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*PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT*

**TSOLO SEWAGE TREATMENT WORKS, TSOLO,  
O.R. TAMBO DISTRICT, EASTERN CAPE,  
SOUTH AFRICA**

**DATE:** 2010-02-15

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## 1) TERMS OF REFERENCE

Biotechnology & Environmental Specialist Consultancy (BESC) has been appointed as independent environmental consultant by the developer, the O.R. Tambo District Municipality, to prepare the Environmental Impact Assessment (EIA) for the proposed *Tsolo Sewage Treatment Works* development, Tsolo, O.R. Tambo District, Eastern Cape (BESC 2008). ArchaeoMaps Archaeological Consultancy has been appointed by BESC to conduct the Phase 1 Archaeological Impact Assessment (AIA) as specialist sub-section to the EIA.

### 1.1) *Development Details, Location & Impact*

**Purpose of Development:** At present there is no licensed sewage treatment works in the Tsolo area and the current uncontrolled method of sewage treatment and disposal threatens the long term use of groundwater resources and water from the Xokonxa River. Groundwater constitutes a significant portion of Tsolo's water supply; contamination thereof could have a serious effect on the health of the population. The proposed *Tsolo Sewage Treatment Works* will receive sewage from a now fully reticulated town (BESC 2008).

**Development Location and Impact:** The proposed study sites are situated in the town of Tsolo, approximately 40km north of Umtata. The sites comprise of the:

1. *Pump Station* site, located on a portion of the Remainder of Erf 42; and the
2. *Sewage Treatment Works* site, located on a portion of Farm 61.

Both sites fall within the area of jurisdiction of the Mhlontlo Municipality.

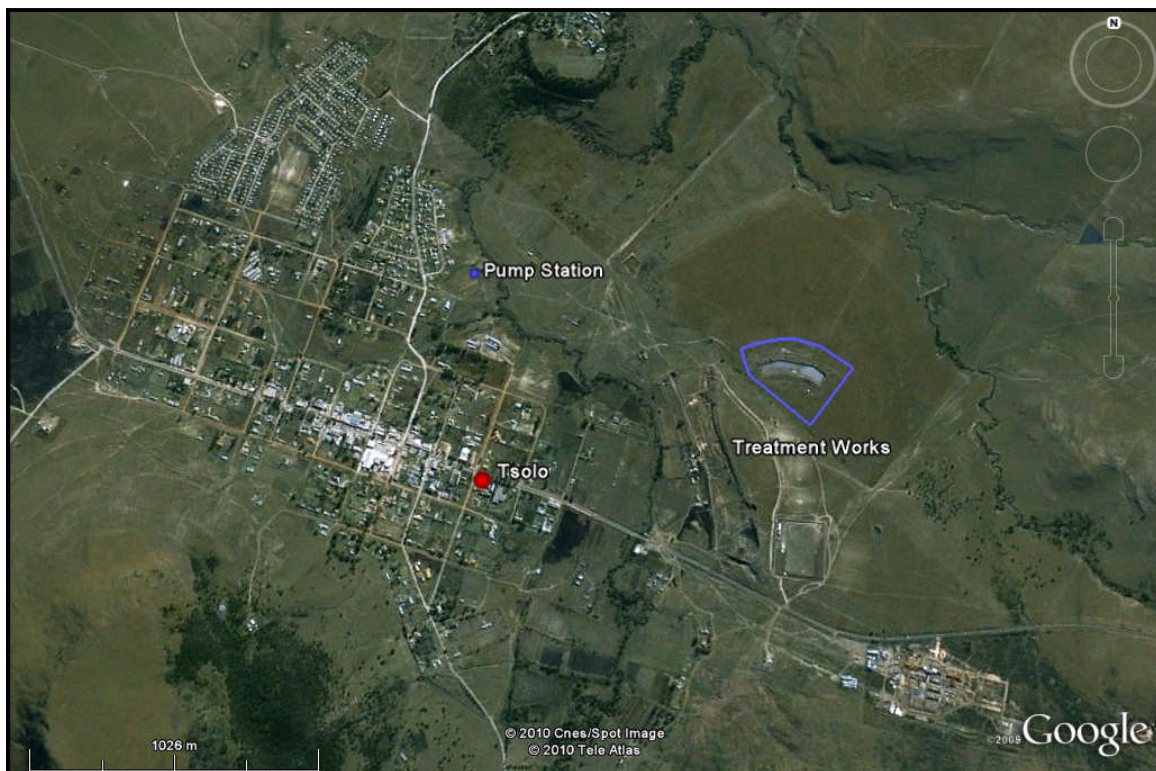
The *Pump Station* site: The study site constitutes the locality of the current oxidation pond site. The oxidation ponds are to be decommissioned and a pump station will be constructed. The property is owned by the municipality and surrounded by residential areas, a school and church. The Xokonxa River lies approximately 50m to the east of the site (BESC 2008).

