

Prepared for:
LANDSCAPE DYNAMICS

**A PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY FOR
UPGRADING OF ROADS, BUILDING A ROAD, UTILIZING
QUARRIES AND FENCING OF A GRAVEYARD ON THE FARM
WORCESTER 195KT IN THE LIMPOPO PROVINCE OF SOUTH
AFRICA**

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EXECUTIVE SUMMARY

This Phase I Heritage Impact Assessment (HIA) study for various development activities on the farm Worcester 195KT near the eastern foothills of the Drakensberg in the Limpopo Province of South Africa was done in accordance with Section 38 of the National Heritage Resources Act (No 25 of 1999). The aim with the HIA study was to determine whether any of the types and ranges of heritage resources ('national estate') as outlined in Section 3 of the National Heritage Resources Act (No. 25 of 1999) occur in the different development areas (see Box 1) and, if so, to determine the significance of these heritage resources and to propose mitigation measures should any of the heritage resources be affected by any of the development activities.

Various development activities are planned for the Monareng community living on the farm Worcester 195KT near the eastern foothills of the Drakensberg Mountains. These activities include: upgrading (graveling) of the dirt road running across the farm London 194KT to the village of Worcester; upgrading of the dirt road running across the farm Worcester 195KT to the graveyard on the same farm; fencing of a newly planned graveyard on the farm Worcester 195KT; utilizing three existing quarries, one located on the farm Enable 175KT and the other two along the London dirt road; building of a short dirt/gravel road to the graveyard on Worcester 195KT.

The Phase I HIA survey of the various activities and development areas on Worcester 195KT revealed the presence of a limited number of stone tools dating from the Middle Stone Age (200 000 years to 22 000 years ago) in the project area where the new road running to the graveyard will be constructed. The Middle Stone Age artefacts were mostly manufactured from flakes derived from pebbles and include points, scrapers and a possible *outille ecaile*

The stone tools were geo-referenced and mapped (Figure 6, Table 1) and are illustrated in Figure 5.

It is possible that the Middle Stone Age tools may be affected when the new road is constructed to the graveyard.

The significance of the stone tools can be rated as follow:

- Only a limited number of stone tools were observed on the bank of the stream.
- The stone tools include common, well known types such as points and scrapers.
- Middle Stone Age sites in the Limpopo Province (called the Pietersburg industrial complex) are well presented across the Limpopo Province.

The limited number of Middle Stone Age tools on the bank of the stream can therefore not be rated as outstanding significant. It is therefore not necessary to apply any special mitigation measures for these few stone tools lying on the bank of the stream.

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1 INTRODUCTION

This document contains the report on the results of a Phase I Heritage Impact Assessment (HIA) study done for various development activities and areas on the farm Worcester 195KT near Hoedspruit in the Limpopo Province of South Africa.

Focused archaeological research has been conducted in the Limpopo Province for more than four decades. This research consists of surveys and of excavations of Stone Age and Iron Age sites as well as of the recording of rock art and historical sites in this area. The Limpopo Province has a rich heritage comprised of remains dating from the pre-historical and from the historical (or colonial) periods of South Africa. Pre-historical and historical remains in the Limpopo Province of South Africa form a record of the heritage of most groups living in South Africa today.

Various types and ranges of heritage resources that qualify as part of South Africa's 'national estate' (as outlined in the National Heritage Resources Act, 1999 [Act No 25 of 1999]) occur in the Limpopo Province (see Box 1, next page).

