HERITAGE IMPACT ASSESSMENT REPORT

PHASE 1 HERITAGE IMPACT ASSESSMENT OF THE PROPOSED DEVELOPMENT OF A TOWNSHIP ON THE REMAINING EXTENT OF PORTION 4 OF THE ALLDAYS 295 MS WITHIN BLOUBERG LOCAL MUNICIPALITY OF CAPRICORN DISTRICT

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EXECUTIVE SUMMARY

The Township development on the Remaining Extent of Portion 4, Alldays 295 MS will have no negative effect on any heritage or cultural resources and no mitigation measures are proposed for the development.

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1. INTRODUCTION AND PROJECT DESCRIPTION

The author was appointed by Phakanani Environmental Consultants to undertake a heritage impact assessment for the proposed Township development in Alldays on the portion 4 of the remaining extent of farm Alldays 295 MS within Blouberg Local Municipality. The total footprint of the project area is 31.18 hectares.

The proposed development lies approximately 1.1km south-south-west of the Alldays CBD. Access to the township area is gained from Matopi Street, which currently lies on the western perimeter of Alldays town. Alldays is located about 150km north of Polokwane City on the R521. The proposed development will consist of 500 residential plots (18.79 ha), a municipal services area (3.72 ha) and access roads (8.67 ha). It appears that the area had recently been affected by land invasions because there are a number of vacant shacks and clear signs of the demarcation of plots. However, during the heritage survey, no person was found occupying any piece of land.

The dominant trees are White Syringa and Marula, with commiphora sp., vachellia sp. and grewia sp. making up most of the remaining trees. Ecologically, the area is in a good condition.

2. TERMS OF REFERENCE

- Review baseline information;
- Impact assessment identify and assess potential impacts and determine cumulative impacts relating to the project;
- Identify mitigation measures;
- Provide guidance with regard to additional information, if applicable; and
- Provide project recommendations.

3. LEGAL REQUIREMENTS

3.1 The National Heritage Resources Act (25 of 1999) (NHRA)

This Act established the South African Heritage Resources Agency (SAHRA) and makes provision for the establishment of Provincial Heritage Resources Authorities (PHRA). The Act makes provision for the undertaking of heritage resources impact assessments for various categories of development as determined by Section 38. It also provides for the grading of heritage resources (Section 7) and the implementation of a three-tier level of responsibilities and functions for heritage resources to be undertaken by the State, Provincial authorities and Local authorities, depending on the grade of the Heritage resources (Section 8).

In terms of the National Heritage Resources Act (1999) the following is of relevance:

Historical remains

Section 34(1) No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

Archaeological remains

Section 35(3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority or to the nearest local authority or museum, which must immediately notify such heritage resources authority.

Subsection 35(4) 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 with the detection or recovery of metals or archaeological material or objects, or use such equipment for the recovery of meteorites.

Subsection 35(5) When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedures in terms of section 38 has been followed, it may-

- (a) serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order:
- (b) carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;
- (c) if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph (a) to apply for a permit as required in subsection (4); and
- (d) recover the costs of such investigation form the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.

Subsection 35(6) The responsible heritage resources authority may, after consultation with the owner of the land on which an archaeological or palaeontological site or meteorite is situated; serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

Burial grounds and graves

Subsection 36(3)

- (a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-
- (c) 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; or
- (d) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in detection or recovery of metals.

Subsection 36(6) Subject to the provision of any law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority-

- (a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
- (b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the content of such grave or, in the absence of such person or community, make any such arrangement as it deems fit.

Culture Resource Management

Subsection 38(1) Subject to the provisions of subsection (7), (8) and (9), any person who intends to undertake a development* ...

must at the very earliest stages of initiating such development notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

- *'development' means any physical intervention, excavation, or action, other than those caused by <u>natural forces</u>, which may in the opinion of the 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-
 - (a) construction, alteration, demolition, removal or change of use of a place or a structure at a place;
 - (b) carry out any works on or over or under a place*;
 - (e) any change to the natural or existing condition or topography of land, and
 - (f) any removal or destruction of trees, or removal of vegetation or topsoil;
 - *"place means a site, area or region, a building or other structure" ..."
 - *"structure means any building, works, device or other facility made by people and which is fixed to the ground ..."