The *Sewage Treatment Works* site: It is proposed to construct an activated sludge sewage treatment works. Waste sludge is to be dried on drying beds and then removed and disposed of in a safe and acceptable manner. The effluent is to be treated to an acceptable standard, as defined by the Department of Water Affairs and Forestry's general Authorization, and then disposed of in the Xokonxa River. The property is owned by the Department of Agriculture and was historically used by the Tsolo College of Agriculture as grazing camps for livestock. The surrounding area consists primarily of vacant land (BESC 2008).

Impact of the proposed development can thus be described as localized but total; implying the loss of all surface and subsurface heritage resources located in the particular areas of development.



**Figure 1:** Tsolo near Umtata in the Eastern Cape



**Figure 2:** Localities of the proposed Pump Station and Sewage Treatment Works sites in relation to Tsolo

## 2) THE PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

### 2.1) *Archaeological Legislative Compliance*

The Phase 1 Archaeological Impact Assessment (AIA) was requested by the South African Heritage Resources Agency (SAHRA) mandatory responsible for the National Heritage Resources Act, Act No 25 of 1999 (NHRA 1999).

The Phase 1 AIA was requested as specialist sub-section to the Environmental Impact Assessment (EIA) in compliance with requirements of the National Environmental Management Act, No 107 of 1998 (NEMA 1998) and associated Regulations (2006), and the NHRA 1999 and associated Regulations (2000).

The Phase 1 AIA aimed to locate, identify and assess the significance of cultural heritage resources, inclusive of archaeological deposits / sites, built structures older than 60 years, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict and cultural landscapes or views as defined and protected by the NHRA 1999, that may be affected by the proposed development. Palaeontological deposits / sites as defined and protected by the NHRA 1999 are not included as subject to this report.

### 2.2) *Methodology*

The Phase 1 AIA was conducted over a 1 day period (2010-02-08) by one archaeologist. The assessment was done by foot and limited to a Phase 1 surface survey; no excavation or sub-surface testing was done. GPS co-ordinates were taken with a Garmin GPSmap 60CSx GPS (Datum: WGS84). Photographic documentation was done with a Pentax K20D camera. A combination of Garmap and Google Earth software was used in the display of spatial information.

Archaeological and cultural heritage site significance assessment and associated mitigation recommendations were done according to the system prescribed by SAHRA (2007).

SAHRA ARCHAEOLOGICAL AND CULTURAL HERITAGE SITE SIGNIFICANCE ASSESSMENT			
SITE SIGNIFICANCE	FIELD RATING	GRADE	RECOMMENDED MITIGATION
High Significance	National Significance	Grade 1	Site conservation / Site development
High Significance	Provincial Significance	Grade 2	Site conservation / Site development
High Significance	Local Significance	Grade 3A / 3B	Site conservation or extensive mitigation prior to development / destruction
High / Medium Significance	Generally Protected A	-	Site conservation or mitigation prior to development / destruction
Medium Significance	Generally Protected B	-	Site conservation or mitigation / test excavation / systematic sampling / monitoring prior to or during development / destruction
Low Significance	Generally Protected C	-	On-site sampling, monitoring or no archaeological mitigation required prior to or during development / destruction

**Table 1:** SAHRA archaeological and cultural heritage site significance assessment



### 2.3) Coverage and Gap Analysis

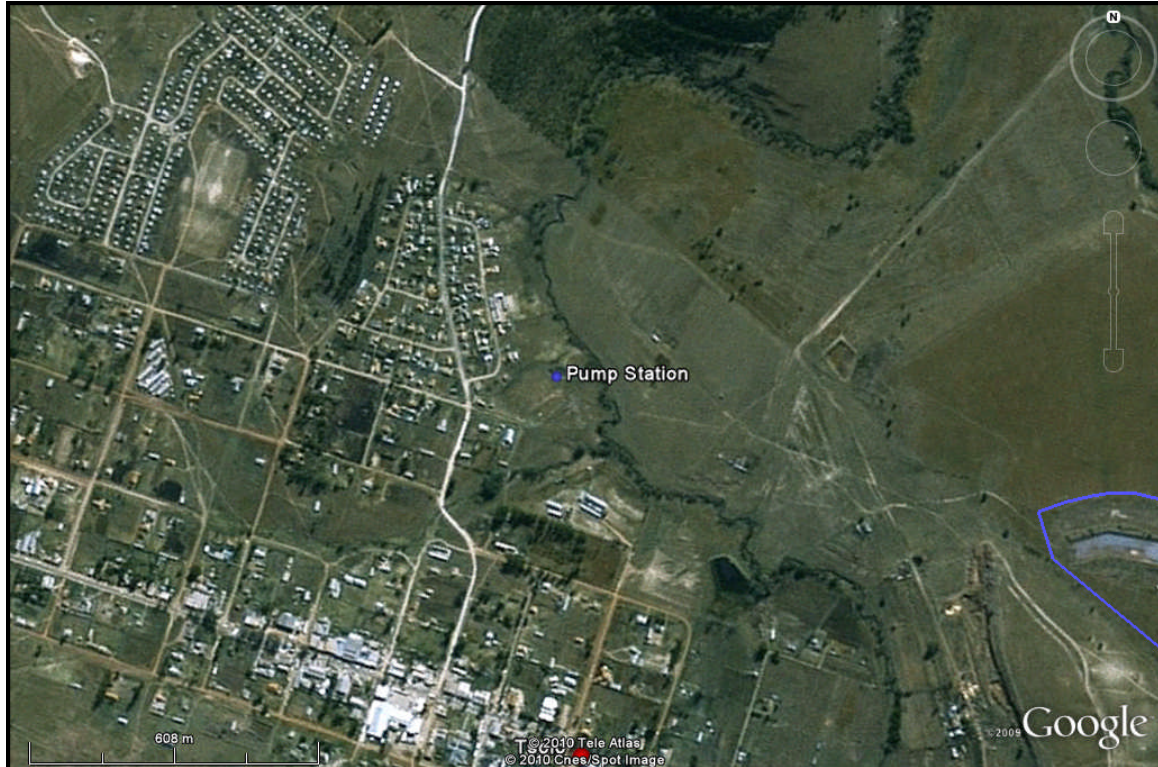
The Phase 1 AIA covered the proposed *Pump Station* as well as the *Sewage Treatment Works* sites. Existing access roads to the sites were travelled at the time of the assessment; the proposed development will not require construction of additional roads or linear development.

