
PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

**GOAGA VILLAGES WATER RETICULATION SUPPLY SCHEME
– BULK WATER SUPPLY BACKLOG:
NGCOBO CLUSTER 6, EASTER CAPE, SOUTH AFRICA**

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1) TERMS OF REFERENCE

Africa Geo-Environmental Services (AGES) has been appointed as independent environmental consultant by the service provider Stemele Bosch Africa (SBA) / Sinakho Consulting Joint Venture, on behalf of the proponent, the Chris Hani District Municipality (CHDM), to prepare the Environmental Impact Assessment (EIA) for the proposed *Gqaga Villages Water Reticulation Supply Scheme – Bulk Water Supply Backlog; Ngcobo Cluster 6*, near Ngcobo in the Eastern Cape. ArchaeoMaps Archaeological Consultancy has been appointed by AGES to conduct the Phase 1 Archaeological Impact Assessment (AIA) as specialist sub-section to the EIA.

1.1) *Development Location, Details & Impact*

The proposed *Gqaga Villages Water Reticulation Supply Scheme – Bulk Water Supply Backlog; Ngcobo Cluster 6* study site centers on the Gqaga Administrative Area, located approximately 25km north-east of Ngcobo in the Easter Cape (and situated on unregistered land). The Gqaga Administrative Area is made up of 9 individual villages with a total of 467 households and an average population size of 2,837, briefly summarized as (SBA & SC 2010):

GQAGA VILLAGES POPULATION DATA			
DWA VILLAGE NAME	LOCAL VILLAGE NAME	HOUSEHOLDS	POPULATION
Mbabakazi – A	Zabasa	24	146
Ngentla	-	25	150
Khokonxa	-	24	141
Ngwemnyame	-	33	200
Gqaga – B	Upper Gqaga	50	300
Lower Gqaga – A	Luxeni	53	350
Lower Gqaga	Komkhulu	58	350
Lower Gqaga – D	-	117	700
Mhlahlane – A	-	83	500
TOTAL		467	2,837

Table 1: Gqaga villages population data (SBA & SC 2010)

The development design is based on a pipeline / linear development of approximately 42km and the installation of 93 standpipes in order to provide water to the 9 villages of the Gqaga Administrative Area, providing for an average daily demand of 117,000 l/day (SBA & SC 2010).

The proposed water supply strategy focuses on the initial supply of bulk water to villages through the utilization of a local spring scheme which will ultimately link to the regional bulk water scheme when available. The 1st Phase of the project comprises of the implementation of bulk spring water supply to the villages. Implementation of the village reticulation from the bulk supply will form the 2nd Phase of the project. Design of the proposed scheme will be sub-divided into 4 sub-schemes (SBA & SC 2010):

1. Sub-scheme 1 – Gqaga Villages Bulk Water Supply Scheme;
2. Sub-scheme 2 – Mbabakazi – A, Ngentla and Khokonxa Villages reticulation;
3. Sub-scheme 3 – Ngwemnyame, Gqaga – B and Lower Gqaga – A Villages reticulation; and
4. Sub-scheme 4 – Lower Gqaga, Lower Gqaga – D and Mhlahlane – A Villages reticulation.

The implementation of the regional bulk water scheme will take place parallel to the implementation of localized spring schemes – local village water supply infrastructure has been designed to accommodate the changeover from the spring supply scheme by the regional bulk water system once the bulk water infrastructure has been installed (SBA & SC 2010).

Where possible, pipelines have been routed along existing roads and tracks to ensure ease of monitoring, maintenance and location of the pipeline (SBA & SC 2010).

There is at present no formalized existing water infrastructure within the Gqaga Administrative Area: Villagers are making use of unsuitable raw water, drawn directly from localized streams and springs and are often required to walk great distances to collect water. In addition analysis of the water has proven it to be unsuitable for human consumption and is recorded as a major agent in the spread of disease, especially amongst children. The development design aims to provide water to standpipes with a maximum walking distance of 200m (SBA & SC 2010).

The general development area can be described as predominantly mountainous and lying east of the Nqancule River and north of the Mbashe. Vegetation consists mainly of grassland, with pockets of natural bush around the water courses emanating from the mountain slopes. The majority of the area is underlain by bedrock, less than 1m below the present day surface (SBA & SC 2010).



Figure 1: General locality of Ngcobo in the Eastern Cape



Figure 2: General locality of the Gqaga Administrative Area's villages in relation to Ngcobo



Figure 3: Locality of the proposed Gqaga Water Reticulation line route study site

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 comprises one of three parts of the Heritage Impact Assessment (HIA) for purposes of development compliance to requirements set out in the NHRA 1999, being:

- 1) The Palaeontological Impact Assessment (PIA);
- 2) The Archaeological Impact Assessment (AIA); and
- 3) The Socio-cultural Impact Assessment (SCIA).

The Phase 1 AIA was requested as specialist sub-section to the HIA for the developments' Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) in compliance with requirements of the National Environmental Management Act, No 107 of 1998 (NEMA 1998), the NEMA 2nd Amendment Act, No 62 of 2008 (NEMA 2008) and the NEMA Regulations (2006), and the NHRA 1999 and NHRA Regulations (2000 & 2002).

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, burial grounds and graves, graves of victims of conflict and cultural landscapes or viewsapes 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.
- No socio-cultural consultation was conducted with the aim to identify intangible heritage resources or sites of cultural significance associated with oral histories. Comments on potential socio-cultural aspects are included in section 2.5) Socio-cultural Consultation.

2.2) *Methodology & Assessor Accreditation*

The Phase 1 AIA was conducted over a 5 day period (2010-11-18, 2010-12-04 and 2011-01-05 to 2011-01-07) by one archaeologist and assisted in part by Pieter Knoetze (Xhosa consultation and translation). The assessment was done by foot and LVD, 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.

The assessment was done by Karen van Ryneveld (ArchaeoMaps):

Qualification: MSc Archaeology (2003) WITS University

Accreditation:

1. 2004 – Association of Southern African Professional Archaeologists (ASAPA) – Professional Member
2. 2005 – ASAPA CRM Section: Accreditation – Field Director (Stone Age, Iron Age, Colonial Period)
3. 2010 – ASAPA CRM Section: Accreditation – Principle Investigator (Stone Age)

Karen van Ryneveld is a SAHRA listed CRM archaeologist.

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			
<i>SITE SIGNIFICANCE</i>	<i>FIELD RATING</i>	<i>GRADE</i>	<i>RECOMMENDED MITIGATION</i>
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 2: SAHRA archaeological and cultural heritage site significance assessment

2.3) Coverage and Gap Analysis

The Phase 1 AIA covered approximately 80.95% or 38km/42km of the proposed line route, excluding the northern route portion through Mbabakazi – A and Ngentla and including all remaining route portions through the villages of Ngwemnyame, Gqaga – B, Lower Gqaga – A, Lower Gqaga, Lower Gqaga – D and Mhlahlane – A.

