A SURVEY OF CULTURAL RESOURCES IN THE PROPOSED PRETORIA EAST WASTE DUMP SITE

For:

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SUMMARY

A survey of cultural resources in the proposed Pretoria East waste dump site

A survey of the area was undertaken with the aim of identifying all objects, features and structures of archaeological, historical and cultural importance. Although a number of features were identified in the area, only one site of Late Iron Age dating, which can be viewed as of sufficient importance to state that the proposed development will have a negative impact, was located. It is suggested that this site be researched and documented in full before the proposed development takes place.

OPSOMMING

'n Opname van kultuurhulpbronne in die voorgestelde Pretoria-oos stortingsterrein

'n Opname van die gebied is gedoen met die doel om alle voorwerpe, verskynsels en strukture van argeologiese, historiese en kulturele belang te identifiseer. Alhoewel 'n aantal verskynsels in die omgewing geïdentifiseer is, is daar slegs een Laat Ysterydperk terrein geïdentifiseer wat as belangrik geevalueer word om te kan aandui dat die beplande ontwikkeling 'n groot impak daarop gaan hê. Daar word aan die hand gedoen dat hierdie terrein in detail nagevors en gedokumenteer word alvorens die beplande ontwikkeling plaasvind.

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1. AIMS OF THE SURVEY

This survey aimed to locate, identify, evaluate and document the sites, objects and structures of archaeological, historical and cultural importance within the section of the farm Hatherley which is to be developed as a waste dump site. The assignment was carried out on the request of Van Wyk & Louw Consulting Engineers.

2. CONDITIONS AND ASSUMPTIONS

The following aspects have direct bearing on the survey and the resulting report:

- For this survey cultural resources are taken to include all non-physical and physical man-made as well as natural occurrences that are associated with human activity. This includes all sites, structures and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.
- The significance of the site and artifacts is determined by means of their historical, social, aesthetic and scientific values in relation to their uniqueness, condition of preservation and research potential. It must be kept in mind that these various aspects are not mutually exclusive and that the evaluation of any site is done with reference to any number of these.
- It is not the purpose of this report to write a history of the area, based on the results of the survey, but rather to list and evaluate what was found.
- All recommendations are made with reference to the **National Monuments Act**, **Act 28 of 1969**, as amended.

3. METHODOLOGY

3.1 Preliminary investigation

3.1.1 Survey of the literature

A survey of all relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. In this regard various anthropological, archaeological and historical sources were consulted -see list of references.

3.1.2 Data sources

The **Archaeological Data Recording Centre** (ADRC), housed at the National Cultural History Museum in Pretoria, was also consulted.

3.1.3 Other sources

In addition, the relevant topocadastral and other maps were studied.

3.2 Field survey

The next step was to vi sit the area to be surveyed. The survey team was orientated on site by Mr Danie Joubert of Van Wyk & Louw Consulting Engineers, in relation to the development plan, beacons and borders of the survey area, security, etc.

The survey was conducted according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. This was done by dividing the whole area into blocks, making use of natural and man-made topographical elements. Within each block, all areas considered to have a potential for human use were investigated. Special attention was given to outcrops, and unnatural topographical occurrences such as trenches, holes and clusters of exotic (and indigenous) trees were also investigated.

3.3 Documentation

All sites, objects and structures identified were documented according to the general standard accepted by the archaeological profession. The specific coordinates of the locality were determined by means of the **Global Positioning System** (GPS)¹ converted to the South African Co-ordinate System and plotted on a map. This information was added to the description to facilitate the identification of each locality.

3.4 Presentation of the information

In discussing the results of the survey, a chronological rather than a geographical

¹ According to the manufacturer a certain deviation may be expected for each reading. Care was, however, taken to obtain as accurate a reading as possible, and then correlate it with reference to the physical environment before plotting it on the map.

approach is taken. This presents an overview of human occupation and landuse in the area to the reader and thus helps to better understand and facilitate the potential impact of the development.

4. DESCRIPTION OF THE AREA SURVEYED

The area surveyed is located on sections of the farms Hatherley 331JR and Pienaarspoort 339JR in the Pretoria district of Gauteng Province.

The geology of the area is made up of shalle of the Magaliesberg Formation of the Pretoria Group of the Transvaal Sequence. Some later intrusions of diabase occurs as outcrops in the area.

The vegetation of the area is classified as Bankenveld (Acocks 1975:99). This is open savanna with Acacia caffra and Celtis africana trees dominating. A large variety of grass species occurs. Acocks indicates that intensive cultivation of this type of veld by Iron Age people resulted in Hyparrhenia hirta (blougras/steekgras) becoming very dominant in the disturbed areas. The next veld type, Sourish Mixed Bushveld (Acocks 1975:48), occurs just to the north of this and the change-over is sometimes indistinct. This latter veldtype is sometimes found in the Bankenveld on rocky outcrops. It includes Acacia karroo, Acacia caffra and Rhus sp as some of the principle trees, with Cymbopogon plurinades and Themeda trianda as dominant grasses.

5. DISCUSSION

In this section, the results of the survey are presented.

5.1 No Early Stone Age² material was recovered during the survey.

5.2 5.2 From the survey it is clear that **Middle Stone Age**³ artifacts are present in small numbers all over the area.

