



AFRICAN HERITAGE CONSULTANTS CC

2001/077745/23

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A. PHASE I CULTURAL HERITAGE RESOURCES IMPACT ASSESSMENT

(a) CULTURAL HERITAGE RESOURCES IMPACT ASSESSMENT OF PORTION 183 OF THE FARM OLIFANTSFONTEIN 410 JR EKURHULENI METROPOLITAN MUNICIPALITY GAUTENG PROVINCE

(b) REPORT COMPILED BY

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(c) DEVELOPER AND CONSULTANT INFORMATION

Developer:

Valumax Midrand (Pty) Ltd

Contact person: Helgardt Slabbert, P.O. Box 78772, Sandton, 2146.

Tel: 011 463 8862; Fax: 011 463 8838

Consultants:

LEAP Landscape Architect and Environmental Planner

Contact person: Dr. Gwen Theron, P.O. Box 13185, Hatfield, 0028

Tel: 012 343 2751; Fax: 086 606 6130

Date of report: 10 July 2014

B. EXECUTIVE SUMMARY

The proposed development site is flat highveld grassland with patches of exotic trees. The site is used for illegal dumping especially near Sebokeng. Near the middle of the site is a natural pan and nearby two Ndebele farm settlements. Both settlements date from the late 1940's and are important from a local heritage point of view.

Except for the two Ndebele farm workers settlements no other important cultural heritage resources or graves have been found on the proposed development site.

The two farm workers settlements are important and should be fully recorded in a Phase II cultural heritage resources impact assessment before an application can be made for demolishing permit.

If during construction any cultural heritage resources or graves are unearthed all work has to be stopped until the site has been inspected and mitigated by a cultural heritage practitioner.

C. TABLE OF CONTENTS

	Page
A. Title Page	01
B. Executive Summary	02
C. Table of Contents	03
D. Background Information on the Project	04
E. Background to the Archaeological History	05
F. Description of the Property or Affected Environment	10
G. Description of sites	11
H. Description of the Artefacts, Faunal, Botanical or other Finds and Features	14
I. Clear Description of Burial Grounds and Graves	14
J. Field Rating	14
K. Statement of Significance (Heritage Value)	14
L. Recommendations	14
M. Conclusions	13
N. Bibliography	15
O. Appendices	16
. Maps:	
• Consolidation diagram	17
• Google Map with detail	18
• Locality map	19

D. BACKGROUND INFORMATION ON PROJECT:

(a) Whether the report is part of a scoping report/EIA/HIA or not

Report is part of a EIA

(b) Type of development (e.g. low cost housing project, mining etc).

Housing development)

(c) Whether re-zoning and/or subdivision of land is involved.

Yes – current zoning is agricultural

(d) Developer and consultant and owner and name and contact details;

Prepared for: Developer and owner:

Applicant:

Valumax Midrand (Pty) Ltd

Contact person: Helgardt Slabbert, P.O. Box 78772, Sandton, 2146.

Tel: 011 463 8862; Fax: 011 463 8838

Landowner:

Summer Symphony Properties 264 CC

Contact person: Basie Strydom, P.O. Box 15; Olifantsfontein, 1065

Tel: 011 463 8862; Fax: 011 463 8838

Consultants contact details:

LEAP Landscape Architect and Environmental Planner

Contact person: Dr. Gwen Theron, P.O. Box 13185, Hatfield, 0028

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(e) Terms of Reference

The broad generic term *Cultural Heritage Resources* refers to any physical and spiritual property associated with past and present human use or occupation of the environment, cultural activities and history. The term includes sites, structures, places, natural features and material of paleontological, archaeological, historical, aesthetic, scientific, architectural,

religious, symbolic or traditional importance to specific individuals or groups, traditional systems of cultural practice, belief or social interaction.

(f) Legislative requirements of Act 25 of 1999.