Heavy rains and adverse weather throughout the months of November and December greatly affected the fieldwork component of the Phase 1 AIA: General slippery conditions, large scale clayey erosion gullies and high water levels specifically in the Nqancule River, having washed away the bridge crossing to Mbabakazi – A and Ngentla, greatly complicated access. Roads and tracks throughout the remainder of the area were also affected, but in large at least allowing reasonable access for purposes of a line route assessment.

Landscape features that affected the assessment include particularly steep slope / kran gradient, varying between 1:5 and 5:1. The focal study site is situated in the Nqancule River valley, to the east of the river, with selected portions of the line route reaching up to the mountain where water from springs will be sourced. Extremely adverse conditions (rain and fog) impacted on the assessment; not necessarily visibility but specifically affecting assessment time and access restrictions. Vegetation consists basically of grassland with pockets of natural bush around the water courses emanating from the mountain slopes. Geologically the area is characterized by basal sandstone layers less than 1m below the surface.

2.4) *Phase 1 AIA Assessment findings*

A total of 13 archaeological and cultural heritage resources, as defined and protected under the NHRA 1999, were identified during the course of the Phase 1 AIA. The proposed development will not impact negatively on any of the identified resources. Proximity of the resources to the development impact area is however of importance, and where of relevance site descriptions include recommendations to ensure continued conservation of sites.

Of the 13 identified sites 12 are directly associated with Iron Age cultural tradition but temporally assigned to the Colonial Period with the majority thereof dating to contemporary times and comprising primarily of cemeteries or grave sites.

From an archaeological point of view the Site G9 Mission Church and associated Site G6 Iron Age Homestead, interpreted as the cattle outpost of the church, remains the most significant and highlighting the first tangible evidence of occupation in the area, roughly dated to the early 1900's. Records of the Chief Surveyor General were consulted in an attempt to obtain additional information on the site. However, the site is not recorded in the CSG records, perhaps due to it being a vernacular structure and situated on unregistered state land. The Site G9 Mission Church is also not recorded in the SAHRA Eastern Cape Provincial Heritage Site database (2007). To date the only information thereon remains that collected orally from an old community member who provided information on the associated Site G6 Handana cattle outpost.

Contemporary resources comprise primarily of cemetery and grave sites. The developer is reminded that cemetery sites should not be regarded as a stationary resource type. Spatial display of identified cemeteries in direct or close proximity to the proposed line route may well increase from the time of compilation of this report to actual development impact. Community consultation prior to impact is recommended across the study site in order to ensure that no cemeteries or individual graves be damaged. Contemporary practice also need to be taken into account: The line route proposal and associated Phase 1 AIA assessment does not require impact on homestead level; cemetery and grave sites have been observed across the development area but more routinely situated within fenced homestead yards.

Occupation of the Gqaga area by the current community seems to be fairly recent; consultation indicated an approximate 2 generation history. Recent occupation is evidenced by the lack of Iron Age sites with archaeological / temporal depth across the study site. Contemporary Iron Age tradition remains, often in the form of hut and stock enclosure mounds are present across the area, in general directly associated with a contemporary homestead. Community consultation indicated that mound remains should be considered against contemporary practice and the realities of every day practicalities; the use of mud-brick as primary building material, inter site spatial changes to homesteads for purposes of subsistence farming, inheritance law and economy all play a role. Ms. Sajini Thyali pointed out the locality of a place where she started to build a hut. Due to a lack of finances building was abandoned and low rising walls fell into a ruined state, today very reminiscent of an archaeological hut mound.

The absence of Stone Age resources is ascribed to the underlying geology, not providing suitable knapping material for the production of lithic artefacts. However, based on the known change in preferred raw material from the ESA/MSA to the LSA and a number of shelters identified immediately west of the

proposed line route (situated west of the proposed line route but still east of the Nquncule River), primarily along the Gqaga – B and upper Lower Gqaga – A line route, assessment was extended to inspection of the shelters in an attempt to provide a more holistic archaeological interpretation for the general Gqaga area. Inspected shelters proved to be unanimously anthropically sterile: no LSA assemblages or rock art was observed in any of the inspected shelters.



Figure 4: The proposed Gqaga Water Reticulation Supply Scheme – development co-ordinates



Figure 5: Spatial display of the Phase 1 AIA findings

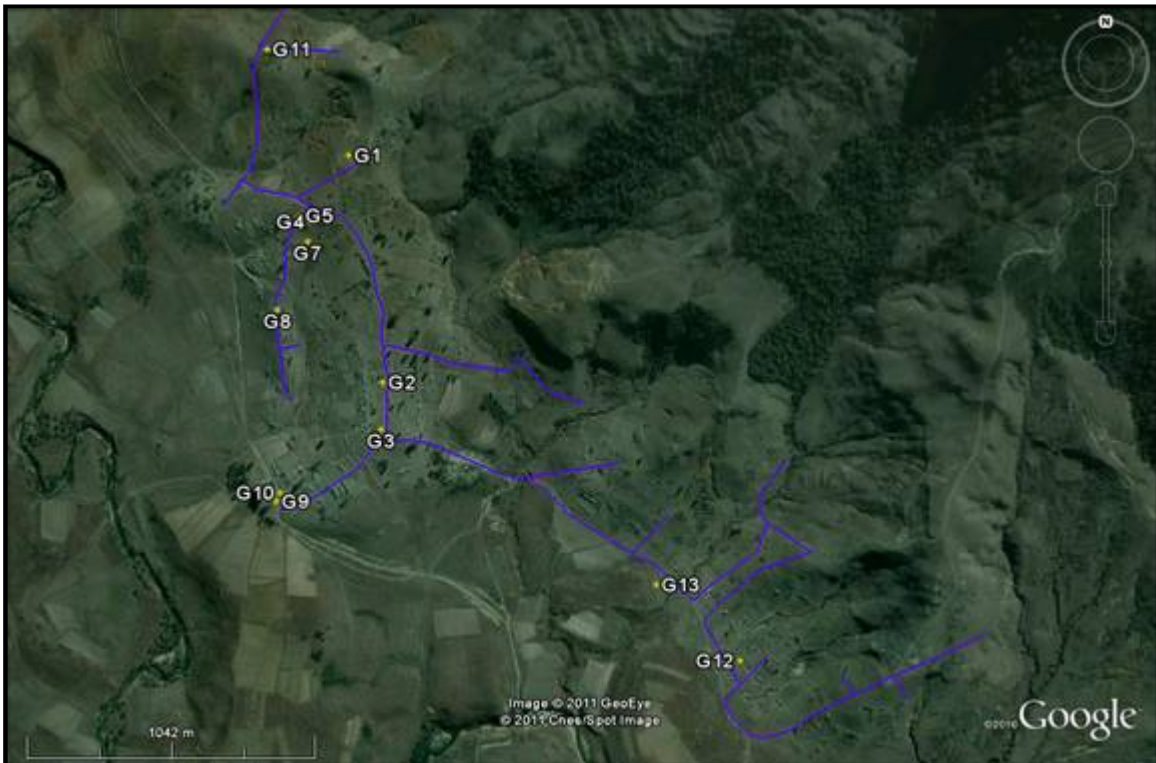


Figure 6: Close-up of the southern portion of the Gqaga study site and Phase 1 AIA findings



