation Act and endorsed by section 38 of the National Heritage Resources Act (NHRA - Act No. 25 of 1999). In addition the NHRA protects all structures and features older than 60 years (see Section 34), archaeological sites and material (see Section 35) and graves as well as burial sites (see Section 36). The objective of this legislation is to enable and to facilitate developers to employ measures to limit the potentially negative effects that the development could have on heritage resources.

Although no areas of significance for heritage management were located, this report details the methodology, limitations and recommendations relevant to the areas of proposed development. Although mitigation is not necessary at this stage it should be noted that mitigation measures are valid for the duration of the development process i.e. mitigation measures might have to be implemented on features of heritage importance not detected during this Phase 1 assessment (e.g. uncovered during the construction process).

2...Background to the Project

2.1 SCOPE AND MOTIVATION FOR INVESTIGATION

The owner of Bow Inn Game Farm, Mr. Casper Breedt, is planning 48 stands with rural-residential units along the banks of the Olifants River in the Marble Hall region of Mpumalanga Province. The authors of this report were contracted via ARK Environmental Consultants to undertake a Phase 1 Heritage Impact Assessment (HIA) of areas demarcated for development. The purpose of this was to archaeologically examine these areas and to identify possible archaeological remains of heritage value by means of a thorough pedestrian survey.

2.2 LEGISLATION, CONSERVATION AND HERITAGE MANAGEMENT

SAHRA and their provincial offices aim to conserve and control the management, research, alteration and destruction of cultural resources of South Africa and to prosecute if necessary. It is therefore crucially important to adhere to heritage resource legislation contained in the Government Gazette of the Republic of South Africa (Act No.25 of 1999) as many heritage sites are threatened daily by development. Conservation legislation requires impact assessment reports that, in all cases must include EIA's and HIA's.

HIA's should be done by qualified professionals with adequate knowledge to (a) identify all heritage resources

including archaeological and palaeontological sites that might occur in areas of developed and (b) make recommendations for protection or mitigation of the impact of the sites.

2.2.1 *The EIA and HIA processes*

Phase 1 Archaeological Assessments generally involve the identification of sites during a field survey with assessment of their significance, the possible impact development might have and relevant recommendations.

All Heritage Impact Assessment reports should include:

- a. Location of the sites that are found
- b. Short description of the characteristics of each site
- c. Short assessment of how important each site is, indicating which should be conserved and which mitigated
- d. Assessment of the potential impact of the development on the site/s
- e. In some cases, a shovel test, to establish the extent of a site, or collection of material might be required to identify the associations of the site. (A pre-arranged SAHRA permit is required) and
- f. Recommendations for conservation or mitigation

This HIA report is intended to inform the client about the legislative protection of heritage resources and their significance and make appropriate recommendations. It is essential that it also provides the heritage authority with sufficient information about the sites to enable it to assess with confidence:

- a. Whether or not it has objections to a development
- b. What the conditions are upon which such development might proceed
- c. Which sites require permits for mitigation or destruction
- d. Which sites require mitigation and what this should comprise
- e. Whether sites must be conserved and what alternatives can be proposed that may re-locate the development in such a way as to conserve other sites and
- f. What measures should/can be put in place to protect the sites that should be conserved

When a Phase 1 HIA is part of an EIA, wider issues such as public consultation and assessment of the spatial and visual impacts of the development may be undertaken as part of the general study and may not be required from the archaeologist. If, however, the Phase 1 project forms a major component of an HIA it will be necessary to ensure that the study addresses such issues and complies with section 38 of the National Heritage Resources Act.

2.2.2 *Legislation regarding archaeology and heritage sites* *National Resource Act of April 1999*

According to Act No.25 of 1999 a historical site is “any identifiable building or part thereof, marker, milestone,

gravestone, landmark or tell older than 60 years.” This clause is commonly known as the “60-years clause”. Buildings are amongst the most enduring features of human occupation, and this definition therefore includes all buildings older than 60 years, modern architecture as well as ruins, fortifications and Iron Age settlements. “Tell” refers to the evidence of human existence which is no longer above ground level, such as building foundations and buried remains of settlements (including artefacts). The Act identifies heritage objects as:

- objects recovered from the soil or waters of South Africa including archaeological and palaeontological objects, meteorites and rare geological specimens.
- visual art objects
- military objects
- numismatic objects
- objects of cultural and historical significance
- objects to which oral traditions are attached and which are associated with living heritage.
- objects of scientific or technological interest.
- any other prescribed category.

