



**PHASE 1 HERITAGE IMPACT ASSESSMENT FOR SECTION 24G
APPLICATION, EXPANSION AND RELATED OPERATION OF 4
ADDITIONAL BROILER POULTRY HOUSES ON PORTION 36 (A PORTION
OF PORTION 19) OF THE FARM TWEERIVIER 197-JQ MADIBENG LOCAL
MUNICIPALITY, NORTH-WEST PROVINCE**



Date: December 2022

Archaeology and Heritage Services

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DECLARATION OF INDEPENDENCE

This report has been compiled by Makhosazana Mngomezulu, principal archaeologist and heritage consultant. The views expressed in this report are independent of the author and no other interest was displayed during the decision-making process of the Section 24G application, expansion and related operation of 4 additional broiler poultry houses.

SIGNATURE:

A handwritten signature in blue ink, appearing to read "M. Mngomezulu", is written over a horizontal line.

TERMINOLOGY

| | |
|---------------|--|
| BP | Before Present |
| EAP | Environmental Assessment Practitioner |
| EIA | Environmental Impact Assessment |
| EIA | Early Iron Age |
| ESA | Early Stone Age |
| HIA | Heritage Impact Assessment |
| Ibid | <i>Ibidem</i> , Latin word meaning same as the previous source |
| LIA | Late Iron Age |
| LSA | Late Stone Age |
| MIA | Middle Iron Age |
| NWPHRA | North-West Provincial Heritage Resources Authority |
| MSA | Middle Stone Age |
| NHRA | National Heritage Resources Act |
| SAHRA | South African National Resources Agency |
| SAHRIS | South African Heritage Resources Information System |
| SAPS | South African Police Services |
| ya | years ago |

DEFINITIONS

In situ: In the original place. No disturbance.

Chance finds: Archaeological and historical artefacts, features, structures and formal or informal burial of human remains that are found accidentally in context not previously identified during the site survey. Such findings are usually exposed by activities such as excavation.

ESA dates between 2 million ya to 2 00 000 BP. Industries associated with this time period includes Oldowan, Acheulean and Fauresmith. ESA stone tools include hammer stones, flakes, cores, handaxes and cleavers (Pelsner 2009).

MSA dates between 2 00 000 and 25 000 to 20 000 BP, this varies with location. Industries associated with this time period includes the Howieson's Poort. The stone tools which characterise this period include scrapers, blades, points and flake.

LSA which dates between 25 000 and 20 000 to 2 000 BP. Stone tools of this period are characterised by their small size; this includes backed knives and borers (Pelsner 2009).

Iron Age (IA) refers to a period of time where agropastoral (mixed farming) way of life began and grew as opposed to Stone Age hunter-gathering.

EIA dates to AD 200 – 900 (Huffman 2007).

MIA dates to AD 900 – 1300 (ibid).

LIA dates to AD 1300 – 1840 (ibid).

EXECUTIVE SUMMARY

Westleigh Environmental Services was appointed as independent environmental assessment practitioners by Mr. Jacob Hendrik Steenkamp of Heavy Feather 2 (PTY) LTD to facilitate their application for environmental authorisation for the Section 24G application and expansion of their existing broiler farm with additional poultry houses. Vungandze Projects has been appointed to undertake a Phase 1 Heritage Impact Assessment in terms of the heritage significance on the site under study.

Heavy Feather 2 (PTY) LTD proposes to construct 4 additional broiler chicken houses with a total carrying capacity of 136 000 (one hundred and thirty-six thousand) poultry units, whereby each house will carry 34 000 (thirty-four thousand) poultry units per production cycle. Currently 8 broiler chicken houses of a carrying capacity of 34 000 (thirty-four thousand) per house, with a total carrying capacity of 272 000 (two hundred and seventy-two thousand) are existing from the current valid environmental authorisation. The existing capacity of 272 000 and proposed expansion capacity of 136 000 will make the total overall carrying capacity for the 12 broiler chicken houses to be 408 000 (four hundred and eight thousand).

During the physical survey conducted on 22 November 2022, no heritage resources were found on the proposed site and within 100m radius. The site under study is viable for the project in terms of heritage; however, proposed mitigation measures must be adhered to.

The report will be submitted to the relevant Heritage Resources Authority through SAHRIS (South African Resources Information System) for comments and for a decision as per the National Heritage Resources Act (Act No 25 of 1999). The project can proceed from a heritage perspective pending a decision from SAHRA.

Project Structure

| | |
|---|---|
| Introduction | <ul style="list-style-type: none">• Report background• Methodology• Assumptions & limitations |
| Project locality | <ul style="list-style-type: none">• Location (include mapping)• Heritage Background |
| Findings | <ul style="list-style-type: none">• Types of findings• Mapping of findings• Assessment of findings• Level of significance• Possible impacts |
| Discussion | <ul style="list-style-type: none">• Evaluation of findings in relation of the historical background of the study area |
| Recommendations & conclusion | <ul style="list-style-type: none">• Mitigation measures |
| Additional Information | <ul style="list-style-type: none">• Applicable Legislation |

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1. INTRODUCTION

Heavy Feather 2 (PTY) LTD proposes to construct 4 additional broiler chicken houses with a total carrying capacity of 136 000 (one hundred and thirty-six thousand) poultry units, whereby each house will carry 34 000 (thirty-four thousand) poultry units per production cycle. Currently 8 broiler chicken houses of a carrying capacity of 34 000 (thirty-four thousand) per house, with a total carrying capacity of 272 000 (two hundred and seventy-two thousand) are existing from the current valid environmental authorisation. The existing capacity of 272 000 and proposed expansion capacity of 136 000 will make the total overall carrying capacity for the 12 broiler chicken houses to be 408 000 (four hundred and eight thousand).

Each production cycle for these broiler chicken rearing activity will be of 49 days throughout the year (approximately 8 production cycles per annum), whereby 32-34 days is for the chickens to grow and the other 15 days is reserved for catching the chickens for transfer to the abattoir for processing, manure removal out of the chicken houses, cleaning and disinfecting of the houses and also allow resting of the empty and cleaned houses before new day old chicks can be placed for the new production cycle.

