HERITAGE IMPACT ASSESSMENT REPORT

RESIDENTIAL DEVELOPMENT ROODEPOORT 744 LS PORT. 4 & LANGGENOEG 745 LS PORT. 1 POLOKWANE, LIMPOPO

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1. INTRODUCTION AND TERMS OF REFERENCE

The application constitutes an activity, which may potentially be harmful to heritage resources that may occur in the demarcated area. The National Heritage Resources Act (NHRA - Act No. 25 of 1999) protects all structures and features older than 60 years (section 34), archaeological sites and material (section 35) and graves and burial sites (section 36). In order to comply with the legislation, the Applicant requires information on the heritage resources, and their significance that may occur in the demarcated area. This will enable the Applicant to take pro-active measures to limit the adverse effects that the development could have on such heritage resources.

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(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

Burial grounds and graves

Section 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

> **(b)** 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.

Culture resource management

Section **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 natural forces, 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, …"

The author was contracted to undertake a heritage scoping survey of the farms Roodepoort 744 LS Portion 4 and Langgenoeg 745 LS Portion 1 (Refer to map, South Africa 1:50 000 2329 CD). The aim was to determine the presence or not of heritage resources such as archaeological and historical sites and features, graves and places of religious and cultural significance, and to submit appropriate recommendations with regard to the cultural resources management measures that may be required at affected sites / features.

The report thus provides an overview of the heritage resources, which may occur in the demarcated area where development is intended. The significance of the heritage resources was assessed in terms of criteria defined in the methodology section. The impact of the proposed development on these resources is indicated and the report recommends mitigation measures that should be implemented to minimize the adverse impact of the proposed development on these heritage resources.

2. METHOD

2.1 Sources of information

The source of information was primarily the field reconnaissance and referenced literary sources.

A pedestrian survey of selected areas and a drive through by vehicle of the demarcated area was undertaken, during which standard methods of observation were applied. 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 heritage remains were recorded by means of a GPS (Garmin 60). Heritage material and the general conditions on the terrain were photographed with a Panasonic Lumix Digital camera.

2.2 Limitations

The scoping survey was thorough, but limitations were experienced due to the fact that archaeological sites are subterranean and only visible when disturbed. Vegetation was dense and visibility limited in some areas. It is thus possible that sites have been missed.

2.3 Categories of significance

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

No significance: sites that do not require mitigation.
Low significance: sites that *may* require mitigation.
Medium significance: sites that require mitigation.
High significance: sites that must not be disturbed at all.

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 crucial aspect in determining 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. Many aspects 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.

2.4 Terminology

Early Stone Age: Predominantly the Acheulean hand axe industry complex dating to ± 1 Myr – 250 000 yrs. before present.

Middle Stone Age: Various lithic industries in SA dating from ± 250 000 yrs. - 30 000 yrs. before present.

Late Stone Age: The period from ± 30 000 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.*

Historical: Mainly cultural remains of western influence and settlement from AD 1652 onwards – mostly structures older than 60 years in terms of Section 34 of the NHRA.

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.

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.

3. BASELINE ARCHAEOLOGICAL INFORMATION

In 1980 Loubser (1981) undertook research in the area immediately south of Polokwane/Pietersburg for his Master's thesis. He established that successive layers of Ndebele speaking groups dominated the Pietersburg plateau from the 17th century up to the Voortrekker period of the mid 19th century.

Loubser identified three types or groups of stone walled sites. Group I sites are situated only on hilltops. Each site consists of a multiplicity of discontinuous walls, forming terraces, which surround an area of relatively large enclosures in the centre. Group II sites are located at the base of hills, or on gradual rises between valleys, and they generally face north. Each unit consists of a perimeter wall around a corridor, which leads to a central enclosure surrounded by smaller ones. Loubser also notes that vast areas of ash deposit and dense patches of vegetation are diagnostic of Group II sites. Group III sites are imploded and haphazard versions of Group II sites. The perimeter walls of Group III sites are scalloped and linked by straight walls to a series of central enclosures.