3.2 The Human Tissues Act (65 of 1983) and Ordinance on the Removal of Graves and Dead Bodies (Ordinance 7 of 1925)

This Act and Ordinance 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.

4. METHODOLOGY

4.1 Sources of information

The project area was traversed on foot. Standard archaeological practices for observation were followed. As most archaeological material occurs 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 were recorded by means of a handheld GPS. In addition, he SAHRIS database was consulted and no previous heritage impact assessments that covers the immediate area was found. Google earth and the Topocadastral map 2229CA was consulted.

4.2 Limitations

No limitations were experienced but it must be noted that archaeological remains are generally subterranean and may have been missed. Such remains may only become visible during earthwork disturbances.

4.3 Categories of significance

The significance of heritage sites is 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, which must not be disturbed at all.

The significance of specifically 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.

4.4 Terminology

Early Stone Age: Predominantly the Oldowan artefacts and Acheulian hand axe industry

complex dating to + 1Myr yrs – 250 000 yrs. before present.

Middle Stone Age: Various lithic industries in SA dating from ± 250 000 yrs. - 22 000 yrs. before

present.

Late Stone Age: The period from ± 22 000-yrs. to contact period with either Iron Age farmers or

European colonists.

Early Iron Age: Most of the first millennium AD

Middle Iron Age: 10th to 13th centuries AD

Late Iron Age: 14th century to colonial period. The entire Iron Age represents the

spread of Bantu speaking peoples.

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 could be undertaken.

Sensitive: Often refers to graves and burial sites, 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.

5. GENERIC BASELINE INFORMATION

5.1 The Stone Age

The Stone Age covers most of southern Africa and the earliest consist of the Oldowan and Acheul artefacts assemblages. Oldowan tools are regularly referred to as "choppers". Oldowan artefacts are associated with Homo *habilis*, the first true humans. In South Africa definite occurrences have been found at the sites of Sterkfontein and Swartkrans. Here they are dated to between 1.7 and 2 million years old. Bearing in mind the proximity of the Makapans Valley palaeontological site about 30km south-east of the project area it is possible that they may occur here. This was followed by the Acheulian technology from about 1.4 million years ago which introduced a new level of complexity. The large tools that dominate the Acheulian artefact assemblages range in length from 100 to 200 mm or more. Collectively they are called bifaces because they are normally shaped by flaking on both faces. In plan view they tend to be pear-shape and are broad relative to their thickness. Most bifaces are pointed and are classified as handaxes, but others have a wide cutting end and are termed cleavers. The Acheulian design persisted for more than a million years and only disappeared about 250 000 years ago. Here, the Makapans Valley Site is referenced; especially the Cave of Hearths.

The change from Acheulian with their characteristic bifaces, handaxes and cleavers to Middle Stone Age (MSA), which are characterized by flake industries, occurred about 250 000 years ago and ended about 30 000 – 22 000 years ago. For the most part the MSA is associated with modern humans; Homo sapiens. MSA remains are found in open spaces where they are regularly exposed by erosion as well as in caves. Characteristics of the MSA are flake blanks in the 40 – 100 mm size range struck from prepared cores, the striking platforms of the flakes reveal one or more facets, indicating the preparation of the platform before flake removal (the prepared core technique), flakes show dorsal preparation – one or more ridges or arise down the length of the flake – as a result of previous removals from the core, flakes with convergent sides (laterals) and a pointed shape, and flakes with

parallel laterals and a rectangular or quadrilateral shape: these can be termed pointed and flake blades respectively. Other flakes in MSA assemblages are irregular in form.

The change from Middle Stone Age to Later Stone Age (LSA) took place in most parts of southern Africa little more than about 20 000 years ago. It is marked by a series of technological innovations or new tools that, initially at least, were used to do much the same jobs as had been done before, but in a different way. Their introduction was associated with changes in the nature of hunter-gatherer material culture. The innovations associated with the Later Stone Age "package" of tools include rock art – both paintings and engravings, smaller stone tools, so small that the formal tools less that 25mm long are called microliths (sometimes found in the final MSA) and Bows and arrows. Rock art is an important feature of the LSA and is abundant in the nearby Zoutpansberg and Makgabeng areas.