Box 1 : Types and ranges of heritage resources as outlined in the National

Heritage Resources Act (No 25 of 1999)

The National Heritage Resources Act (Act No 25 of 1999, Art 3) outlines the following types and ranges of heritage resources that qualify as part of the national estate, namely:

- (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 paleontological 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 by 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) moveable objects, including -
 - (i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects;
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interest; and
 - (vii) books, records, documents, photographs, 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 National Heritage Resources Act (Act No 25 of 1999, Art 3) also distinguishes nine criteria for places and

objects to qualify as 'part of the national estate if they have cultural significance or other special value ...'. These criteria are the following:

- (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;
- (i) sites of significance relating to the history of slavery in South Africa

2 AIMS WITH THIS REPORT

Various development activities are planned near the villages of Worcester and Enable on the farm Worcester 195KT in the Limpopo Province of South Africa (Figure 6). Landscape Dynamics, the environmental company responsible for compiling the EIA report for the development commissioned the author to undertake a Phase 1 Heritage Impact Assessment (HIA) study of the various development area with the following aims:

- to establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) do occur within the perimeters of the proposed new development areas and, if so:
 - to determine the level (or degree) of significance of these heritage resources; and
 - to make recommendations regarding the mitigation or the conservation of these heritage resources if they are to be affected by the proposed new development activities.

3 THE PROJECT AREA

3.1 Location

The farm Worcester 195KT is located near the eastern foothills of the Drakensberg, approximately six kilometres to the west of the national road running from the Abel Erasmus/Hoedspruit road to Leydsdorp/Tzaneen which is located another sixty kilometres further to the north of the project area in the Limpopo Province of South Africa.

Two villages on the farms Worcester 195KT and Enable 175KT are occupied by Eastern (Drakensberg) Sotho clans with the Monareng as the dominant group. This clan lived together with groups such as the Bakgaga, Tlhabine, Bakoni and Balobedu in the foothills of the Drakensberg for the last few centuries (Figure 6).

The following development activities are planned for the Monareng community living on the farm Worcester 195KT:

- Upgrading (gravelling) of the dirt road running across the farm London 194KT to the village of Worcester.
- Upgrading of the dirt road running across the farm Worcester 195KT to the graveyard on the same farm.
- Fencing of a newly planned graveyard on the farm Worcester 195KT.
- Utilizing three existing quarries, one located on the farm Enable 175KT and the other two along the London dirt road.
- Building of a short dirt/gravel road to the graveyard on Worcester 195KT.

3.2 Brief summary of the historical context of the project area

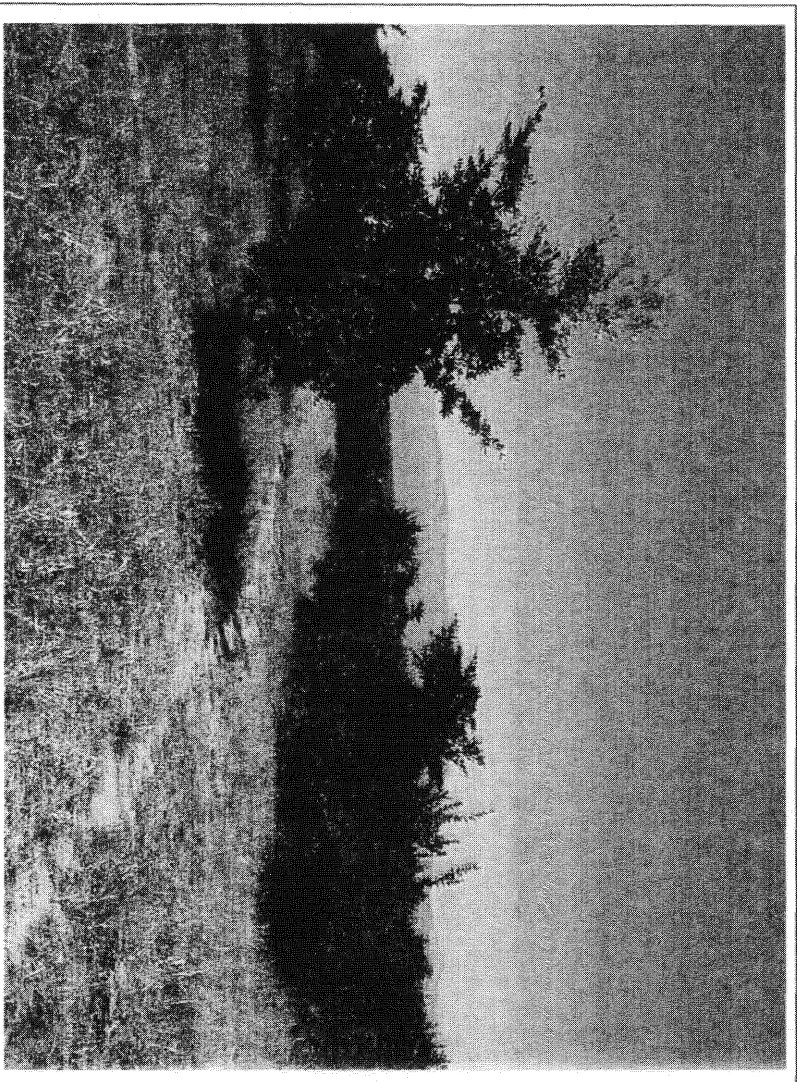
The wider study area is known to contain a considerable number of Iron Age sites, some dating from the Early Iron Age located at the Eiland (Hans Merensky Nature Reserve) and Silver Leaves (Tzaneen). The majority of Iron Age sites