<u>Description</u>: A few Middle Stone age tools, flakes and cores. The material used in the manufacture of these artifacts are mostly hornfels, quarts and quartsite, and in all probability was imported into the area for this purpose. Typically, these artifacts were not located in concentrations signifying activity areas, but rather as single occurrences.

² Early Stone Age: 1 500 000 (and older) to 150 000 years ago.

³ Middle Stone Age: 150 000 to 30 000 (and younger) years ago.

Location: Hatherley 331JR & Pienaarspoort 339JR

<u>Discussion</u>: Due to the fact that large parts of the area have been disturbed by Iron Age settlement, as well as by recent agricultural and roadmaking activities, it is postulated that these artifacts were not found in primary context. Future development will therefore not add much negative impact to these already displaced artifacts.

5.3 No Late Stone Age⁴ artifacts were found, though they are known to occur to the south, on the farm Donkerhoek (365JR).

5.4 No Early Iron Age⁵ sites/artifacts were found.

5.5 The most important find in the area dates to the later part of the **Late Iron Age**⁶ and can be associated with the Manala section of the Southern Ndebele, the members of whom are known to have been living in this area during historical times (cf Van Warmelo 1930). These sites can be dated to the period c. AD 1650 - 1820.

<u>Description</u>: A Late Iron Age site, indicated by extensive stone walling. A number of artifacts, including grindstones, rubbing stones, stone hammers and a few pieces of pottery were also found here. The site consists of at least four separate settlement units, of which a very large segment is located in the area which will be impacted upon by the proposed development. Some of it falls outside the area to be developed. However, the site should be viewed as a unit, as it might have resorted under the authority of a single headman or subchief.

<u>Location</u>: Hatherley 331JR North western extremity:

GPS: S 25° 44' 11.4" (X 2847546.101)

E 28° 24' 05.4" (Y 60055.904)

South eastern extremity

GPS: S 25° 44' 32.0" (X 2848177.775) E 28° 24' 25.0" (Y 59506.862)

<u>Discussion</u>: All archaeological sites are important when viewed as non renewable cultural resources, and are irreplaceable archaeological data bases. If threatened in any way, they should be thoroughly investigated: surveyed, excavated and the results published.

Other similar sites are known in this area, eg. on Zwartkoppies 364JR. The significance of the site, therefore, also depends upon its association with these other sites. However,

⁴ Late Stone Age: 30 000 to 2 000 (and younger) years ago.

⁵ Early Iron Age: 1 800 to 800 years ago.

⁶ Late Iron Age: 800 to 100 years ago.

their relationship to each other is not yet well understood. Development of this waste dump and destruction of the site will therefore have a negative impact, not only on this particular site itself, but also in understanding the other sites. It is therefore crucial that the site be studied and documented in full before development takes place.

As the site can be linked to a historically known group of people, it might also have some emotional significance.

5.6 Settlement of the area during historical times is indicated by a large number of fences, roads and a plantation of bluegum and pine trees, but is judged not to be of significance. A more significant site, though not within the borders of the survey area, is the remains of a possible farmstead.

<u>Description</u>: The remains of a possible farmstead consist of a series of bluegum trees, a well for water and some smaller pieces of artifacts such as fencing poles and building rubble.

Location: Hatherley 331JR

GPS: S 25° 43' 56.1" (X 2847074.563) E 28° 24' 11.1" (Y 59899.152)

<u>Discussion</u>: From our briefing, we are led to believe that this latter site actually falls outside of the area to be developed and that the developement would therefore not impact upon it. However, it is mentioned here as we do not known the location of planned access routes to the waste dump site, which might impact upon it.

6. CONCLUSIONS AND RECOMMENDATIONS

One site that is definately being threatend by the proposed development was identified. It is judged to be of high scientific significance and it is therefore recommend that money be made available to document it as soon as possible. The Anthropological and Archaeological Section of the National Cultural History Museum would be willing to undertake such a project on a contract basis.

Archaeological material usually occurs below ground, making its detection very difficult. We recommend that, should the development continue, the developers be alerted to this fact. If any indication of archaeological material is found, the relevant authorities should be contacted immediately.

7. REFERENCES

7.1 Unpublished sources

7.1.1 Data base:

Archaeological Data Recording Centre, (former) Tvl section, National Cultural History Museum, Pretoria.

7.2 Published sources

7.2.1 Books and journals

Acocks, J.P.H. 1975. Veld types of South Africa. Memoirs of the Botanical

Sur vey of Sou th Afri ca, No. 40. Pret oria Bot anic Res earc h Inst itut

Holm, S.E. 1966. Bibliography of South African Pre- and Protohistoric

arc hae olo gy. Pret oria : J.L. van Sch aik.

Mason, R. 1962. Prehistory of the Transvaal. Johannesburg: Witwatersrand

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Van Riet Lowe, C. n.d. The distribution of Prehistoric rock engravings and
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Van Warmelo, N.J. 1930. Transvaal Ndebele Texts. Ethnological Publications No.
             1. Pretoria: Government Printer.
Van Warmelo, N.J. 1977. Anthropology of Southern Africa in Periodicals to
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7.2.2 Maps1:50 000 Topocadastral map - 2528 CB Silverton1:50 000 Geological map - 2528 CB Silverton

8. PROJECT TEAM

J A van Schalkwyk (project leader) - survey and report A Pelser - survey S Smith - language editing