Each of the chicken houses will be 132m x 12m in size for each house with some spacing of 15-20m in between the houses. The poultry production site will have a ring road around the site to allow orderly movement of delivery trucks and service vehicles and also fenced off to lower unnecessary movements into the production site and have a biosecurity gate to manage entry and exit into the production area.

The total farm size is 85.7127 hectares, and the proposed Section 24G application and expansion development footprint will be approximately 11.6 hectares which includes the clearance of vegetation only on areas where development will take place.

According to the National Heritage Resources Act (Act 25 of 1999), any person who intends to undertake a development must conduct a Heritage Impact Assessment to determine if there are any heritage resources along and within the proposed project and if any resources are found, mitigation measures and recommendations for the protection of such resources need to be adhered to. Below is the heritage act with reference to the proposed project and why a heritage impact assessment should be conducted:

Based on Section 38 under Heritage Resources Management of the National Heritage Act 25 of 1999 the heritage resources in South Africa should be managed in the following:

“(1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as—

(c) any development or other activity which will change the character of a site—

(i) exceeding 5 000 m² in extent; (see appendix A for the Heritage Act).

The aim of this report is to outline existing and anticipated impacts on the heritage resources that may be found and still to be found during construction phase; if whether the chosen site is suitable for such a development in terms of heritage; and provide recommendations/mitigation measures as a way forward.

2. TERMS OF REFERENCE (TOR)

The approach used for this report was:

- Undertake a Phase 1 HIA in accordance with the NHRA.
- Identify and map all heritage resources in the proposed area and its surroundings, as defined in Section 3 of the NHRA, including archaeological sites on or close (within a 100m boundary of the site) to the proposed area.
- Assess the significance of any identified resources in terms of the heritage assessment criteria as set out in the South African Heritage Resources Agency (SAHRA) regulations.
- Provide mitigation measures to safeguard heritage resources identified on study area; and
- Comply with specific requirements and guidelines of North-West Provincial Heritage Resources Authority (NWPHERA) and SAHRA.
- Submit final report to SAHRIS for comments and decision making.

3. METHODOLOGY

The physical survey was conducted and completed on 22 November 2022. This report is prepared according to the NHRA. Background research of the study area was conducted using literature such as books, journals, previously conducted HIA's on the study area and the internet before and after the site visit. The purpose of the research prior to the physical survey was to acquire information as to what to expect in the study area, the site visit was completed to identify heritage resources that may be impacted due to the commencement of site clearance and additional built houses.

A heritage resource means any place or object of cultural significance [NHRA1999 (Act No. 25 of 1999)]. The NHRA was used as a source of reference to identify what is known as a heritage resource (see Appendix A Section 3 for list of heritage resources).

The survey was conducted on foot to record and locate any heritage resources within the study areas. A Garmin eTrex was used for coordinates and recording a tracklog (See Appendix B). A Nikon camera was used to take photographs on site. The table from SAHRA Regulations will be used to grade the significance and evaluate the level of impact on the heritage resources identified.

Table 1: Site significance rating according to SAHRA.

| FIELD RATING | GRADE | SIGNIFICANCE | RECOMMENDED MITIGATION |
|------------------------------|--------------|----------------------------|--|
| National Significance (NS) | Grade 1 | High Significance | Conservation; National Site nomination |
| Provincial Significance (PS) | Grade 2 | High Significance | Conservation; Provincial Site nomination |
| Local Significance (LS) | Grade 3A | High Significance | Conservation: Mitigation not advised |
| Local Significance (LS) | Grade 3B | High Significance | Mitigation (Part of site should be retained) |
| Generally Protected A (GP.A) | - | High / Medium Significance | Mitigation before destruction |
| Generally Protected B (GP.B) | - | Medium Significance | Recording before destruction |
| Generally Protected C (GP.A) | - | Low Significance | Destruction |

The determination of the effects of environmental impact on an environmental parameter is determined through a systematic analysis of the various components of the impact. This is undertaken using information that is available from the Environmental Assessment Practitioner

(EAP) through the process of the Environmental Impact Assessment (EIA). The impact evaluation of predicted impacts was undertaken through an assessment of the significance of the impacts. This is in line with specialist requirements as required by the client. For example, the request that:

The impact methodology (should) concentrates on addressing key issues. The methodology employed in the report thus allows for the evaluation of the efficiency of the process itself.

The following Assessment Criteria is used for Impact Assessment

Impacts can be defined as any change in the physical-chemical, biological, cultural and or socio-economic environmental system that can be attributed to humans. The significance of the aspects/impacts of the process will be rated by using a matrix derived from Plomp (2004) and adapted to some extent to fit this process. These matrixes use the consequence and the likelihood of the different aspects and associated impacts to determine the significance of the impacts.

The significance of the impacts will be determined through a synthesis of the criteria below:

Probability: describes the likelihood of the impact actually occurring

- **Improbable:** the possibility of the impact occurring is very low, due to the circumstances, design or experience.
- **Probable:** there is a probability that the impact will occur to the extent that provision must be made therefore.
- **Highly probable:** it is most likely that the impact will occur at some stage of the development.
- **Definite:** the impact will take place regardless of any prevention plans and there can only be relied on mitigation measures or contingency plans to contain the effect.

Duration: the lifetime of the impact

- **Short Term:** the impact will either disappear with mitigation or will be mitigated through natural processes in a time span shorter than any of the phases.
- **Medium Term:** the impact will last up to the end of the phases, where after it will be negated.
- **Long Term:** the impact will last for the entire operational phase of the project but will be mitigated by direct human action or by natural processes thereafter.
- **Permanent:** the impact is non-transitory. Mitigation either by man or natural processes will not occur in such a way or in such a time span that the impact can be considered transient.

Scale: the physical and spatial size of the impact

- **Local:** the impacted area extends only as far as the activity, e.g. footprint
- **Site:** the impact could affect the whole or measurable portion of the abovementioned property.
- **Regional:** the impact could affect the area including the neighbouring residential areas.

Magnitude/Severity: Does the impact destroy the environment, or alter its function

- **Low:** the impact alters the affected environment in such a way that natural processes are not affected.
- **Medium:** the affected environment is altered, but functions and processes continue in a modified way.
- **High:** function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases.

Significance: This is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required.

