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24 August 2022

Attention: Mr Elijah Katsetse

SAHRA Case Officer North West Province

South African Heritage Resources Agency (SAHRA)

Dear Ms Khumalo

<u>Application for exemption from a Heritage Impact Assessment for the Proposed Development Of The Rustenburg Medical Waste Treatment Facility On Portion 1 Of Erf 2191, Rustenburg Extension 9</u>

1. Introduction

Beyond Heritage was appointed by Prism EMS to provide an assessment of the possible impacts on heritage resources by the proposed development of the Rustenburg medical waste treatment facility located on Portion 1 Of Erf 2191, Rustenburg Extension 9, North West Province (Figure 1-3). The assessment consists of a desktop study.

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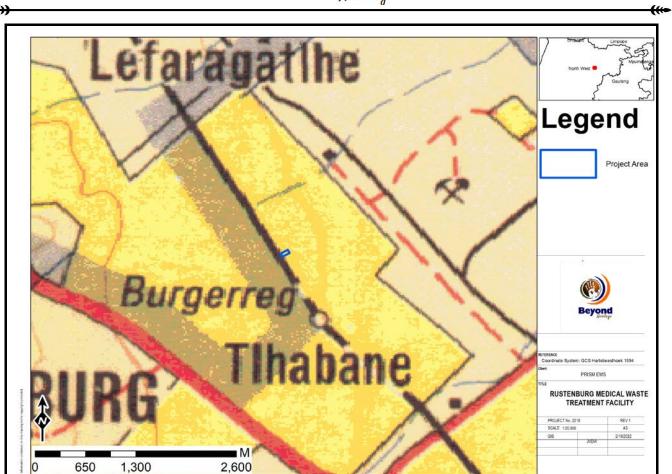


Figure 1. Regional setting of the Project (1: 250 000 topographical map).

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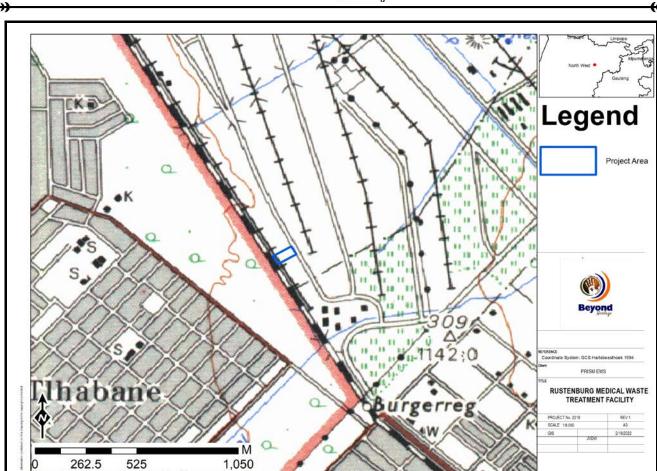


Figure 2. Local setting of the Project (1: 50 000 topographical map).

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Figure 3. Aerial image of the study area.

2. Project detail

The proposed Rustenburg Medical Waste Treatment Facility will utilize Gient Heating Industry Autoclave Technology. As part of this, medical waste will be loaded by autoclave bins into the Autoclave, and then sterilized by saturated steam at 134°C (273°F) and 0.20Mpa (29Psi) for approximately 30 minutes. This will result in effective sterilization. Sterilized material will then be shredded and disposed as municipal waste, as the process achieves the necessary microbial inactivation 6 log10 (99.9999%)

3. The Heritage Character of the Study area

3.1. Literature review

A brief survey of available literature was conducted to extract data and information on the area in question to provide general heritage context into which the development would be set. This literature search included published material, unpublished commercial reports, and online material, including reports sourced from the South African Heritage Resources Information System (SAHRIS).

3.2. Background to the general area

The archaeological record for the greater study area consists of the Stone Age and Iron Age.

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3.2.1. Stone Age

South Africa has a long and complex Stone Age sequence of more than 2 million years. The broad sequence includes the Later Stone Age, the Middle Stone Age and the Earlier Stone Age. Each of these phases contain sub-phases or industrial complexes, and within these we can expect regional variation regarding characteristics and time ranges. The three main phases can be divided as follows;

- * Later Stone Age; associated with Khoi and San societies and their immediate predecessors. Recently to ~30 thousand years ago
- * Middle Stone Age; associated with Homo sapiens and archaic modern humans. 30-300 thousand years ago.
- * Earlier Stone Age (ESA); associated with early Homo groups such as Homo habilis and Homo erectus. 400 000-> 2 million years ago.