Protected sites in terms of the National Heritage Resources Act, Act No. 25 of 1999

The following are the most important sites and objects protected by the National Heritage Act:

- Structures or parts of structures older than 60 years.
- Archaeological sites and objects.
- Paleontological sites.
- Meteorites.
- Ship wrecks.
- Burial grounds.
- Graves of victims of conflict.
- Public monuments and memorials.
- Structures, places and objects protected through the publication of notices in the Gazette and Provincial Gazette.
- Any other places or objects, which are considered to be of interest or of historical or cultural significance.
- Geological sites of scientific or cultural importance.
- Sites of significance relating to the history of slavery in South Africa.
- Objects to which oral traditions are attached.
- Sites of cultural significance or other value to a community or pattern of South African history

E. BACKGROUND TO THE ARCHAEOLOGY AND HISTORY OF THE AREA

Although it is the smallest (in size) of all, the Gauteng Province's heritage resources and history are among the best studied in the country. Evidence shows that the province has a wide spectrum of sites belonging to different time periods and cultural traditions. Gauteng houses some of the earliest heritage resources with its evolutionary history dating back to more than three (3) million years ago. The earliest evidence for stone tool manufacture and use in southern Africa is found within the Gauteng Province at sites in the 'Cradle of Humankind'. The 'Cradle of Humankind' and its environs have been awarded World Heritage Status by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), owing to the vast evidence from the discovery there of hominid fossils and associated cultural material that has made considerable contribution to the body of scientific knowledge in the subject of the origin of humanity and human evolution.

(i) Stone Age

The Stone Age is comprised of three (3) industries namely, the Early Stone Age (ESA), Middle Stone Age (MSA) and the Later Stone Age (LSA). The ESA dates to between approximately the last 2.5 million years to about 250 000 years ago. This is a period during which human ancestors began the usage of stone tools. The ESA tools were simple tools, which were, among other things, used to chop and butcher meat, de-skin animals and probably to smash animal bones to obtain bone marrow (Esterhuysen, 2007).

The ESA tool technology consists of two industries, namely the Oldowan Industry and Acheulean Industry. The Oldowan Industry is named after Olduvai Gorge in Tanzania where these tools were first discovered. This industry dates from approximately 2.5 million years ago to around 1.7 million years. The Oldowan Industry consists of very simple, crudely made core tools from which flakes are struck a couple of times. To date, there is no consensus amongst archaeologists as to which hominid species manufactured these artefacts. According to the evidence presented from Sterkfontein, it is believed that the first tool making hominids belonged to either an early species of *Homo* (our own genus) or an immediate ancestor, which is yet to be discovered here in South Africa (Esterhuysen, 2007).

At around 1.7 million years ago, it is thought that another hominid appeared on the landscape and is believed to have been responsible for manufacturing Acheulean tools. The Acheulean Industry lasted until about 250 000 years ago. Acheulean tools were more specialized tools than those of the earlier industry. They were shaped intentionally to carry out specific tasks, such as hacking and bashing to remove limbs from animals and marrow from bone. These duties were performed using the large sharp pointed artefacts known as hand axes. Cleavers, with their sharp, flat cutting edges were used to carry out more heavy duty butchering activities (Esterhuysen, 2007).

Although the specific sites that were investigated in this survey did not reveal any of the Stone Age artifacts, both the Oldowan and Acheulean Industries are represented in the archaeology of the Gauteng Province, especially from sites at Sterkfontein and Kromdraai. Deposits containing about 3000 ESA stone artifacts estimated to date to between 2 and 1.7 million years ago have been recovered from Sterkfontein. Research on ESA tools reveals that the advancement of tool technology from the simply flaked

Oldowan cores to the more refined Acheulean tools provide evidence about the changes associated with cognition and behaviour that preceded the emergence of *Homo Sapiens* between 250 000 and 150 000 years ago (Esterhuysen, 2007).

The MSA dates back to about 250 000 years ending around 25 000 years ago. In general, the MSA stone tools are smaller than those of the ESA. A variety of MSA tools include blades, flakes, scrapers and pointed tools that may have been put onto shafts or handles and used as spearheads. Between 70 000 and 60 000 years ago, new tool types appeared in South Africa known as segments and trapezoids. These tool types are referred to as backed tools from the

method of preparation. Residue analyses on the backed tools from South African MSA sites indicate that these tools were certainly used as spear heads (Wadley, 2007).

Stone tool technology in the LSA is observed to display rapid stylistic change compared to the slower pace of stylistic change in the MSA. The rapidity is more evident during the last 10 000 years. The LSA sequence includes informal small blade tradition from about 22 000 – 12 000 years ago, a scraper and adze-rich industry between 12 000 – 8 000 years ago, a backed tool and small scraper industry between 8 000 – 4 000 years and ending with a variable set of other industries thereafter (Wadley, 2007).