Figure 7: View of the proposed line route along the general area between Spring 2 and Res 1



Figure 8: General view of Ngwemnyame and Gqaga – B Villages



Figure 9: Inspected shelters situated west of the Gqaga – B upper Lower Gqaga – A line route



Figure 10: An inspected shelter situated west of the Gqaga – B line route



Figure 11: View from the Nqwemnyame / Gqaga – B line route (vicinity of R/c3 – BPT5)



Figure 12: View of the line route through lower Gqaga – B / Lower Gqaga - A



Figure 13: View of a portion of the line route through Lower Gqaga – A (general vicinity of SP32-SP34)



Figure 14: General view of Lower Gqaga – A



Figure 15: General view of the Lower Gqaga study site (from the general SP84 to SP90 area)



Figure 16: View of the line route through Lower Gqaga



Figure 17: Well defined development corridors throughout Lower Gqaga – D (vicinity of SP71)



Figure 18: Well defined development corridors throughout Lower Gqaga – D (vicinity of SP69 - SP75)



Figure 19: Ms. Sajini Thyali and a friend at the contemporary ruins of a hut, similar contemporary remains characterize much of the study site



Figure 20: Well defined development corridors at Mhlahlane – A Village



Figure 21: View of a portion of Mhlahlane – A Village with a well defined development corridor to the left

2.4.1) SITE G1 – Cemetery & Contemporary Homestead - S31°33'10.3"; E28°12'58.7"

Site G1 (S31°33'10.3"; E28°12'58.7") is situated approximately 40m north of a proposed line route in Lower Gqaga – D Village. The site is characterized by contemporary homestead remains, in itself too recent to be of archaeological significance. However, the site is directly associated with 2 graves located towards the north of the homestead ruins, and labeled G1.1 (S31°33'09.5"; E28°12'58.4") and G1.2 (S31°33'10.0"; E28°12'59.2"). The graves are inferred to be of recent origin, associated with the homestead remains, and probably dating to the last approximate 30 years. Graves are at present not fenced; formal or temporary fencing thereof for purposes of heritage compliance prior to development should be pre-negotiated with the community.

- **RECOMMENDATIONS:** *Graves at Site G1 comprises of heritage sites as defined and protected under the NHRA 1999. Both graves are ascribed a SAHRA MEDIUM SIGNIFICANCE and a GENERALLY PROTECTED B FIELD RATING. Development will not directly impact on the graves but based on proximity to the proposed alignment route it is recommended that the graves be formally / temporarily fenced prior to development impact. Community consultation prior to implementation of either formal or temporary conservation measures is recommended.*



Figure 22: One of the huts comprising the G1 contemporary ruins



Figure 23: View of the G1.2 grave with the G2.2 grave in the right background

2.4.2) SITE G2 – Cemetery - S31°33'35.8"; E28°13'02.9"

Site G2 (S31°33'35.8"; E28°13'02.9") is situated immediately to the west of the access road and proposed line route in Lower Gqaga – D Village. The site comprises of a fairly large informal cemetery, but containing only 12 graves, all believed to be of the James family. Five more recent graves, one with an inscribed headstone is located in the vicinity of the G2 co-ordinate, while slightly to the south-west thereof seven older graves, characterized only by slight overgrown mounds and the odd headstone are visible (G2.1 – S31°33'37.2"; E28°13'01.9"). Exact dates for the graves could not be provided, but the graves may well pre-date 60 years of age. The cemetery is at present not fenced. Based on proximity to the proposed line route formal conservation by means of a permanent fence with an access gate is recommended.

- **RECOMMENDATIONS:** *The Site G2 cemetery comprises of a heritage site as defined and protected under the NHRA 1999. The site is ascribed a SAHRA MEDIUM SIGNIFICANCE and a GENERALLY PROTECTED B FIELD RATING. Development will not directly impact on the cemetery, but based on direct proximity to the development line route it is recommended that the site be permanently conserved prior to development impact.*



Figure 24: View of the G2 more contemporary cluster of graves



Figure 25: View of the older G2.1 component of the cemetery

2.4.3) SITE G3 – Cemetery & Contemporary Stock Enclosure - S31°33'41.2"; E28°13'02.6"

Site G3 (S31°33'41.2"; E28°13'02.6") is situated approximately 20m west of the proposed line route in Lower Gqaga – D Village. The site comprises of the remains of an approximate 8m in diameter rectangular stone built stock enclosure. To the south of the enclosure 2 graves characterized by stone covered grave linings are visible. Both graves belong to the Mhlahlo family. Resident young women reported that the graves demarcates the places of burial of their first ancestors (grandfather and grandmother) at the site; providing for an average of an approximate 2 generation Xhosa occupation in the area. An exact date for the graves could not be given, but graves may well pre-date 60 years of age.

- **RECOMMENDATIONS:** *Graves at Site G3 comprises of a heritage site as defined and protected under the NHRA 1999. Both graves are ascribed a SAHRA MEDIUM SIGNIFICANCE and a GENERALLY PROTECTED B FIELD RATING. Development will not directly impact on the graves but based on proximity to the proposed alignment route it is recommended that the graves be formally / temporarily fenced prior to development impact. Community consultation prior to implementation of either formal or temporary conservation measures is recommended.*



Figure 26: View of the Site G3 stock enclosure and graves (where the children are gathering)



Figure 27: Close-up of 1 of the graves identified by remains of the original stone grave lining

2.4.4) SITE G4 – Cemetery - S31°33'17.6"; E28°12'53.3"

The site G4 (S31°33'17.6"; E28°12'53.3") informal cemetery comprises of 2 graves situated in close proximity to one another, more or less 60m from the proposed line route. Graves are those of adults of the Ntshuntswane(?) family. An exact date for the graves could not be obtained, but graves are of fairly recent origin and expected to safely post-date 60 years of age. Immediately to the south of the homestead is a child's grave (G4.1 - S31°33'18.2"; E28°12'51.7"). A woman at the Ntshuntswane(?) homestead reported that it is the grave of her 7 month old child, Ntombi Njebe, who was buried in 2006.

