12 August, 2021

Attention: Ms Nokukhanya Khumalo (nkhumalo@sahra.org.za)
SAHRA Case Officer Limpopo
South African Heritage Resources Agency (SAHRA)

Dear Ms Khumalo

RE: Wildebeestlaagte Vodacom Mast

1. Introduction

Tekplan Environmental Consultants were appointed by Vodacom as Environmental Assessment Practitioner to manage the EIA process for the proposed Vodacom Mast on Portion 58 of the farm Wildebeestlaagte 411 KQ in the Northwest Province. As part of the process Beyond Heritage was appointed to provide an assessment of the impact on possible heritage resources.

The Vodacom Mast is located inside a fenced area, characterised by manicured lawns surrounding a farmhouse and outbuildings like sheds. None of these buildings will be impacted on but development activities associated with these structures and the lawns would have obliterated any surface indicators of heritage sites or features if any ever occurred in the area. Other studies in the region indicated that archaeological settlements are located close to koppies and water sources (van Schalkwyk (2004), Huffman (2006) and van der Walt (2009; 2014, 2016 7 2018) of which none occur in the study area. The site under investigation is of low heritage potential and the proposed mast is not expected to impact on any heritage resources.

2. Project Background

The Wildebeestlaagte Vodacom Mast is located on Portion 58 of the farm Wildebeestlaagte 411 KQ, Northam, Limpopo Province. The GPS coordinates of the study site location is 24° 59’ 04,8” and 27° 14’ 21,8” (Figure 2.1 – 2.3).