The ESA is represented in the area by the Wonderboom site on the southern slopes of the Magaliesberg north of Pretoria. This site is characterised by numerous cleavers, hand axes, cores and flakes (Mason, 1958). The nearby Jubilee shelter has been excavated and provides a record from the Late Pleistocene to the 7th Century AD (Turner, 1986), an extended cultural sequence with assemblages' characteristic of the Middle Stone Age, Early Later Stone Age and Later Stone Age including assemblages from the Oakhurst and Wilton industries (Wadley, 1986). The Jubilee shelter provides evidence of hunter–gatherer occupation during three phases of agro pastoralist contact, beginning in 225 AD and characterised by cooperative contact, prior to the hunter-gatherers being either assimilated or dispersed to other areas (Wadley, 1996).

3.2.2. The Iron Age

The Iron Age as a whole represents the spread of Bantu speaking people and includes both the pre-Historic and Historic periods. It can be divided into three distinct periods:

- The Early Iron Age: Most of the first millennium AD.
- The Middle Iron Age: 10th to 13th centuries AD
- The Late Iron Age: 14th century to colonial period.

There are no signs of Early Iron Age remains in the immediate vicinity of the study area (Bergh 1999: 4-6). There are however signs that the present-day Rustenburg is located in an area that used to be a large Late Iron Age (1000-1800) terrain. (Bergh 1999: 7)

Since the beginning of the 19th century, there was a presence of Fokeng, Kwena and Tuang settlements in the present-day Rustenburg area. The Fokeng tribe had its settlement at Phokeng, to the northwest of Rustenburg, and were able to live there up until the time of the Difaqane, when Mzilikazi's Khumalo-Ndebeles drove all other black communities from the area. The Fokeng, under the authority of Nôgê, was one of the few groups that resisted Mzilikazi, and without success. (Bergh 1999: 10-11; 110-111) The Difaqane (Sotho), or Mfekane ("the crushing" in Nguni) was a time of bloody upheavals in Natal and on the Highveld, which occurred around the early 1820's until the late 1830's. (Bergh 1999: 10) It came about in response to heightened competition for land and trade and caused population groups like gun-carrying Griquas and Shaka's Zulus to attack other tribes. (Bergh 1999: 14; 116-119)

3.2.3. Historical Information

During the time of the Difaqane, a northwards migration of white settlers from the Cape was also taking place. Some travellers, missionaries and adventurers had gone on expeditions to the northern areas in South Africa, some already as early as the 1720's. In 1829, Robert Scoon and McLuckie made a journey from Mzilikazi's

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Kraal, along the area directly to the north of Rustenburg to the north of Zeerust and finally down to Danielskuil. In the same year, Moffat and Archbell travelled from Mzilikazi's Kraal (to the north of Pretoria), through Rustenburg and all the way Zeerust and then to Kuruman in the southwest. In 1835, Dr Andrew Smith, a natural and medical scientist, travelled between Mzilikazi's kraal and Rustenburg, and finally much further to the north, almost up to Mahalapye. (Bergh 1999: 12-13)

It was however only by the late 1820's that a mass-movement of Dutch speaking people in the Cape Colony started advancing into the northern areas. This was due to feelings of mounting dissatisfaction caused by economical and other circumstances in the Cape. This movement later became known as the Great Trek. This migration resulted in a massive increase in the extent of that proportion of modern South Africa dominated by people of European descent. (Ross 2002: 39)

3.2.4. Anglo-Boer War

The Anglo-Boer War, which took place between 1899 and 1902 in South Africa, was one of the most turbulent times in South Africa's history. Even before the outbreak of war in October 1899 British politicians, including Sir Alfred Milner and Mr. Chamberlain, had declared that should Britain's differences with the Z.A.R. result in violence, it would mean the end of republican independence. This decision was not immediately publicized, and subsequently republican leaders based their assessment of British intentions on the more moderate public utterances of British leaders. Consequently, in March 1900, they asked Lord Salisbury to agree to peace on the basis of the status quo ante bellum. Salisbury's reply was; however, a clear statement of British war aims. (Du Preez 1977)

One battalion of British troops moved through Rustenburg between February and September 1900. This was the regiment of General Major R. S. S. Baden-Powell. The Boer war-hero General Jacobus Herculaas de la Rey (more commonly known as Koos de la Rey) also moved past Rustenburg on his route between Barberton and Lichtenburg. (Bergh 1999: 51)

Rustenburg was under siege on 14 June 1900, when Colonel Herbert Plumer accepted the surrender of the Rustenburg Field Cornet Piet Kruger. Kruger, on his part, had been unable to get the Burghers to put up any resistance against the British forces. The British camped near the old goal, but on strict order from General Baden-Powell that there were no demonstrations. On the same day, the demoralized Burghers handed 1000 rifles to the British authorities, and it is perhaps safe to assume that an equivalent number signed the oath of neutrality. (Wulfsohn 1992: 50-51)