recorded, however, dates from the Late Iron Age. These groups included the metal workers (Bamalaji) of Phalaborwa who lived in present-day Phalaborwa and a western part of the Kruger National Park.

The Eastern (or Drakensberg) Sotho clans used to occupy villages during the Late Iron Age which straggled along the eastern foothills of the Drakensberg Mountain range. These clans were renowned agriculturists and included the Balobedu , Bakgaga, Bakoni, Monareng and Bathabane.

To the north of the project area several iron reduction sites have been recorded on farms such as Quagga 759LT, Solomons Mine 762LT, Free State 763LT, Rubbervale 784LT and The Neck 665LT. At least one ancient copper mine dating from the 12th to the 13th centuries AD have been investigated on the farm Harmony 140KT. The historical Leydsdorp is located somewhat further to the north of the current project area.

Figure 1- The project area on the farm Worcester 195KT near the eastern foothills of the Drakensberg in the Limpopo Province of South Africa. The photograph has been taken where the new graveyard will be established – on sandveldt dominated by *Terminalia Sericea*.



4 METHODOLOGY

4.1 Method

This survey was conducted by means of a brief survey of literature on the pre-history and history of the Hoedspruit area; consulting archaeological data bases; doing a survey on foot of the project area and by means of studying maps of the project area.

- A brief survey of literature on the pre-history and history of the Hoedspruit area was undertaken.
- Archaeological data bases kept at institutions such as African Window and the South African Heritage Resources Authority (SAHRA) (Cape Town [national] and Polokwane [provincial]) was consulted to establish if any heritage resources of significance occur in or near the project area.
- The various development areas were surveyed on foot.
- The 1: 50 000 and 1: 250 000 maps were also used to study the project area.

4.2 Assumptions and limitations

It is possible that this HIA study may have missed heritage resources in the project area as heritage remains may occur in thick clumps of vegetation while others may lie below the surface of the earth and may only be exposed once development commences.

4.3 Some remarks on terminology

Terminology that may be used in this report is outlined in Box 2 (below, next page).

Box 2: Some remarks on terminology

The Heritage Impact Assessment (HIA) referred to in the title of this report includes a survey of heritage resources as outlined in the National Heritage Resources Act, 1999 (Act No 25 of 1999) (See Box 1).

Heritage resources (cultural resources) include all human-made phenomena and intangible products that are the result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyles of the people or groups of people of South Africa.

The term 'pre-historical' refers to the time before any historical documents were written or any written language developed in a particular area or region of the world. The historical period and historical remains refer, for the project area, to the first appearance or use of 'modern' Western writing brought to the Lowveld in the Limpopo Province by the first Colonists who settled in this part of the country after c. 1860.

The term 'relatively recent past' refers to the 20th century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may, in the near future, qualify as heritage resources.