Adzes are thought to be wood working tools and may have also been used to make digging sticks and handles for tools. Scrapers are tools that are thought to have been used to prepare hides for clothing and manufacture of other leather items. Backed tools may have been used for cutting and as tips for arrows. Evidence from LSA sites in the greater Gauteng Province indicates poor representation during the mid-Holocene Period (6 000 – 4 000 years ago) (Wadley, 2007).

Along with the marked social transformation and technological innovation of the LSA people is the associated Rock Art panels that occur on cave walls or rock faces. Rock Art can be in the form of rock paintings or rock engravings, depending on the geology of a region. In the Magaliesberg valley of the Gauteng Province, dozens of engraved rocks can be seen today with the majority of the depictions being large game such as eland, rhinoceros, zebra and hartebeest (Pearce, 2007). However, no Rock Art has been found on the properties investigated.

(ii) Iron Age

A farming way of life was introduced to southern Africa about 2 000 years ago by Bantu-speaking people from the north. They brought with them crops such as sorghum, millet, ground beans and cow peas to be cultivated for the first time in this part of the world. Domestic animals such as cattle, sheep and goats were also part of the newly introduced farming way of life. Unlike the hunter-gatherers and herders who lived in temporary camps and led a nomadic way of life, farming necessitated sedentary life styles. Some features of the permanent settlements of these early mixed farming communities are houses, raised grain bins, underground storage pits and stock enclosure. An important feature of this time period was that they also made their own iron implements, hence the name Iron Age. The Iron Age has been divided into three periods, namely the Early Iron Age (EIA Period) (AD 200 – 900), the Middle Iron Age (MIA) (AD 900 – 1300) and the Late Iron Age (LIA) (AD 1300 – 1820) (Huffman, 2007). The investigation did not reveal any Iron Age features or artefacts in the study area.

The best known site of the EIA Period is Broederstroom that occurs adjacent to the Hartebeespoort Dam in the Magaliesberg valley. Dated to 350 – 600 AD the site represents the first phase of occupation in the region by Bantu-speaking farmers. The site is significant in that it provides the earliest tangible evidence for the practice of lobola in South Africa and proves that black farming people were living in this part of the world much earlier than previously assumed by academics (Huffman, 2007). EIA Period pottery has also been found at Jubilee Shelter in the Magaliesberg Mountain range. These potsherds are called Bambata and may date back to approximately 500 AD. For many years archaeologists thought that Bambata ware was only

associated with Khoi pastoralists. However, today most researchers agree that these potsherds were associated with early Bantu speaking farming communities.

Although there are some exceptions, Iron Age mixed farmers preferred to settle in river valleys where there was sufficient water for domestic use and fertile soils, which were cultivatable with their iron hoes. Several Iron Age settlements occur on the foothills of the Magaliesberg Range (Hall, 2007) of the Gauteng Province.

Historic period

This period is associated with the arrivals of the Voortrekkers and the establishment of farms and Pretoria. In the area of the vicinity of Sunderlands and the farm Olifantsfontein the most heritage sites are farm settlements and lime works.

Impact assessments in the area:

Site ID	Name	Classification	Farm	Latitude	Longitude	General
1127	Bridge: Olifantspruit	Historic	Olifantsfontein 402JR	-25.92195	28.22800	Old railway viaduct across Olifantspruit, constructed of stone. The keystone on both sides bear the inscription "IMR 1001" (Imperial Military Railways 1901)
1128	Charolais Farmstead	Historic	Olifantsfontein 402JR	-25.92694	28.22111	Old farmstead known Charolais.
1129	Lime Works Historic	Historic	Olifantsfontein 402 JR	-25.93	28.21472	Ruin of old lime Works
1130	Cemetery	Historic	Olifantsfontein 402 JR	-25.92972	28.21472	Can be associated with the old lime works
1380	Cemetery	Historic	Olifantsfontein 402 JR	-25.92417	28.22167	Cemetery contains as many as 10 graves.
1388	Sunlawns Farmstead	Historic	Olifantsfontein 402 JR	-25.93239	28.22944	Complex of farm buildings built in 1930 by Roley Cullinan.
2359	Cement Dam	Historic	Olifantsfontein 401 JR	25.92583	28.21500	
2360	Farmstead	Historic	Olifantsfontein 401 JR	-25.92639	28.21722	
3102	Cemetery	Historic	Sterkfontein 401 JR	-25.93744	28.26336	According to the 1:50 000 topocadastral map

						(4th edition, 1975), there are some graves located here.
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On a Portions 35, 39,48 and 128 of the remainder of Portion 34 of the farm Olifantsfontein 410 JR Küsel U.S. (2009) recorded the remains of a lime mine, a lime kiln, two cemeteries as well as the remains of the mine manager and workers houses. There are also the remains of a canal for irrigation purposes.

