A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT (AIA) FOR THE PROPOSED ROAD UPGRADE OF THE DR 08376 FROM THE R61 AT ST MARKS TO SABALELE VILLAGE AND ASSOCIATED BORROW PITS, NEAR COFIMVABA, INTSIKA YETHU LOCAL MUNICIPALITY, EASTERN CAPE PROVINCE.

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NOTE: The phase 1 archaeological impact assessment was conducted as a requirement of the National Heritage Resources Act 25 of 1999 (NHRA), Section 38 (1)(c)(i):

38. (1) Subject to the provisions of subsections (7), (8), and (9), any person who intends to undertake a development categorized as –

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;
- (c) any development or other activity which will change the character of the site -
 - (i) exceeding 5000m² in extent

This report follows the minimum standard guidelines required by the South African Heritage Resources Agency (SAHRA) and the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) for compiling a Phase 1 Archaeological Impact Assessment (AIA).

1. EXECUTIVE SUMMARY

1.1. Purpose of the Study

The purpose of the study was to conduct a phase 1 archaeological impact assessment (AIA) for the proposed road upgrade for the DR 08376 from the R61 at St Marks to Sabalele Village and mining right applications for seven borrow pits and one hard rock quarry. The survey was conducted to establish the range and importance of the exposed and *in situ* archaeological heritage material remains, sites and features; to establish the potential impact of the development; and to make recommendations to minimize possible damage to the archaeological heritage.

1.2. Brief Summary of Findings

No pre-colonial archaeological heritage resources were observed along the DR 08376 from the R61 at St Marks to Sabalele Village within or adjacent to the road reserve. A few built environment structures and one informal burial area were encountered adjacent to the DR 08376 road. These included the remains of unidentified structures, buildings, and a dry packed stone walling complex. The informal burial area may be negatively affected by the proposed road upgrade.

An isolated scatter of Middle Stone Age stone artefacts were encountered on the area proposed for Borrow Pit 190 (BP190). Dry packed stone walling features were identified on the areas proposed for Borrow Pit 171 (BP171), Borrow Pit 186 (BP186), and Borrow

Pit 190 (BP190). Dry packed stone walling features also occurred on the boundary of the existing Borrow Pit 193 (BP193). One burial area was identified on the area proposed for Borrow Pit 183 (BP183).

1.3. Summary of Recommendations

The areas investigated (DR 08376 and associated borrow pits) are of a low pre-colonial archaeological cultural sensitivity. Two of the stone walling features are likely to be impacted by the construction activities. The informal burial area along the DR 08376 will be negatively affected and the informal burial area on the site proposed for Borrow Pit 183 (BP183) may be negatively affected if the appropriate mitigation measures are not followed. In cases where the development may impede negatively on these heritage resources the appropriate mitigation and conservation measures must be considered and implemented before development commences and continue during the development, construction, and quarrying activities. The following recommendations must be considered (see Section 11 for full recommendations and mitigation measures):

- 1. Borrow Pit 171 (BP171): A 20 m no development buffer zone should be established and clearly demarcated around the dry packed stone walling features.
- 2. Borrow Pit 183 (BP183): No development may take place with 20 m of the burial ground, therefor, a 20 m no development buffer zone should be established from the western side of the burial ground.
- 3. Borrow Pit 190 (BP190): A 20 m no development buffer zone should be established and clearly demarcated around the dry packed stone walling features.
- 4. Borrow Pit 193 (BP193): A 20 m no development buffer zone should be established and clearly demarcated around the dry packed stone walling features.
- 5. SVR SW1: A 20 m no development buffer zone should be established and clearly demarcated around the dry packed stone walling features.
- SVR G1: No development may take place with 20 m of the burial ground, therefor, a 20 m no development buffer zone should be established from the western side of the burial ground.
- 7. If concentrations of archaeological heritage material and human remains are uncovered during construction, all work must cease immediately and be reported to the Albany Museum and/or the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) so that systematic and professional investigation/ excavation can be undertaken.
- 8. Construction managers/foremen and/or the Environmental Control Officer (ECO) should be informed before construction starts on the possible types of heritage sites

and cultural material they may encounter and the procedures to follow when they find sites.

2. BACKGROUND INFORMATION

SRK Consulting has been appointed as the independent specialists to assess the environmental impacts and requirements in terms of the National Environmental Management Act (Act 28 of 2002) (MPRDA). The South African National Roads Agency Limited (SANRAL) proposes to upgrade and rehabilitate approximately 19 km of the provincial road DR 08376 from the R61 at St Marks to Sabalele Village. The project includes the submission of an application to the Department of Mineral Resources for a mining right for the use of seven borrow pits and one hard rock quarry. The

The Phase 1 Archaeological Impact Assessment (AIA) which has been prepared as part of the Basic Assessment (BA) for the Environmental Impact Assessment (EIA) phase for the proposed project is in accordance with the National Heritage Resources Act 25 of 1999, and guidelines by the South African Heritage Resources Agency (SAHRA), and the Eastern Cape Heritage Resources Agency (ECPHRA).

2.1. Developer:

South African National Roads Agency Limited (SANRAL)

2.2. Consultant:

SRK Consulting PO Box 21842 Port Elizabeth 6000 Tel: 041 509 4800 Fax: 041 509 4850 Contact person: Ms Karien Killian Email: kkillian@srk.co.za

2.3. Terms of Reference (ToR)

- Conduct a literature review of known archaeological resources within the area with a view to determining which of these resources are likely to occur within the development footprint;
- Conduct a site visit to identify and record any heritage resources (if present);
- Comment on potential impacts on these resources resulting from the development;
- Make recommendations regarding the mitigation of any damage to archaeological resources identified, or that may be identified during the construction phase;

• Submit the Phase 1 Archaeological Impact Assessment (AIA) report to the relevant heritage authorities.