- **RECOMMENDATIONS:** *The Site G4 graves comprise of heritage site(s) as defined and protected under the NHRA 1999. Graves are of SAHRA MEDIUM SIGNIFICANCE and GENERALLY PROTECTED B FIELD RATINGS are ascribed thereto. Development will not directly impact on any of the graves, but based on proximity to the development line route it is recommended that the site be either formally or temporarily conserved prior to development impact. Conservation measures should be pre-negotiated with the family / community.*



Figure 28: View of the Site G4 adult graves

2.4.5) SITE G5 – Cemetery - S31°33'16.9"; E28°12'51.9"

Site G5 (S31°33'16.9"; E28°12'51.9") comprises of a single grave, characterized by what seems to be a fairly recent earth mound only. The grave is situated immediately to the north of the proposed line route and between the gravel access track and a neighboring agricultural field. Residents consulted from the immediate vicinity reported that the grave was of 'unknown' origin, interpreted as being that of a 'stranger' to the area, thus not belonging to a member of the local community.

- **RECOMMENDATIONS:** *The Site G5 graves comprises of a heritage site as defined and protected under the NHRA 1999. The site is ascribed a SAHRA MEDIUM SIGNIFICANCE and a GENERALLY PROTECTED B FIELD RATING. Development will not directly impact on the cemetery, but based on direct proximity to the development line route it is recommended that the site be permanently / temporarily conserved prior to development impact. Community consultation prior to implementation of conservation measures is recommended.*



Figure 29: View of the Site G5 grave

2.4.6) SITE G6 – Iron Age Homestead - S31°33'17.8"; E28°12'49.6"

Site G6 (S31°33'17.8"; E28°12'49.6") comprises of the remains of a fairly large, approximate 10m in diameter rectangular stock enclosure, the demarcations of which is characterized by aloes rather than wall remains, and may thus have been originally constructed from pole rather than stone. The remains of 4 associated huts were found, all located towards the north and north-east of the stock enclosure. Hut remains are identifiable as overgrown mounds. Thick vegetation hampered further identification of site features, but associated middens may reasonably be expected. In the lack of an identified cemetery or burial area both the stock enclosure and middens, as a norm situated, intersecting residential areas may prove to be particularly sensitive to possible human remains. A single surface artefact, an old bottle, may be indicative of an early 1900's date to the site. Locals believe that the site used to belong to a family Handana, who ran the cattle outpost associated with the mission church. The Handana family does not form part of the local community, but it was reported that some members of the Handana family still visited from time to time after the area was primarily settled by the current community. An old man from a nearby homestead commented that the last Handana visit to the area was more than 40 years ago.

- **RECOMMENDATIONS:** *The Site G6 comprises of a heritage site as defined and protected under the NHRA 1999. The site is ascribed a SAHRA MEDIUM SIGNIFICANCE and a GENERALLY PROTECTED B FIELD RATING. Development will not directly impact on the cemetery, but based on direct proximity to the development line route it is recommended that the site be permanently / temporarily conserved prior to development impact. Community consultation prior to implementation of conservation measures is recommended.*



Figure 30: View of the G6 aloe demarcated stock enclosure



Figure 31: A G6 hut mound with remains of the stock enclosure at the back



Figure 32: Two hut mounds situated directly north of the G6 stock enclosure



Figure 33: An old bottle, the only tangible Site G6 temporal site indicator

2.4.7) SITE G7 – Cemetery - S31°33'19.8"; E28°12'52.8"

The site G7 (S31°33'19.8"; E28°12'52.8") informal cemetery is situated east of the proposed line route. The site is characterized by 4 earth mound graves. The cemetery demarcates a Njongile family cemetery; some of the graves may well pre-date 60 years of age but exact dates for graves could not be obtained.

- **RECOMMENDATIONS:** *The Site G7 graves comprise of heritage site(s) as defined and protected under the NHRA 1999. Graves are of SAHRA MEDIUM SIGNIFICANCE and GENERALLY PROTECTED B FIELD RATINGS are ascribed thereto. Development will not directly impact on any of the graves, but based on proximity to the development line route it is recommended that the site be either formally or temporarily conserved prior to development impact. Conservation measures should be pre-negotiated with the family / community.*



Figure 34: View of the Site G7 cemetery

2.4.8) SITE G8 – Cemetery - S31°33'27.5"; E28°12'48.5"

Site G8 (S31°33'27.5"; E28°12'48.5") constitutes a small informal cemetery comprising of 4 graves of the Geraphi family. The site is situated immediately east of the proposed line route and between the access road and the family's agricultural fields. The exact date of origin of the graves could not be obtained, but at least some of the graves may pre-date 60 years of age.

- **RECOMMENDATIONS:** *Site G8 comprises of heritage site as defined and protected under the NHRA 1999. The site is ascribed a SAHRA MEDIUM SIGNIFICANCE and a GENERALLY PROTECTED B FIELD RATING. Development will not directly impact on the cemetery, but based on direct proximity to the development line route it is recommended that the site be permanently / temporarily conserved prior to development impact. Community consultation prior to implementation of conservation measures is recommended.*



Figure 35: General view of the Site G8 informal cemetery



Figure 36: Close-up of a grave at Site G8

2.4.9) SITE G9 – Colonial Period Mission Church - S31°33'49.5"; E28°12'48.2"

Site G9 (S31°33'49.5"; E28°12'48.2") is situated approximately 25-30m from the proposed line route, on the opposite side of the main access road running east of the Gqaga Administrative Area. The site comprises of fairly contemporary ruins of a clay-brick hut. The hut is believed to have fallen in disuse after a new church building was constructed. Children in the vicinity of the site could not provide a date for the building but a rough 1970's / 1980's date can be ascribed thereto. To the north of the new church building are the remains of the old mission church, inferred to date to the early 1900's. The small, what seems to be a one room structure is reasonably well conserved. Locked at the time of the assessment, no comment can be raised regarding conservation of interior features. A number of gum trees (Eucalyptus) characteristically typify the immediate cultural landscape of the Colonial church building.

- **RECOMMENDATIONS:** *Site G9 comprises of heritage site as defined and protected under the NHRA 1999. The site is ascribed a SAHRA MEDIUM SIGNIFICANCE and a GENERALLY PROTECTED B FIELD RATING. Development will not impact on the church grounds and it is recommended that the Colonial Period mission church component of the site be conserved in situ. (No additional conservation measures are required on behalf of the developer.)*



Figure 37: Iron Age tradition hut ruins with the contemporary church in the background



Figure 38: From left to right – Iron Age tradition hut ruins, the contemporary church and the Colonial Period (early 1900's) mission church

2.4.10) SITE G10 – Cemetery - S31°33'48.5"; E28°12'48.7"

Site G10 (S31°33'48.5"; E28°12'48.7") comprises of a small formal family cemetery of the Siccu family. The site is situated more or less 60m from the proposed line route and will not be impacted on. The site is at present fenced, complying with SAHRA Minimum Site Conservation Standards.

