HIA FOR THE TRANQUILITY MEMORIAL PARK, INANDA, KZN

FOR WALLACE & GREEN (PTY) LTD

DATE: 27 MARCH 2022

By Gavin Anderson

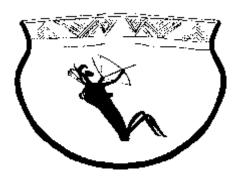
Umlando: Archaeological Surveys and Heritage

Management

PO Box 10153, Meerensee, 3901

Phone: 035-7531785 Cell: 0836585362

umlando@gmail.com



EXECUTIVE SUMMARY

Tranquility Memorial Park (Pty) Ltd intends to establish the Tranquility Memorial Park located on Portion 40 of Erf 818 Inanda, eThekwini Municipality. The total extent of the site is approximately 18.5ha and is covered by sugar cane plantations. The proposed development will entail the construction of a guardhouse, electric fencing, parking, walkways, roads, cemetery, a garden, open air memorial/reflection area, wetland park and office space with ablution facilities.

A heritage impact assessment was undertaken for the proposed Tranquility Memorial Park, Inanda. The desktop noted that several houses occurred within, and adjacent to, the study area. Some of these buildings are older than 60 years in age and would need further assessment if affected. The desktop also noted that archaeological sites had been previously recorded in the general area.

The field survey noted that only one house dating to the 1970s occurs within the development and that it is of low significance. The survey also recorded an ephemeral scatter of Historical Period pottery within the sugar cane fields. This archaeological site is of low significance, but will require a permit from KZNARI before the development begins. Permits are required for a site regardless of its significance.

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Abbreviations

HP	Historical Period
IIA	Indeterminate Iron Age
LIA	Late Iron Age
EIA	Early Iron Age
ISA	Indeterminate Stone Age
ESA	Early Stone Age
MSA	Middle Stone Age
LSA	Late Stone Age
HIA	Heritage Impact Assessment
PIA	Palaeontological Impact Assessment

INTRODUCTION

Tranquility Memorial Park (Pty) Ltd intends on establishing the Tranquility Memorial Park located on Portion 40 of Erf 818 Inanda within the eThekwini Municipality. The total extent of the site is approximately 18.5ha and is covered by sugar cane plantations. The site is situated north of Durban, west to the Town of Verulam and is accessed via a gravel road off the M27 Main Road. The proposed development will entail the construction of a guardhouse, electric fencing, parking, walkways, roads, cemetery, a garden, open air memorial/reflection area, wetland park and office space with ablution facilities.

Umlando was requested to undertake an HIA of the proposed Tranquility Memorial Park. Figures 1 – 4 show the location of the development.

FIG. 1 GENERAL LOCATION OF THE PROPOSED DEVELOPMENT

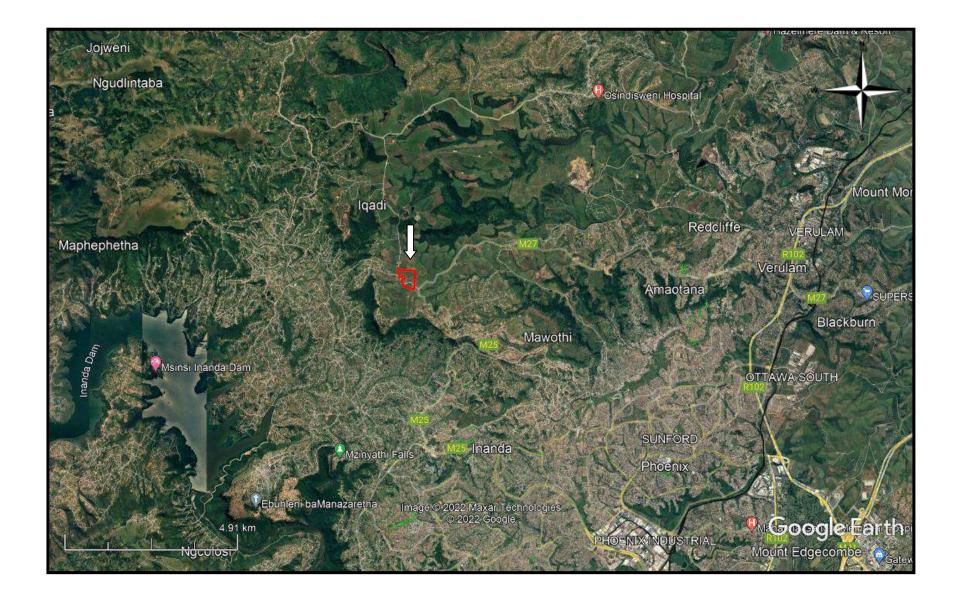


FIG. 2: AERIAL OVERVIEW OF THE PROPOSED DEVELOPMENT



FIG. 3: TOPOGRAPHICAL MAP OF THE PROPOSED DEVELOPMENT (2000)