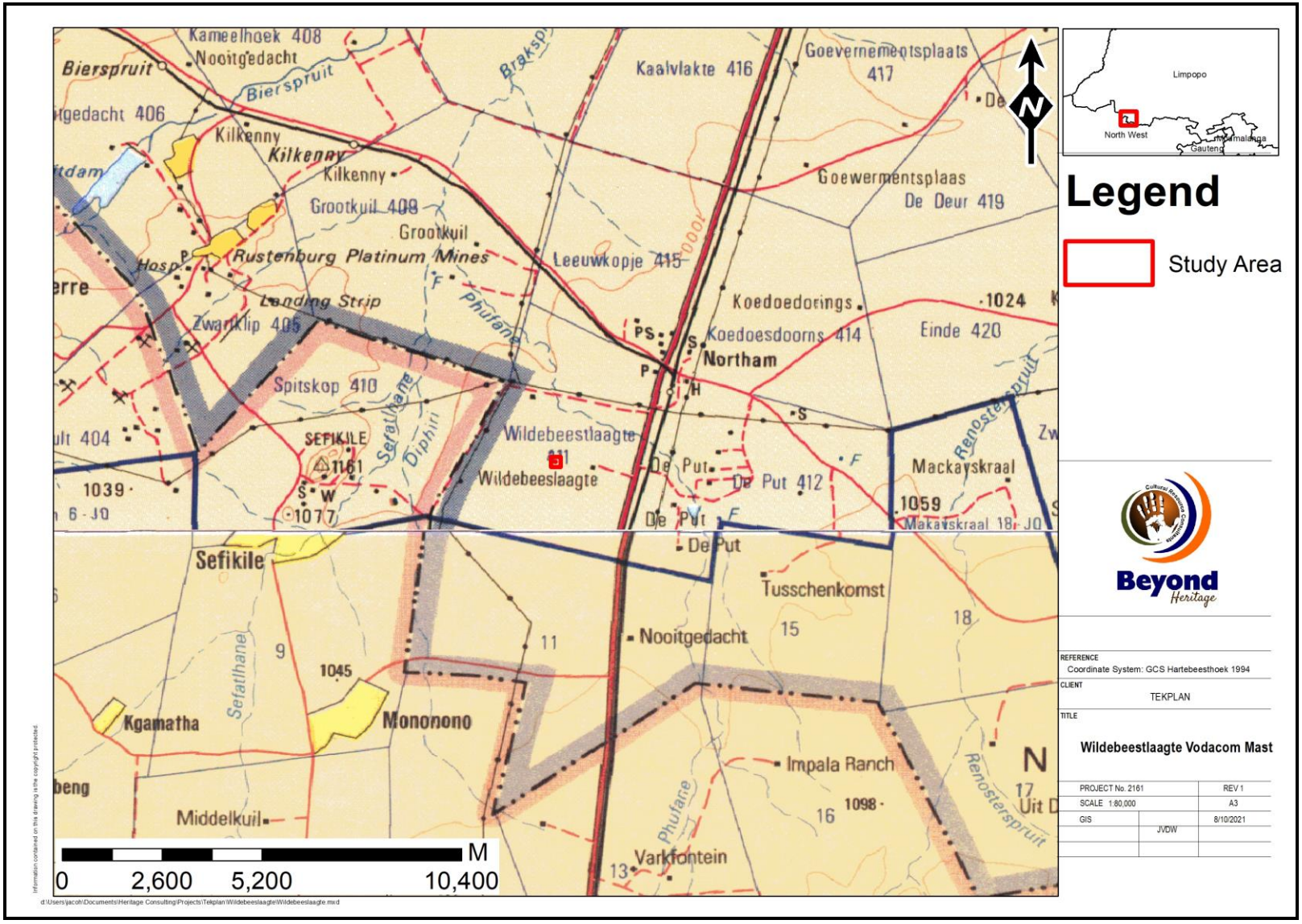

Figure 2.1. Regional setting of the project (1: 250 000 topographical map).