With regards to activities and work on archaeological and heritage sites this Act states that:

“No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit by the relevant provincial heritage resources authority.” (34. [1] 1999:58)

and

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

- (a) *destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;*
- (b) *destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;*
- (c) *trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or*
- (d) *bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites. (35. [4] 1999:58).”*

and

“No person may, without a permit issued by SAHRA or a provincial heritage resources agency-

- (a) *destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;*
- (b) *destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority;*

- (c) *bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) and excavation equipment, or any equipment which assists in the detection or recovery of metals (36. [3] 1999:60)."*

On the development of any area the gazette states that:

"...any person who intends to undertake a development categorised as-

- (a) *the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*
- (b) *the construction of a bridge or similar structure exceeding 50m in length;*
- (c) *any development or other activity which will change the character of a site-*
- (d) *exceeding 5000m² in extent; or*
- (e) *involving three or more existing erven or subdivisions thereof; or*
- (f) *involving three or more erven or divisions thereof which have been consolidated within the past five years; or*
- (g) *the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;*
- (h) *the re-zoning of a site exceeding 10000m² in extent; or*
- (i) *any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development (38. [1] 1999:62-64)."*

and

"The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:

- (a) *The identification and mapping of all heritage resources in the area affected;*
- (b) *an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;*
- (c) *an assessment of the impact of the development on such heritage resources;*
- (d) *an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;*
- (e) *the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;*
- (f) *if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and*
- (g) *plans for mitigation of any adverse effects during and after the completion of the proposed development (38. [3] 1999:64)."*

Human Tissue Act and Ordinance 7 of 1925

The Human Tissues Act (65 of 1983) and Ordinance on the Removal of Graves and Dead Bodies (Ordinance 7 of 1925) protects graves younger than 60 years. These fall under the jurisdiction of the National Department of Health and the Provincial Health Departments. Approval for the exhumation and re-burial must be obtained from the relevant Provincial MEC as well as the relevant Local Authorities. Graves 60 years or older fall under the

jurisdiction of the National Heritage Resources Act as well as the Human Tissues Act, 1983.

3...Background to Area

3.1 GENERAL DESCRIPTION

The Olifants River runs in a north-south orientation through the western section of Mpumalanga Province, passing west of the town of Marble Hall. Bow Inn Game Farm is located approximately 10 km east of Marble Hall with its eastern fence bordering the western banks of the River. The area of the planned development was demarcated in a 400m x 1.2 km stretch along the banks of the river. This area includes sections of the shore just above the floodplains as well as the plains and hills situated above the level of the river and its banks. Refer to Figure 1.

3.2 PHYSICAL SURROUNDINGS

Refer to main EIA Report for geographical, environmental and demographic attributes.

3.3 ARCHAEO-HISTORICAL BACKGROUND

The larger surroundings of Marble Hall are synonymous with mainly two ethnic groups. These groups, the Ndebele and the Sotho, resided, moved around and made war in these areas, the remains of which became embedded in the recent archaeological landscape.

The Ndebele (NGUNI):

The north Nguni groups of the Swazi and the Ndebele are found in a large area covering Mpumalanga, Swaziland, Kwazulu/Natal east of the Drakenberg extending into the Eastern Cape.

Concise history of the Ndebele Groups...

One of the Nguni split groups, the Hlubi moved to the north-eastern parts of the Transvaal where they became known as the Transvaal Ndebele. The Transvaal Ndebele (that should not be confused with the Ndebeles of Mzilikazi) can be divided into two groups, the Northern and Southern Ndebeles. Before the Difaqane (see later reference) the Southern Ndebele Group included the Manala, Ndzundza and Hwaduba. The Manala resided north of Pretoria and the Ndzundza lived at Kwa Maza near present-day Stoffberg after living in the Steelpoort River area for some time. The Hwaduba, who adopted much of the cultural and linguistic attributes of the Kgatla (see later discussion), lived at the confluence of the Pienaars and Apies rivers. The Northern Ndebele included the Langa and Kekana groups that settled in the areas surrounding Polokwane and Modimole. These groups were already present in the Transvaal by the 15th century and up to this day they are scattered over large parts of Mpumalanga and Gauteng.