### 2.4) Phase 1 AIA Assessment findings

#### 2.4.1) The Pump Station Site

The proposed *Pump Station* site is situated at S31°18'14.2"; E28°45'35.6", on a portion of the Remainder of Erf 42, Tsolo, Eastern Cape, more or less 1.3km north west of the *Sewage Treatment Works* site. Development at the site will be very localized, and limited to the locality of the current oxidation ponds, which will be decommissioned *in lieu* of the *Pump Station* development. The Phase 1 AIA covered the immediate vicinity of the proposed *Pump Station* site; east up to the Xokonxa River, west to the neighboring residential area and with approximate equal distances towards the north and south having resulted in a roughly 4ha assessment area.

**No archaeological or cultural heritage resources as defined and protected by the NHRA 1999 were discovered during assessment of the *Pump Station* study site.**



**Figure 3:** Locality of the Tsolo Sewage Treatment Works *Pump Station* study site

General observations can be summarized as:

- The current oxidation pans itself, by implication, and its immediate surrounds yielded no evidence of archaeological remains. Neither was remains found in the oxidation pan walls constructed from sub-surface material. Towards the south of the pans surface disturbance was evident, again indicative of surface and sub-surface anthropic sterility. The banks of the Xokonxa River displayed some pedological / geological stratigraphy but with no intersecting cultural member.



**Figure 4:** View of the current oxidation pan site – the proposed *Pump Station* locality



**Figure 5:** Disturbance to the south of the oxidation pans





**Figure 6:** Anthropogenic sterile sections of the Xokonxa River

#### 2.4.2) *The Sewage Treatment Works Site*

The proposed *Sewage Treatment Works* site comprises an approximate 8ha area between co-ordinates:

- 1) S31°18'26.7"; E28°46'15.5";
- 2) S31°18'23.6"; E28°46'14.4";
- 3) S31°18'22.4"; E28°46'20.3";
- 4) S31°18'23.2"; E28°46'26.0";
- 5) S31°18'25.9"; E28°46'30.5"; and
- 6) S31°18'33.0"; E28°46'24.2";

located on a portion of Farm 61, Tsolo, Eastern Cape. Development impact at the site is expected to be total, implying impact on all surface and sub-surface heritage resources. The Phase 1 AIA covered the total of the 8ha proposed development area.

Existing surface impact indicated a Middle Stone Age (MSA) member situated roughly between 20-70cm below the present day surface of the *Sewage Treatment Works* site. Artefacts were found eroding from sections of the dam and towards the south and north thereof in shallow scraped surface disturbance and associated dumps. Artefacts are expected in the particular geological member across the extent of the proposed study site. Lithic material is technologically and typologically ascribed to the MSA. Extremely low artefact ratios (artefacts: m<sup>2</sup>) and low quantities of blades and points, as the most prominent MSA *fossiles directeurs*, gives the assemblage a rather a-diagnostic character. No bone or other organic material was found in association with the Stone Age artefacts. The site constitutes an archaeological site as defined and protected by the NHRA 1999. The Site, TSOLO 1, is ascribed a *SAHRA Low Significance* and a *Generally Protected C Field Rating*. It is recommended that the site be either:

- 1) CONSERVED (implying no development at the proposed study site); or
- 2) that the site be DESTROYED *in lieu* of the development under a SAHRA APM Unit *Site Destruction Permit* (the site may be legally destroyed after a SAHRA APM Unit *Site Destruction Permit* have been issued to the developer, after which development may proceed as applied for).