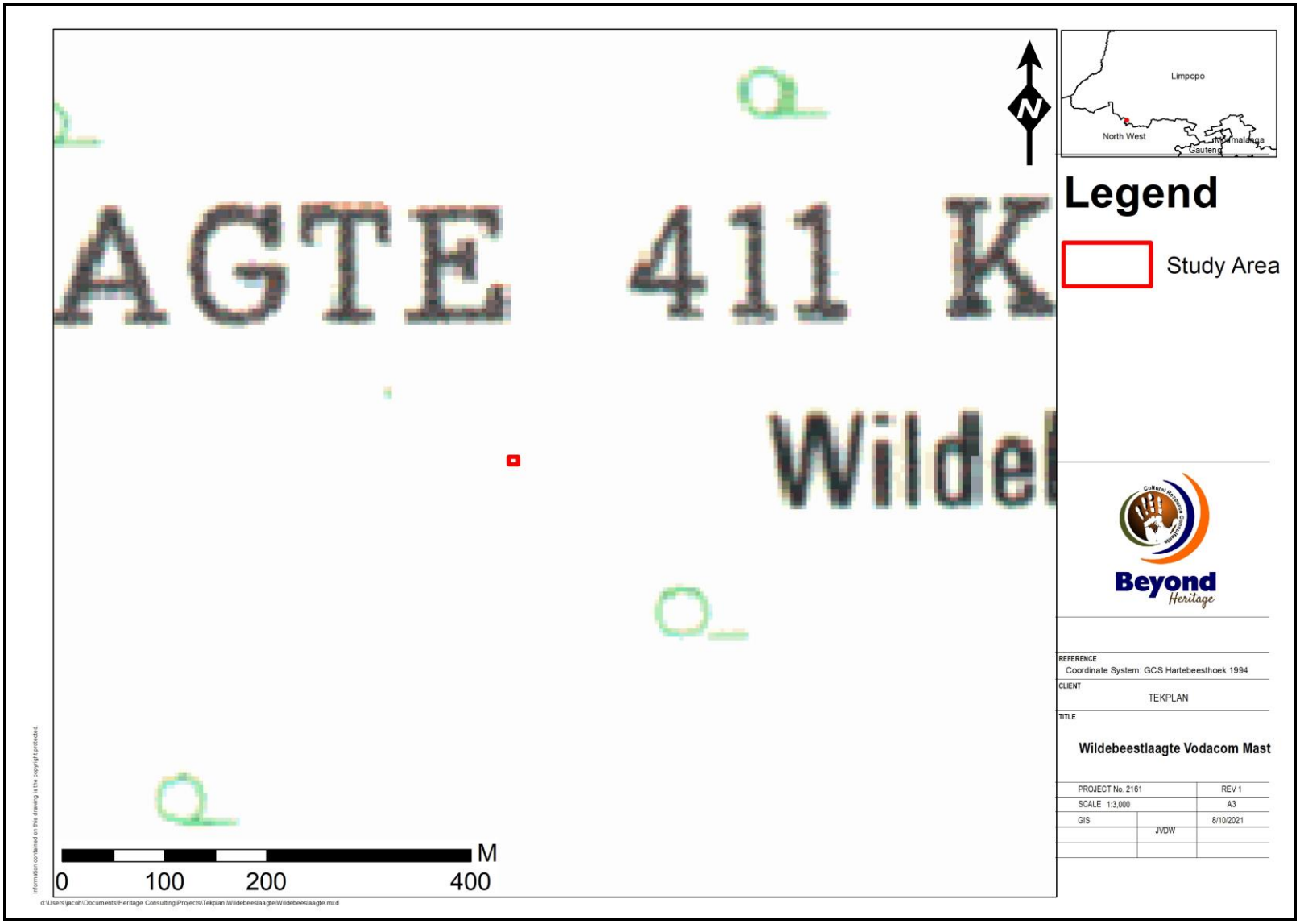

Figure 2.2. Local setting of the project (1: 50 000 topographical map).