Recent research by Huffman explores the origin of stonewalling found among Sotho-Tswana and Ndebele speaking communities of the Iron Age. The oldest known walling following the Central Cattle Pattern occurs in the midlands of KwaZulu-Natal. Dating from the 14th to 16th centuries, **Moor Park** walling partially served defensive purposes. Located on spurs and the ends of hills, stonewalls cut the settlement off from the remaining terrain. Perimeter walls enclose about two-thirds of the settlement, leaving the back free. Low hut platforms supported beehive huts in the residential zone behind cattle enclosures.

Of all the organizational principles of the Central Cattle Pattern, Moor Park appears to have emphasized the front/back axis.

Adverse climatic conditions occurred in the early 17th century, and by this time populations had expanded. As a result, it appears, some Nguni-speaking people left KwaZulu-Natal and moved up onto the plateau where they built walls on top of defensive hilltops similar to Moor Park. These Trans-vaal Ndebele built stonewalled settlements throughout the Waterberg in the 17th to 18th centuries. Named after a prominent hill in the Lapalala drainage, **Melora** walling incorporates beehive huts at the back of small terrace platforms. Defensive walling on Malora Hill itself follows the edge of the hilltop, surrounding the entire settlement, while the sparsely decorated pottery includes rim notching and punctates. Melora walling in the Waterberg thus derives from Moor Park.

Some Melora Nguni appear to have moved east to the Polokwane area because characteristic walling stands in the saddle of Bambo Hill at the Bakone Malapa Museum. Low residential terraces, cattle track ways, and the front/back orientation place this site in the Moor Park cluster. Significantly, the front/back arrangement contrasts markedly with settlements below at the base of the hill (Group II) and shows that Melora Nguni once lived here. Dated to the early 17th century, Melora settlements represent the second Nguni movement up onto the interior plateau. This early movement appears to have predated oral history, and we cannot yet identify their descendents.

Koni people are associated with the extensive Badfontein type of walling found along the Mpumalanga escarpment, more or less contemporary with Melora. Badfontein walling emphasizes the centre/side axis of the Central Cattle Pattern expressed through concentric circles: the inner circle encompassed cattle, the next marked the men's court, and the outer ring the zone of houses.

Rock engravings in the same area depict this settlement pattern. Associated engravings, terrace walls, cattle lanes and circular settlements extend over an enormous area along the escarpment south of Lydenburg. Oral traditions place Koni in this escarpment area before the Pedi, and so some walled settlements must first date before AD 1650, perhaps as early as AD 1600 and the second dispersal. The centre/side layout pattern indicates that they were of Langa origin from northern KwaZulu-Natal. Later, as the associated ceramics show, they became allied to the Pedi. These Badfontein Koni probably chose the escarpment because it is part of a mist belt that would have offered some relief to dry conditions during the Little Ice Age.

Based on such datable phenomena as initiation cycles, other northern and southern groups are thought to have left KwaZulu-Natal between about AD 1630 and 1670. These dates, of course, are tentative. At about the same time, around AD 1700, cool, very dry conditions prevailed throughout the subcontinent. Indeed, according to climatic data, this was the worst time in the Little Ice Age. Dated with remarkable precision, this event is so close to the historical dating that the severe conditions were the most likely reason for the third set of movements. Although the reason may have been the same, there were so many small groups at different times that a coordinated movement was unlikely.

The history of many Nguni-derived groups on the plateau today is accessible to oral traditions. Generally, those who live north of the Springbok Flats are known collectively as Northern (Transvaal) Ndebele and those below as Southern (Transvaal) Ndebele. Generally again, many northern groups claim Langa as a legendary leader and many of those to the south claim Musi. If they retained the Nguni language, they are called Ndebele, while those who adopted Sotho-Tswana are Koni (Sotho-Tswana for *Nguni*).

The third set of movements also included various groups that claim Langa as a legendary leader. Most of these Langa people were supposed to have followed the escarpment north through Swaziland to the Leydsdorp area in the Limpopo Province low-veld before turning west to climb onto the plateau. Thus, there was a different Langa route out of KwaZulu-Natal.