- **RECOMMENDATIONS:** *The Site G10 comprise of heritage site as defined and protected under the NHRA 1999. The site is assigned a SAHRA MEDIUM SIGNIFICANCE and GENERALLY PROTECTED B FIELD RATING. Current conservation measures comply with SAHRA Minimum Site Conservation Standards; no additional conservation measures are recommended.*



Figure 39: View of Site G10

2.4.11) SITE G11 – Cemetery - S31°32'58.2"; E28°12'47.7"

The Site G11 (S31°32'58.2"; E28°12'47.7") cemetery is situated immediately east of the proposed line route. The site is at present fenced, complying with SAHRA Minimum Site Conservation Standards. The cemetery houses 4 graves, some with stone headstones, but typically characterized primarily by earth mounds.

- **RECOMMENDATIONS:** *The Site G11 comprise of heritage site as defined and protected under the NHRA 1999. The site is assigned a SAHRA MEDIUM SIGNIFICANCE and GENERALLY PROTECTED B FIELD RATING. Current conservation measures comply with SAHRA Minimum Site Conservation Standards; no additional conservation measures are recommended.*



Figure 40: View of the Site G11 cemetery

2.4.12) SITE G12 – Iron Age Homestead and Cemeteries - S31°34'07.9"; E28°13'51.2"

Site G12 (S31°34'07.9"; E28°13'51.2") is situated approximately 45m north-east of the proposed line route. The site comprises of the remains of 2 huts, one with a lower grindstone and block and indicating continuing Iron Age practice till very recent times. Related cemeteries are more directly associated with the contemporary Bonase family homestead situated just north of the site. Bonase family members pointed towards the graves of the 2 founding fathers of the family buried at the livestock encampment (G12.1 - S31°34'06.9"; E28°13'52.1"). Graves are characterized by remains of stone outlines and earth fills. Towards the east of the male graves is the female cemetery (G12.2 - S31°34'07.5"; E28°13'53.6"), the 5 female graves are identified by overgrown earth mounds, some with visible stone headstones. Slightly towards the north of the female cemetery is the children's cemetery, comprising of 4 graves (G12.3 - S31°34'07.1"; E28°13'54.2") all characterized by earth mounds. The Bonase family provided additional information relating to the founding of Mhlahlane – A Village: They were the first family to have settled there and today still constitutes the dominant family group, with origin of their settlement recorded as to 2 generations ago, dating roughly to the mid 1900's or slightly before.

- **RECOMMENDATIONS:** *The Site G12 comprises of a heritage site as defined and protected under the NHRA 1999. The site (including the archaeological homestead and graves) is ascribed a SAHRA MEDIUM SIGNIFICANCE and a GENERALLY PROTECTED B FIELD RATING. Development will not directly impact on the site. Permanent or temporary conservation measures of component parts of the site should be pre-negotiated with the family.*



Figure 41: View of archaeological mound remains at Site G12 with the lower grindstone and block in context



Figure 42: View of the site G12 male graves in close proximity to the livestock enclosure



Figure 43: View of the Site G12 female cemetery in relation to the main contemporary Bonase homestead



Figure 44: View of the children's cemetery in relation to the contemporary Bonase homestead

2.4.13) SITE G13 – Cemetery - S31°33'59.2"; E28°13'39.8"

Site G13 (S31°33'59.2"; E28°13'39.8") comprises of a single stone stacked grave. The site is situated approximately 50m south-west of the proposed line route and in close proximity to an agricultural field fence.

- **RECOMMENDATIONS:** *The Site G13 graves comprises of a heritage site as defined and protected under the NHRA 1999. The site is ascribed a SAHRA MEDIUM SIGNIFICANCE and a GENERALLY PROTECTED B FIELD RATING. Development will not directly impact on the cemetery, but based on direct proximity to the development line route it is recommended that the site be permanently / temporarily conserved prior to development impact. Community consultation prior to implementation of conservation measures is recommended.*



Figure 45: View of Site G13

3) CONCLUSION AND RECOMMENDATIONS

With reference to cultural heritage compliance as per the requirements of the NHRA 1999 it is recommended that the proposed *Gqaga Villages Water Reticulation Supply Scheme – Bulk Water Supply Backlog: Ngcobo Cluster 6*, near Ngcobo in the Eastern Cape proceeds as applied for, provided the developer complies with the following requirements:

3.1) *Background*

The project, which centers on the supply of water to villagers of the Gqaga Administrative Area, including the villages of Mbabakazi – A, Ngentla, Ngwemnyame, Gqaga – B, Lower Gqaga – A, Lower Gqaga, Lower Gqaga – D and Mhlahlane – A, by means of 92 standpipes along an approximate 42km line route development, aims to provide water to each of the affected 467 households within a 200m walking distance.

Heavy rains and adverse weather throughout the months of November, December and January greatly affected the fieldwork component of the Phase 1 AIA: General slippery conditions and large scale clayey erosion gullies negatively affected assessment. Local floods and associated high water levels in the Nqancule River resulted in the bridge crossing towards Ngwemnyame and Ngentla being washed away, the associated approximate 8km line route was by implication not assessed. Final line route assessment thus included 80.95% or 38km/42km of the proposed line route.

A total of 13 archaeological and cultural heritage resources were identified along the 38km/42km line route assessment. All but one identified resource (Site G9) is of Iron Age traditional affiliation. The Site G9 Mission Church and associated Site G7 Handana cattle outpost signifies the earliest tangible traces of occupation in the area, dated roughly to the early 1900's. Contemporary Iron Age occupation of the area seems to be of fairly recent origin, with oral testimony indicating an approximate 2 generation history in the area. Associated resources include some settlement remains, in itself not of substantial archaeological significance. The primary associated formally protected resource type includes associated cemetery and grave sites.

No Stone Age resources were identified: Local sandstone rich deposits of the southern Drakensberg foothills may simply not have provided suitable knapping material for large scale Stone Age occupation. In addition a number of shelter sites were inspected, situated to the west of the development lone route for possible traces of LSA occupation of the area preceding more recent recorded occupation. Inspected shelters proved to be devoid of LSA archaeological assemblages and no associated Rock Art was found.

3.2) *Recommendations*

The proposed *Gqaga Villages Water Reticulation Supply Scheme – Bulk Water Supply Backlog: Ngcobo Cluster 6*, near Ngcobo in the Eastern Cape, will not impact directly on any identified cultural heritage resources.