3. BRIEF HERITAGE LEGISLATIVE REQUIREMENTS

Parts of sections 3(1)(2)(3), 34(1), 35(4), 36(3) and 38(1)(8) of the National Heritage Resources Act 25 of 1999 apply:

S3. National estate

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.

3. (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 and 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 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 (Act No. 43 of 1996).

3. (3) Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of –

(a) its importance in the community, or pattern of South Africa's history;

(b) its possession of uncommon , rare or endangered aspects of South Africa's natural or cultural heritage;

(c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;

(d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;

(e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;

(f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;

(g) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and

(i) sites of significance relating to the history of slavery in South Africa.

S34. Structures

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.

S35. Archaeology, palaeontology and meteorites

35 (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;
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

S36. Burial grounds and graves

36. (3) (a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority—

(a) destroy, damage, alter, exhume or remove from its original position or otherwise

disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

- (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

S38. Heritage resources management

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as –

- (a) the construction of a road, wall, power line, 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 the site -
 - (i) exceeding 5000m2 in extent, or
 - (ii) involving three or more erven or subdivisions thereof; or
 - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
- (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA, or a provincial resources authority;
- (d) the re-zoning of a site exceeding 10 000 m^2 in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must as 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.

4. BRIEF ARCHAEOLOGICAL BACKGROUND

The archaeological literature and research within the proposed development area is limited and incomplete, although a few sites (pre-colonial and historical) have been recorded. The Albany Museum Site Recording Database was consulted for archaeological sites nearby and within the surrounding area for the proposed road upgrade and associated borrow pits. The South African Heritage Resources Agency (SAHRA) SAHRIS digital database was consulted to refer to archaeological and heritage impact assessments that have been conducted near to and within the surrounding area of the proposed project area, these have been consulted to assist in the awareness of the heritage resources that occur within the region (Huffman 2011; Prins 2011; Van Ryneveld 2013a-b).

4.1. The Early Stone Age (ESA) (1.5 million-250 000 years ago)

The Early Stone Age that ranges between 1.5 million and 250 000 years ago refers to the earliest that *Homo sapiens sapiens* predecessors began making stone tools. The earliest stone tool industry was referred to as the Olduwan Industry originating from stone artefacts recorded at Olduvai Gorge, Tanzania. The Acheulian Industry, the predominant southern African Early Stone Age Industry, replaced the Olduwan Industry approximately 1.5 million years ago, is attested to in diverse environments and over wide geographical areas. The hallmark of the Acheulian Industry is its large cutting tools (LCTs or bifaces), primarily handaxes and cleavers. Bifaces emerged in East Africa more than 1.5 million years ago (mya) but have been reported from a wide range of areas, from South Africa to northern Europe and from India to the Iberian coast. The end products were similar across the geographical and chronological distribution of the Acheulian techno-complex: large flakes that were suitable in size and morphology for the production of handaxes and cleavers perfectly suited to the available raw materials (Sharon 2009).

According to the records held in the Albany Museum Site Recording Database, Early Stone Age handaxes have been recorded in the wider region of the area proposed for the road upgrade and associated borrow pits. Derricourt (1977) and Feely (1987) have also reported Early Stone Age artefact occurrences in other parts of the Transkei.

4.2. Middle Stone Age (MSA) (250 000 - 30 000 years ago)

The Middle Stone Age spans a period from 250 000 - 30 000 years ago and focuses on the emergence of modern humans through the change in technology, behaviour, physical appearance, art and symbolism. Various stone artefact industries occur during this time period, although less is known about the time prior to 120 000 years ago, extensive systemic archaeological research is being conducted on sites across southern Africa dating within the last 120 000 years (Thompson & Marean 2008). The large handaxes and cleavers were replaced by smaller stone artefacts called the Middle Stone Age flake and blade industries. Surface scatters of these flake and blade industries occur widespread across southern Africa although rarely with any associated botanical and faunal remains. It is also common for these stone artefacts to be found between the surface and approximately 50-80cm below ground. Fossil bone may in rare cases be associated with Middle Stone Age occurrences (Gess 1969). These stone artefacts, like the Earlier Stone Age handaxes are usually observed in secondary context with no other associated archaeological material.

The Middle Stone Age is distinguished from the Early Stone Age by the smaller-sized and distinctly different stone artefacts and *chaîne opératoire* (method) used in manufacture, the introduction of other types of artefacts and evidence of symbolic behaviour. The prepared core technique was used for the manufacture of the stone artefacts which display a characteristic facetted striking platform and includes mainly unifacial and

bifacial flake blades and points. The Howiesons Poort Industry (80 000 - 55 000 years ago) is distinguished from the other Middle Stone Age stone artefacts: the size of tools are generally smaller, the range of raw materials include finer-grained rocks such as silcrete, chalcedony, quartz and hornfels, and include segments, backed blades and trapezoids in the stone toolkit which were sometimes hafted (set or glued) onto handles. In addition to stone artefacts, bone was worked into points, possibly hafted, and used as tools for hunting (Deacon & Deacon 1999).