It is not always possible, based on observations alone, to distinguish clearly between archaeological remains and historical remains, or between historical remains and remains from the relatively recent past. Although certain criteria may help to make this distinction possible, these criteria are not always present, or, when they are present, they are not always clear enough to interpret with great accuracy. Criteria such as square floor plans (a historical feature) may serve as a guideline. However, circular and square floors may occur together on the same site.

The term 'sensitive remains' is sometimes used to distinguish graves and cemeteries as well as ideologically significant features such as holy mountains, initiation sites or other sacred places. Graves in particular are not necessarily heritage resources if they date from the recent past and do not have head stones that are older than sixty years. The distinction between 'formal' and 'informal' graves in most instances also refers to graveyards that were used by colonists and by indigenous people. This distinction may be important as different cultural groups may uphold different traditions and values with regard to their ancestors. These values have to be recognised and honoured whenever graveyards are exhumed and relocated.

The term 'Stone Age' refers to the prehistoric past, although Late Stone Age peoples lived in South Africa well into the historical period. The Stone Age is divided into an Earlier Stone Age (3 million years to 150 000 thousand years ago) the Middle Stone Age (150 000 years to 40 000 years ago) and the Late Stone Age (40 000 years to 200 years ago).

The term 'Late Iron Age' refers to the period between the 17th century and the 19th century and can therefore include the historical period.

Mining heritage sites refer to old, abandoned mining activities, underground or on the surface, which may date from the pre-historical, historical or the relatively recent past.

The term 'project area' refers to the area where the developer wants to focus its development activities (refer to plan) while the peripheral area refers to the area which will not be affected by the proposed new development..

Phase I studies refer to surveys using various sources of data in order to establish the presence of all possible types of heritage resources in any given area.

Phase II studies include in-depth cultural heritage studies such as archaeological mapping, excavating and sometimes laboratory work. Phase II work may include the documenting of rock art, engraving or historical sites and dwellings; the sampling of archaeological sites or shipwrecks; extended excavations of archaeological sites; the exhumation of bodies and the relocation of graveyards, etc. Phase II work may require the input of specialists and requires the co-operation and approval of SAHRA.

5 THE PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY

The various development activities and areas are briefly discussed below and illuminated with photographs.

5.1 The various development (critical) areas

The following pieces of land will be affected by the proposed development project:

5.1.1 Upgrading the London dirt road

This dirt road runs westwards towards the village of Worcester from the national road running to Leydsdorp/Tzaneen) in the north. It is approximately 6km long and will be upgraded by means of gravelling the surface of the road. The upgrading activities will mainly be confined to the road itself. Gravel may be collected from the two quarries located on the southern side of the road.

Both shoulders of the London dirt were surveyed for heritage resources. However, no heritage resources of significance were observed along this stretch of the road.

5.1.2 Upgrading the Worcester dirt road

The Worcester dirt road will be upgraded by means of constructing culverts on both sides of the road in order to prevent excessive rain water from washing away the shoulders of the road. The surface of the road running to the newly planned graveyard will also be upgraded. This stretch of the road is approximately 2km long.

The longest part of the Worcester dirt road runs through the village of Worcester. The community living in the Worcester village still follow the custom to bury their dead relatives within the confines of homesteads (*malapa*).

No graves were observed near the shoulders of the Worcester dirt road.

5.1.3 Fencing the newly planned graveyard

The newly planned graveyard which is covering an area of approximately 150/200mx150/200m is located on a level stretch of sandveld dominated by *Terminalia Sericea* (Vaalbos). This level piece of land is also pocked with large termite heaps. (In pre-historical and historical times pots were placed in termite heaps to catch ants which were enjoyed as a delicacy).

No heritage resources of significance were observed on this level piece of land.