5.2 The Iron Age

According to the most recent archaeological cultural distribution sequences by Huffman (2007), this area falls within the distribution area of various cultural groupings originating out of both the Urewe Tradition (eastern stream of migration) and the Kalundu Tradition (western stream of migration). The facies that may be present are:

Urewe Tradition: Moloko branch Icon facies AD 1300 – 1500 (Late Iron Age)

Letsibogo facies AD 1500 - 1700.

Kalundu Tradition: Benfica sub-branch Bambata facies

Happy Rest sub-branch Happy Rest facies AD 750 - 1000 (Early Iron Age)

Eiland facies AD 1000 – 1300 (Middle Iron Age) Khami facies AD 1450 - 1820 (Late Iron Age) Letaba facies AD 1600 – 1840 (Late Iron Age)

To the north-east of Allday, the Mapungubwe Cultural Landscape (MCL) is located within the Shashi-Limpopo Confluence area on the connecting borders of South Africa, Botswana and Zimbabwe. The main residential sites are K2, Mapungubwe and Leokwe. The Alldays area would probably have been affected by this period from the 10th to 13th centuries, although no settlements of this period has been recorded here. The later Venda Machete chiefdom and Sibola (Sothonised Machete Venda) in the region also did not settle in the Alldays vicinity. The main reason being availability of permanent water as there is no perennial river in the area.

5.3 The historical landscape

Alldays was founded in the mid-1800s where the beaten track from North to South and from East to West between Botswana, Zimbabwe and South Africa crossed each other. It was this natural meeting point, rather than the surroundings that determined the location at which the city was founded. The place is not really suitable for larger settlements, especially as the access to water is severely limited.

6. RESULTS OF THE SURVEY

6.1 Desktop palaeontological study (Compiled by: Chris Jones, B.Sc (Hons), FGSSA, Pr. Sci. Nat)

6.1.1 Background

The study area is located immediately to the south of the town Alldays, in the northern part of Limpopo Province, South Africa.

6.1.2 Regional Geology

The area is underlain by the Archaean granulite-grade metamorphic rocks of the Limpopo Mobile Belt. To the south, sandstones and conglomerates of the Soutspansberg Group form an east-west trending ridge. Younger sedimentary rocks of the Karoo Supergroup are deposited in basins, notably the Tuli and Tshipise Basins which are of economic importance due to the occurrence of coal. The area is also noted for kimberlite pipes, such as Venetia Mine which is exploited for diamonds. Karoo-age dolerite dykes are very common.

6.1.3 Geology of Alldays

The area is completely underlain by rocks of the Beit Bridge Complex, which dominates the Central Zone of the Limpopo Mobile Belt. This metamorphic terrain was formed by the collision of the Zimbabwe and Kaapvaal Cratons around 2.7 Ga. Two groups are distinguished locally within the Beit Bridge Complex, The Mount Dowe Group and the Malela Drift Group.

The older Mount Dowe Group consists of quartzite with interlayers of feldspar, pyroxene, grunerite, garnet, magnetite and amphibole minerals. The Malela Drift Group consists mainly of leucocratic gneiss with intercalations of granulite and marble.

An association with marble suggests a marine shelf deposit.

6.1.4 Palaeontology

These rocks are Archaean in age, are highly deformed, forming migmatites in places and are not fossiliferous. However, a site visit may reveal Quaternary sand deposits, although such deposits are not known to be fossiliferous in this area.

6.1.5 Conclusion

The rocks underlying the study area have zero palaeontological potential.

6.2 Stone Age remains

No Stone Age material was observed in the project area.

6.3 Iron Age

No Iron Age remains were observed in the project area.

6.4 Graves and burials

No graves or cemeteries were observed in the project area. .

6.5 The built environment

No historical structures were recorded in the project area. A study of the 1968 topographical 1:50000 map shows no indication of any structure. The only man-made structures are some corrugated iron shacks that were recently constructed by land invaders.