Other types of artefacts that have been encountered in archaeological excavations include tick shell (*Nassarius kraussianus*) beads, the rim pieces of ostrich eggshell (OES) water flasks, ochre-stained pieces of ostrich eggshell and engraved and scratched ochre pieces, as well as the collection of materials for purely aesthetic reasons. Although Middle Stone Age artefacts occur throughout the Eastern Cape, the most well-known Middle Stone Age sites include the type-site for the Howiesons Poort stone tool industry, Howiesons Poort (HP) rock shelter, situated close to Grahamstown and Klasies River Mouth Cave (KRM), situated along the Tsitsikamma coast. Middle Stone Age sites are located both at the coast and in the interior across southern Africa. Scatters of Middle Stone Age stone artefacts are known to occur within the surrounding area where these have been recorded in archaeological and heritage impact assessments

The Albany Museum Site Recording Database provides locations of several Middle Stone Age stone artefact scatters and sites within the wider region of the area proposed for the road upgrade and associated borrow pits. Middle Stone Age sites have been recorded in other areas of the Transkei and Ciskei (Derricourt 1977) and near the Maclear area by Opperman (1987). Scatters of Middle Stone Age stone artefacts have also been documented by Cultural Resource Management practitioners (Van Ryneveld 2013b).

4.3. The Later Stone Age

The Later Stone Age (LSA) spans the period from about 30 000 years ago until the colonial era, although some communities continue making stone tools today. The period between 30 000 and 20 000 years ago is referred to as the transition from the Middle Stone Age to Later Stone Age; although there is a lack of crucial sites and evidence that represent this change. By the time of the Later Stone Age the genus *Homo*, in southern Africa, had developed into *Homo sapiens sapiens*, and in Europe, had already replaced *Homo Neanderthalensis*.

The Later Stone Age is marked by a series of technological innovations, new tools and artefacts, the development of economic, political and social systems, and core symbolic beliefs and rituals. The stone toolkits changed over time according to time-specific needs and raw material availability, from smaller microlithic Robberg (20/18 000-14 000ya), Wilton (8 000-the last 500 years) Industries and in between, the larger Albany/Oakhurst (14 000-8 000ya) and the Kabeljous (4 500-the last 500 years) Industries. Bored stones used as part of digging sticks, grooved stones for sharpening

and grinding and stone tools fixed to handles with mastic also become more common. Fishing equipment such as hooks, gorges and sinkers also appear within archaeological excavations. Polished bone tools such as eyed needles, awls, linkshafts and arrowheads also become a more common occurrence. Most importantly bows and arrows revolutionized the hunting economy. It was only within the last 2000 years that earthenware pottery was introduced, before then tortoiseshell bowls were used for cooking and ostrich eggshell (OES) flasks were used for storing water. Decorative items like ostrich eggshell and marine/fresh water shell beads and pendants were made.

Hunting and gathering made up the economic way of life of these communities; therefore, they are normally referred to as hunter-gatherers. Hunter-gatherers hunted both small and large game and gathered edible plantfoods from the veld. For those that lived at or close the coast, marine shellfish and seals and other edible marine resources were available for the gathering. The political system was mainly egalitarian, and socially, hunter-gatherers lived in bands of up to twenty people during the scarce resource availability dispersal seasons and aggregated according to kinship relations during the abundant resource availability seasons. Symbolic beliefs and rituals are evidenced by the deliberate burial of the dead and in the rock art paintings and engravings scattered across the southern African landscape.

Later Stone Age sites occur both at the coast (caves, rock shelters, open sites and shell middens) and in the interior (caves, rock shelters and open sites) across southern Africa. There are more than a few significant Later Stone Age sites in the Eastern Cape. The most popular are the type sites for the above-mentioned stone artefact industries, namely Wilton (for the Wilton Industry), Melkhoutboom (for the Albany Industry), both rock shelters situated to the west of Grahamstown, and Kabeljous Rock Shelter (for the Kabeljous Industry) situated just north of Jeffreys Bay.

The majority of archaeological sites found in the area would date from the past 15 000 years where San hunter-gatherers inhabited the landscape living in rock shelters and caves as well as on the open landscape. These latter sites are difficult to find because they are in the open veld and often covered by vegetation and sand. Sometimes these sites are only represented by a few stone tools and fragments of bone. The preservation of these sites is poor and it is not always possible to date them (Deacon and Deacon 1999). Caves and rock shelters, however, in most cases, provide a more substantial preservation record of pre-colonial human occupation.

The Albany Museum Site Recording Database provides locations of Later Stone Age stone artefact scatters and sites within the wider region of the area proposed for the road upgrade and associated borrow pits. Scatters of Later Stone Age stone artefacts have also been documented by Cultural Resource Management practitioners whilst conducting archaeological heritage impact assessments ranging between (Van Ryneveld 2013b).

4.4. Pastoralism within the last 2 000 years

Until 2 000 years ago, hunter-gatherer communities traded, exchanged goods, encountered and interacted with other hunter-gatherer communities. From about 2 000 years ago the social dynamics of the southern African landscape started changing with the immigration of two 'other' groups of people, different in physique, political, economic and social systems, beliefs and rituals.

One of these groups, the Khoekhoen pastoralists or herders entered southern Africa with domestic animals, namely fat-tailed sheep and goats, travelling through the south towards the coast. They also introduced thin-walled pottery common in the interior and along the coastal regions of southern Africa. Their economic systems were directed by the accumulation of wealth in domestic stock numbers and their political make-up was more hierarchical than that of the hunter-gatherers. The most significant Khoekhoen pastoralist sites in the Eastern Cape include Scott's Cave near Patensie (Deacon 1967), Goedgeloof shell midden along the St. Francis coast (Binneman 2007) and Oakleigh rock shelter near Queenstown (Derricourt 1977). Often, these archaeological sites are found close to the banks of large streams and rivers.