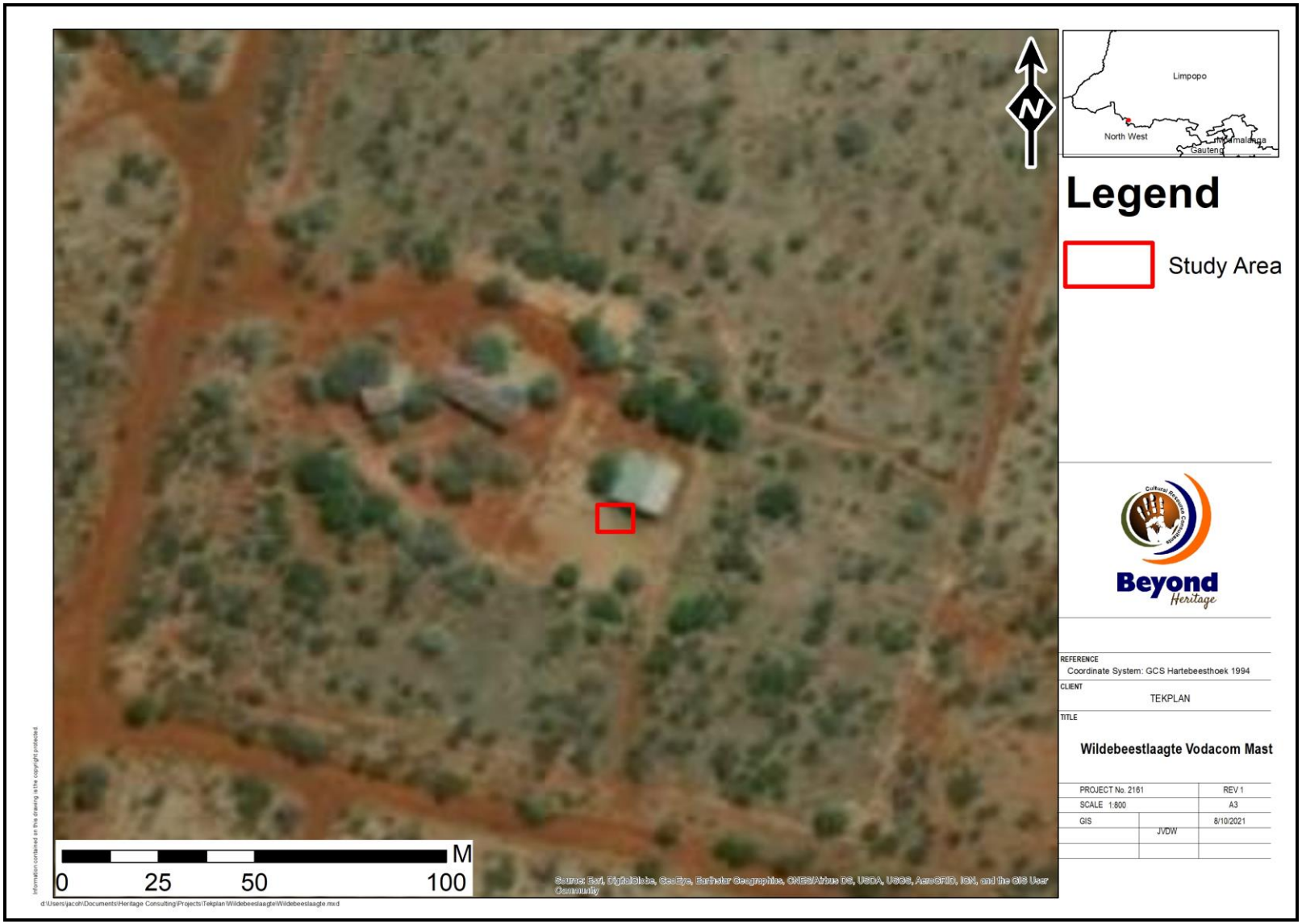

Figure 2.3. Aerial image of the study area.

3. The Heritage Character of the Study area

a. Literature review

On the 1.50 000 map sheet 2427 CD several sites are on record for the larger study area at the Wits Archaeological database consisting of historic and LIA (Moloko) sites. Several Cultural Resource Management (CRM) surveys are also on record for the area e.g. van Schalkwyk (2004), Huffman (2006) and van der Walt (2009; 2014, 2016and 2019), the relevant results of these studies are discussed below.

The National Cultural History Museum conducted archaeological mitigation of a Late Iron Age site on the farm Elandsfontein 386 KQ, approximately 10.2 km to the north of the current study area (van Schalkwyk 2004). The mitigation included the survey and mapping of sites in and around the Madeleine Robinson Nature Reserve of the Amandelbult Platinum Mine as part of the proposed extension of the mines operations into the area. From their survey, several stone walled sites conforming to the Central Cattle Pattern (CCP) were identified along the base and between the saddles of the hills. Sites contained central kraals, smaller livestock enclosures, lower grindstones and ceramic scatters. These sites form part of a larger settlement complex dating to the Late Iron Age (LIA). The LIA dates to AD 1300 – 1840 (Huffman 2007).

Mitigation of the Rhino Andalusite Mine to the north east of the study area by Archaeological Resources Management (ARM) (Huffman 2006) resulted in excavation and recording of several Early and Late Iron Age sites. Specifically, the Happy Rest and Mzonjani facies (EIA) and the Icon and Madikwe facies of the Moloko group (LIA) have been identified. Additionally, ancient mine workings for ochre have been identified. A Survey for the Cronimet Underground Mine and Process Plant (van der Walt & du Piesanie 2009) to the north of the study area recorded 37 sites ranging from historic dwellings, graves, MSA and Iron Age sites.

Other studies conducted in the wider area that was consulted is listed below:

Author	Year	Project	Findings
Van der Walt, J.	2019	Heritage Impact Assessment Northam Shaft 3, Limpopo Province	Iron Age sites
Van der Walt, J.	2018	Heritage Impact Assessment Northam Ext 20	No sites were identified
Van der Walt, J.	2016	AIA For the proposed additional underground and opencast mining, associated infrastructure and processing facilities at Thaba Cronimet Chrome Mine, Limpopo Province.	Stone age and Iron Age sites were identified.
Gaigher, S.	2016	Heritage Impact Assessment (HIA) Report for the Proposed Re-alignment of the Railway Line at the proposed 37 open pits, Amandelbult Mine, Limpopo Province	No sites were identified.
Ages EIA report	2014	Platinum EIA report	Structures
Hutten, M.	2010	HIA for the proposed residential township development, South of Northam.	No sites were identified

b. Background Study

South Africa has one of the longest archaeological sequences in the world because humanity evolved in the area stretching from the Cape to Ethiopia. Most of this sequence covers the times when our ancestors used stone tools. It is worthwhile, thus, to review the archaeological record for southern Africa and to place in context the known occurrences. The archaeology of the area can be divided into the Stone Age, Iron Age and Historical timeframe. These can be divided as follows:

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 contains sub-phases or industrial complexes, and within these we can expect regional variation regarding characteristics and time ranges. For Cultural Resources Management (CRM) purposes it is often only expected/ possible to identify the presence of the three main phases. Yet sometimes the recognition of cultural groups, affinities or trends in technology and/or subsistence practices, as represented by the sub-phases or industrial complexes, is achievable (Lombard 2011). 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; associated with early Homo groups such as Homo habilis and Homo erectus. 400 000-> 2 million years ago.

Early Stone Age:

The Early Stone Age in southern Africa is defined by the Oldowan complex, primarily found at the sites Sterkfontein, Swartkrans and Kromdraai, situated within the Cradle of Humankind, just outside Johannesburg (Kuman, 1998). Within this complex, tools are more casual and expediently made and tools consist of rough cobble cores and simple flakes. The flakes were used for such activities as skinning and cutting meat from scavenged animals. This industry is unlikely to occur in the study area.

The second complex is that of the more common Acheulean, defined by large handaxes and cleavers produced by hominids at about 1.4 million years ago (Deacon & Deacon, 1999). Among other things these Acheulian tools were probably used to butcher large animals such as elephants, rhinoceros and hippopotamus that had died from natural causes. Acheulian artefacts are usually found near the raw material from where they were quarried, at butchering sites, or as isolated finds. No Acheulian sites are on record near the project area, but isolated finds are possible. However, isolated finds have little value. Therefore, the project is unlikely to disturb a significant site. The closest Stone Age terrain to the study area is located a small distance to the west thereof. This Early Stone Age terrain is situated near the Rooiberg Hill and the Blaauwberg Stone Age Terrain. (Bergh 1999: 4)

Middle Stone Age:

During the Middle Stone Age, significant changes start to occur in the evolution of the human species. These changes manifest themselves in the complexity of the stone tools created, as seen in the diversity of tools, the standardisation of these tools over a wide spread area, the introduction of blade technology, and the development of ornaments and art. What these concepts ultimately attest to is an increase or development of abstract thinking. By the beginning of the Middle Stone Age (MSA), tool kits included prepared cores, parallel-sided blades and triangular points hafted to make spears (Volman, 1984). MSA people had become accomplished hunters by this time, especially of large grazing animals such as wildebeest, hartebeest and eland.

These hunters are classified as early humans, but by 100,000 years ago, they were anatomically fully modern. The oldest evidence for this change has been found in South Africa, and it is an important point in debates

about the origins of modern humanity. In particular, the degree to which behaviour was fully modern is still a matter of debate. The repeated use of caves indicates that MSA people had developed the concept of a home base and that they could make fire. These were two important steps in cultural evolution (Deacon & Deacon, 1999). Accordingly, if there are caves in the study area, they may be sites of archaeological significance. MSA artefacts are common throughout southern Africa, but unless they occur in undisturbed deposits, they have little significance. Some MSA finds are on record close to the study area (e.g., van der Walt 2016).

Later Stone Age:

By the Late Stone Age, human beings are anatomically and culturally modern. Tools associated with this time period are specialised, and commonly associated with hunter-gatherer groups. It is also within this period that contacts with migrating groups occur throughout southern Africa. Initial contact was between hunter-gatherer groups and expanding Bantu farming societies, and secondly with the arrival of colonist along the coast.

San rock art has a well-earned reputation for aesthetic appeal and symbolic complexity (Lewis-Williams, 1981). Several rock art sites are on record to the north and east of the general project area.

In addition to art, LSA sites contain diagnostic artefacts, including microlithic scrapers and segments made from very fine-grained rock (Wadley, 1987). Spear hunting probably continued, but LSA people also hunted small game with bows and poisoned arrows. Sites in the open are usually poorly preserved and therefore have less value than sites in caves or rock shelters. The lack of shelters in the study area probably indicates a low likelihood of finding LSA sites of significance.