7. EVALUATION AND STATEMENT OF SIGNIFICANCE

The Township development on the Remaining Extent of Portion 4, Alldays 295 MS project does not impact on any heritage resources.

7.1 Significance criteria in terms of Section 3(3) of the National Heritage Resources Act.

Significance		Rating
1.	The importance of the cultural heritage in the community or pattern of South Africa's history	None
	(Historic and political significance)	
2.	Possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage (Scientific significance).	None
3.	Potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage (Research/scientific significance)	None
4.	Importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects (Scientific significance)	None
5.	Importance in exhibiting particular aesthetic characteristics valued by a community or cultural group (Aesthetic significance)	None
6.	Importance in demonstrating a high degree of creative or technical achievement at a particular period (Scientific significance)	None
7.	Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (Social significance)	None
8.	Strong or special association with the life and work of a person, group or organization of importance in the history of South Africa (Historic significance)	None
9.	The significance of the site relating to the history of slavery in South Africa.	None

7.2 Section 38(3) (c) An assessment of the impact of the development on such heritage resources.

The development will have no effect on heritage remains.

7.3 Section 38(3) (d) An evaluation of the impact of the development on heritage resources relative to the sustainable economic benefits to be derived from the development.

No recorded heritage remains were recorded. The sustainable economic benefits outweigh the conservation benefits.

7.4 Section 38(3) (e) The results of consultation with the communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources.

No impact on heritage resources.

7.5 Section 38(3)(f) If heritage resources will be adversely affected by the proposed development the consideration of alternatives.

No heritage resources will be adversely affected.

7.6 Section 38(3)(g) Plans for mitigation of any adverse effects during and after the completion of the proposed development.

No mitigation measures are proposed.

8. CONCLUSION

The proposed Township development on the Remaining Extent of Portion 4, Alldays 295 MS poses no threat to heritage resources.

From a heritage management perspective, there is no reason why the proposed development may not continue.

9. RECOMMENDATIONS

No recommendations for mitigation is proposed.

10. REFERENCES

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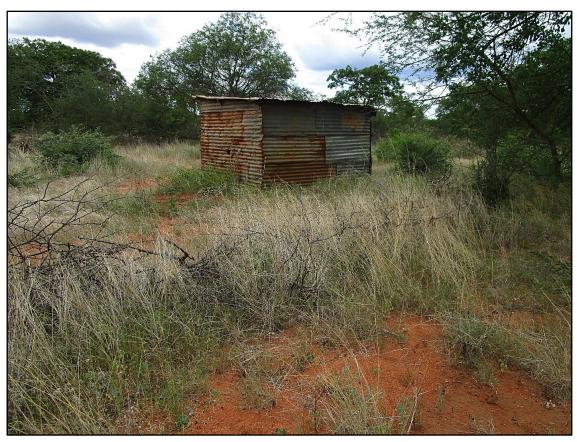


Figure 1. A shack built on the project area by land invaders.



Figure 2. View of a cleared plot by invaders.



Figure 3. View of aardvark burrow – a typical disturbance exposing subterraneous layers.



Figure 4. Dumped rubble on the site.



Figure 5. Project area (red) and survey track (yellow).

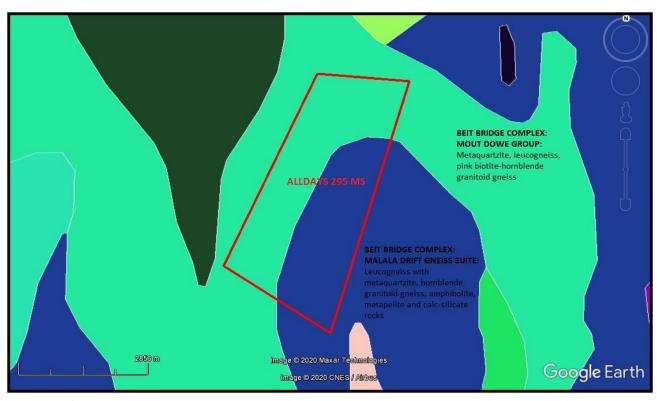


Figure 6. Geology map of the Alldays area.