4.5. The Iron Age within the last 2 000 years

The Bantu-speaking agro pastoralists or 'first-farming communities' or Iron Age communities entered southern Africa along the east coast within the last 2 000 years. They owned domesticated stock, namely goats, sheep, cattle, and dogs. Their pottery was different to that of the Khoekhoen, in the shape, thickness, heavy decoration and variety of the vessels. First farming communities lived a relatively sedentary way of life, they planted sorghum and millet, and were therefore limited to settle in the summer rainfall areas. In addition, first farming communities possessed the skill of metal working, having the ability to mine and work iron, copper, tin and even gold. Their economic systems were also based on the accumulation of wealth through owner-ship and their political organisation slightly more hierarchical than that of the Khoekhoen.

A small amount of Iron Age (IA) research has been conducted in the Eastern Cape thus far, but two important Eastern Cape Early Iron Age Sites (EIA) sites include Ukulele situated in the Kei River Valley near Khomga, situated about 50 km south of the proposed development area along the Kei River and Ntsitsana situated in the interior Transkei, 70 km west of the coast, along the Mzimvubu River.

4.6. Historical Period (last 500 years)

This region of the Eastern Cape gave birth to several influential religious and political figures who would be memorialised in the shaping of South Africa. Colonial infiltration into this region of the Eastern Cape happened relatively late by Anglican missionaries. The Anglican missionaries arrived in 1795 with the annexation of the Cape. It was only in

1855 that Bishop Armstrong visited Chief Sandile to erect a Church mission within his area, Sandile consented and offered a site near his kraal on the Kabusie River which was then called St John's. There still remained the great Chief Kreli who lived further east across the Kei River. Bishop Armstrong travelled across the country, within a week he reached the banks of the Kei River, and met with Kreli and 50 of his men. Kreli readily agreed to have missionaries in his country, though his 600 000 people were not in any way under British rule.

A little later, in 1855, the great mission station of St Mark's was established by Archdeacon Henry T Waters, as one of the four Anglican mission stations named after the Apostles. St Mark's mission was the first Anglican mission founded in the Transkei. The Anglican Church at St Mark's is a reminder of the mission station that flourished during the latter 1800's and into the 1900's. A memorial to the first black Anglican priest, Peter (Petrus) K. Masiza can be seen in the entrance to the Anglican Church at St Marks.

On the 28th June 1942 Martin Tembisile who later became known as Chris Hani was born in Sabalele Village. His political interest and activism took him away from his birthplace only to return to his home village March 1993 for the first time in 30 years. Hani was shot dead a month later in April 1993 in front of his house in Dawn Park, Boksburg. A monument was erected in Sabalele Village to honour Chris Hani.

4.7. Human Remains

It difficult to detect the presence of archaeological human remains on the landscape as these burials, in most cases, are not marked at the surface. Human remains are usually observed when they are exposed through erosion or construction activities for development. In some instances packed stones or rocks may indicate the presence of informal pre-colonial burials.

4.8. Rock Art (Paintings and Engravings)

Rock art is generally associated with the Later Stone Age period mostly dating from the last 5 000 years to the historical period. It is difficult to accurately date the rock art without destructive practices. The southern African landscape is exceptionally rich in the distribution of rock art which is determined between paintings and engravings. Rock paintings occur on the walls of caves and rock shelters across southern Africa. Rock engravings, however, are generally distributed on the semi-arid central plateau, with most of the engravings found in the Orange-Vaal basin, the Karoo stretching from the Eastern Cape (Cradock area) into the Northern Cape as well as the Western Cape, and Namibia. At some sites both paintings and engravings occur in close proximity to one another especially in the Karoo and Northern Cape. The greatest concentrations of engravings occur on the andesite basement rocks and the intrusive Karoo dolerites, but sites are also found on about nine other rock types including dolomite, granite, gneiss,

and in a few cases on sandstone (Morris 1988). Substantial research has also been conducted in the Western Cape Karoo area around Beaufort West (Parkington 2008).

The Albany Museum Site Recording Database holds records of several rock art painting sites that have been recorded within the wider region including a site situated on the farm known as the St Marks. A collection of the sites photographs are held in the University of Pretoria's Woodhouse collection database.

5. DESCRIPTION OF THE PROPERTY

5.1. Location data

The proposed area for the DR 08376 provincial road upgrade is situated off the R61 between Cofimvaba in the east, Queenstown in the west, and Cathcart, about 40 km south-west. The White Kei River is located to the west. St Marks Mission settlement to the Lower Sabalele Village is approximately 19 km in length. The proposed development area situated within the road reserve and in some adjacent areas has been heavily disturbed by the construction and maintenance of the current gravel road, DR 08376.

The borrow pits and hard rock quarry are all situated along the DR 08376 road that extends from St Marks Mission off the R61 to Lower Sabalele Village following the road back to the R61 at Camama near Cofimvaba along the DR 08375.

5.2. Maps

1:50 000 Maps: 3227 AB ST MARKS and 3227 BA COFIMVABA

1:50 000 SUIDAFRIKA 3227BA COFIMVABA

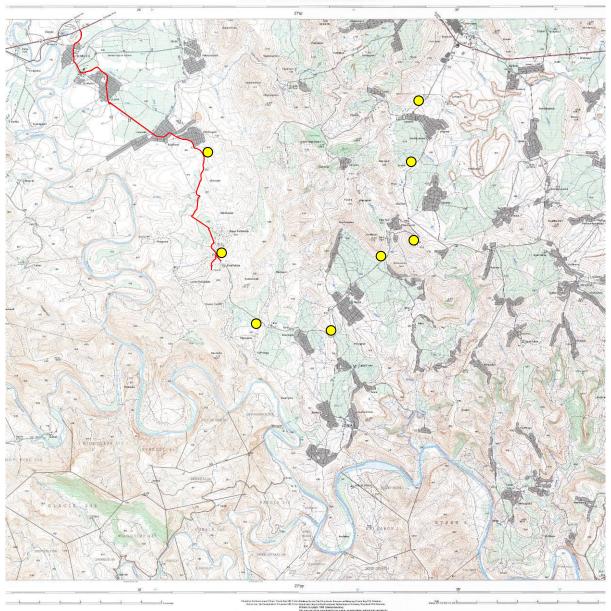


Figure 1. 1:50 000 topographic maps 3227 AB ST MARKS and 3227 BA COFIMVABA showing the location of the DR 08376 upgrade (red line) and the associated borrow pits (yellow dots).