3.3. Literature Review

3.3.1. CRM reports

The following reports were conducted in the immediate vicinity of the study area and were consulted for this report:

Table 1. Studies consulted for this project

Author	Year	Project	Findings
Kruger, N.	2015	Delron Environmental: Proposed Rustenburg Extension 30 Township Establishment on The Remaining Extent Of Portion 1 Of The Farm Town And Townlands Of Rustenburg 272-Jq, Rustenburg Local Municipality, North West Province	No Sites

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Pelser, A.J.	2012	A Report On A Heritage Impact Assessment For The Proposed Strumosa Solid Waste Transfer Station Near Rustenburg In The Northwest Province	No sites
Huffman, T.N.	2005	The Archaeology of the Anglo Platinum Lease Area.	Stone Age occurrences and Iron Age sites, structures and graves.
Huffman, T.N. and Murimbika T.M.	2002	Archaeological study of the Boschfontein East Options, Rustenburg	MSA artefacts, Iron Age scatters

3.3.2. Society and Google Earth Monuments

No known grave sites are indicated close to the study area.

4. Findings

4.1. Heritage Resources

The study area has been entirely transformed by a succession of development activities through the years that would have impacted on surface indicators of heritage sites if any ever occurred in the study area (Figure 3 - 5). The entire area has been levelled, cleared and paved and in terms of the national estate as defined by the NHRA no sites of significance occur in the study area.

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Figure 4. General site conditions – the entire site has been built up.



Figure 5. General site conditions – the entire site has been built up.

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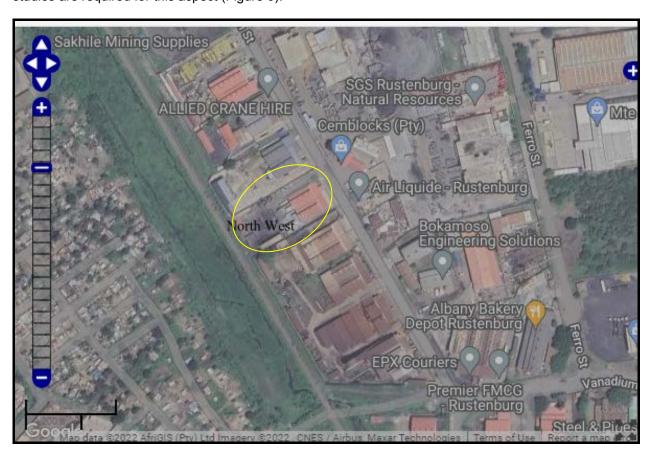
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4.2. Paleontological Resources

Based on the SAHRA paleontological sensitivity map the study area is of insignificant sensitivity and no further studies are required for this aspect (Figure 6).



Colour	Sensitivity	Required Action
RED	VERY HIGH	Field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	Desktop study is required and based on the outcome of the desktop study, a field assessment is likely
GREEN	MODERATE	Desktop study is required
BLUE	LOW	No palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	No palaeontological studies are required
WHITE/CLEAR	UNKNOWN	These areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

Figure 6. Paleontological sensitivity of the approximate study area (yellow polygon) as indicated on the SAHRA Paleontological Map.

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4.3. Cultural Landscape

The landscape setting in which the project is located is urban in character with limited development until the 1990's when the first buildings were constructed. Prior to this developments consisted of a railway line that bordered the site in the 1960's with road infrastructure in the late 1970's/early 1980's. The surrounding area is now densely developed and characterised by residential developments and roads.

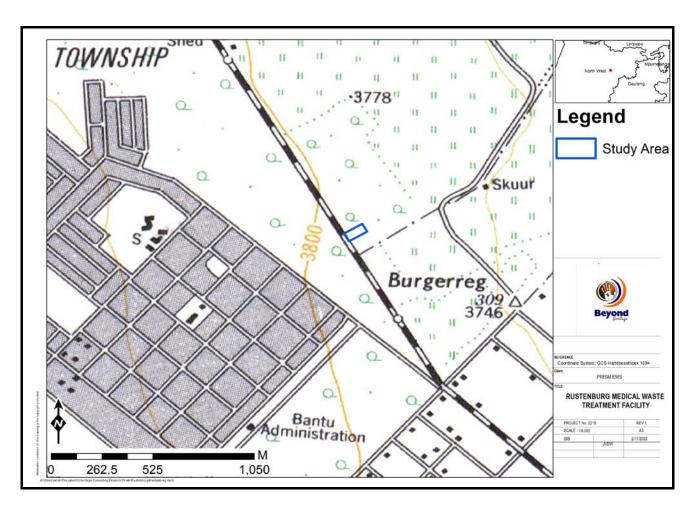


Figure 7. 1968 Topographical map of the project area and surrounds indicating the study area as undeveloped with a railway line bordering the site.