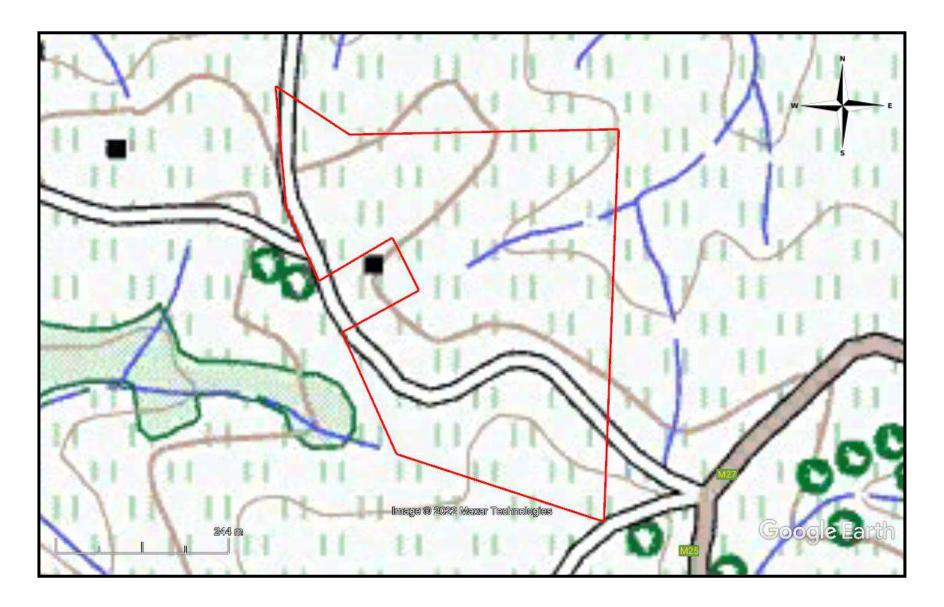


FIG. 4: SCENIC VIEWS OF THE STUDY AREA









KWAZULU NATAL AMAFA AND RESEARCH INSTITUTE, ACT 05, 2018

"General protection: Structures.—

- No structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without the prior written approval of the Council having been obtained on written application to the Council.
- Where the Council does not grant approval, the Council must consider special protection in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- The Council may, by notice in the Gazette, exempt—
- A defined geographical area; or
- defined categories of sites within a defined geographical area, from the provisions of subsection where the Council is satisfied that heritage resources falling in the defined geographical area or category have been identified and are adequately protected in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- A notice referred to in subsection (2) may, by notice in the Gazette, be amended or withdrawn by the Council.

General protection: Graves of victims of conflict.—No person may damage, alter, exhume, or remove from its original position—

- the grave of a victim of conflict;
- a cemetery made up of such graves; or
- any part of a cemetery containing such graves, without the prior written approval of the Council having been obtained on written application to the Council.
- General protection: Traditional burial places.—
- No grave—
- not otherwise protected by this Act; and
- not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, removed from its original

position, or otherwise disturbed without the prior written approval of the Council having been obtained on written application to the Council.

The Council may only issue written approval once the Council is satisfied that—

- the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and
- the applicant and the relevant communities or individuals have reached agreement regarding the grave.

General protection: Battlefield sites, archaeological sites, rock art sites, palaeontological sites, historic fortifications, meteorite or meteorite impact sites.—

- No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- Upon discovery of archaeological or palaeontological material or a
 meteorite by any person, all activity or operations in the general vicinity of
 such material or meteorite must cease forthwith and a person who made
 the discovery must submit a written report to the Council without delay.
- The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.
- No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or

excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.

 The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government."

METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the database that has been collated by Umlando. This databases contains archaeological site locations and basic information from several provinces (information from Umlando surveys and some colleagues), most of the national monuments and battlefields Southern Africa provincial in (http://www.vuvuzela.com/googleearth/monuments.html) and cemeteries southern Africa (information supplied by the Genealogical Society of Southern Africa). We use 1st and 2nd edition 1:50 000 topographical and 1937 aerial photographs where available, to assist in general location and dating of buildings and/or graves. The database is in Google Earth format and thus used as a quick reference when undertaking desktop studies. Where required we would consult with a local data recording centre, however these tend to be fragmented between different institutions and areas and thus difficult to access at times. We also consult with an historical architect, palaeontologist, and an historian where necessary.