- **Negligible:** the impact is non-existent or unsubstantial and is of no or little importance to any stakeholder and can be ignored.
- **Low:** the impact is limited in extent, has low to medium intensity; whatever its probability of occurrence is, the impact will not have a material effect on the decision and is likely to require management intervention with increased costs.
- **Moderate:** the impact is of importance to one or more stakeholders, and its intensity will be medium or high; therefore, the impact may materially affect the decision, and management intervention will be required.
- **High:** The impact could render development options controversial or the project unacceptable if it cannot be reduced to acceptable levels; and/or the cost of management intervention will be a significant factor in mitigation.

The significance is calculated by combining the criteria in the following formula:

Sum (Duration, Scale, Magnitude) x Probability (*Table -2*)

S = Significance weighting; Sc = Scale; D = Duration; M = Magnitude; P = Probability

Table 2: The significance weighing for each potential impact are as follows:

| Aspe | Description | Weight |
|-------------|-------------|--------|
| Probability | Improbable | 1 |

| | | |
|---------------------------|--|--------|
| | Probable | 2 |
| | Highly Probable | 4 |
| | Definite | 5 |
| | | |
| Duration | Short term | 1 |
| | Medium term | 3 |
| | Long term | 4 |
| | Permanent | 5 |
| | | |
| Scale | Local | 1 |
| | Site | 2 |
| | Regional | 3 |
| | | |
| Magnitude/Severity | Low | 2 |
| | Medium | 6 |
| | High | 8 |
| Significance | Sum (Duration, Scale, Magnitude) x Probability | |
| | Negligible | ≤20 |
| | Low | >20≤40 |
| | Moderate | >40≤60 |
| | High | >60 |

3.1 Assumptions

It was assumed based on the aerial view from Google Earth and literature review that the study area might yield heritage resources such as burial grounds and graves and possibly Iron Age sites especially on the areas that have not been disturbed and surrounding areas.

3.2 Limitations

No limitations were encountered on site during the survey.

4. LOCALITY AREA

The Heavy Feather 2 (Pty) Ltd farm is located on Portion 36 (a Portion of Portion 19) of the Farm Tweerivier 197-JQ which is located approximately 65 kilometers south-western of the Brits town, within the jurisdiction of the Madibeng Local Municipality in North-West Province. The property can be accessed from the Brits town, taking the R511 Road towards Thabazimbi, turning left into Beestekraal Road. The project site is situated on GPS Co-ordinates: 25° 16' 58.47"S; 27° 31' 12.22"E, these were taken at mid-point north of the proposed expansion site. The site is a mixture of small to medium grass with trees, and the other portion has been severely disturbed by the construction of the existing houses (figure 1-5).

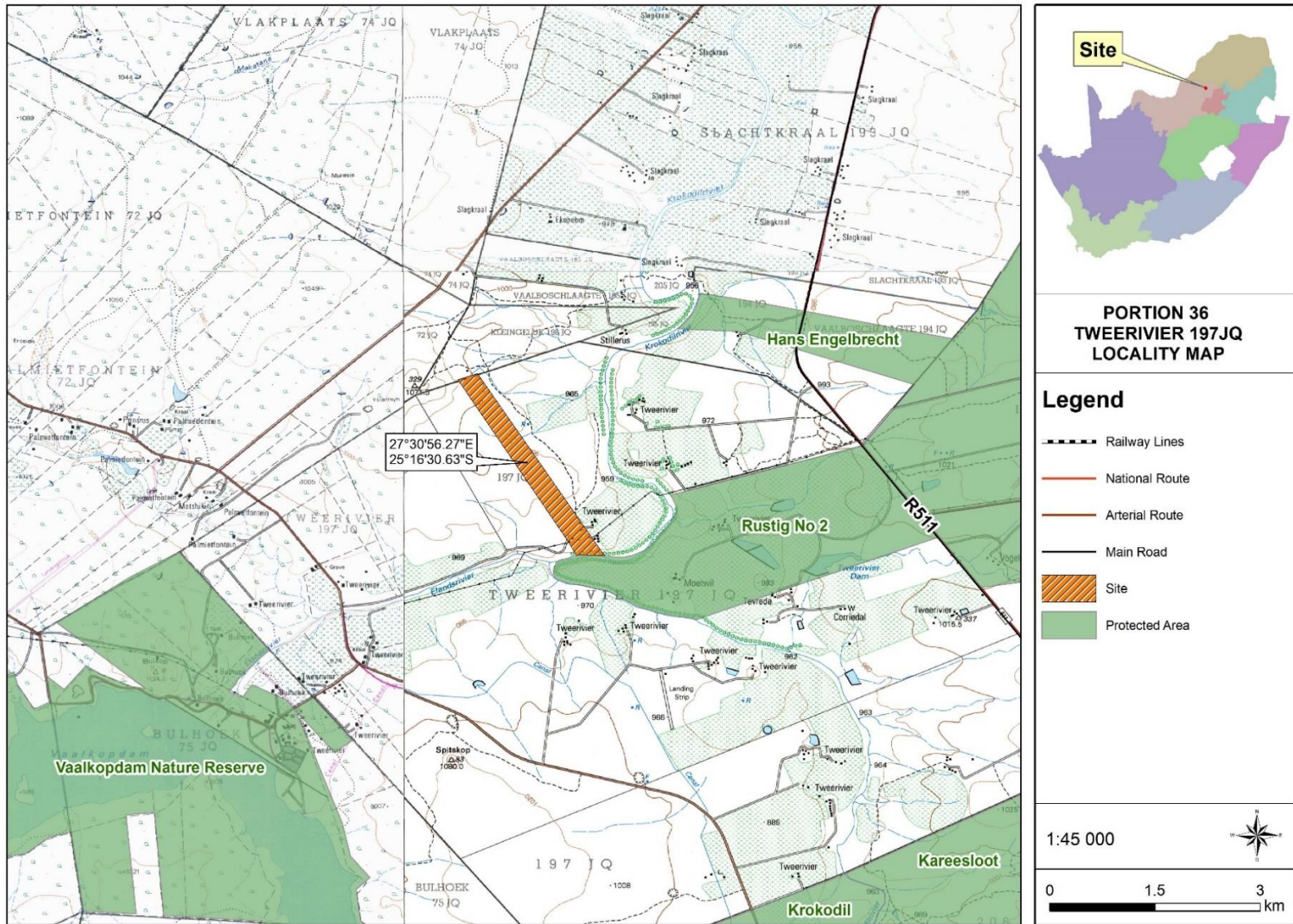


Figure 1: Locality map of the total farm size.