The Sotho:

The Sotho groups were found in the interior of the Highveld areas of South Africa. At the end of the 18th century they occupied a large area that included present-day Botswana, large sections of the old Transvaal, the Free State Province as well as parts of the Northern Cape. Archaeological evidence tells us that the area between the Vaal River and the Malopo / Marico / Limpopo Rivers was relatively densely populated by the 15th century AD by related Sotho-speaking communities.

Concise history of relevant Tswana (Western Sotho) and Northern Sotho Groups...

The Kgatla and Kwena: At the end of the 15th century a certain chief Mokgatla broke away from the Hurutshe group and settled in the Witwatersrand area to form the Kgatla. The Kgatla, a Tswana group resided in an expansive area including Pretoria, the surroundings of the Magaliesberg and areas around present-day Brits, Rustenburg, Modimolle and Warmbaths as well as the Pilansberg area. Isolated Kgatla communities also settled in the surroundings of Lydenburg, Middelburg and the Soutpansberg. As with the other Sotho groups the Kgatla also split into several smaller groups including the Pedi, Tlokwa, Phuting and Kholokwe.

The Pedi: The most prominent chieftaincy to separate from the Kgatla was the Pedi. Not much is known about the earlier history of the Pedi but its separation from the Kgatla probably occurred during the 17th century. The Pedi were preceded by the Kwena of Mongatane, the first to settle in present-day Sekhukhuneland in the Steelpoort Valley in the second part of the 17th century. This group divided at the Olifants River to form the Masabela, who became the first permanent Sotho-speaking residents of Sekhukhuneland and the Kopa / Kope who settled in the vicinity of present-day Groblersdal. After the Masabela clan the Phasa community, relatives of the former settled in Sekhukhuneland. In later years the Roka and Tau communities also established communities in the area. At around the end of the 18th century and the beginning of the 19th century the Maroteng Chieftaincy became a powerful influence over smaller neighboring Sotho groups, dominating all of these smaller groups in the area. Their Chief, Thulare, won many small communities and large amounts of cattle which, many say, resulted in the formation of the Sotho state. The nucleus of this so-called state was defined by a triangle roughly demarcated by the confluence of the Olifants -and Steelpoort Rivers although the Pedi never confined their influence to this area. Groups such as the Kopa at Groblersdal and those living in the Strydpoort Mountains were also under the rule of the Pedi. The Pedi was the only Kgatla group to remain in the Transvaal, the other groups moved over the Vaal River into the Free State.

The *difaqane* occurred during the second decade of the 19th century and is commonly known as a “time of disruption, disintegration and dispersal” (Bergh 1999) of many Bantu-speaking communities in the interior of Southern Africa. Traditional views on the difaqane attributed much of this period to the military activities of the Zulu king Shaka and state formation within the larger Northern-Nguni communities. More recent perceptions include environmental, demographic and political dynamics as well as the influence of foreign elements (e.g. Europeans, Griquas and Traders) penetrating the area as probable instigators of the difaqane. This period was characterized by violence, disruption and uncertainty and caused major population movements amongst groups living north of the Orange River in the interior of Southern Africa. It was during these episodes that Ndebele groups moved into areas north of the Vaal River where they attacked, amongst others, the Phuting in the region of the Olifants River. Led by their ambitious leader Mzilikazi, they continued to attack various other groups but later became dispersed. Many of the Sotho groups were attacked and displaced and it was during this period that the Pedi settled in the Sekhukhuneland areas and the surroundings of the Olifants River. The difaqane and its legacy are regarded amongst the most important historical events in South African history as it profoundly influenced the social, political and physical organization of the Bantu-speaking groups of South Africa as we know in today.

European Contact:

The first Europeans to trek through the interior of South Africa north of the Vaal River was the expedition party of dr. Andrew Cowan who traveled from the Cape to the border of Botswana and from there eastwards past the Waterberg into Sekhukhuneland on the way to Delagoa Bay. The party however disappeared and was never heard of after a final report written by Cowan in 1808. After the foundation of Andries-Ohrigstad in 1845 many farms

were proclaimed in the larger Mpumalanga area including the areas surrounding the Olifants River and the Strydpoort Mountains. These farms were awarded to white farmers which lead to increasing tension and hostility between the Pedi's and the whites. At the same time, two Missionaries from the Berlin Missionary Society, Alexander Merensky and H. Grutzner established Mission Stations at Gerlachshoop near Groblersdal and Botshabelo near Middelburg. As tension mounted and both the Pedi's and the ZAR prepared for a confrontation, the Missionaries penetrated the local groups and built relatively positive relations with them. A war between the Pedi's led by Sekhukhune and the white farmers broke out in 1876. After continued confrontations Sekhukhune approached Merensky to act as mediator between his people and the ZAR Government and in February 1877 a peace treaty was announced. However, this treaty was flawed and further confrontation, also with the British authorities followed. In 1879, after many confrontations and a prolonged time of instability Sekhukhune was arrested and incarcerated in the Pretoria Central Prison.