Figure 2. Aerial view showing the location of the proposed road upgrade from St Marks to Sabalele Village (DR 08376) (dark red line) and associated borrow pits (yellow spots).

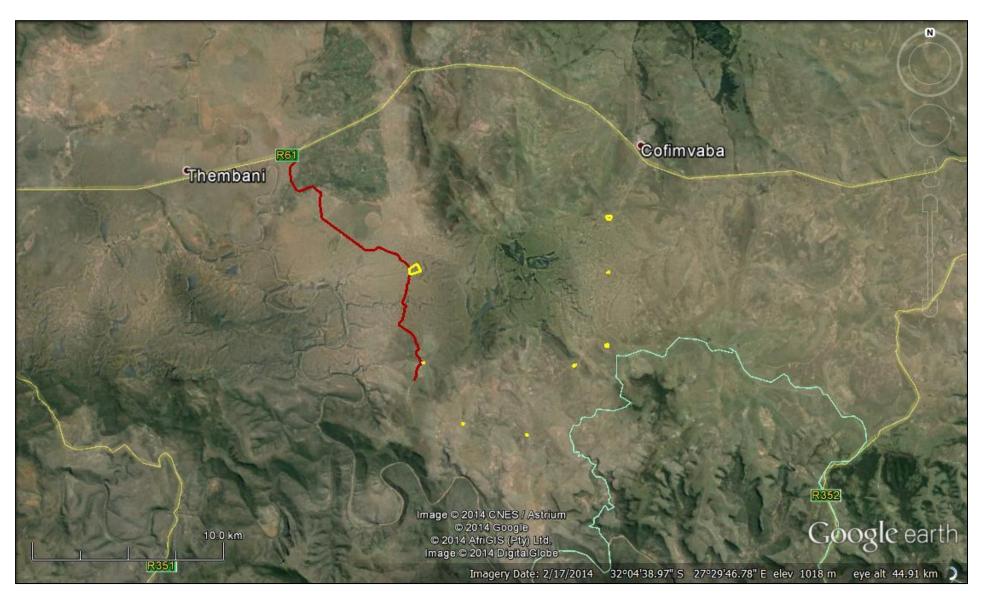


Figure 3. Close-up aerial view showing the location of the proposed road upgrade from St Marks to Sabalele Village (DR 08376) (dark red line) and associated borrow pits (yellow spots).

6. ARCHAEOLOGICAL INVESTIGATION

6.1. Methodology

The surveys for the seven borrow pits and one hard rock quarry sites were conducted on foot. The survey for DR 08376 provincial road upgrade was done by conducting spot checks from a vehicle when structures, features, and exposed areas were observed along the route. GPS readings and photographs were taken using a Garmin Oregon 550 (Table 1). The GPS readings have been plotted on the accompanying Google Earth generated maps.

The surveys and results for the DR 08376 road upgrade and associated seven borrow pits and one hard rock quarry will be described separately.

6.2. Results of Survey



6.2.1. Borrow Pit 171 (BP171)

Figure 4. Close-up aerial view of the area proposed for Borrow Pit 171 (BP171) showing the extent of the proposed borrow pit and area surveyed.

Borrow Pit 171 (BP171) is located about 11 km along the proposed route for the DR 08376 road upgrade from the turn-off at St Marks on the property St Marks Mission No. 45 (Figure 4). The site is situated on the eastern side of the road just south and south east of the villages of Luncwini, KwaFanti, and Ntsingeni.

The intention is to expand the existing borrow pit area. The existing borrow pit area is approximately 115 m x 85 m in extent (Figure 5). The proposed borrow pit area including the existing borrow pit is approximately 575 m x 450 m in extent.

The vegetation cover is mainly low grass cover that allowed for relatively good archaeological visibility (Figures 6-7). The exposed and disturbed surface and soil eroded areas were investigated for the possibility of encountering archaeological heritage remains.

The remains of two dry packed stone walling features situated at the base of a hill on the boundary of the proposed mining area in the south-eastern corner were recorded. The features included a relatively large circular enclosure and a smaller rectangular enclosure that may have been adjoined (Figures 8-10).



Figure 5. View of the existing Borrow Pit 171 (BP171).



Figure 6. View of the general landscape of the area proposed for the extension of Borrow Pit 171 (BP171) facing east.



Figure 7. View of the general landscape of the area proposed for the extension of Borrow Pit 171 (BP171) facing south east.



Figure 8. View of the dry packed stone walling complex situated at the base of the hill on the boundary of the proposed borrow pit development area.

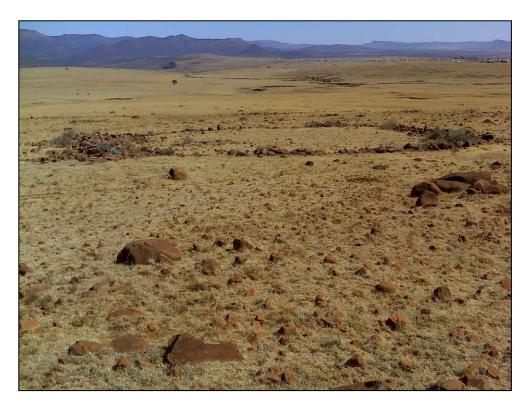
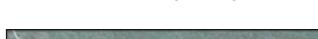


Figure 9. Close-up view of the remains of the circular dry packed stone walling feature.