Heavy Feather 2 (PTY) LTD
Portion 36 of Farm Tweerivier 197 JQ

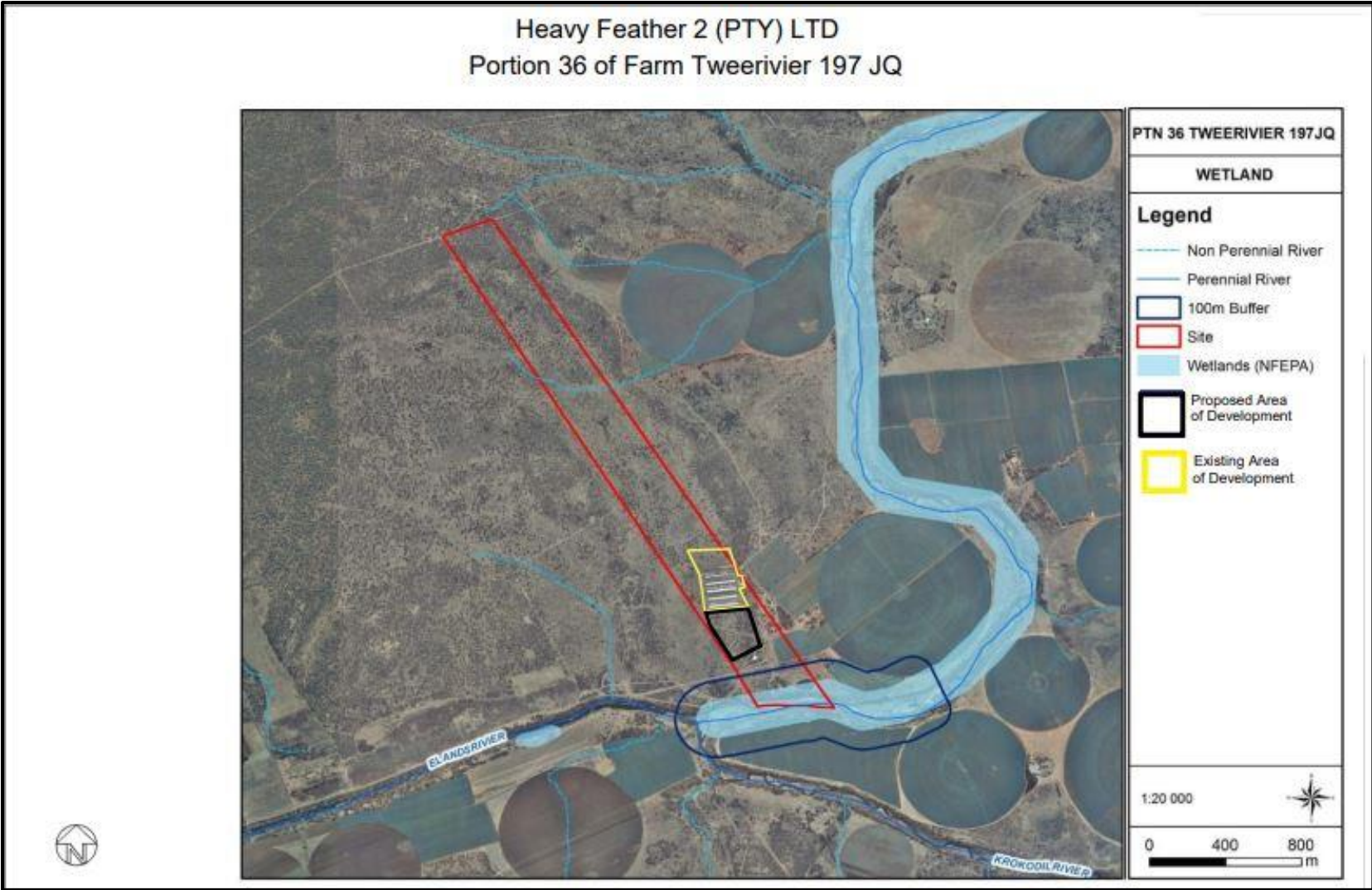


Figure 2: Total farm size including study areas.