During prospecting for the NZASM railway line between Pretoria and Johannesburg in the 1890`s the high quality clay fields at Olifantsfontein were found. These were bought by Sir Thomas Cullinan who established the Consolidated Rand Brick Pottery and Lime Company which later became known as Conrand Company. At its inception in 1902 it had two operating plants, a brick and pipe manufacturing plant in Boksburg and a lime works and pottery works in Olifantsfontein.

The site under investigation is associated with the Cullinan family and their factories in Olifantsfontein where pottery and bricks were produced

The manufacture of art ceramics on an organized basis in South Africa began at a relatively late stage.

Although there are isolated references to potters who manufactured ceramics at the Cape in the seventeenth, eighteenth and nineteenth centuries, it was only in 1907 that the first organized attempt as such manufacture was set in motion by [Sir Thomas Cullinan](#). After the [Anglo-Boer War](#), Cullinan undertook to provide fireproof bricks for the Rand mines. In 1902 he purchased the farms Olifantsfontein, Kaalspruit and Sterkfontein between Pretoria and Johannesburg for their outstanding clay deposits. Besides the brickworks ([Conrand Company](#)), Cullinan was eager to operate a pottery, and in 1907 he began to lay out a potters' village next to the clay-pit at Olifantsfontein. Special down-draught kilns, workshops and stores were constructed, together with accommodation and sports facilities for potters.

Cullinan dispatched his son [Rowland Vivian Cullinan](#) to Stoke-on-Trent to study the techniques of pottery and requested [Harold Emery](#) of Stoke-on-Trent to assist with planning, the purchase of machinery and the recruitment of potters in England.

Between 1907 and 1914 Emery worked at Olifantsfontein together with about thirty English potters. The business was known as the "Transvaal Potteries".

The work produced at Olifantsfontein during this period was in essence English pottery. In 1914 the Transvaal Potteries had to close down because they were uneconomic and because the English artists were not happy in South Africa.

In 1914, too, an English potter, [John Adams](#), came to South Africa to take up a position as head of the art department at the Technical College in Durban. There he started a school of pottery.

Among Adams's students in the early twenties were [Audrey Frank](#), [Marjorie Johnstone](#), [Joan Methley](#), [Thelma Newlands](#) and [Gladys Short](#). Methley, Newlands and Short pursued their studies in England. Johnstone had meanwhile become friendly with Sir Thomas Cullinan's son Reginald, whom she was later to marry.

After completing their studies in England, Methley and Short started a pottery in Durban. The mediation of Johnstone led Reginald Cullinan to invite them to begin a pottery at Olifantsfontein. From 1925 Johnstone, Methley and Short worked together at Olifantsfontein, the studio being known as the "[Ceramic Studio](#)". Upon her marriage to Reginald Cullinan in 1926, Johnstone left the studio. In 1927 Audrey Frank joined the Ceramic Studio as did Thelma Newlands in 1928.

The Ceramic Studio produced a wide variety of decorative pots and utensils which were distributed throughout South Africa. In cooperation with the Natal potter [Mary Stainbank](#), a large number of statues were manufactured for private and public buildings. The [DEPARTMENT OF PUBLIC WORKS](#) commissioned tiled panels and works of art from the Ceramic Studio for the decoration of dozens of public buildings.

The Ceramic Studio became an artistic centre in the Transvaal and made a major contribution to educating the public of the time in the appreciation of high-quality indigenous ceramics.

Since the artists had close ties with England, they were strongly influenced by the thought of such individuals as William de Morgan and William Morris, as by the art potters of England, especially Bernard Leach. The Chinese Song period also had a great influence on the work of the Ceramic Studio.