The survey results will define the significance of each recorded site, as well as a management plan.

All sites are grouped according to low, medium, and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts or features. Sites of medium significance have diagnostic artefacts or features and these sites tend to be sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips, and decorated sherds are sampled, while bone, stone, and shell are mostly noted. Sampling usually occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features.

Defining significance

Heritage sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance rating of archaeological sites.

These criteria are:

1. State of preservation of:

- 1.1. Organic remains:
- 1.1.1. Faunal
- 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
- 1.5.1. Ash Features
- 1.5.2. Graves

- 1.5.3. Middens
- 1.5.4. Cattle byres
- 1.5.5. Bedding and ash complexes

2. Spatial arrangements:

- 2.1. Internal housing arrangements
- 2.2. Intra-site settlement patterns
- 2.3. Inter-site settlement patterns

3. Features of the site:

- 3.1. Are there any unusual, unique or rare artefacts or images at the site?
 - 3.2. Is it a type site?
- 3.3. Does the site have a very good example of a specific time period, feature, or artefact?

4. Research:

- 4.1. Providing information on current research projects
- 4.2. Salvaging information for potential future research projects

5. Inter- and intra-site variability

- 5.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?
- 5.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

6. Archaeological Experience:

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

7. Educational:

- 7.1. Does the site have the potential to be used as an educational instrument?
 - 7.2. Does the site have the potential to become a tourist attraction?
- 7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

8. Other Heritage Significance:

- 8.1. Palaeontological sites
- 8.2. Historical buildings
- 8.3. Battlefields and general Anglo-Zulu and Anglo-Boer sites
- 8.4. Graves and/or community cemeteries
- 8.5. Living Heritage Sites
- 8.6. Cultural Landscapes, that includes old trees, hills, mountains, rivers, etc related to cultural or historical experiences.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. This occurs in Phase 2. These test-pit excavations may require further excavations if the site is of significance (Phase 3). Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts. Table 1 lists the grading system.

TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES

SITE SIGNIFICANCE	FIELD RATING		GRADE	RECOMMENDED MITIGATION			ΓΙΟΝ	
High	National		Grade 1		Site	conservation	1	Site
Significance	Significance		Ciddo i		developme		,	Oito
High	Provincial		Grade 2		Site	conservation	/	Site
Significance	Significance				developme	ent		
High	Local		Grade 3A	/				
Significance	Significance	3B						
High / Medium	Generally				Site o	conservation or	mitig	gation
Significance	Protected A			prior to development / destruction				
Medium	Generally			Site conservation or mitigation /				
Significance	Protected B			test excavation / systematic sampling				
					/ monitor	ing prior to	or c	during
					developme	ent / destruction		
Low Significance Generally						e sampling mo		•
	Protected C					ological mitigation		
					prior to	or during deve	elopm	ent /
					destruction)		

RESULTS

DESKTOP STUDY

The desktop study consisted of analysing various maps for evidence of prior habitation in the study area, as well as for previous archaeological surveys. Many archaeological sites occur in the general area. The archaeological sites tend to be open Stone Age and Iron Age sites of varying significance. Some historical buildings do exist in the general area. These are sites that have been recorded through systematic surveys (fig. 5).

The following maps and aerial photographs were used to note the occurrence of built structures and features within the study area. 1937, 1942, 1953, 1965, 1978, 1996 and 1996. This allows for approximate dates of the various features and determines if permits are required for their demolition. Table 2 summarises the houses and the associated maps.

The 1937 aerial photograph indicates that there are three settlements in the general area: H1, H3 (possible feature) and H6, H6 is out of the study area (fig. 6).

The 1942 topographical map indicates that H1 and H6 occur on the landscape (fig. 7).

The 1953 aerial photograph indicates that only H1 exists (fig. 8). H6 has been demolished.

The 1967 aerial photograph indicates that H6 has been rebuilt, and that H5 occurs just outside of the study area (fig. 9). This aerial photograph is important in that anything built before it, will be older than 60 years in age and thus require

a permit if it was to be demolished or altered. If any part of H5 will be affected, then it needs to be assessed by a qualified Built Environment specialist.

The 1978 aerial photograph shows that H4 was built after 1967 and is thus not older than 60 years in age. Only H1, H3 and H4 occurs within the study area.