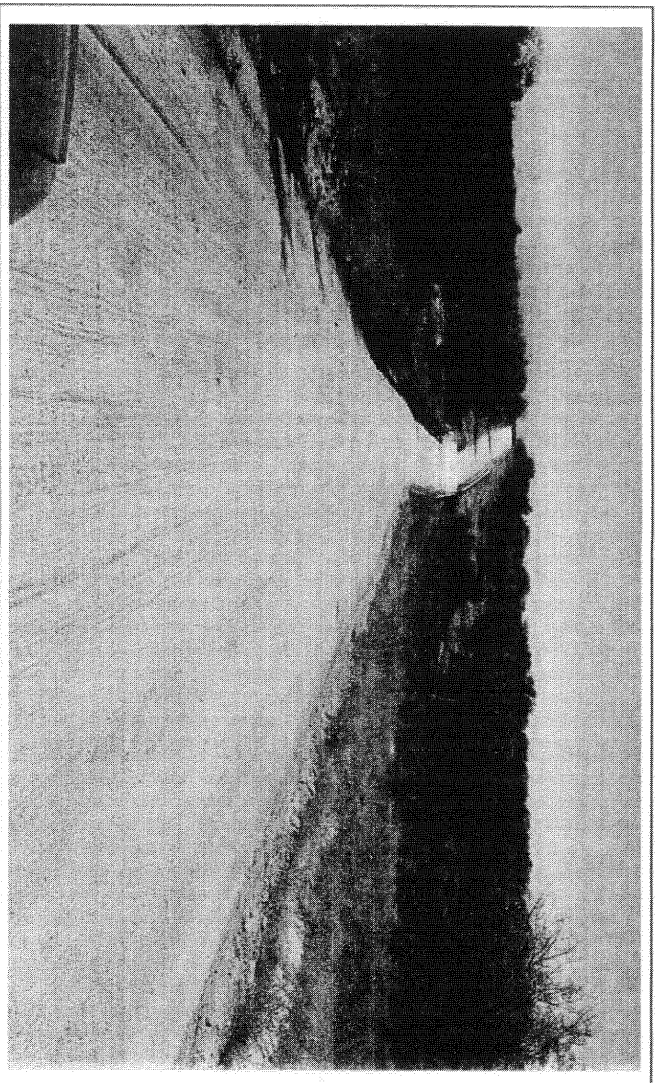
5.1.4 Utilizing three existing quarries

Three quarries, one on the farm Enable 175KT and the other two on London 194KT, south of the London dirt road, will be used to collect gravel for the upgrading of the roads.

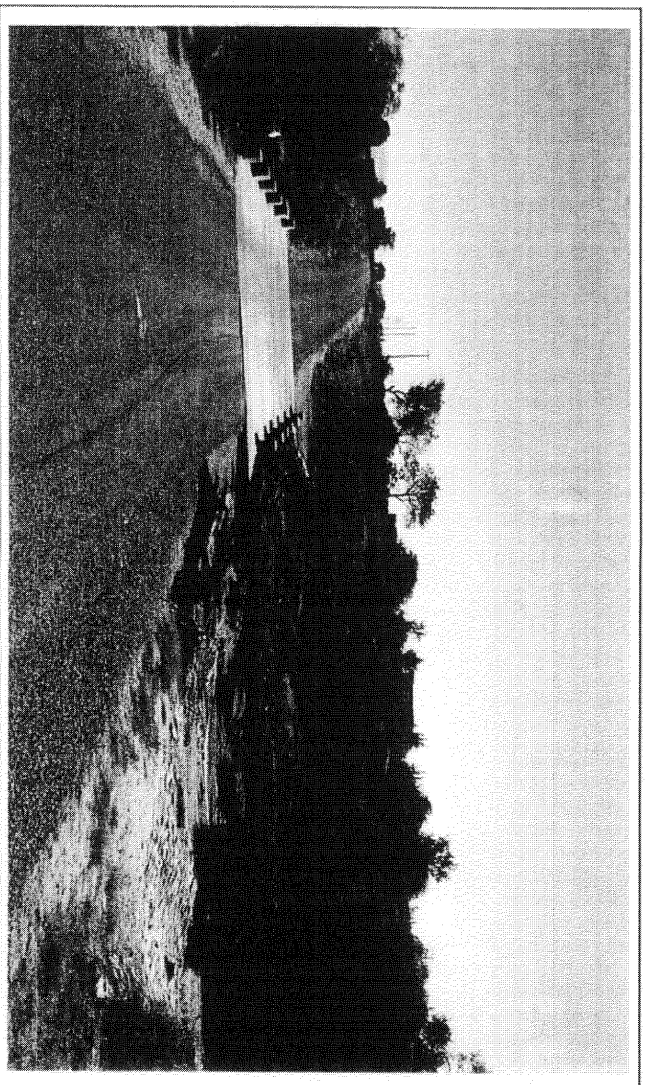
The quarry areas have been disturbed by quarrying activities in the past. No heritage resources, such as stone tools, were observed in these features.