**Figure 7:** Locality of the *Sewage Treatment Works* site (1-2-3-4-5-6-1) in relation to the demarcated TSOLO 1 site extent (thin blue line)

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#### 2.4.2.1) Site TSOLO 1 – Middle Stone Age (MSA) – S31°18'28.7"; E28°46'24.1"

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A small contemporary structure (CS) is located at S31°18'28.7"; E28°46'24.1", also used as co-ordinate for the TSOLO 1 Middle Stone Age (MSA) site.



**Figure 8:** The contemporary structure at Site TSOLO 1



**Figure 9:** Visible scraped surface disturbance at the contemporary structure revealed a low density of MSA artefacts



**Figure 10:** The dam with exposed sections in the foreground

A low density of MSA artefacts were found in the built-up sections around the contemporary structure. Shallow scraped disturbance of approximately 50cm in depth was present in a rough east-west direction from immediately south of the structure northwards towards the perimeter of the dam. A low density of artefacts was present across the extent of the scraped surface. Artefacts ratios (artefacts: m<sup>2</sup>) varied from 1:1 to  $\leq 1:49$ . Dam sections displayed a basic stratigraphy where the 1<sup>st</sup> or top approximate 20cm comprised of sterile topsoil underlain by a thin yellow decomposed layer. Below that an approximate 50cm layer (20-70cm below the present day surface) yielded the anthropic member characterized by low quantities of lithic artefacts in a dark red-grey shale rich member overlying a shallow, approximately 20cm in depth (70-90cm below the present day surface) decomposed calcrete member, also comprising the anthropic basal layer. Geological stratigraphic members underlying the calcrete member proved anthropically sterile. This basic stratigraphy could be discerned across the extent of the exposed dam sections. Impact of the construction of the dam on the anthropic member is evident in the dump area



located immediately north of the dam where a number of artefacts were collected from the dumps and immediate surrounds.



**Figure 11:** Basic stratigraphy of the dam section

Artefacts are typologically and technologically assigned to the MSA. Average artefact size varied between 5-10cm with a number of larger artefacts and smaller flakes, which may represent either part of the tool collection or possible knapping *debris* / production waste. Inferred knapping *debris* together with the amount of cores and core reduced pieces present on site suggests that the area have been used as a knapping site, although no prominent raw material source could be identified from the immediate vicinity. A few formal tools were identified, comprising the expected  $\leq 3\%$  of the assemblage and primarily represented by points and relatively short blades approaching flade-blades or bladelets as primary diagnostic type. In large the collection is made up of a-diagnostic flake types, with a significant informal tool with edge-wear component. Primary raw material used includes medium grained granite and shale types.



**Figure 12:** Artefacts discovered in the vicinity of the contemporary structure  
Reasonable cenable





**Figure 13:** Artefacts collected from the sections of the dam



**Figure 14:** Artefacts collected from the dumps located north of the dam

No bone or other organic material was found in association with the artefacts.

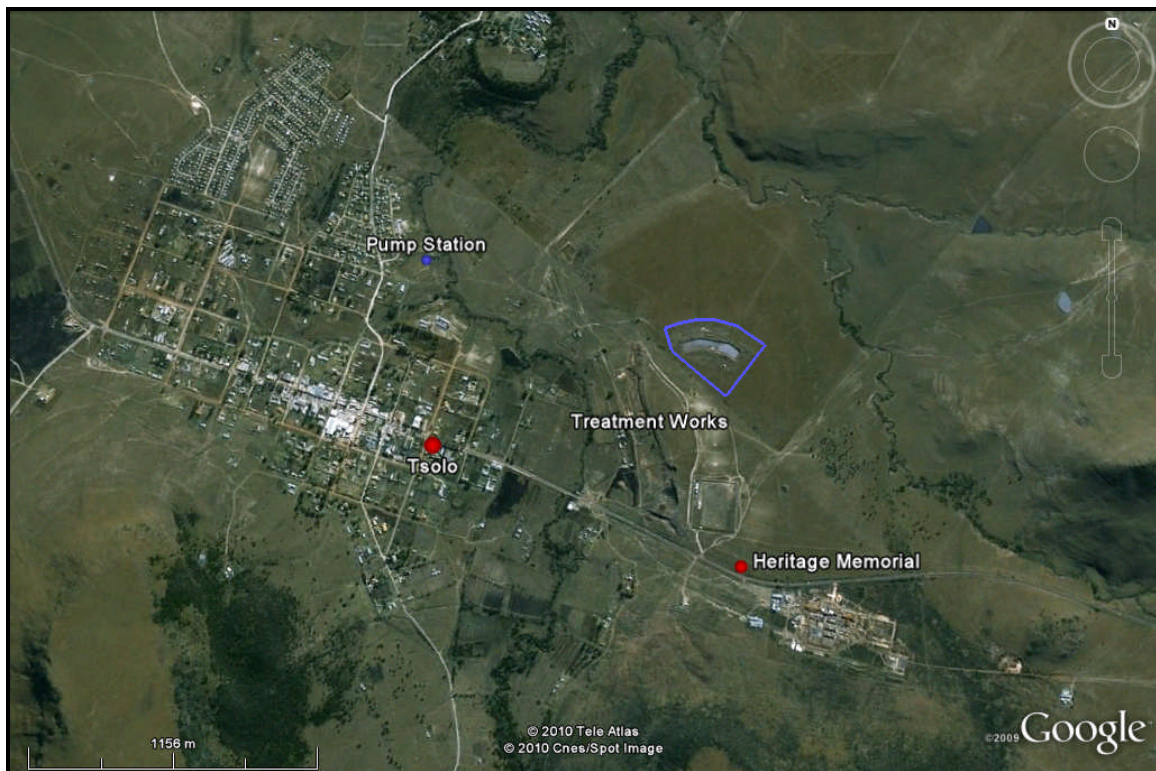
**Conclusion and Discussion:** Based on the extremely low artefact densities recorded at the site, with artefact ratios approximating 1:1 to  $\leq 1:49$ , in conjunction with the primarily *ex-situ* context of artefacts (extent of existing disturbance across the development area versus *in situ* or virgin areas), Phase 2 archaeological mitigation of Site TSOLO 1 is not expected to make a significant contribution in furthering our understanding of the Transkei / Lesotho type MSA assemblages.