TABLE 2: LOCATION OF POSSIBLE HERITAGE SITES

Name	Latitude	Longitude	Description	1937	1942	1953	1967	1978	1999
h1	-29.6523509	30.92665534	House	X	X	X			
h3	-29.6529443	30.93008361	Feature	X					
h4	-29.65744236	30.93170865	House					X	X
h5	-29.65748758	30.9310692	House				X	X	X
h6	-29.65464401	30.92735415	House	X	X		X	X	X

FIG. 5: LOCATION OF KNOWN HERITAGE SITES IN THE GENERAL AREA

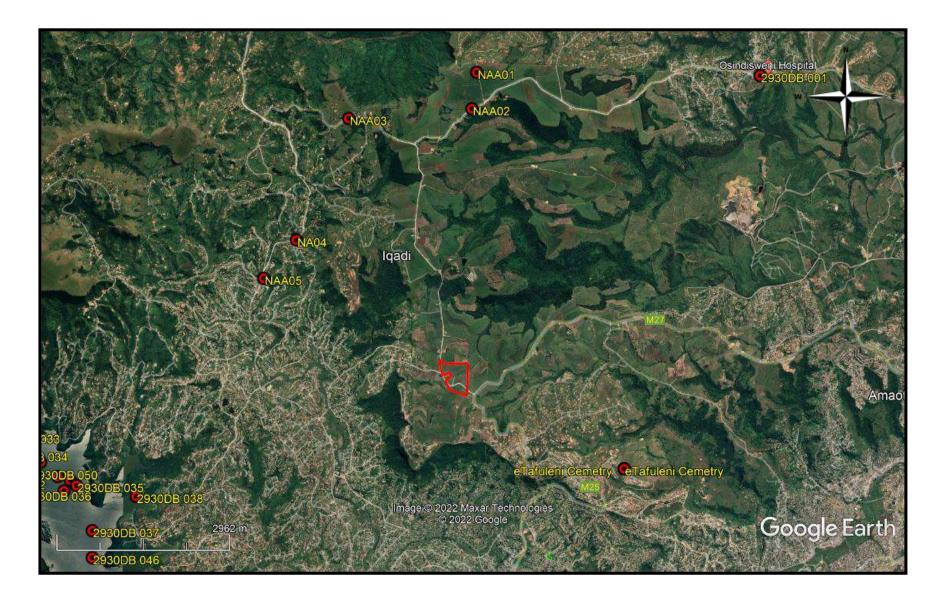


FIG. 6: LOCATION OF THE STUDY AREA IN 1937



FIG. 7: LOCATION OF THE STUDY AREA IN 1942

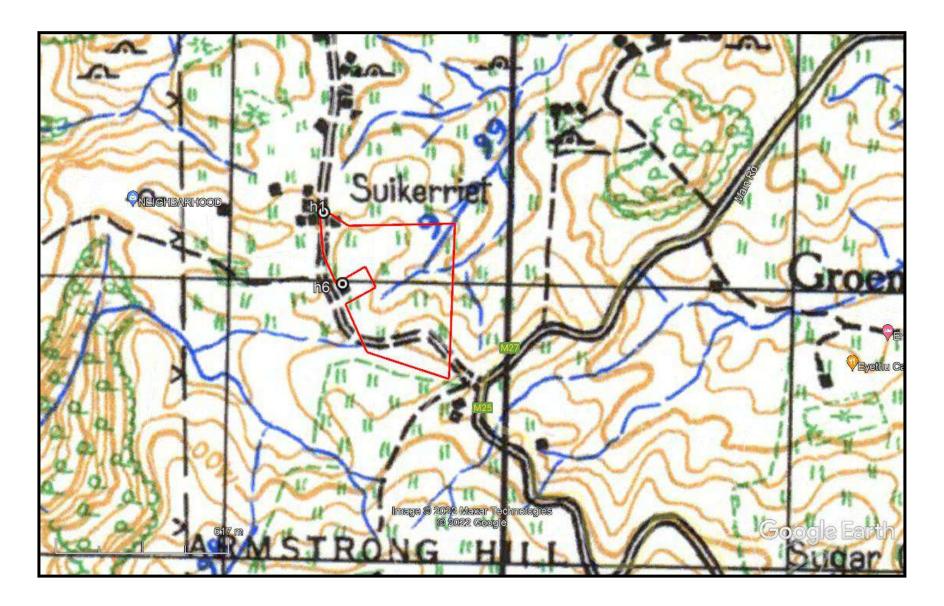


FIG. 8: LOCATION OF THE STUDY AREA IN 1953



FIG. 9: LOCATION OF THE STUDY AREA IN 1967



FIG. 10: LOCATION OF THE STUDY AREA IN 1978



FIG. 11: LOCATION OF THE STUDY AREA IN 1996



PALAEONTOLOGICAL SENSITIVITY

The area is in an area of zero to low palaeontological sensitivity (fig. 12). No further PIA mitigation is required.