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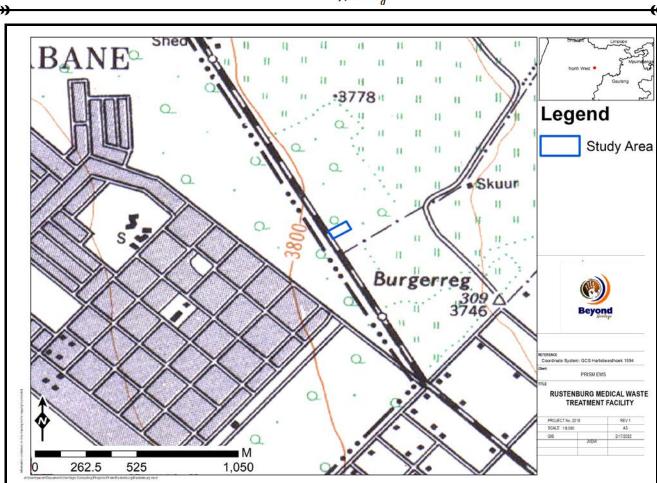


Figure 8. 1984 Topographical map of the impact area indicating the study area as undeveloped with a railway line bordering the site.

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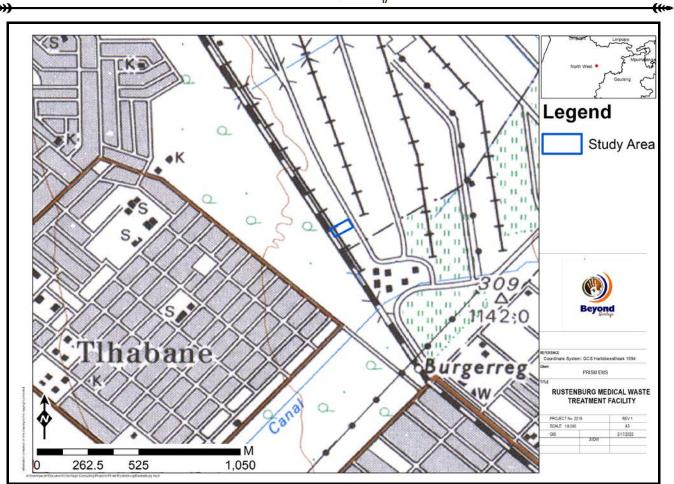


Figure 9. 1980 Topographic map of the study area – the railway is still visible with road infrastructure.

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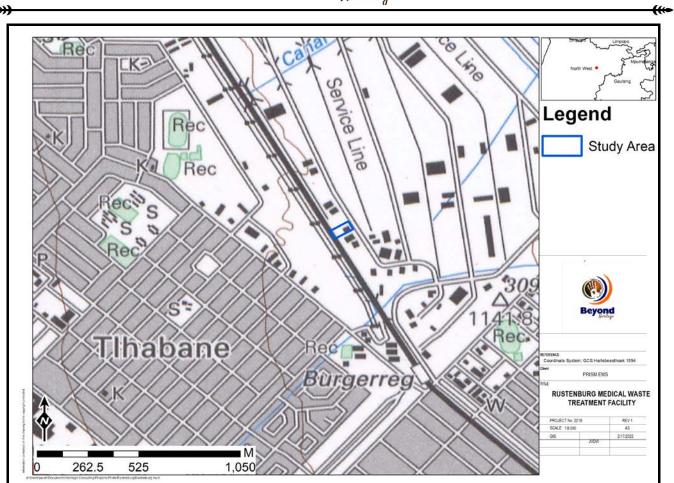


Figure 10. 1996 Topographic map of the study area showing a new structure.

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5. Conclusion

The project area has been totally transformed through construction and by road and railway developments within and around the study area from the 1980's onwards. The impact of clearing, levelling and construction activities would have obliterated any indicators of heritage resources if any ever occurred in the study area. The area is also of insignificant palaeontology and the study area is therefore considered to be of low heritage potential. No standing structures older than 60 years, graves or archaeological sites of significance occur on site and an application for exemption from further heritage studies is supported.

Any further queries can be forwarded to Jaco van der Walt on Cell: +27 82 373 8491 or to jaco@heritageconsultants.co.za.



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