The Ledwaba are an example of Langa Ndebele who followed the Langa route. The Ledwaba settled in the Polokwane (Pietersburg) district in about AD 1840 and found that the Sebietela (Musi) to the south and the Bakoni ba Matlala (Langa) to the north had preceded them. The Matlala had also followed the Langa route.

While living in the northeastern low-veld, some members of the Langa cluster, including the Ledwaba, were greatly influenced by the Zimbabwe culture in general and the Lovedu in particular. Loubser (1994) interprets *Letaba* pottery found on Group II sites, characteristic of the low-veld, as evidence for this influence in Ledwaba sites.

Apart from the above, 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:	Kwale branch-	*Mzonjani facies*	AD 450 – 750
	Moloko branch-	*Icon facies*	AD 1300 - 1500
Kalundu Tradition:	Happy Rest sub-branch -	*Doornkop facies*	AD 750 - 1000
		Eiland facies	AD 1000 – 1300

Klingbeil facies AD 1000 - 1200
Letaba facies AD 1600 - 1840

4. ARCHAEOLOGICAL AND HISTORICAL REMAINS

4.1 Stone Age Remains

MSA Flakes are scattered over the site in low densities, however, one erosion gully, at the old earth dam contains slightly higher concentrations of flakes. This concentration was exposed by erosion - removing the topsoil and concentrating the material.

Co-ordinates: **Site 9**. *S23º 59' 06.2" E29º 26' 36.1"*


Fig 1. View of erosion area.


Fig 2. MSA flakes.

4.2 Iron Age Remains

A number of Iron Age sites exist in the area. Most of them are heavily disturbed and of low significance. Two Stonewalled sites were recorded, but due to the disturbances, it is not possible to discern if it is indeed two different sites, or if it is in fact one large site. In addition, a number of open areas with some pottery fragments were recorded, which probably belong to an earlier period that predates the use of stone as building material.

Co-ordinates: **Site 2**. *S23º 59' 10.7" E29º 26' 14.8"*
This is a stone walled site, which is located between two small hills; it has been robbed and the stones used in the construction of recent structures. Because of the disturbances in the area, it is not clear if it perhaps forms part of Site 4.

Co-ordinates: **Site 4**. *S23º 59' 06.8" E29º 26' 11.3"*
This site is close to the above site. The walling is in a better condition, but it has also been disturbed; part of the site runs into the adjacent property, where it is destroyed because of earthworks.

It could not be determined whether Sites 2 & 4 consists of Group I, II, or III walling.

Co-ordinates: **Site 5**. *S23º 58' 52.0" E29º 26' 09.0"*
This site was identified due to a small concentration of pottery fragments close to an old termite mound; it is also close to the following site 6.

Co-ordinates: **Site 6**. *S23º 58' 41.3" E29º 26' 16.7"*

This is an open area containing a low concentration of pottery fragments, the possibility exist of a larger subterranean concentration of cultural material, and it probably pre-dates stonewalling in the area.

Co-ordinates: **Site 8**. *S23º 59' 11.5" E29º 26' 47.2"*
This site is similar to the above site and is probably a site that pre-dates stonewalling in the area site with a higher concentration of remains underground.

Co-ordinates: **Site 10**. *S23º 58' 45.9" E29º 26' 28.4"*
This is also similar to the previous two sites and is most likely an earlier occupation.

Site 6, 8 and 10 could belong to either the *Eiland* or the *Icon* facies of the Iron Age.

Fig 3. Stonewall foundation at Site 2.

Fig 4. Site 2. Monoliths at an entrance.

Fig 5. Site 4 - Stone walls.

Fig 6. Walling at Site 4.

Fig 7. Site 5. Pottery fragments.

Fig 8. Site 6. Open area with pottery.