The Studio's work was aesthetically successful with outstanding shapes and glazes and well-finished decoration. The Ceramic Studio marked the beginning of art ceramics in South Africa.

During the Second World War the activities of the Ceramic Studio declined. The studio was forced to close down and was bought out by the Cullinan Company. The work was now known as "[Linn Ware](#)"- Short returned to Durban and Methley acted as manager until 1952, In 1955 the pottery was finally closed down.

F. DESCRIPTION OF THE PROPERTY OF AFFECTED ENVIRONMENT

(a) Details of area surveyed:

- Full location Data for Province, Magisterial District/Local Authority and property (e.g. farm/erf) name and number etc.;

Portion 183 of the Farm Olifantsfontein 410 JR Ekurhuleni Metropolitan Municipality Gauteng Province

- Location map(s)/ orthophotos of the general area. These must include the map name and number (e.g. 3313 DC Bellville). Maps must include at least a 1:50 000 and (if) available also a 1:10 000 (i.e. most detail possible). Large scale colour satellite photos make a useful addition. Maps should be preferable at least A4 size.
 - 1/50 000 Map: Centurion 2528CC
 - Map attached page 19
- Either the Location Map or the Site Map must have the polygon of the area surveyed marked on it and full geographical co-ordinates for all relevant points and where applicable, indication of the area to be developed (footprint).

Attached page: 18& 19

(b) Description of the Methodology

All related literature on the area was studied and the database of the National Cultural History Museum visited. The area is mainly Highveld grassland of which a large portion was burned recently. Visibility was excellent. Here and there are patches of exotic trees. The area was searched on foot and by vehicle.

G. DESCRIPTION OF SITES MAPPED

The site lies near Sebokeng Township and illegal dumping takes place all along the rim of the site. The major portion of the site is highveld grassland with patches of exotic trees – see photographs.





Near the centre of the site is a natural pan with water and on the south eastern and south western side are two farm workers settlements each with a number of buildings – see photographs of pan



At S25° 58' 34.1" & E28° 10' 21.3" is the Mahlangu settlement consisting of a number of flat roofed and pitched roof houses. According to the inhabitants the Mahlangu family lives here since the late 1940's. The houses are typical of the period when grass (thatch) was replaced by corrugated iron as a roof covering. According to Mrs. Mahlangu there are no graves on the farm as the deceased were buried in the cemetery just north of the development area – see photographs



The second farm workers settlement is at S25° 58' 28.4 & E28° 10' 19.4". This settlement belongs to the Kutumelo family who live here since 1949. The houses are typical Ndebele flat roofed houses, but with no decorations – see photographs.



Except for the ruins of an old farm house of which little has survived, no other important structures or graves were found on the area. There is also no Stone Age material on the surface at the eroded areas and no graves.

The two Ndebele farm workers settlements will most probably be demolished during development.

H. DESCRIPTION OF THE ARTEFACTS, FAUNAL, BOTANICAL OR OTHER FINDS AND FEATURES

None

I. CLEAR DESCRIPTION OF BURIAL GROUNDS AND GRAVES

None

J. EVALUATION AND RATING (FIELD RATING)

The two Ndebele farm settlements are typical of farm workers settlements and are older the sixty years. The two sites are given a rating of General Protection B (Field rating IV B an shall be recorded before destruction (Medium)

K. STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

Very few sites of this period and of farm workers settlements have been recorded in the past and are important in demonstrating the principal characteristics of a particular class of South African cultural history.

L. RECOMMENDATIONS

Except for the two Ndebele farm workers settlements no other important cultural heritage resources or graves have been found on the proposed development site.

The two farm workers settlements are important and should be fully recorded in a Phase II cultural heritage resources impact assessment before an application can be made for demolishing permit.

If during construction any cultural heritage resources or graves are unearthed all work has to be stopped until the site has been inspected and mitigated by a cultural heritage practitioner.

M. CONCLUSION

The only important cultural heritage resources found on the proposed development site are the two Ndebele farm workers settlements which should be fully recorded before they can be demolished.