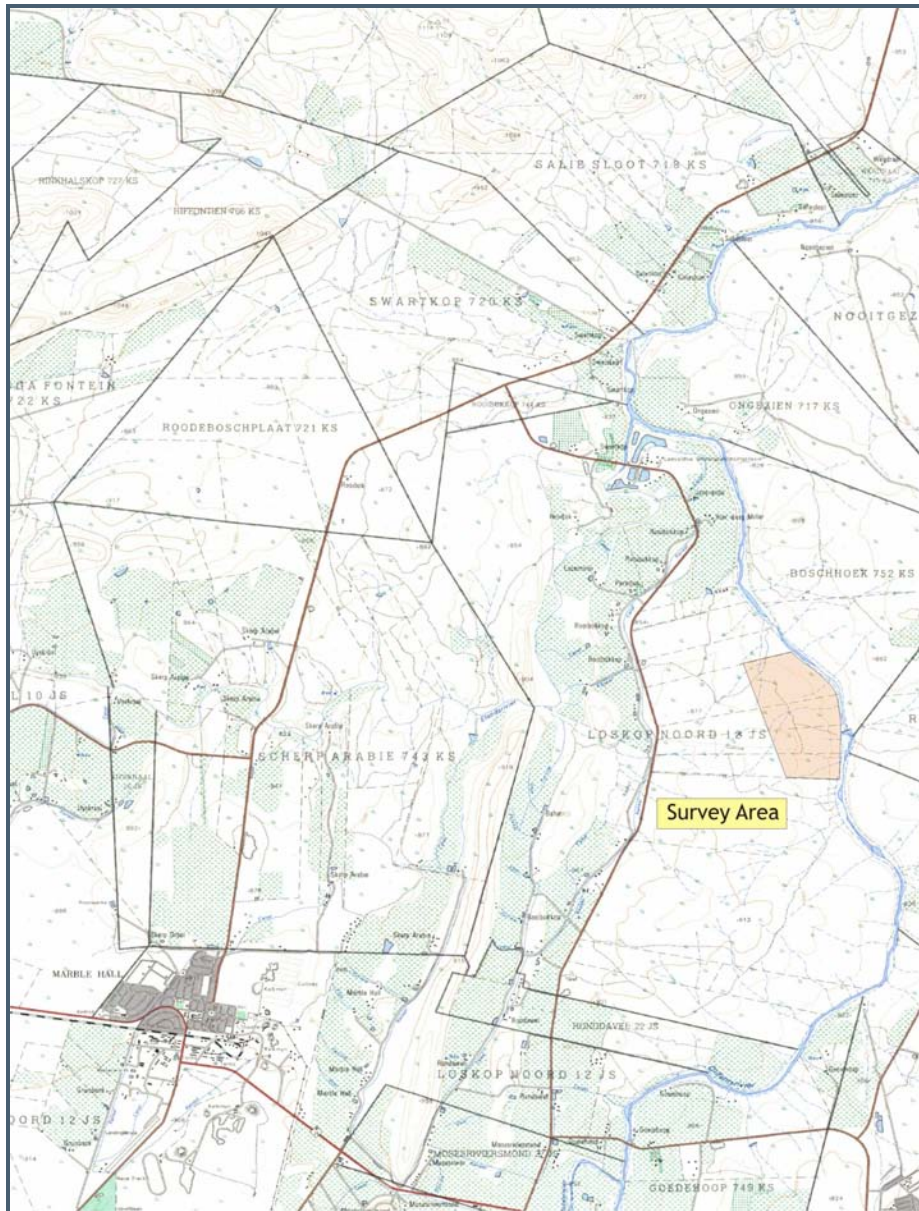


Figure 1: Segment of SA 1:50 000, 2429CD indicating the research locale.