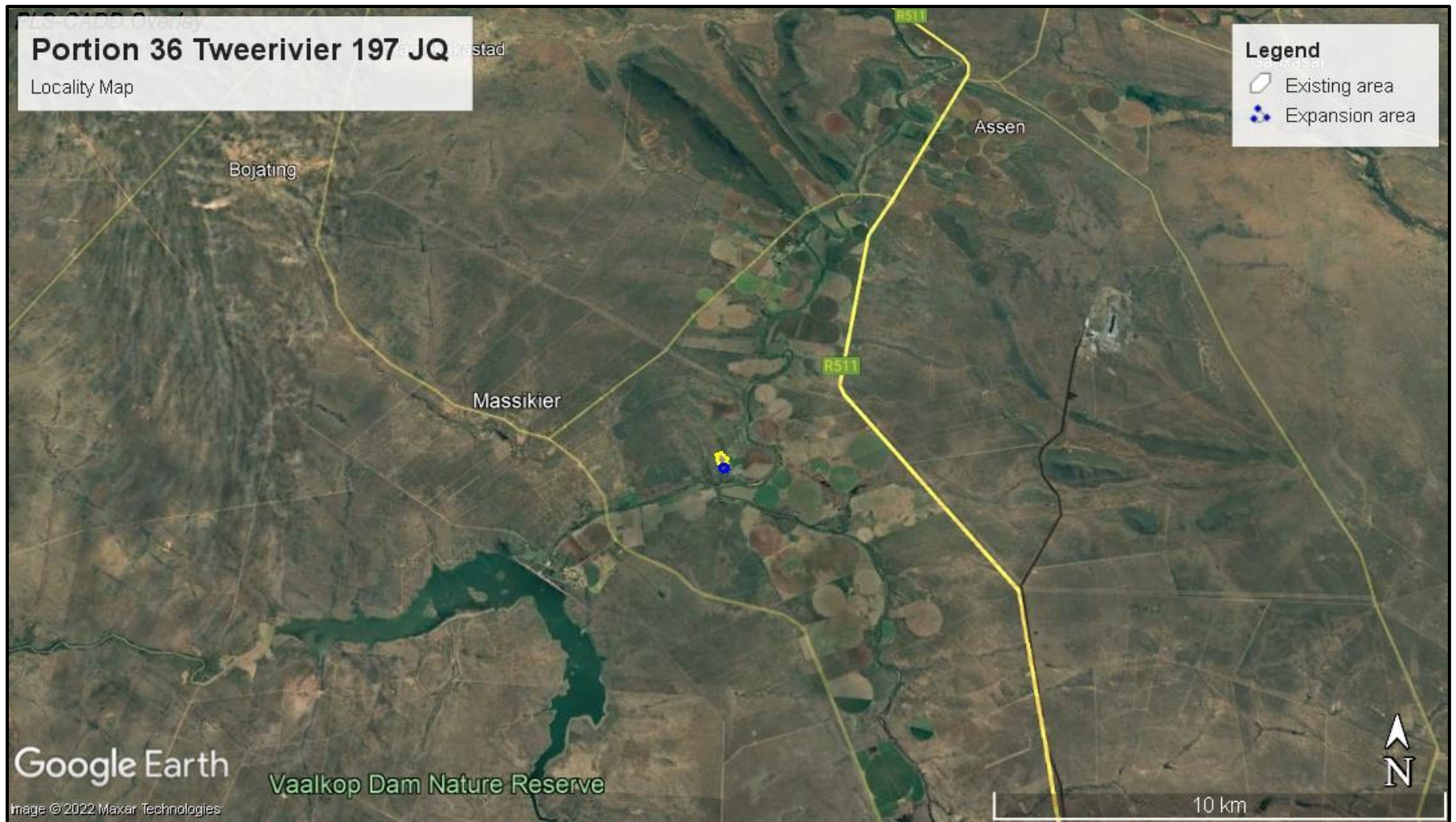


Figure 3: Locality map of the study area and its surroundings

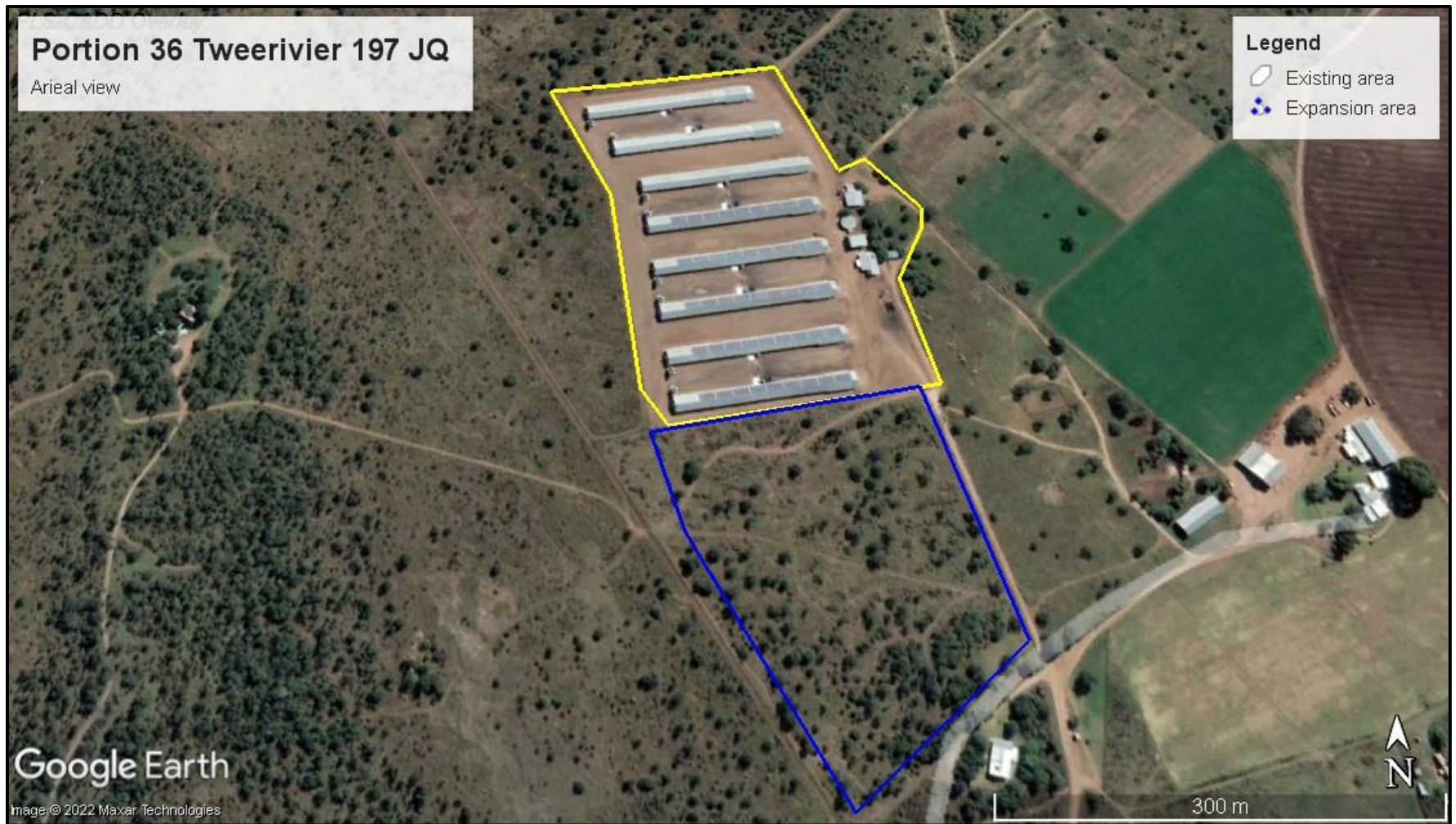


Figure 4: Aerial view of the study area.