- **CEMETERIES:**

- (Sites G2, G4, G5, G7, G8, G11 and G13)

Local consultation indicated that, in general across the Gqaga Administrative Area, villagers had no particular religious / ethical objection to the formal conservation (formal fence with access gate) of cemeteries for purposes of development. Formal / temporary conservation of cemeteries should be preceded by community consultation. Where landscape gradient, current location or household preference prohibits formal or temporary conservation, it is recommended that an appointed family member be on site at the time of development. Sites G11 and G13 is at present formally fenced, complying with SAHRA Minimum Site Conservation Standards.

- **CONTEMPORARY IRON AGE REMAINS DIRECTLY OR INDIRECTLY ASSOCIATED WITH CEMETERIES:**

- (Sites G1, G3, G6 and G12)

1. In the cases of contemporary sites (Sites G1, G3 and G12) local consultation should aim to determine if family members would want the sites to be either formally or temporarily conserved in totally or only focusing on the graves.
2. In the case of the archaeological site (Site G6) it is recommended that conservation of the site focuses on total site conservation, either formally or temporary, based on the possible presence of graves intersecting inter site spatial features.

- **COLONIAL PERIOD SITES:**

- (Site G9)

Development will impact on the Colonial Period G9 Mission Church. The general property is still in use and in situ conservation is recommended (no additional conservation requirements need to be complied to by the developer prior to development impact.

- **ARCHAEOLOGICAL MONITORING:**

Portions of line route (approximately 8km7.5km – Mbabakazi – A and Ngentla) not included in this Phase 1 AIA should be assessed by means of on-site archaeological monitoring at the time of assessment,.

[The primary agent that negatively affected the assessment, high water levels in the Nqancule River that resulted in the bridge crossing to Mbabakazi – A and Ngentla being washed away and large scale water damage associated with heavy rains over November, December and January, not expected to be addressed on municipal level prior to planned commencement of the development would not make Phase 1 AIA assessment of areas not included in this assessment a practical recommendation. Access obstacles encountered is envisioned to be first addressed at the time of development implementation; thus the recommendation for on-site archaeological monitoring rather than Phase 1 assessment preceding development.]

- **GENERAL:**

1. Should any archaeological or cultural heritage resources as defined and protected under 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 / an ASAPA accredited CRM archaeologist.

2. The developer is reminded that all structures pre-dating 60 years of age are formally protected under the NHRA 1999, with an automatic blanket *Provincial Heritage Resource* status assigned to them. Any impact on, alteration to or destruction of these resources are subject to application and approval from SAHRA and has to be done under an Eastern Cape Provincial Heritage Resources Agency (EC PHRA) permit. Structures post-dating 60 years of age are not formally protected under the NHRA 1999. Impact on or destruction of such structures is not subject to SAHRA application or approval.

3. Should any graves or human remains be encountered during the course of development the developer should immediately alert both the police and SAHRA / an ASAPA accredited CRM archaeologist. The process associated with the identification of human remains post-dating 60 years of age are managed by the police while the process associated with human remains pre-dating 60 years of age are managed by SAHRA under the NHRA 1999 and in accordance with requirements of the Human Tissues Act, Act No 65 of 1983 (HTA 1983) and the Human Tissues Amendment Act, Act No 51 of 1989 (HTAA 1989).

GQAGA WATER RETICULATION SUPPLY SCHEME, NGCOBO CLUSTER 6

MBABAKAZI – A, NGENTLA, NGWEMNYAME, GQAGA – B, LOWER GQAGA – A, LOWER GQAGA, LOWER GQAGA – D & MHLAHLANE – A

MAP CODE	SITE	TYPE / PERIOD	DESCRIPTION	CO-ORDINATES	PRELIMINARY RECOMMENDATIONS
DEVELOPMENT AREA					
BPT1	-	-	-	S31°28'50.5"; E28°14'11.3"	N/A
BPT2	-	-	-	S31°28'55.0"; E28°14'21.1"	N/A
BPT3	-	-	-	S31°30'22.9"; E28°13'14.3"	N/A
BPT4	-	-	-	S31°30'24.2"; E28°12'59.4"	N/A
BPT5	-	-	-	S31°30'13.7"; E28°12'49.3"	N/A
R/c1	-	-	-	S31°28'38.3"; E28°14'03.6"	N/A
R/c10	-	-	-	S31°33'11.4"; E28°12'45.0"	N/A
R/c11	-	-	-	S31°33'34.4"; E28°13'19.6"	N/A
R/c12	-	-	-	S31°33'50.7"; E28°13'53.6"	N/A
R/c13	-	-	-	S31°33'47.1"; E28°13'20.9"	N/A
R/c2	-	-	-	S31°29'12.0"; E28°13'16.7"	N/A
R/c3	-	-	-	S31°30'05.4"; E28°12'44.8"	N/A
R/c4	-	-	-	S31°30'22.2"; E28°12'39.9"	N/A
R/c5	-	-	-	S31°31'37.1"; E28°13'23.3"	N/A
R/c6	-	-	-	S31°32'05.1"; E28°12'54.7"	N/A
R/c7	-	-	-	S31°34'10.6"; E28°12'54.0"	N/A
R/c8	-	-	-	S31°32'39.9"; E28°12'56.4"	N/A
R/c9	-	-	-	S31°32'53.6"; E28°12'50.3"	N/A
Res1	-	-	-	S31°28'59.5"; E28°14'31.0"	N/A
Res2	-	-	-	S31°30'27.2"; E28°13'40.4"	N/A
Res3	-	-	-	S31°32'01.0"; E28°13'23.5"	N/A
SP1	-	-	-	S31°29'11.5"; E28°13'12.0"	N/A
SP10	-	-	-	S31°28'33.6"; E28°14'19.9"	N/A
SP11	-	-	-	S31°28'34.9"; E28°14'09.7"	N/A
SP12	-	-	-	S31°28'35.8"; E28°14'00.6"	N/A
SP13	-	-	-	S31°28'28.7"; E28°13'44.1"	N/A
SP14	-	-	-	S31°28'23.8"; E28°13'35.3"	N/A
SP15	-	-	-	S31°28'15.6"; E28°13'31.2"	N/A
SP16	-	-	-	S31°28'06.5"; E28°13'29.8"	N/A
SP17	-	-	-	S31°27'57.8"; E28°13'28.4"	N/A
SP18	-	-	-	S31°27'41.0"; E28°13'25.3"	N/A
SP19	-	-	-	S31°27'32.1"; E28°13'21.8"	N/A
SP2	-	-	-	S31°29'09.2"; E28°13'21.4"	N/A
SP20	-	-	-	S31°27'23.4"; E28°13'18.6"	N/A
SP21	-	-	-	S31°27'14.7"; E28°13'19.7"	N/A
SP22	-	-	-	S31°27'06.2"; E28°13'21.8"	N/A
SP23	-	-	-	S31°27'00.9"; E28°13'30.2"	N/A
SP24	-	-	-	S31°26'53.3"; E28°13'36.5"	N/A
SP26	-	-	-	S31°26'44.3"; E28°13'40.0"	N/A
SP27	-	-	-	S31°26'37.9"; E28°13'48.0"	N/A
SP28	-	-	-	S31°26'29.8"; E28°13'51.9"	N/A
SP29	-	-	-	S31°31'41.5"; E28°13'25.7"	N/A
SP3	-	-	-	S31°29'00.7"; E28°13'29.2"	N/A
SP30	-	-	-	S31°31'35.9"; E28°13'16.6"	N/A
SP31	-	-	-	S31°31'34.0"; E28°13'08.2"	N/A
SP32	-	-	-	S31°31'28.3"; E28°13'06.6"	N/A
SP33	-	-	-	S31°31'27.6"; E28°12'58.2"	N/A
SP34	-	-	-	S31°31'22.9"; E28°12'52.9"	N/A
SP35	-	-	-	S31°31'25.0"; E28°12'42.1"	N/A