FIG. 12: PALAEONTOLOGICAL SENSITIVITY MAP

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.

FIELD SURVEY

A field survey was undertaken in March 2022. The aim of the survey was to confirm the presence/absence of the built features, or houses, and to survey the three hilltops for archaeological sites. The sugar cane was very dense; however, the access tracks were cleared and this allowed suitable survey conditions.

Fig. 13 shows the location of recorded sites, while Table 3 lists their locations.



FIG. 13: LOCATION OF RECORDED SITES

TABLE 3: LOCATION OF RECORDED SITES

Name	Latitude	Longitude	Description	Affected development?	by
TRAN01	-29.653152	30.928511	Scatter of pottery	Yes	
h4	-29.65744236	30.93170865	House	Yes	
h5	-29.65748758	30.9310692	House	No	
h6	-29.65464401	30.92735415	House	No	

HOUSES

H5 and H6 will not be affected by the proposed Memorial Park and do not require further mitigation. Both buildings are older than 60 years in age and are protected by the heritage legislation. H1 and H3 no longer exist and have been cleared. H4 post-dates 1967 and is less than 60 years in age (fig. 14). Fig. 14

was sent to Lindsay Napier for an initial comment who confirmed the house dated to the 1970s and that there was no significance attached to it.

FIG. 14: REMAINS OF H4



TRAN01

TRAN01 is located on the top of the main hill just north of the house H6. Several pottery shards were noted over a 120m distance as well as three lower grinding stone fragments (fig. 15). The shards are all in a secondary context and the area has been heavily ploughed over several decades. There will be no

archaeological deposit either as the ground is not deep enough to withstand ploughing activity. I believe this would occur across the rest of the hill.

The pottery shards are mostly thin-walled and undecorated. The sherds vary in colour from brown, light brown, orange. Unfortunately, the shards in Fig. 15 are slightly out of focus, and this was only noted after the survey.

Significance: The site is of low significance

Mitigation: No further mitigation is required; however, a permit for the destruction of the site will be required.

SAHRA Rating: 3C

FIG. 15: SHARDS AND GRINDING STONE FRAGMENTS FROM TRAN01



RECOMMENDATIONS & MITIGATION

The proposed Tranquility Memorial Park will affect one archaeological site and one house dating to the 1970s. No mitigation is required for the house H4.

The two houses adjacent to the development (H5 and H6) will require further assessment if they are to be affected in any manner. They will also require permits to be altered, damaged or demolished.

The archaeological site TRAN01 is of low significance and does not require further mitigation. A permit is required to damage, alter, or demolish the site.

CONCLUSION

A heritage impact assessment was undertaken for the proposed Tranquility Memorial Park, Inanda. The desktop noted that several houses occurred within, and adjacent to, the study area and that some of these are older than 60 years. The desktop also noted that archaeological sites had been previously recorded in the general area and it was likely to occur in the proposed development.

The field survey noted that only one house dating to the 1970s occurs within the development and that it is of low significance. The survey also recorded an ephemeral scatter of Historical Period pottery. This archaeological site is of low significance, but will require a permit from KZNARI before the development begins.

REFERENCES

1:50 000 Topographical Maps

2930DB Inanda 1942, 1996

Aerial Photographs

117B_044_36770

Database

KZN Museum

SHARIS

Umlando

30/04/2022

EXPERIENCE OF THE HERITAGE CONSULTANT

Gavin Anderson has a M. Phil (in archaeology and social psychology) degree from the University of Cape Town. Gavin has been working as a professional archaeologist and heritage impact assessor since 1995. He joined the Association of Professional Archaeologists of Southern Africa in 1998 when it was formed. Gavin is rated as a Principle Investigator with expertise status in Rock Art, Stone Age and Iron Age studies. In addition to this, he was worked on both West and East Coast shell middens, Anglo-Boer War sites, and Historical Period sites.

DECLARATION OF INDEPENDENCE

I, Gavin Anderson, declare that I am an independent specialist consultant and have no financial, personal or other interest in the proposed development, nor the developers or any of their subsidiaries, apart from fair remuneration for work performed in the delivery of heritage assessment services. There are no circumstances that compromise the objectivity of my performing such work.

Gavin Anderson

Archaeologist/Heritage Impact Assessor