Heavy Feather 2 (PTY) LTD
 Portion 36 of Farm Tweerivier 197 JQ



PRESENTATION PLAN OVERVIEW
 PROPOSED DEVELOPMENTS ON PORTION 36 OF FARM TWEERIVIER 197 JQ



General Notes

- Proposed area of development
- Existing area of development
- Proposed houses

| No. | Modification/Issue | Date |
|-----|--------------------|------|
| | | |
| | | |

File Name and other

Portion 36 of Farm Tweerivier 197 JQ

| | |
|--------------------------|--|
| 12 Broiler Houses 2 of 3 | |
| 05/12/2022 | |
| 1:20000 | |

Figure 5: Map of proposed development.

5. PHOTOGRAPHS OF THE STUDY AREA



Figure 6: Existing chicken broiler houses.



Figure 7: West view of the site.



Figure 8: East view of the proposed site.



Figure 9: Vegetation on site.

6. HISTORICAL BACKGROUND OF THE STUDY AREA

History of human activity in South Africa, as in all parts of the world, dates to millions of years. It is important to elaborate as far back in time to enable the reader to understand what is meant by archaeological material and why is it declared a heritage resource. Archaeological materials are divided into two periods, the Stone Age, and the Iron Age. Late Iron Age marks the transition between prehistory and history, a period of colonial era until recent.

6.1 Stone Age Archaeology:

The Stone Age is a period that dates between 2 million years ago (ya) to 2000 ya. Due to the vast character found within stone tools of this period, it was then divided into three phases: Early Stone Age (ESA), Middle Stone Age (MSA) and the Late Stone Age (LSA). ESA dates between 2 million ya and 200 000 Before Present (BP). Industries associated with this time includes Oldowan, Acheulean and Fauresmith. ESA stone tools include hammer stones, flakes, cores, hand axes and cleavers (Pelser 2009). The more refined stone tools appeared during the MSA. MSA dates between 200 000 and 25 000 to 20 000 BP, this varies with location. Industries associated with this period includes the Howieson's Poort. The stone tools which characterise this period include scrapers, blades, points, and flake. Lastly is the LSA which dates between 25 000 and 20 000 to 2 000 BP. Stone tools of this period are characterised by their small size; this includes backed knives and borers (Pelser 2009).

No Stone Age site or material was noted on the proposed site or in close proximity.

6.2 Iron Age Archaeology

According to Huffman (2007) Iron Age marks the early evidence of farming community in Southern Africa. Animal husbandry, crop farming, pottery and metal working were introduced which in due time liberated hunter gatherers to change their way of life which is less mobile (Carruthers 1990). Due to vast technological discrepancies and settlement pattern within this period, it was divided into three. The Early Iron Age (EIA) dates to AD 200 – 900, Middle Iron Age (MIA) dates to AD 900 – 1300, and the Late Iron Age (LIA) dates to AD 1300 – 1840 (Huffman 2007).

During the physical survey, no Iron Age sites, or associated material were found in the proposed area.

6.3 History of the Brits area

Brits is a large town situated in North-West Province of South Africa, just north of the slopes of the ancient and majestic Magaliesberg Mountains. In 1827 Mizilikazi, having broken away from the Zulus under the reign of Shaka, arrived in the area. One by one the Tswana groups in the region were destroyed, scattered or subjugated, and very soon Mizilikazi was able to lay claim to a large kingdom with Magaliesberg at its centre extending from the Vaal to the Limpopo River.

In 1828 a band of Griqua and Korana horsemen led by Jan Bloem and assisted by a regiment seconded to them by the Taung chief Moletsane, raided the Ndebele settlements in the Magaliesberg, while Mizilikazi's main army was campaigning in the west. They captured about 3000 head of cattle and the attackers retreated through Olifantsnek, and although the Taung took their share of the spoils and left the area immediately, the Griqua and Korana dallied only to be overtaken by the Ndebele who killed many of the raiders forcing the survivors to abandon their booty and escape on horseback.

With Mizilikazi controlling a wide area the Griqua found that their hunting grounds and trade routes had diminished, and therefore it is not surprising that in 1831 Barend Barends one of Jan Bloem's rivals, sent one of his lieutenants Gert Hooyman, on another raid on the Ndebele with a mixed commando of Griqua, Korana and Tswana. This time the purpose of the raid was to sweep Mizilikazi from the area and the commando had been given instructions not to encumber themselves with stolen cattle.

The commando entered the area through Olifantsnek and split into parties to destroy all the Ndebele basis north of the mountains between the Crocodile and Hex Rivers. With the main Ndebele force out on raiding parties they again encountered little resistance as Mizilikazi initially hid in the mountains, however unable to overcome their greed and falling into the same trap as Jan Bloem two years earlier, the commando regrouped and camped at the Hex river near Bospoort, with a huge herd of captured cattle.

That night Mizilikazi's reinforcements arrived and attacked while Hooyman's men were sleeping, killing all but the handful of men who managed to escape. It was eventually the Zulus who, in 1832, sent a raiding party into the area and after an inconclusive battle with the Ndebele, had managed to make off with a large herd of captured cattle, that finally convinced Mizilikazi to move further west leaving a void which was soon filled by the Voortrekkers who had started arriving in the area from 1837, and the remnants of the tribes who had been scattered by the Ndebele. Soon

Hekpoort and Skeerpoort were thriving farming communities and it is recorded that as early as 1840 Albertus Venter with his wife and daughter were already farming on the farm De Kroon, in the Brits area.

In 1864 the armistice treaty for the Transvaal civil war was signed beneath a Karee tree just to the south of Brits. The Brits railway station, built on the property of Johan Nicolaas Brits part owner of the farm Roodekopjes, was opened on 9 July 1906 and soon entrepreneurs started setting up shops on the southern side of the station, which is today known as Tom Street, and is the major part of the Indian area of Brits called Pimindia. Another significant event in the area was a speech by General Hertzog in 1912 at the nearby De Wildt railway station that led to the formation of the National Party a major player in the history of South Africa until the country's first totally democratic election in 1994.

Initially when post started arriving at Brits by train the station master was required to sort the mail until 1915, when Heydon Thomas was appointed as the first Postmaster of the little Post Office that was established on the Brits Station, and in due course the first telephone in the area was installed in this building. By 1918 the first steam driven roller mill, built on the west side of the station, was in operation, and was to serve the community for years to come.