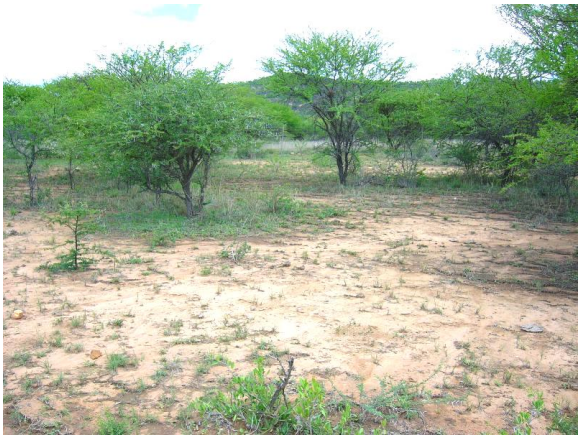

Fig 9. Site 8. Open area with pottery.

Fig 10. Site 10. Open area with pottery.

4.3 Recent Historical Remains

Some historical remains were noted on the site; the original farmhouse is most likely over sixty years old and thus is classified as historical. There is also circular foundation remains in one area and a rectangular stone structure that is also classified as historical.

Co-ordinates: **Site 1**. *S23º 59' 22.5" E29º 26' 35.1"*
This site consists of at least three circular stone foundations; due to the construction method, it is clearly not archaeological and is probably a farm worker's homestead.

Co-ordinates: **Site 3**. *S23º 59' 06.7" E29º 26' 15.5"*
Historical stone remains, in the vicinity of Iron Age site 2. Probably a farm worker's homestead.

Co-ordinates: **Site 7**. *S23º 58' 21.8" E29º 26' 17.7"*
This is the old farmhouse, it still has some wooden window frames and wooden door frames, and from the roof construction, it is deducted that the original structure is older than 60 years. The size of the roofing corrugated iron appears to be manufactured pre-ISCOR period which places it within the historically protected time period.

Fig 11. Site 1. Circular foundation.

Fig 12. Site 3. Rectangular structure.

Fig 13. Site 7. Old farmhouse. Note roof structure indicating age older than 60 years.

Fig 14. Site 7. Wooden doorframe.

4.4 Graves

There were no formal graves noted on the terrain, however there is a possibility that the Iron Age sites could contain unmarked burials. The probability that Iron Age archaeological sites may contain unmarked burials is >80%.

5. DISCUSSION

The heritage resources on the terrain consist of Middle Stone Age, Iron Age and Historical remains. None of these have a high significance rating. All have been impacted on and are no longer conservation worthy. However, the Stonewalled Iron Age remains have significant scientific value to understand the distribution pattern and time depth on this type of walling. Their relationship and cultural affinity to nearby archaeological sites such as Bambo Hill at the Bakone Malapa Museum must also be determined. The earlier sites that pre-date stonewalling (Sites 6, 8 and 10) must also be assessed in order to accurately identify the period and their position within the cultural sequence of the region. In addition the archaeological sites probably contain human burials.

6. MANAGEMENT AND MITIGATION MEASURES

Stone Age
The Stone Age material is of **no significance**; due to the low concentrations, it is not possible to do any further research.

Iron Age
Site 2 and 4 are situated next to the two small hills on the property, these are Later Stone walled sites and of **medium significance**, it is recommended that this area not be developed as the property is large and there are other areas that can be used.

The other Iron Age remains are of very low concentrations, I was not able to ascertain which group they belong to, it is advised that monitoring should be done during development and that if remains of cultural importance are unearthed, mitigation measures will need to be instituted, possibly resulting in Phase 2 assessment.

Historical
The historical remains are of no significance, but due to the fact that site 3, is on an Iron Age site it should be left *in situ*. The farmhouse is protected in terms of NHRA Act 25 of 1999. This prevents altering or destroying the structure without a permit. It is recommended that the house remain *in situ* or if development cannot accommodate this recommendation, a Phase 2 historical assessment of the structure must take place to comply with legal requirements.

7. RECOMMENDATIONS

1. Development should exclude Iron Age Sites and the farmhouse.
2. If the above is not viable, phase 2 assessments of the sites will need to be conducted, especially with regard to Site 2, 4 and the farmhouse.