Figure 10. Close-up view of the remains of the adjacent rectangular dry packed stone walling feature.



6.2.2. Borrow Pit 183 (BP 183):



Figure 11. Close-up aerial view of the area proposed for Borrow Pit 183 (BP183) showing the extent of the proposed borrow pit and area surveyed.

Borrow Pit 183 (BP183) is located about 6 km along the proposed route for the DR 08376 road upgrade from the area proposed for Borrow Pit 171 (BP171) on the Farm Sabalele No 119 (Figure 11). The site is situated on the eastern side of the road just south of Lower Sabalele Village and north of Kwanakaya Village.

The intention is to expand the existing borrow pit area. The existing borrow pit area is approximately 45 m x 15 m in extent (Figure 12). The proposed borrow pit area including the existing borrow pit is approximately 115 m x 50 m in extent.

The vegetation cover is mainly low grass cover that allowed for relatively good archaeological visibility (Figures 13-15). The exposed and disturbed surface and soil eroded areas were investigated for the possibility of encountering archaeological heritage remains.

An established burial ground housing traditional graves occurs immediately next to an informal gravel access road that would presumably be used for the proposed mining activities and that leads to the neighbouring village (Figures 16-17). The burial ground can be regarded as informal and is therefore protected under the National Heritage Resources Act 25 of 1999 (NHRA).



Figure 12. View of the existing Borrow Pit 183 (BP183).



Figure 13. View of the general landscape of Borrow Pit 183 (BP183) and surrounding area facing south-west.



Figure 14. View of the general landscape of the area proposed for the extension of Borrow Pit 183 (BP183) facing north-west.



Figure 15. View of the general landscape of the area proposed for the extension of Borrow Pit 183 (BP183) facing north-east.



Figure 16. View of the burial ground situated near Borrow Pit 183 (BP183) facing north.



Figure 17. View of the burial ground situated near Borrow Pit 183 (BP183) facing south-east.

6.2.3. Borrow Pit 185 (BP 185):



Figure 18. Close-up aerial view of the area proposed for Borrow Pit 185 (BP185) showing the extent of the proposed borrow pit and area surveyed.

Borrow Pit 185 (BP185) is located about 5 km along the DR 08375 road that connects with the R61 near Cofimvaba on the Farm Hohita No. 117 (Figure 18). The site is situated on the southern near the Village of Lower Cardif.

The intention is to expand the existing borrow pit area. The existing borrow pit area is approximately $25 \text{ m} \times 20 \text{ m}$ in extent (Figure 19). The proposed borrow pit area including the existing borrow pit is approximately $80 \text{ m} \times 75 \text{ m}$ in extent.

The vegetation cover is mainly low grass cover that allowed for relatively good archaeological visibility (Figures 20-21). The exposed and disturbed surface and soil eroded areas were investigated for the possibility of encountering archaeological heritage remains.

No archaeological or other heritage resources were documented within the exposed areas. However, it is possible that stone artefacts may occur in primary context (*in situ*) 50 cm – 80 cm underneath the dense vegetation.



Figure 19. View of the existing Borrow Pit 185 (BP185).



Figure 20. View of the general landscape of the area proposed for the extension of Borrow Pit 185 (BP185) facing south-west.



Figure 21. View of the general landscape of the area proposed for the extension of Borrow Pit 185 (BP185) facing north-west.

6.2.4. Borrow Pit 186 (BP186)



Figure 22. Close-up aerial view of the area proposed for Borrow Pit 186 (BP186) showing the extent of the proposed borrow pit and area surveyed.

Borrow Pit 186 (BP186) is located about 4 km from Borrow Pit 185 (BP185) along the DR 08375 on the Farm Hohita No. 117 (Figure 22). The site is situated on the northern side of the road between the villages of Ntshinsthi and Banzi.

The intention is to expand the existing borrow pit area. The existing borrow pit area is approximately 120 m x 50 m in extent (Figure 23). The proposed borrow pit area including the existing borrow pit is approximately 145 m x 70 m in extent.

The vegetation cover is mainly low grass cover that allowed for relatively good archaeological visibility (Figures 24-25). The exposed and disturbed surface and soil eroded areas were investigated for the possibility of encountering archaeological heritage remains.

No archaeological or other heritage resources were documented within the exposed areas. However, it is possible that stone artefacts may occur in primary context (*in situ*) 50 cm – 80 cm underneath the dense vegetation.

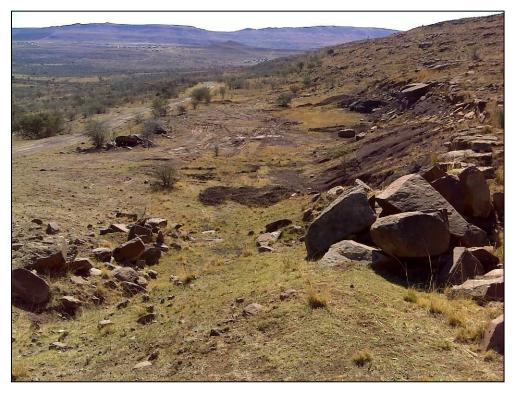


Figure 23. View of the existing Borrow Pit 186 (BP186).