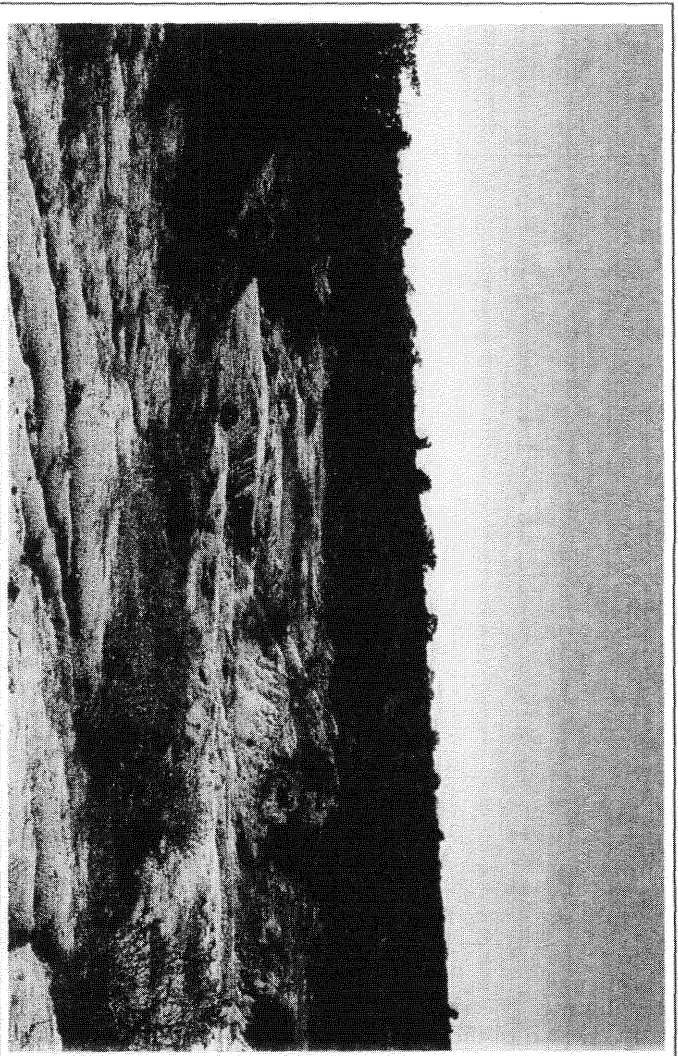
5.1.5 Building of a new road to the graveyard

A short gravel road will be built from the Worcester dirt road to give access to the newly planned graveyard. This road cuts across a little stream where a few Middle Stone Age tools which have eroded from the banks of the stream have been observed.