Iron Age (general)

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.

The Iron Age is characterised by the ability of these early people to manipulate and work iron ore into implements that assisted them in creating a favourable environment to make a better living.

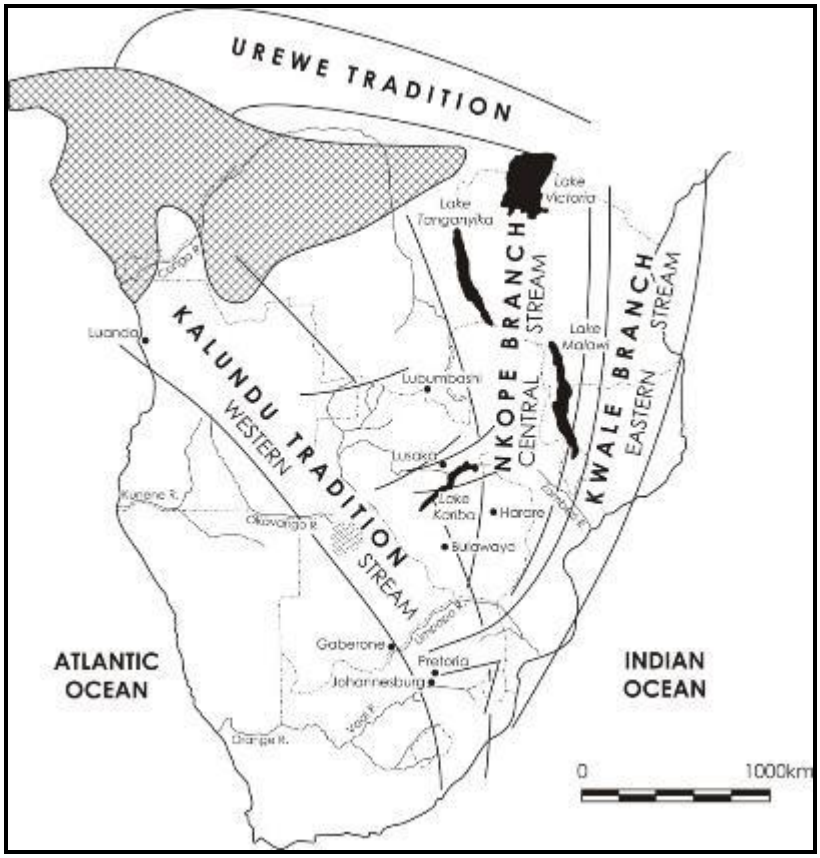

Figure 3.1: Movement of Bantu speaking farmers (Huffman 2007)

Early Iron Age

Early in the first millennium AD, there seem to be a significant change in the archaeological record of the greater part of eastern and southern Africa lying between the equator and Natal. This change is marked by the appearance of a characteristic ceramic style that belongs to a single stylistic tradition. These Early Iron Age people practised a mixed farming economy and had the technology to work metals like iron and copper. A meaningful interpretation of the Early Iron Age has been hampered by the uneven distribution of research conducted so far; this can be partly attributed to the poor preservation of these early sites.

Sites belonging to the EIA consisting of *Happy Rest and Mzonjani facies* have been recorded to the north of the project area. Happy Rest and Mzonjani pottery form part of two traditions (Kalundu and Urewe) that represent the spread of mixed farmers into southern Africa during the Early Iron Age (See Figure 3.1). This find is important as it provides evidence for early interaction between these groups. Later, by the 8th and 9th centuries, the two merged to form a new facies, *Doornkop*.

Late Iron Age

For the area in question the history and archaeology of the Sotho Tswana are of interest. The ceramic sequence for the Sotho Tswana is referred to as Moloko and consists of different facies with origins in either the Icon facies or a different branch associated with Nguni speakers. Several sites belonging to the Madikwe and Olifantspoort facies (from Icon) have been recorded close to the project area. These sites date to between AD 1500 and 1700 and predate stone walling ascribed to Sotho-Tswana speakers. Sotho Tswana stonewalled sites with Uitkomst pottery have been found close to the study area and dates to the seventeenth to nineteenth centuries. Stone walled sites belonging to the LIA have also been identified next to the study area but so far have not been linked to a cultural group.