- **Site TSOLO 1 in a Regional Context:** The majority of MSA research in the general area has been done by Cater, Kort and Opperman (in the former Ciskei and Transkei) and by Mitchell (in Lesotho). With much less research on MSA (and ESA) sites than on recorded LSA (and Rock Art sites) and with research interest often having been focused on early farming communities and the Historic Period (Pers. Comm: Manie Opperman – former HoD Archaeology Department, Fort Hare University). In addition Binneman (2002) recorded a range of archaeological type sites,

ranging from the Stone Age to the Iron Age and Historical Period during his Phase 1 assessment of the realignment of the N2, with archaeological information supplemented by a significant number of intangible heritage sites (Pers. Comm: Thanduxolo Lungile – SAHRA Eastern Cape).

- **Local Significance of Site TSOLO 1:** With particular reference to the Transkei MSA Opperman is of the opinion that the number of excavated sites in the vicinity of Tsolo, the majority of which were in shelter contexts, does provide a relatively clear understanding of the typology and technology of the generally late MSA, with known dates ranging from 30-22kya, where the lithic collection is more than often supplemented by organic data. At present excavated lithic assemblages provides the proxy samples for comparative studies. Open air ESA and MSA lithic surface collections, collected by Opperman and his students during the 1990's, in an approximate 60km radius from Tsolo include collections from the Ugie and Maclear areas towards the north west, Tsitsa towards the south east and Ntshiga Falls area towards the north east; the value of which lie primarily in comparison of MSA *fossiles directeurs* types with excavated lithic assemblages in attempting to determine technological and typological variation in the MSA (Pers Comm: Manie Opperman). The largely a-diagnostic character, low artefact ratios and *ex-situ* context of the TSOLO 1 site for comparative purposes does not warrant systematic surface collection or excavation.

#### 2.4.3) Sites Located in the General Vicinity of the Tsolo Sewage Treatment Works Development Area



**Figure 15:** Locality of the Heritage Memorial in relation to the *Pump Station* and *Sewage Treatment Works* sites



A single heritage site, a commemorative Heritage Memorial, is located at S31°18'55.9"; E28°46'26.4", approximately 1km south of the *Sewage Treatment Works* site and immediately adjacent to and visible from the road.

The memorial contains the following inscriptions: *'This memorial was initiated, planned and erected by the Masakhisizwe Tsolo Heritage Project Committee with assistance from the Department of Sport & Recreation, Arts & Culture of the Province of the Eastern Cape. Was officially unveiled by the Premier of the Eastern Cape. 02 June 2000'* and *'Heroes Commemorated by the Tsolo District: Chief – Velelo Mditshwa; Nkosi – Bikhwe Ndlebe; Nkosi – Tshongweni Mcasa; Councilor – Willie Mehlo; Councilor – Chalmers Bam; Councilor – Henry Makamba; Comrade – Tyhalulwandle Ntozini; Comrade – Vumisa Mbabamba; Comrade – Willie Mdukiswa Tyabashe; Comrade – Gamalakhe Bulawa. Mrs Elizabeth Paul (nee Spalding)'* on two of the sides with the Xhosa translations thereof on the third and forth wall panels. The face brick memorial is fenced and well maintained.