Should the recommendations be followed, we have no objections to the development taking place.

8. REFERENCES

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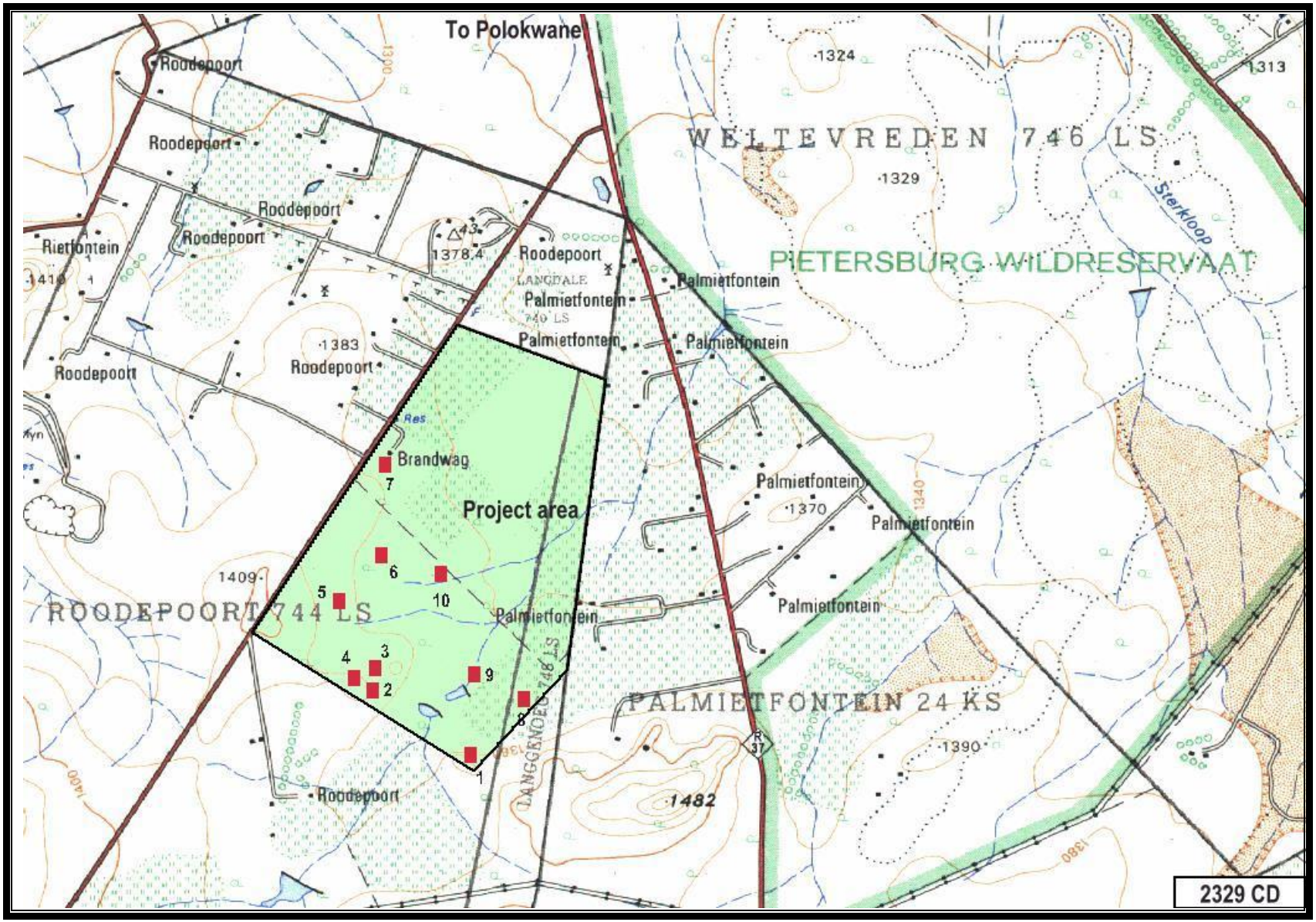

Locality map