Late Iron Age peoples were attracted to the area because of the relatively fertile soils around the hills and valleys, and because of the iron ore and red ochre. Mining techniques associated with the ancient mine workings are the same as those found in the Rooiberg area some 30km from Thabazimbi (Huffman 2006). Three groups are found in the Rooiberg area, specifically Madikwe, Melora and Rooiberg groups. Stratigraphically, the relationship between Madikwe and Rooiberg is evident where the Madikwe site 20/85 lies underneath the Rooiberg site 11/85, suggesting that Rooiberg is the more recent (Mason 1986). Ceramic evidence suggests then that Sotho-Tswana people were mining at Rooiberg. The ceramic evidence from the Rhino Andalusite Mine shows that the Sotho-Tswana people living there were directly related to the miners at Rooiberg: both belonged to the Western Sotho-Tswana cluster. Therefore, the relationship, between the ochre mine and Madikwe settlements, is of importance. Associated with the Madikwe settlements, in addition to the ochre mine is the several maize grindstones found.

Trade connections for ochre and tin have a bearing on the presence of maize. Trade networks spanned a wide area, up to the Zimbabwe culture area in the north, and as far as Maputo in the east before the arrival of the Dutch (Friede & Steel 1976). Maize came to Maputo sometime after the early 16th century through Portuguese trade with the New World. The grindstones found at the site CB14 in the Rhino Andalusite Mine indicate that maize was grown in the Thabazimbi area during the 17th century (Huffman 2006). If one accepts the grindstone as diagnostic, then maize was cultivated some 150 years earlier than in Kwazulu-Natal.
Evidence for Iron Age activity will most likely be concentrated along water courses and rocky outcrops marked by ceramic clusters or dry-stone walling.

c. Cultural Landscape

The project is in an area that has been developed as a farmstead and related infrastructure and is rural in character (Figure 3.2 – 3.4).

Figure 3.2. 2010 The study area and surrounds have been levelled and cleared for a farmstead and associated infrastructure.

Figure 3.3. 2012 Google image of the study area and surrounds. A structure has been constructed close to the study area and the area has been cleared completely.

Figure 3.4. 2021 Google image of the study area, the study area is now part of a well maintained farmstead with a manicured lawn.

4. Findings

The project is located on approximately 12 x 12 m (144m²) of land that was significantly altered by previous developments of a house and associated infrastructure including a manicured garden from prior to 2010 (Figure 3.1). Development activities would have obliterated any surface indicators of heritage resources if any were present. The study area is indicated as of insignificant palaeontological significance on the SAHRA paleontological map (Figure 4.6) and no impacts to palaeontological resources is expected.

Figure 4.1. View from the site to the east

Figure 4.2. View of the site to the south east.