At the outset the area developed with no proper planning, having no running water, however after Louis Karovsky bought the part of Hendrik Christiaan Brits' farm to the north of the rail road and cut up the area into 940 stands, and this section was proclaimed as a township, in October 1923. In 1923 the Hartbeespoort Dam, situated less than twenty kilometres south of Brits, on the Crocodile River finally opened, and by 1928 the last of the network of irrigation canals was completed, bringing water to large areas of farmland around Brits, which encouraged the cultivation of citrus, vegetables and grain, the mainstays of the present farming community.

Today with its strong industrial base the town plays an important role in the South African mining industry, as, addition to the large vanadium mine in the district, 94% of South Africa's platinum is produced in the Rustenburg and Brits districts, which together mine more platinum than any other single area in the world.

7. FINDINGS

During the survey, no heritage resources were found on the site under study. One portion of the site has been severely disturbed by construction of the existing houses. The structures found on

site were recently built, below 60 years old. This means, they have no heritage significance, and therefore protected by the heritage Act.

8. IMPACT ASSESSMENT

The project will probably impact the site under study during the operation phase due to disturbance of the ground. Should any heritage resource be discovered that were not initially noted during the survey, the proposed recommendations should be adhered to. This section evaluates the extent of the impact WITH and WITHOUT mitigation measures in relation to the study area.

Table 3: Evaluation of the impacts of the project on the heritage resource *WITHOUT* mitigation measures.

| Aspect | Description | Weight |
|---------------------------|--|--------|
| Probability | Improbable | 1 |
| | Probable | 2 |
| | Highly Probable | 4 |
| | Definite | 5 |
| Duration | Short term | 1 |
| | Medium term | 3 |
| | Long term | 4 |
| | Permanent | 5 |
| Scale | Local | 1 |
| | Site | 2 |
| | Regional | 3 |
| Magnitude/Severity | Low | 2 |
| | Medium | 6 |
| | High | 8 |
| Significance | Sum (Duration, Scale, Magnitude) x Probability | |

| | | |
|--|-----------------|------------------|
| | Negligible | ≤20 |
| | Low | >20≤40 |
| | Moderate | >40≤60 |
| | High | >60 |

Results: $3+3+8 \times 4 = 56$ i.e $>40 \leq 60$

This means without mitigation measures, the impact of the proposed project is of importance to one or more stakeholders, and its intensity will be medium or high; therefore, the impact may materially affect the decision, and management intervention will be required.

Table 4: Evaluation of the impacts of project on the structures WITH mitigation measures.

| Aspect | Description | Weight |
|---------------------------|--|--------|
| Probability | Improbable | 1 |
| | Probable | 2 |
| | Highly Probable | 4 |
| | Definite | 5 |
| Duration | Short term | 1 |
| | Medium term | 3 |
| | Long term | 4 |
| | Permanent | 5 |
| Scale | Local | 1 |
| | Site | 2 |
| | Regional | 3 |
| Magnitude/Severity | Low | 2 |
| | Medium | 6 |
| | High | 8 |
| Significance | Sum (Duration, Scale, Magnitude) x Probability | |
| | Negligible | ≤20 |

| | | |
|--|----------|--------|
| | Low | >20≤40 |
| | Moderate | >40≤60 |
| | High | >60 |

Results: $1+1+6\times 1 = 8$ i.e. ≤ 20

The impact is non-existent or unsubstantial and is of no or little importance to any stakeholder and can be ignored.

8.1.1 Cumulative impacts

Such impacts are expected during the construction phase or operation phase of the project when the constructor or the owner goes beyond the proposed scope of work such as areas that are not permitted for the chicken broiler houses. This in turn results in disturbance of the ground and possibly affecting heritage resources that may exist.

8.1.2 Residual Impacts

8.1.2.1 *Positive*

These are the kind of impacts that are predicted to positively affect the environment even after efforts were made to mitigate. No positive residual impacts are anticipated.

8.1.2.2 *Negative*

The project has a high possibility of altering or damaging heritage resources that may exist underground if proposed mitigation measures are not adhered to. This means, possible heritage resources *in situ* will be disturbed and cannot be reversed.

8.2 Construction Phase

8.2.1 Impact

Discovery of heritage resources such as burial grounds and graves and stone tools is a probability and/or cannot be ruled out in the construction phase, due to ground disturbance as a result of excavations.

8.2.2 Mitigation measure

Should potential human remains and/or stone tools be found on site, the contractor should cease construction immediately and the South African Police Service and the client should be contacted for human remains, and a professional archaeologist for the stone tools.

8.3 Operational Phase

8.3.1 Impact

No heritage impacts are anticipated during the operational phase.

8.3.2 Mitigation measure

No mitigation measure proposed.

8.4 Decommissioning Phase

8.4.1 Impact

No heritage impacts are anticipated during the operational phase.

8.4.2 Mitigation measure

No mitigation measure proposed.

8.5 Site Significance

The level of significance of the site and the cultural resources varies between social, historical, spiritual, scientific and aesthetic value.

Social value is when a place has become a focus of spiritual, political, national, or other cultural sentiments to a majority or minority group. This may be because the site is accessible and well known, rather than particularly well preserved or scientifically important (SAHRA Regulations). The proposed site has no social value.

Historical value refers to areas where historical events took place, and such events have high significance either locally, regionally, provincially, or nationally. The proposed site has no historical value.

Scientific value refers to the importance of the study area for research purposes. The study areas seemed to have no scientific value.

Aesthetic value refers to the unique beauty of the site. No aesthetic value found on the proposed site.

Based on the level of significance, the proposed site has no heritage significance.

9. RECOMMENDATIONS AND CHANGE FINDINGS

- During the operational phase, the applicant should be on the lookout for possible heritage resources that may be exposed during clearing and excavation on site.
- The applicant should induct all employees on the importance of heritage sites and resources that they should not be impacted in any way. This is to ensure that even if any heritage resources are found during the operational phase or exposed due to digging, should by no means be impacted or destroyed.
- Should any other heritage resources be found on site; be it archaeological artefacts such as stone tools and pottery; burial grounds and graves and structures; the applicants should cease operations immediately and contact the client. A heritage expert should be called to site to assess the significance of the archaeological material and the impacts of the proposed activities on such materials, and then provide mitigation measures.
- The possibility of uncovering unearthed human remains and shallow grave(s) should not be ruled out. Should potential human remains be found on site, the applicants should cease operations immediately and the South African Police Service and the client should be contacted. Should the remains be below 60 years old since time of death, it is considered a forensic case and further investigations should be conducted by the police and should the remains be above 60 years old since time of death, it becomes a South African Heritage Resources Agency case. This means an archaeologist should be called on site to remove the remains at the expense of the client.