**The commemorative Heritage Memorial will not be impacted on by the proposed *Tsolo Sewage Treatment Works* development. Existing access roads will be used during construction and operational phases of the development ensuring no additional impact or encroachment thereof on the site.**



**Figure 16:** General view of the Heritage Memorial located approximately 1km south of the *Sewage Treatment Works* site

#### 2.4.4) *Socio-cultural Consultation*

The Phase 1 AIA included brief socio-cultural consultation with members of the community. All consulted community members was identified through the BESC *Public Participation Process* or referenced by registered *Interested and Affected Parties* (I&AP's). Significant contributors included Mr. Mzingisi Katiya (Tsolo Counselor Ward 5) and Mr. Vusumzi Muyanda (Tsolo Counselor Ward 7) with reference to the *Pump Station* and *Sewage Treatment Works* sites and Mr. Pat Mhlanhla, referred to by the secretary of Mr. M. Sondaba, both Mhlontlo Municipal employees, with specific contributions to the significance of the commemorative memorial.

- ***The Pump Station and Sewage Treatment Works sites:*** Due to the nature of the current use of the proposed *Pump Station* site the site holds no, or has in recent years held no, specific intangible heritage significance to the community. The *Sewage Treatment Works* site has been used for economic and educational purposes by the Department of Agriculture. Development at these sites poses no threat to any intangible heritage. Consultants did point out that the community do on occasion and on an informal level still make use of the general landscape with specific reference to the use of natural / medicinal plants – the mountainous area to the south of the Tsolo access road rather than the grass landscapes at the proposed development areas however offer a wider variety of plant resources.
- ***The Heritage Memorial:*** The Heritage Memorial commemorates a number of important leaders and managers at various levels of Tsolo together with former significant personalities of the *Struggle*. Mr. Pat Mhlanhla pointed specifically to the fact that the memorial is still often visited by individuals and groups for various purposes and that activity may in cases include festivities in the vicinity of the site, albeit of a more informal nature. The intangible heritage significance of the site, despite the fact that no particular event is attached to the specific locality, cannot be negated and it is of utmost importance that the site be conserved and that no development impact, during the construction or operational phases, impacts or encroaches on the site.



### 3) CONCLUSION AND RECOMMENDATIONS

It is recommended that the proposed *Tsolo Sewage Treatment Works* development, Tsolo, O.R. Tambo District, Eastern Cape, proceeds as applied for provided the developer complies with the following requirements:

- **The Pump Station site:** No archaeological or cultural heritage resources as defined and protected by the NHRA 1999 were discovered during assessment of the *Pump Station* study site. It is recommended that development proceeds as applied for.
- **The Sewage Treatment Works site:** Existing surface impact indicated a Middle Stone Age (MSA) member situated roughly between 20-70cm below the present day surface of the *Sewage Treatment Works* site. Artefacts were found eroding from sections of the dam and towards the south and north thereof in shallow scraped surface disturbance and associated dumps. Artefacts are expected in the particular geological member across the extent of the proposed study site. Lithic material is technologically and typologically ascribed to the MSA. Extremely low artefact ratios (artefacts: m<sup>2</sup>) and low quantities of blades and points, as the most prominent MSA *fossiles directeurs*, gives the assemblage a rather a-diagnostic character. No bone or other organic material was found in association with the Stone Age artefacts. The site constitutes an archaeological site as defined and protected by the NHRA 1999. The Site, TSOLO 1, is ascribed a SAHRA *Low Significance* and a *Generally Protected C Field Rating*. It is recommended that the site be either:
  - 1) CONSERVED (implying no development at the proposed study site); or
  - 2) that the site be DESTROYED *in lieu* of the development under a SAHRA APM Unit *Site Destruction Permit* (the site may be legally destroyed after a SAHRA APM Unit *Site Destruction Permit* have been issued to the developer, after which development may proceed as applied for).
- **Socio-cultural consultation:** Socio-cultural consultation indicated that the Heritage Memorial, situated approximately 1km south of *Sewage Treatment Works* site is of particular intangible heritage significance to the Tsolo community. No specific activity or event is associated with the particular locality. The proposed development will not impact directly on the site. It is recommended that the developer ensures that development impact be restricted to the existing access roads during the construction and operational phases of the development.