4...Method of Enquiry

Archaeological reconnaissance implies the systematic procedure of the identification of archaeological sites. Reconnaissance of the area under question was done by means of a systematic pedestrian survey. This involved field walking along a system of transects. In this way the total area was divided into sectors and these were walked systematically along various transects, thus making the recording of finds more accurate and impartial.

The reconnaissance of the area under question served a twofold aim:

- The identification of archaeological and historical sites of importance.
This was done in order to indicate and determine the extent of the possible archaeological and historical landscape of the area under question.

- The spatial recording of archaeological sites.
All archaeological cultures and historical events have spatial definitions in addition to their cultural and chronological context. Where applicable, spatial recording of these definitions are done by means of a handheld GPS (Global Positioning System).

4.1 SOURCES OF INFORMATION

In accordance with archaeological practise, a pedestrian survey was carried out as part of the scoping process of the area under question during which standard archaeological procedures for observation were followed. In order to cover the total area systematically and thoroughly a total coverage transect survey was carried out by two archaeologists. The survey area was divided up into 20m x 1.2km sectors and GPS waypoints were plotted at the beginning and end of each of these strips. Starting at one waypoint and field walking to the next whilst surveying, the total surface of the area was examined impartially and consistently. As most archaeological material occur in single or multiple stratified layers beneath the soil surface, special attention was given to disturbances, both man-made such as roads and clearings, as well as those made by natural agents such as burrowing animals and erosion. Locations of archaeological material remains are usually recorded by means of a Garmin E-trex Legend GPS although no such features were located in this area. General conditions on the terrain were photographed with a Canon D350 Digital camera.

4.2 LIMITATIONS

The surrounding vegetation in the area under question was mostly a combination of riverine bush and scrubs and scattered bush, trees and grass (refer to Figure 2). The general visibility was moderately-high at the time of the survey (03-11-2006) as a result of a prolonged drought in the area. In single cases during the survey sub-surface inspection was possible but this revealed no apparent archaeological deposits. The two camps of the Bow Inn Game Farm is situated in the area under investigation and although this hampered the survey it should not have any influence on the integrity of findings as these areas will not be (or have already been) developed (refer to Figure 3 and 4).

It should be noted that undetected heritage remains may still be on the property in sub-surface deposits, in which case it must be reported to the Heritage Resources Authority or the archaeologist and may require further mitigation measures.



Figure 2: View of surroundings



Figure 3: Existing structures on the property



Figure 4: Existing structures on the property

4.3 CATEGORIES OF SIGNIFICANCE

The significance of archaeological sites is generally ranked into the following categories.

• No significance: sites that do not require mitigation.
• Low significance: sites, which may require mitigation.
• Medium significance: sites, which require mitigation.
• High significance: sites, where disturbance should be avoided.

The significance of an archaeological site is based on the amount of deposit, the integrity of the context, the kind of deposit and the potential to help answer present research questions. Historical structures are defined by Section 34 of the National Heritage Resources Act, 1999, while other historical and cultural significant sites, places and features, are generally determined by community preferences.

A fundamental aspect in assessing the significance and protection status of a heritage resource is often whether or not the sustainable social and economic benefits of a proposed development outweigh the conservation issues at stake. There are many aspects that must be taken into consideration when determining significance, such as rarity, national significance, scientific importance, cultural and religious significance, and not least, community preferences. When, for whatever reason the protection of a heritage site is not deemed necessary or practical, its research potential must be assessed and mitigated in order to gain data / information which would otherwise be lost. Such sites must be adequately recorded and sampled before being destroyed. These are generally sites graded as of low or medium significance.

5...Archaeological and historical remains

5.1 BACKGROUND: ARCHAEOLOGICAL FRAMEWORK

The field of archaeology in southern Africa is typically divided into the **Stone Age**, **Iron Age** and **Historical Periods**. Table 1 gives a concise outline of the chronological sequence of Southern African prehistory.

5.2 STONE AGE REMAINS

No Stone Age archaeological material was identified in the demarcated areas.

5.3 IRON AGE REMAINS

No Iron Age archaeological material was identified in the demarcated areas.

5.4 HISTORICAL REMAINS

No Historical remains were identified in the demarcated areas.

5.5 GRAVES

No Graves were identified in the demarcated areas.