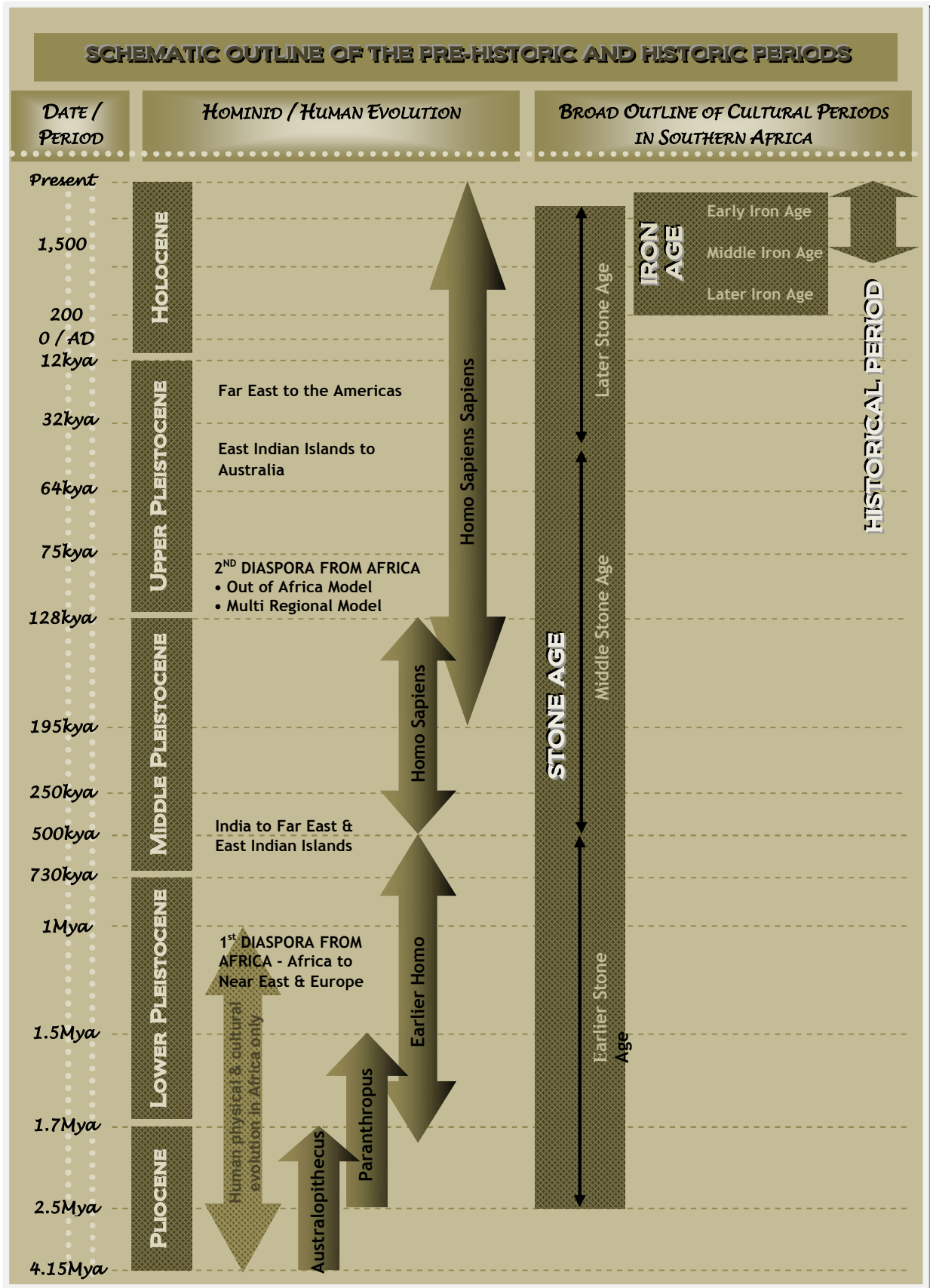
SP36	-	-	-	S31°31'21.9"; E28°12'32.4"	N/A
SP37	-	-	-	S31°31'18.4"; E28°12'45.9"	N/A
SP38	-	-	-	S31°31'13.4"; E28°12'29.8"	N/A
SP39	-	-	-	S31°31'14.2"; E28°12'37.0"	N/A
SP4	-	-	-	S31°28'58.2"; E28°13'39.3"	N/A
SP40	-	-	-	S31°31'11.1"; E28°12'43.2"	N/A
SP41	-	-	-	S31°31'07.3"; E28°12'41.3"	N/A
SP42	-	-	-	S31°31'04.3"; E28°12'35.0"	N/A
SP43	-	-	-	S31°30'58.4"; E28°12'27.4"	N/A
SP44	-	-	-	S31°30'47.7"; E28°12'28.6"	N/A
SP45	-	-	-	S31°30'39.5"; E28°12'33.7"	N/A
SP46	-	-	-	S31°30'31.5"; E28°12'35.3"	N/A
SP47	-	-	-	S31°30'26.0"; E28°12'26.4"	N/A
SP48	-	-	-	S31°30'19.9"; E28°12'22.3"	N/A
SP49	-	-	-	S31°30'25.1"; E28°12'37.1"	N/A
SP5	-	-	-	S31°28'56.6"; E28°13'50.0"	N/A
SP50	-	-	-	S31°30'17.2"; E28°12'10.7"	N/A
SP51	-	-	-	S31°30'10.2"; E28°12'46.4"	N/A
SP52	-	-	-	S31°30'01.9"; E28°12'56.3"	N/A
SP53	-	-	-	S31°29'58.8"; E28°12'46.4"	N/A
SP54	-	-	-	S31°29'53.4"; E28°12'50.1"	N/A
SP55	-	-	-	S31°29'47.3"; E28°12'44.2"	N/A
SP56	-	-	-	S31°29'36.3"; E28°12'46.8"	N/A
SP57	-	-	-	S31°29'27.1"; E28°12'48.9"	N/A
SP58	-	-	-	S31°34'04.0"; E28°14'23.3"	N/A
SP59	-	-	-	S31°34'11.9"; E28°14'13.8"	N/A
SP6	-	-	-	S31°28'52.5"; E28°13'58.2"	N/A
SP60	-	-	-	S31°34'08.2"; E28°14'03.9"	N/A
SP61	-	-	-	S31°34'14.1"; E28°14'01.1"	N/A
SP62	-	-	-	S31°34'07.2"; E28°13'54.9"	N/A
SP63	-	-	-	S31°33'55.2"; E28°14'01.0"	N/A
SP64	-	-	-	S31°33'44.4"; E28°13'56.9"	N/A
SP65	-	-	-	S31°33'48.9"; E28°13'53.0"	N/A
SP66	-	-	-	S31°33'58.9"; E28°13'47.3"	N/A
SP67	-	-	-	S31°33'50.8"; E28°13'41.4"	N/A
SP68	-	-	-	S31°33'45.1"; E28°13'34.5"	N/A
SP69	-	-	-	S31°33'42.0"; E28°13'06.0"	N/A
SP7	-	-	-	S31°28'45.4"; E28°14'06.3"	N/A
SP70	-	-	-	S31°33'38.4"; E28°12'50.1"	N/A
SP71	-	-	-	S31°33'48.4"; E28°12'59.2"	N/A
SP72	-	-	-	S31°33'38.1"; E28°13'30.3"	N/A
SP73	-	-	-	S31°33'33.1"; E28°13'21.3"	N/A
SP74	-	-	-	S31°33'31.8"; E28°13'03.1"	N/A
SP75	-	-	-	S31°33'20.9"; E28°13'03.3"	N/A
SP77	-	-	-	S31°33'31.5"; E28°12'51.8"	N/A
SP78	-	-	-	S31°33'20.8"; E28°12'49.8"	N/A
SP79	-	-	-	S31°33'11.1"; E28°12'59.7"	N/A
SP8	-	-	-	S31°28'41.6"; E28°13'59.9"	N/A
SP80	-	-	-	S31°33'16.9"; E28°12'40.3"	N/A
SP81	-	-	-	S31°33'09.2"; E28°12'45.7"	N/A
SP82	-	-	-	S31°32'59.3"; E28°12'46.1"	N/A
SP83	-	-	-	S31°32'58.3"; E28°12'57.5"	N/A
SP84	-	-	-	S31°32'49.3"; E28°12'55.5"	N/A
SP85	-	-	-	S31°32'43.5"; E28°12'46.6"	N/A
SP86	-	-	-	S31°32'33.3"; E28°12'55.6"	N/A
SP87	-	-	-	S31°32'29.8"; E28°12'44.4"	N/A
SP88	-	-	-	S31°32'21.4"; E28°12'55.9"	N/A
SP89	-	-	-	S31°32'19.8"; E28°12'45.9"	N/A