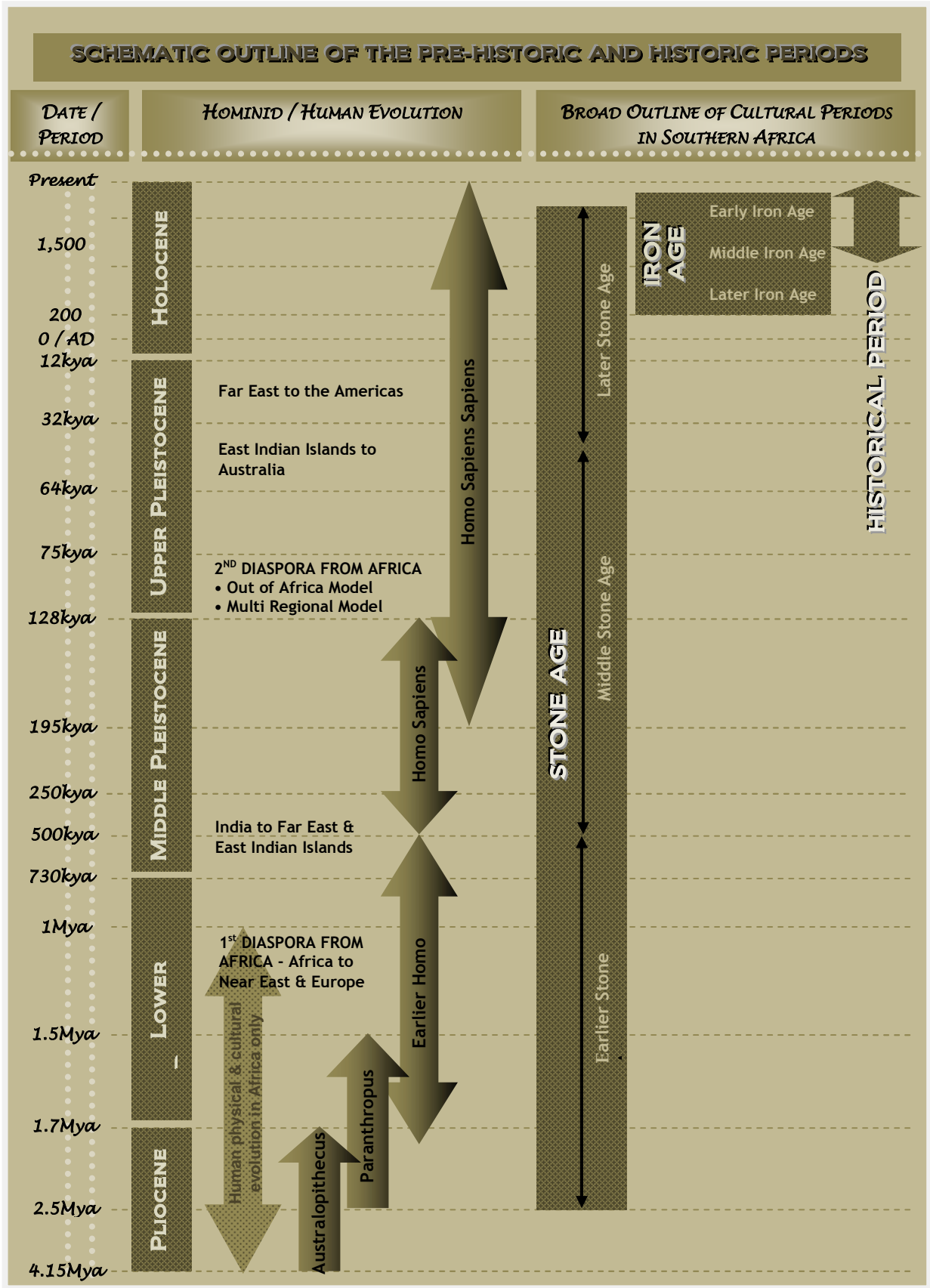
**NOTE:** Should any archaeological or cultural heritage resources as defined and protected by the NHRA 1999 and not reported on in this report be identified during the course of development the developer should immediately cease operation in the vicinity of the find and report the site to SAHRA.

TSOLO SEWAGE TREATMENT WORKS, TSOLO, O.R. TAMBO DISTRICT, EASTERN CAPE					
PORTION OF REMAINDER ERF 42 (PUMP STATION) & PORTION OF FARM 61 (SEWAGE TREATMENT WORKS)					
MAP CODE	SITE	TYPE / PERIOD	DESCRIPTION	CO-ORDINATES	PRELIMINARY RECOMMENDATIONS
<b>DEVELOPMENT AREA</b>					
1	Pump Station	-	-	S31°18'14.2"; E28°45'35.6"	N/A
1	Treatment Works	-	-	S31°18'26.7"; E28°46'15.5"	N/A
2	-	-	-	S31°18'23.6"; E28°46'14.4"	N/A
3	-	-	-	S31°18'22.4"; E28°46'20.3"	N/A
4	-	-	-	S31°18'23.2"; E28°46'26.0"	N/A
5	-	-	-	S31°18'25.9"; E28°46'30.5"	N/A
6	-	-	-	S31°18'33.0"; E28°46'24.2"	N/A
<b>Two (2) archaeological and cultural heritage sites as defined and protected by the NHRA 1999 were identified during the Phase 1 AIA</b>					
<b>Site 1</b>	TSOLO 1	MSA	Knapping site	S31°18'28.7"; E28°46'24.1"	<b>Formal Conservation:</b> No development at the proposed <i>Sewage Treatment Works</i> site <b>OR</b> <b>Site Destruction:</b> Legal destruction of Site TSOLO 1 under a SAHRA APM Unit <i>Site Destruction Permit</i> issued to the developer (after which development may proceed as applied for)
<b>Site 2</b>	Heritage Memorial	Contemporary	Memorial	S31°18'55.9"; E28°46'26.4"	<b>Formal Conservation:</b> <i>In situ</i> conservation recommended based on proximity of the site to the development area (development will not impact on the site)