Table 1: Chronological sequence of Southern African prehistory

* Years before present

Period	Associated Cultural Groups	Characteristic Artifacts
Early Stone Age 2.5 million - 125 000 ybp*	Early Hominids: <i>Australopithecines</i> <i>Homo habilis</i> <i>Homo erectus</i>	Typically large stone tools such as hand axes.
Middle Stone Age 125 000 - 25 000 ybp*	First <i>Homo sapiens</i> species	Typically smaller stone tools such as scrapers, blades and points
Late Stone Age 20 000 BC - present	<i>Homo sapiens sapiens</i> including San people	Typically small to minute stone tools such as arrow heads
Early Iron Age 300 - 900 AD	First Bantu-speaking groups	Typically distinct ceramics.
Middle Iron Age 900 - 1350 AD	Bantu-speaking groups, ancestors of present-day groups	Typically distinct ceramics, bead ware and iron / gold / copper objects
Late Iron Age 1400 AD - present	Various Bantu-speaking groups including BaVenda, Thonga, Tswana, Basotho and Zulu	Remains of occupation including hut remains and artifacts including grinding stones, potsherds and iron objects. Remains of iron smelting activities including iron smelting furnace, iron slag and residue as well as iron ore.
Historical & Colonial Periods ±1850 AD - present	Various Bantu-speaking groups as well as European farmers, settlers and explorers	Remains of historical objects and structures.

6...Evaluation

No areas of heritage importance were located in the areas demarcated for development.

7...Recommendations

This report serves to confirm that no significant heritage resources such as archaeological or historical sites, graves, or places of social or religious significance were found on the area demarcated for the development of the Bow Inn Eco Resort on Loskop Noord 12JS Portions 822 to 825. This does not rule out the possibility of sub-surface archaeological or cultural material being uncovered during future construction work. **The discovery of previously undetected cultural remains during development must be reported to the South African Heritage Resources Agency (SAHRA -Mpumalanga), or the archaeologists, and may require mitigation measures.**

From a heritage resources management point of view no objections are raised with regard to the proposed development.



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8...Addendum: Terminology

Archaeology:

The study of the human past through its material remains.

Artifact:

Any portable object used, modified, or made by humans; e.g. pottery and metal objects.

Assemblage:

A group of artifacts recurring together at a particular time and place, and representing the sum of human activities.

Context:

An artifact's context usually consist of its immediate *matrix* (the material surrounding it e.g. gravel, clay or sand), its *provenience* (horizontal and vertical position within the matrix), and its *association* with other artifacts (occurrence together with other archaeological remains, usually in the same matrix).

Cultural Resource Management (CRM):

The safeguarding of the archaeological heritage through the protection of sites and through salvage archaeology (rescue archaeology), generally within the framework of legislation designed to safeguard the past.

Excavation:

The principal method of data acquisition in archaeology, involving the systematic uncovering of archaeological remains through the removal of the deposits of soil and the other material covering and accompanying it.

Feature:

An irremovable artifact; e.g. hearths, architectural elements, or soil stains.

Ground Reconnaissance:

A collective name for a wide variety of methods for identifying individual archaeological sites, including consultation of documentary sources, place-name evidence, local folklore, and legend, but primarily actual fieldwork.

Matrix:

The physical material within which artifacts is embedded or supported, i.e. the material surrounding it e.g. gravel, clay or sand.

Phase 1 Assessments:

Scoping surveys to establish the presence of and to evaluate heritage resources in a given area.

Phase 2 Assessments:

In-depth culture resources management studies which could include major archaeological excavations, detailed site surveys and mapping / plans of sites, including historical / architectural structures and features.

Alternatively, the sampling of sites by collecting material, small test pit excavations or auger sampling is required.

Sensitive:

Often refers to graves and burial sites although not necessarily a heritage place, as well as ideologically significant sites such as ritual / religious places. *Sensitive* may also refer to an entire landscape / area known for its significant heritage remains.

Site:

A distinct spatial clustering of artifacts, features, structures, and organic and environmental remains, as the residue of human activity.

Surface survey:

Two basic kinds can be identified: (1) unsystematic and (2) systematic. The former involves field walking, i.e. scanning the ground along one's path and recording the location of artifacts and surface features. Systematic survey by comparison is less subjective and involves a grid system, such that the survey area is divided into sectors and these are walked systematically, thus making the recording of finds more accurate.

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