10. CONCLUSION

In conclusion, no heritage resources were found during the site survey. All the structures on site were recently built, below 60 years old. This means the proposed site has low significance from a heritage perspective. Chances of finding burial grounds and graves on the proposed site should not be ruled out especially during construction phase on the areas that have not been disturbed. The proposed project may proceed provided mitigation measures and recommendations provided are adhered to and implemented.

The final report will be submitted on SAHRIS for review and for a decision. Furthermore, subject to approval from SAHRA we recommend the approval to proceed with the Section 24G application, expansion and related operation of 4 additional broiler poultry houses in terms of the NHRA.

11. REFERENCES

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<https://showme.co.za/history-of-brits/>

APPENDIX A

LIST OF LEGISLATION APPLICABLE TO THE SITE

12. LEGISLATION

National Heritage Resources Act 25 of 1999

12.1 Section 3 of the NHRA 25 of 1999

According to Section 3 under **National Estate** of the National Heritage Act 25 of 1999 the heritage resources in South Africa includes the following:

“(1) For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.

(2) Without limiting the generality of subsection (1), the national estate may include –

- (a) places, buildings, structures and equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage; (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and paleontological sites;
- (g) graves and burial grounds, including—
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;

- (iii) graves of victims of conflict;
- (iv) graves of individuals designated by the Minister by notice in the Gazette;
- (v) historical graves and cemeteries; and
- (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects, including:
 - (i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects;
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interest; and
 - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).
- (3) Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of –
 - (a) its importance in the community, or pattern of South Africa's history;
 - (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
 - (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;

- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- (i) sites of significance relating to the history of slavery in South Africa".

12.2 Section 36 of NHRA 25 of 1999

According to Section 36 under **Burial grounds and graves** of the National Heritage Act 25 of 1999 the graves in South Africa are protected as follows:

- (1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.
- (2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.
- (3)(a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority—
 - (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

- (b) 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
- (c) 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 the detection or recovery of metals.
- (4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.
- (5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection (3)(b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority—
 - (a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
 - (b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.
- (6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority—
 - (a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
 - (b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

- (7)(a) SAHRA must, over a period of five years from the commencement of this Act, submit to the Minister for his or her approval lists of graves and burial grounds of persons connected with the liberation struggle and who died in exile or as a result of the action of State security forces or agents provocateur and which, after a process of public consultation, it believes should be included among those protected under this section.
- (b) The Minister must publish such lists as he or she approves in the Gazette.
- (8) Subject to section 56(2), SAHRA has the power, with respect to the graves of victims of conflict outside the Republic, to perform any function of a provincial heritage resources authority in terms of this section.
- (9) SAHRA must assist other State Departments in identifying graves in a foreign country of victims of conflict connected with the liberation struggle and, following negotiations with the next of kin, or relevant authorities, it may re-inter the remains of that person in a prominent place in the capital of the Republic.

12.3 Section 38 of NHRA 25 of 1999

According to Section 38 under Heritage resources management of the National Heritage Act 25 of 1999 the heritage resources in South Africa should be managed in the following:

“(1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as—

- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50 m in length;
- (c) any development or other activity which will change the character of a site—
 - (i) exceeding 5 000 m² in extent; or
 - (ii) involving three or more existing erven or subdivisions thereof; or
 - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m² in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

(2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection (1)—

(a) if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report. Such report must be compiled at the cost of the person proposing the development, by a person or persons approved by the responsible heritage resources authority with relevant qualifications and experience and professional standing in heritage resources management; or

(b) notify the person concerned that this section does not apply.

(3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:

(a) The identification and mapping of all heritage resources in the area affected;

(b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;

(c) an assessment of the impact of the development on such heritage resources;

(d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;

(e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;

(f) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and

(g) plans for mitigation of any adverse effects during and after the completion of the proposed development.

(4) The report must be considered timeously by the responsible heritage resources authority which must, after consultation with the person proposing the development, decide—

(a) whether or not the development may proceed;

(b) any limitations or conditions to be applied to the development;

(c) what general protections in terms of this Act apply, and what formal protections may be applied, to such heritage resources;

(d) whether compensatory action is required in respect of any heritage resources damaged or destroyed as a result of the development; and

(e) whether the appointment of specialists is required as a condition of approval of the proposal.

(5) A provincial heritage resources authority shall not make any decision under subsection (4) with respect to any development which impacts on a heritage resource protected at national level unless it has consulted SAHRA.

(6) The applicant may appeal against the decision of the provincial heritage resources authority to the MEC, who—

(a) must consider the views of both parties; and

(b) may at his or her discretion—

(i) appoint a committee to undertake an independent review of the impact assessment report and the decision of the responsible heritage authority; and

(ii) consult SAHRA; and

(c) must uphold, amend or overturn such decision.

(7) The provisions of this section do not apply to a development described in subsection (1) affecting any heritage resource formally protected by SAHRA unless the authority concerned decides otherwise.

(8) The provisions of this section do not apply to a development as described in subsection (1) if an evaluation of the impact of such development on heritage resources is required in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act No. 50 of 1991), or any other legislation: Provided that the consenting authority must ensure that the evaluation fulfils the requirements of the relevant heritage resources authority in terms of subsection (3), and any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent.

(9) The provincial heritage resources authority, with the approval of the MEC, may, by notice in the Provincial Gazette, exempt from the requirements of this section any place specified in the notice.

(10) Any person who has complied with the decision of a provincial heritage resources authority in subsection (4) or of the MEC in terms of subsection (6) or other requirements referred to in subsection (8), must be exempted from compliance with all other protections in terms of this Part, but any existing heritage agreements made in terms of section 42 must continue to apply.