**Table 2:** Phase 1 AIA assessment findings – co-ordinate details

#### **4) REFERENCES CITED**

1. BESC. 2008. *Background information document: Tsolo Sewage Treatment Works, O.R. Tambo District Municipality*. Unpublished report.
2. Binneman, J. 2008. *Archaeological heritage sensitivity survey. Proposed N2 Wild Coast toll highway*. For CCA Environmental (Pty) Ltd. Unpublished report.
3. South African Government. (No. 107) of 1998. *National Environmental Management Act*.
4. South African Government. (No. 25) of 1999. *National Heritage Resources Act*.
5. South African Heritage Resources Agency. 2007. *Minimum standards for the archaeological and heritage components of impact assessments*. Unpublished guidelines.





## EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (No 25 OF 1999)

### DEFINITIONS

#### Section 2

In this Act, unless the context requires otherwise:

- ii. *"Archaeological"* means –
  - a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
  - b) rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10 m of such representation;
  - c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic,... and any cargo, debris, or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation.
- viii. *"Development"* means any physical intervention, excavation or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including –
  - a) construction, alteration, demolition, removal or change of use of a place or structure at a place;
  - b) carrying out any works on or over or under a place;
  - c) subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;
  - d) constructing or putting up for display signs or hoardings;
  - e) any change to the natural or existing condition or topography of land; and
  - f) any removal or destruction of trees, or removal of vegetation or topsoil;
- xiii. *"Grave"* means a place of interment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place;
- xxi. *"Living heritage"* means the intangible aspects of inherited culture, and may include –
  - a) cultural tradition;
  - b) oral history;
  - c) performance;
  - d) ritual;
  - e) popular memory;
  - f) skills and techniques;
  - g) indigenous knowledge systems; and
  - h) the holistic approach to nature, society and social relationships.
- xxxi. *"Palaeontological"* means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace;
- xli. *"Site"* means any area of land, including land covered by water, and including any structures or objects thereon;
- xliv. *"Structure"* means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith;

### NATIONAL ESTATE

#### Section 3

- 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 palaeontological 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 palaeontological 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).

## **STRUCTURES**

### ***Section 34***

- 1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

## **ARCHAEOLOGY, PALAEOLOGY AND METEORITES**

### ***Section 35***

- 3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.
- 4) No person may, without a permit issued by the responsible heritage resources authority –
  - a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
  - b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
  - c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
  - d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- 5) When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedure in terms of section 38 has been followed, it may –
  - a) serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;
  - b) carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;
  - c) if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph a) to apply for a permit as required in subsection 4); and
  - d) recover the costs of such investigation from the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.
- 6) The responsible heritage resources authority may, after consultation with the owner of the land on which an archaeological or palaeontological site or meteorite is situated, serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

## **BURIAL GROUNDS AND GRAVES**

### ***Section 36***

- 3) 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 of any burial ground or grave referred to in subsection 3a) 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 3b) 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.

## HERITAGE RESOURCES MANAGEMENT

### Section 38

- 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 300 m 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 m<sup>2</sup> in extent; or
    - ii. involving three or more existing erven or subdivisions thereof; or
    - iii. involving three or more erven or subdivisions thereof which have been consolidated within the past five years; or
    - iv. the costs which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
  - d) the rezoning of a site exceeding 10 000 m<sup>2</sup> 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 2a) ...
- 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.

## APPOINTMENT AND POWERS OF HERITAGE INSPECTORS

### Section 50

- 7) Subject to the provision of any other law, a heritage inspector or any other person authorised by a heritage resources authority in writing, may at all reasonable times enter upon any land or premises for the purpose of inspecting any heritage resource protected in terms of the provisions of this Act, or any other property in respect of which the heritage resources authority is exercising its functions and powers in terms of this Act, and may take photographs, make measurements and sketches and use any other means of recording information necessary for the purposes of this Act.
- 8) A heritage inspector may at any time inspect work being done under a permit issued in terms of this Act and may for that purpose at all reasonable times enter any place protected in terms of this Act.
- 9) Where a heritage inspector has reasonable grounds to suspect that an offence in terms of this Act has been, is being, or is about to be committed, the heritage inspector may with such assistance as he or she thinks necessary –
  - a) enter and search any place, premises, vehicle, vessel or craft, and for that purpose stop and detain any vehicle, vessel or craft, in or on which the heritage inspector believes, on reasonable grounds, there is evidence related to that offence;
  - b) confiscate and detain any heritage resource or evidence concerned with the commission of the offence pending any further order from the responsible heritage resources authority; and
  - c) take such action as is reasonably necessary to prevent the commission of an offence in terms of this Act.
- 10) A heritage inspector may, if there is reason to believe that any work is being done or any action is being taken in contravention of this Act or the conditions of a permit issued in terms of this Act, order the immediate cessation of such work or action pending any further order from the responsible heritage resources authority.