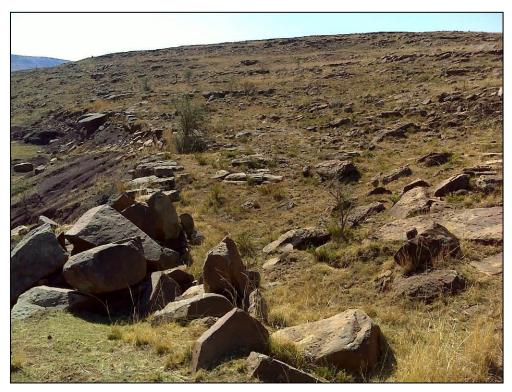


Figure 24. View of the general landscape of the area proposed for the extension of Borrow Pit 186 (BP186) facing north.



Figure 25. View of the general landscape of the area proposed for the extension of Borrow Pit 186 (BP186) facing south.



6.2.5. Borrow Pit 188 (BP188):

Figure 26. Close-up aerial view of the area proposed for Borrow Pit 188 (BP188) showing the extent of the proposed borrow pit and area surveyed.

Borrow Pit 188 (BP188) is located about 5 km from Borrow Pit 186 (BP186) along the DR 08375 on the Farm Banzi No. 114 (Figure 26). The site is situated on the northern side of the road between the villages of Thunzini and Luxeni Villages.

The intention is to expand the existing borrow pit area. The existing borrow pit area is approximately 105 m x 20 m in extent (Figure 27). The proposed borrow pit area including the existing borrow pit is approximately 145 m x 65 m in extent.

The vegetation cover is mainly low grass cover that allowed for relatively good archaeological visibility (Figures 28-29). The exposed and disturbed surface and soil eroded areas were investigated for the possibility of encountering archaeological heritage remains.

No archaeological or other heritage resources were documented within the exposed areas. However, it is possible that stone artefacts may occur in primary context (*in situ*) 50 cm – 80 cm underneath the dense vegetation.

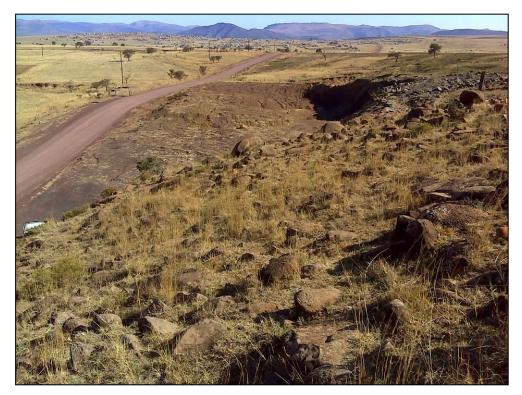


Figure 27. View of the existing Borrow Pit 186 (BP186).



Figure 28. View of the general landscape of the area proposed for the extension of Borrow Pit 188 (BP188) facing north-east.



Figure 29. View of the general landscape of the area proposed for the extension of Borrow Pit 188 (BP188) facing east.

6.2.6. Borrow Pit 190 (BP190):



Figure 30. Close-up aerial view of the area proposed for Borrow Pit 190 (BP190) showing the extent of the proposed borrow pit and area surveyed.

Borrow Pit 190 (BP190) is located about 3 km from Borrow Pit 188 (BP188) along the DR 08375 on the Farm Qutsa No. 113 (Figure 30). The site is situated on the southern side of the road in close proximity to Ngxingweni Village.

The intention is to expand the existing borrow pit area. The existing borrow pit area is approximately 110 m x 100 m in extent (Figure 31). The proposed borrow pit area including the existing borrow pit is approximately 175 m x 160 m in extent.

The vegetation cover is mainly low dense grass cover that allowed for made archaeological visibility difficult (Figures 32-34). The exposed and disturbed surface and soil eroded areas were investigated for the possibility of encountering archaeological heritage remains.

A dry packed stone walling complex occurs within the north-western boundary of the proposed extended mining area (Figures 35-37). The complex comprises one rectangular structure, the foundations (floor) remains of what may have been a hut floor, and a low possibly erosion wall.

Two stone artefacts were documented within the north-eastern boundary of the proposed extended mining area (Figure 38).



Figure 31. View of the existing Borrow Pit 190 (BP190).



Figure 32. View of the general landscape of the area proposed for the extension of Borrow Pit 190 (BP190) facing north-west.



Figure 33. View of the general landscape of the area proposed for the extension of Borrow Pit 190 (BP190) facing west.

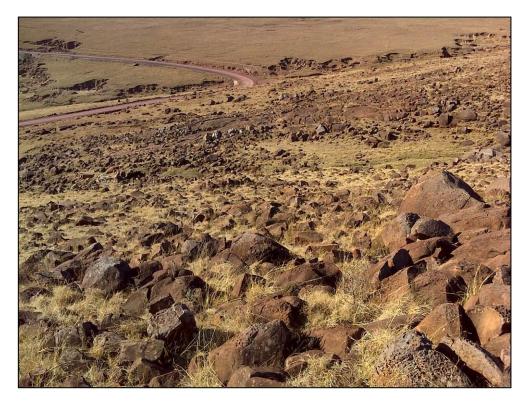


Figure 34. View of the general landscape of the area proposed for the extension of Borrow Pit 190 (BP190) facing north.



Figure 35. View of one of the dry packed stone walling features situated within the area proposed for the extension of Borrow Pit 190 (BP190).



Figure 36. View of one of the dry packed stone walling features situated within the area proposed for the extension of Borrow Pit 190 (BP190).



Figure 37. View of one of the dry packed stone walling features situated within the area proposed for the extension of Borrow Pit 190 (BP190).



Figure 38. Examples of stone artefacts documented within the area proposed for the extension of Borrow Pit 190 (BP190).