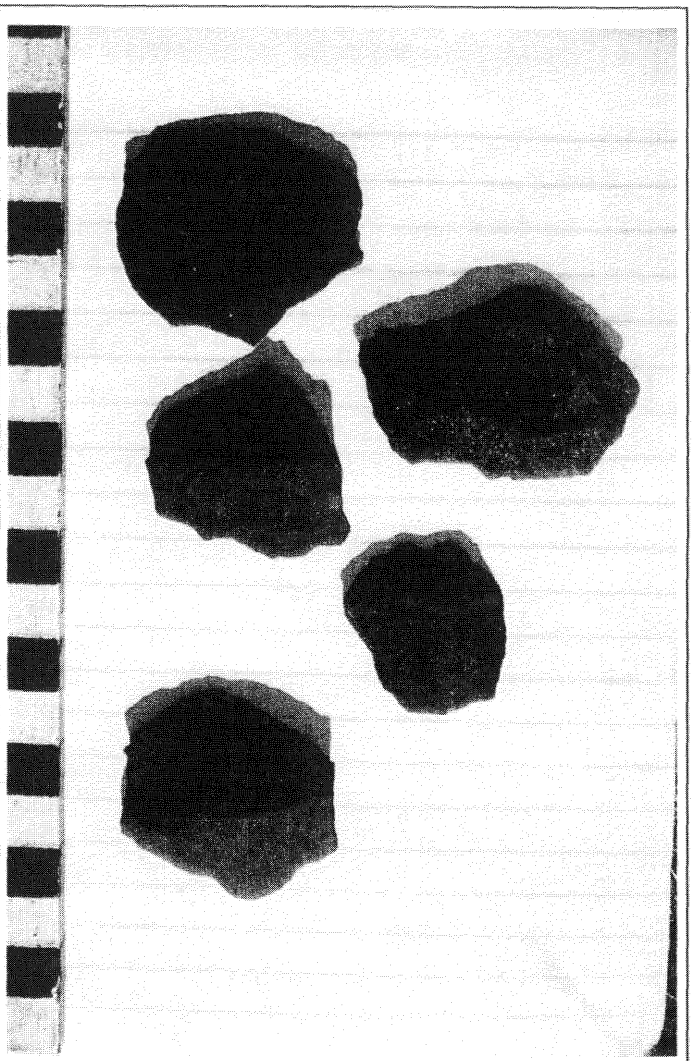


Figures 2 & 3- The London dirt road will be gravelled (above). The Worcester road (of which the first part is tarred) will also be upgraded (below).





Figures 4 & 5- One of three existing quarries which will be utilized to collect gravel for the upgrading of the London and Worcester roads (above). Middle Stone Age tools near the road to be constructed to the cemetery (below).