SP9	-	-	-	S31°28'34.8"; E28°14'29.9"	N/A
SP90	-	-	-	S31°32'12.1"; E28°12'59.7"	N/A
SP91	-	-	-	S31°32'09.9"; E28°12'49.7"	N/A
SP92	-	-	-	S31°32'05.1"; E28°13'11.8"	N/A
SP93	-	-	-	S31°31'59.6"; E28°13'23.9"	N/A
SPR1	-	-	-	S31°28'02.0"; E28°15'22.1"	N/A
SPR2	-	-	-	S31°28'16.4"; E28°15'47.8"	N/A
SPR3	-	-	-	S31°30'28.2"; E28°14'04.6"	N/A
HERITAGE SITES					
G1	Site G1	Contemporary	Cemetery & Contemporary Homestead	S31°33'10.3"; E28°12'58.7"	Formal / Temporary Conservation (graves) Community consultation prior to implementation of conservation measures
G2	Site G2	Contemporary	Cemetery	S31°33'35.8"; E28°13'02.9"	Formal conservation (Permanent fence with access gate) Community consultation prior to implementation of conservation measures
G3	Site G3	Contemporary	Cemetery & Contemporary S / Enclosure	S31°33'41.2"; E28°13'02.6"	Formal / Temporary Conservation (graves) Community consultation prior to implementation of conservation measures
G4	Site G4	Contemporary	Cemetery	S31°33'17.6"; E28°12'53.3"	Formal / Temporary Conservation Community consultation prior to implementation of conservation measures
G5	Site G5	Contemporary	Cemetery	S31°33'16.9"; E28°12'51.9"	Formal / Temporary Conservation Community consultation prior to implementation of conservation measures
G6	Site G6	Iron Age	Homestead	S31°33'17.8"; E28°12'49.6"	Formal / Temporary Conservation (site) Community consultation prior to implementation of conservation measures
G7	Site G7	Contemporary	Cemetery	S31°33'19.8"; E28°12'52.8"	Formal / Temporary Conservation Community consultation prior to implementation of conservation measures
G8	Site G8	Contemporary	Cemetery	S31°33'27.5"; E28°12'48.5"	Formal / Temporary Conservation Community consultation prior to implementation of conservation measures
G9	Site G9	Colonial Period	Mission Church	S31°33'49.5"; E28°12'48.2"	In situ conservation
G10	Site G10	Contemporary	Cemetery	S31°33'48.5"; E28°12'48.7"	Formal / Temporary Conservation Community consultation prior to implementation of conservation measures
G11	Site G11	Contemporary	Cemetery	S31°32'58.2"; E28°12'47.7"	Formal conservation measures in place
G12	Site G12	Contemporary / Iron Age	Homestead & Cemeteries	S31°34'07.9"; E28°13'51.2"	Formal / Temporary Conservation (component parts of site) Community consultation prior to implementation of conservation measures
G13	Site G13	Contemporary	Cemetery	S31°33'59.2"; E28°13'39.8"	Formal conservation measures in place

Table 3: Development and Phase 1 AIA assessment findings – co-ordinate details

4) REFERENCES CITED

1. South African Government. (No. 107) of 1998. *National Environmental Management Act*.
2. South African Government. (No. 62) of 2008. *National Environmental Management Second Amendment Act*.
3. South African Government. (No. 25) of 1999. *National Heritage Resources Act*.
4. South African Heritage Resources Agency. 2007. *Minimum standards for the archaeological and heritage components of impact assessments*. Unpublished guidelines.
5. Stemele Bosch Africa (SBA) & Sinakho Consulting (SC). 2010. *Design Report – Chris Hani District Municipality – Gqaga Villages Water Supply Scheme – Bulk water Supply Backlog: Ngcobo Cluster 6*. Unpublished report.



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 trances;
- 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 m² 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 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 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.