Figure 4.3. View from the site to south-west

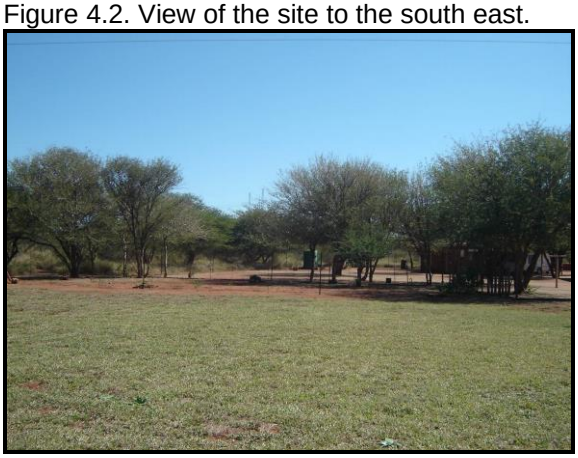

Figure 4.4. View from the site to the west

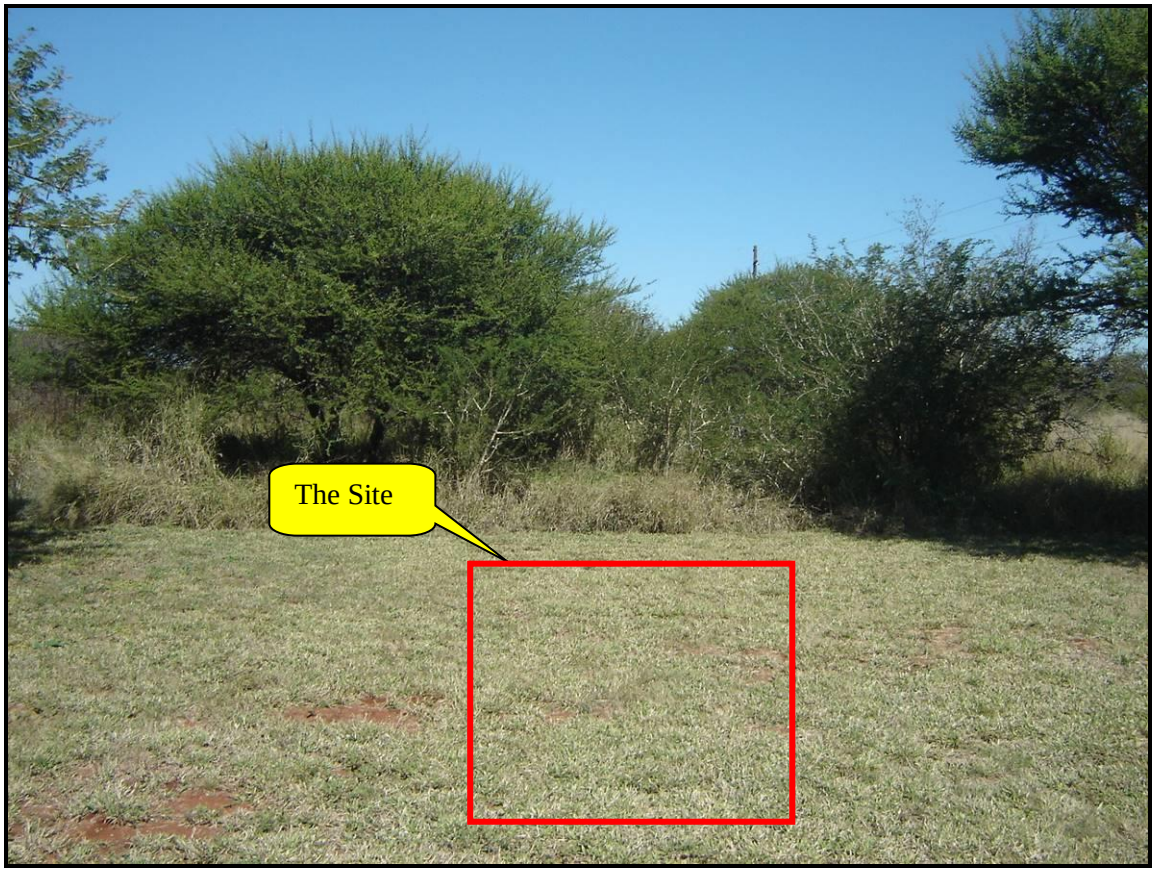

Figure 4.5. View of the proposed site

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 4.6.Paleontological sensitivity of the approximate study area (blue polygon) as indicated on the SAHRA Paleontological Map.

5. Conclusion

The study area has been impacted upon by the extensive development of the project site and surrounding areas from prior to the 2010 and the area is therefore of low heritage potential.
Other studies in the region indicated that archaeological settlements are located close to koppies and water sources (van Schalkwyk (2004), Huffman (2006) and van der Walt (2009; 2014, 2016 7 2018) of which none occur in the study area. The site under investigation is of low heritage potential and the proposed mast is not expected to impact on any heritage resources. Therefore, 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.

Jaco van der Walt
Archaeologist
Beyond Heritage

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