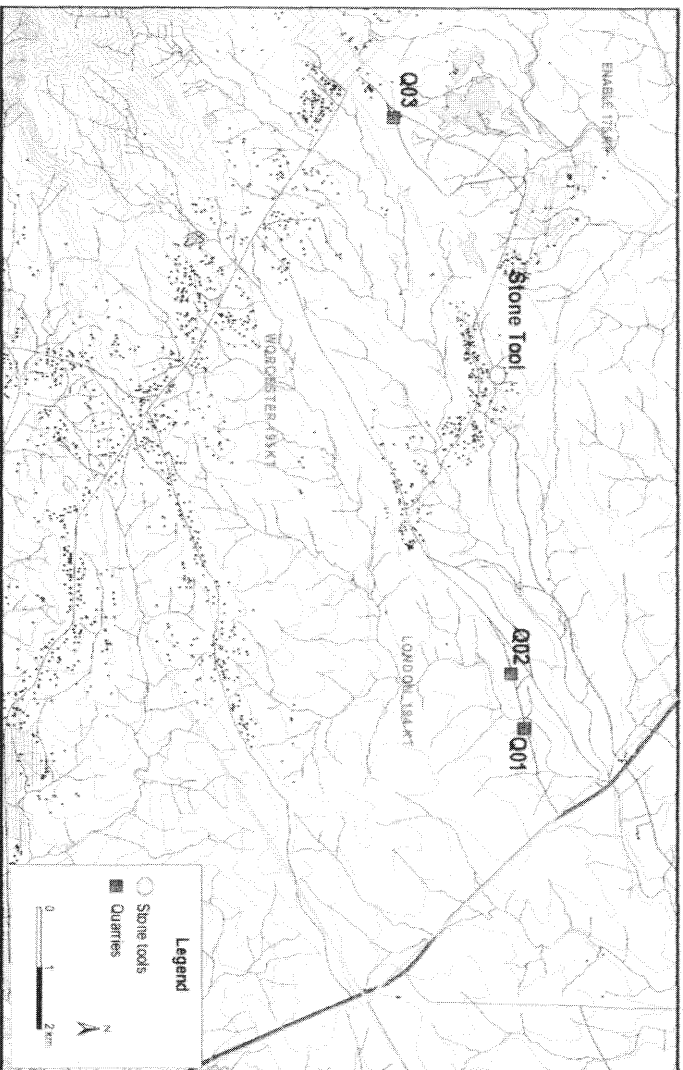


Figure 6- The project area on the farm Worcester 195KT near the eastern foothills of the Drakenberg in the Limpopo Province of South Africa. Only a few stone tools were observed where a new road running to a graveyard is planned

5.2 The stone tools in the project area

The Phase I HIA survey of the various areas and features to be developed on Worcester 195KT revealed the presence of a limited number of stone tools dating from the Middle Stone Age (200 000 years to 22 000 years ago) in the area where the new road running to the graveyard will be constructed. These stone tools were mostly manufactured from flakes and include points, scrapers and a possible *outlie ecaile*

The stone tools were geo-referenced and mapped (Figure 6, Table 1). The stone tools are also illustrated in Figure 5.

5.3 Possible impact of the development on the stone tools

It is possible that the stone tools may be affected when the new road is constructed to the graveyard.

5.4 The significance of the stone tools

The significance of the stone tools can be rated as follow:

- Only a limited number of stone tools were observed on the bank of the stream.
- The stone tools include common, well known types such as points and scrapers.
- Middle Stone Age sites in the Limpopo Province (called the Pietersburg industrial complex) are well presented occurs across the Limpopo Province.

The limited number of Middle Stone Age tools on the bank of the stream can therefore not be rated as outstanding significant.

Heritage resources	Coordinates	Context and description	Level of significance	Magnitude of impact
Stone tools	24° 17.322' 30° 33.261'	In an eroded spot along a stream where a new dirt road running to a graveyard will be built	LOW	MEDIUM-LOW
Quarry 01	24° 17.087' 30° 36.327'	South of London dirt road
Quarry 02	24° 17.223' 30° 35.838'	South of London dirt road
Quarry 03	24° 18.244' 30° 31.013'	On the farm Enable 175KT

5.5 Mitigating the stone tools

Various criteria considered indicated that the limited number of Middle Stone Age tools on the bank of the stream can not be rated as outstanding significant. It is therefore not necessary to apply any special mitigation measures for the few stone tools on the bank of the stream.

6 CONCLUSION AND RECOMMENDATIONS

Various development activities are planned for the Monareng community living on the farm Worcester 195KT in the foothills of the Drakensberg Mountains in the Limpopo Province of South Africa. These activities include: upgrading (graveling) of the dirt road running across the farm London 194KT to the village of Worcester; upgrading of the dirt road running across the farm Worcester 195KT to the graveyard on the same farm; fencing of a newly planned graveyard on the farm Worcester 195KT; utilizing three existing quarries, one located on the farm Enable 175KT and the other two along the London dirt road; building of a short dirt/gravel road to the graveyard on Worcester 195KT.

The Phase I HIA survey of the various development areas on Worcester 195KT revealed the presence of a limited number of stone tools dating from the Middle Stone Age (200 000 years to 22 000 years ago) in the project area where the new road running to the graveyard will be constructed. The Middle Stone Age artefacts were mostly manufactured from flakes derived from pebbles and include points, scrapers and a possible *outille ecaile*

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8 SPOKESPERSONS CONSULTED

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