N. BIBLIOGRAPHY

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O. APPENDICES

- Consolidation diagram page 17
- Google Map with detail page 18
- Locality Map page 19

CONSOLIDATION DIAGRAM

OFFICE COPY

Portion 183 of the farm
OLIFANTSFONTEIN No. 410-JR

S.G. No.
7749/2008

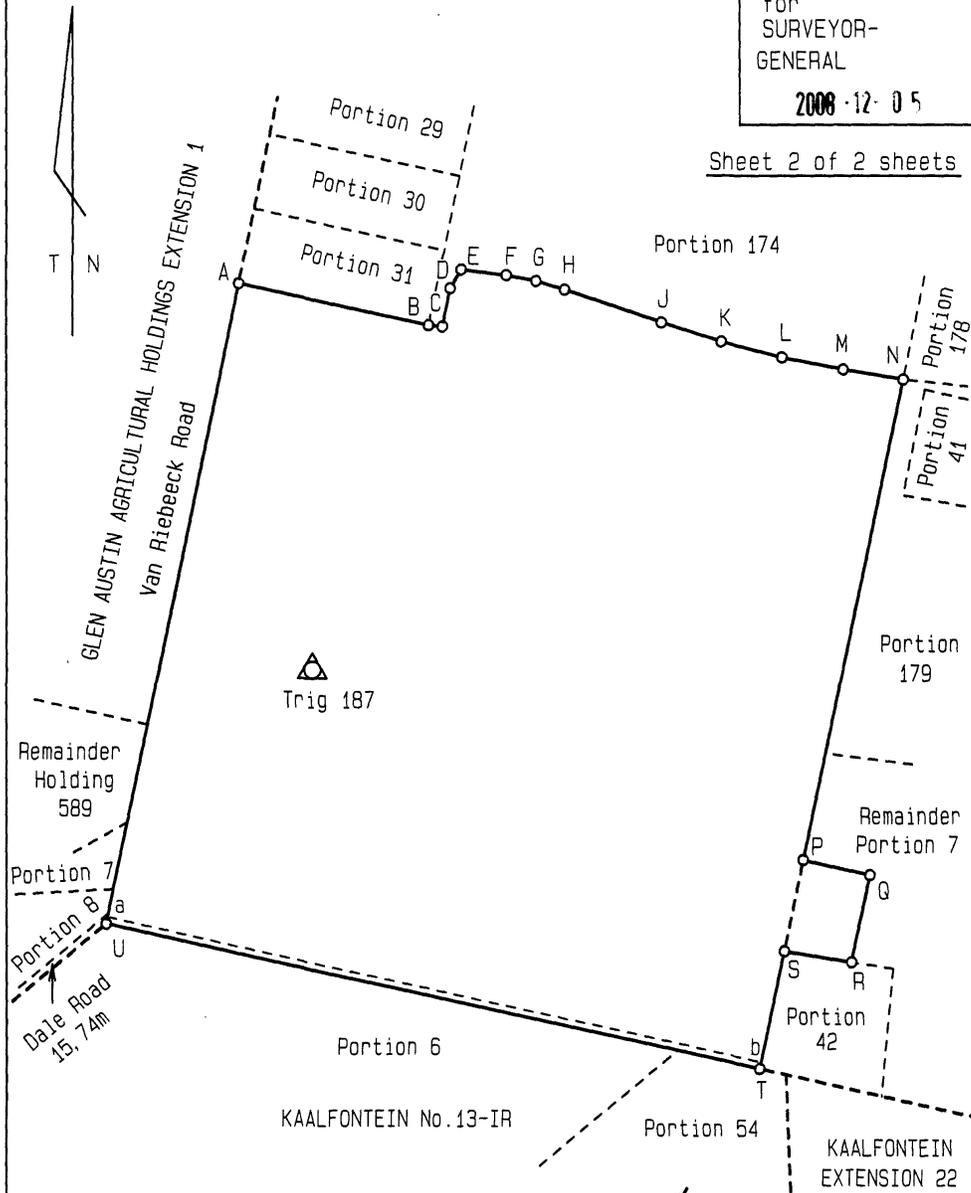
Approved



for
SURVEYOR-
GENERAL

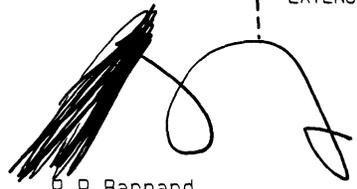
2008-12-05

Sheet 2 of 2 sheets



Scale 1:15 000

Surveyed in September and
October 2008 by me


P R Barnard
Professional Land Surveyor
Registration Number PLS - 0025