6.2.7. Borrow Pit 192 (BP192):



Figure 39. Close-up aerial view of the area proposed for Borrow Pit 192 (BP192) showing the extent of the proposed borrow pit and area surveyed.

Borrow Pit 192 (BP192) is located about 4.5 km from Borrow Pit 190 (BP190) along the DR 08375 on the Farm Camama No.112 (Figure 39). The site is situated on the northern side of the road in south of Camama and Mkoba Villages.

The intention is to expand the existing borrow pit area. The existing borrow pit area is approximately 60 m x 20 m in extent (Figure 40). The proposed borrow pit area including the existing borrow pit is approximately 115 m x 66 m in extent.

The vegetation cover is mainly a mixture of sparse and dense low grass cover that allowed for relatively good archaeological visibility (Figures 41-43). The exposed and disturbed surface and soil eroded areas were investigated for the possibility of encountering archaeological heritage remains.

No archaeological or other heritage resources were documented within the exposed areas. However, it is possible that stone artefacts may occur in primary context (*in situ*) 50 cm – 80 cm underneath the dense vegetation.



Figure 40. View of the existing Borrow Pit 192 (BP192).



Figure 41. View of the general landscape of the area proposed for the extension of Borrow Pit 192 (BP192) facing south-west.



Figure 42. View of the general landscape of the area proposed for the extension of Borrow Pit 192 (BP192) facing north-east.



Figure 43. View of the general landscape of the area proposed for the extension of Borrow Pit 192 (BP192) facing west.

6.2.8. Borrow Pit 193 (BP193):



Figure 44. Close-up aerial view of the area proposed for Borrow Pit 193 (BP193) showing the extent of the proposed borrow pit and area surveyed.

DR 08375 on the Farm Cofimvaba No. 111 (Figure 44). The site is situated on the northern side of the road between Camama and Cofimvaba Villages.

The intention is to expand the existing borrow pit area. The existing borrow pit area is approximately 165 m x 130 m in extent (Figure 45). The proposed borrow pit area including the existing borrow pit is approximately 235 m x 230 m in extent.

The vegetation cover is mainly dense low dense grass cover that made archaeological visibility difficult (Figures 46-48). The exposed and disturbed surface and soil eroded areas were investigated for the possibility of encountering archaeological heritage remains.

A dry packed stone walling complex occurs within the northern boundary of the existing borrow pit area. The concrete remains of an unknown built environment structure was documented in the southern area proposed for the mining activities.



Figure 45. View of the existing Borrow Pit 193 (BP193).



Figure 46. View of the general landscape of the area proposed for the extension of Borrow Pit 193 (BP193) facing west.



Figure 47. View of the general landscape of the area proposed for the extension of Borrow Pit 192 (BP192) facing west.



Figure 48. View of the general landscape of the area proposed for the extension of Borrow Pit 193 (BP193) facing west.



Figure 49. Remains of foundations situated within the area proposed for the extension of Borrow Pit 193 (BP193).

6.2.9. DR 08376 Provincial Road Upgrade:



Figure 50. Aerial view of the location and extent of the DR 03876 provincial road upgrade showing the positions of some of the associated borrow pits built environment structures, dry packed stone walling structures, and burial area encountered during the survey.

The proposed road upgrade extends from St Mark's Village at the R61 turn-off for about 19 km to Lower Sabalele Village (Figure 50). The vegetation cover of the area within and adjacent to the road reserve proposed for the upgrade of the DR03876 allowed for good archaeology visibility along the route (Figures 51-56). The area within the road reserve and immediately adjacent to the road reserve has in the past been heavily disturbed by the construction and continued maintenance of the existing DR 03876 provincial road as well as by the construction of road drainages channels, power lines, boundary fences, bridges, bus stops located along the route, and the establishment of residential dwellings (Figures .

No pre-colonial archaeological heritage resources were observed along the DR 08376 provincial road within or adjacent to the road reserve. It is unlikely that *in situ* archaeological heritage remains would be encountered during construction activities. However, built environment structures, a dry packed stone walling complex, and an informal burial area were documented during the survey and are discussed in the following sections.



Figures 51-56. Views of the general landscape along the route proposed for the upgrade of the DR 08376 provincial road.



Figures 57-62. Views of the disturbed areas along the route proposed for the upgrade of the DR 08376 provincial road.

6.2.9.1. DR 08376 - Built Environment

The built environment encountered along the proposed route for the upgrade of the DR 08376 provincial road included several contemporary dwellings associated with the villages situated along the route, most likely younger than 60 years, ruins of structures that are now unidentifiable, abandoned buildings, probably associated with the once thriving St Mark's mission station, and a functional historical Anglican Church.

Most of the built environment should not be affected by the construction activities associated with the upgrade of the DR 08376 provincial road. The built environment structures considered as part of the heritage resources encountered (SVR BE1, SVR BE2, SVR BE3) have been highlighted below to show their location in relation to the proposed layout of the DR 08376 provincial road upgrade.

i. SVR BE1:

Figure 63. Close-up aerial view of the location of the ruin of the structure (SVR BE1) situated along the route proposed for the upgrade of the DR 08376.

SVR BE1 is situated about 3 km along route from St Mark's Village turn off the R61 between the villages of Tubeni, KwaManzi, and Nontengo (Figure 63). It is located on the southern side of the DR 08376 road. Only the broken remains of an unidentifiable concrete structure remains (Figures 64-65). It is unlikely that these remains still have any significant value for conservation. No other artefacts were associated with the built environment remains.



Figure 64. View of the remains of the structure situated at SVR BE1 facing south.



Figure 65. View of the remains of the structure at SVR BE1 facing north.

ii. SVR BE2:



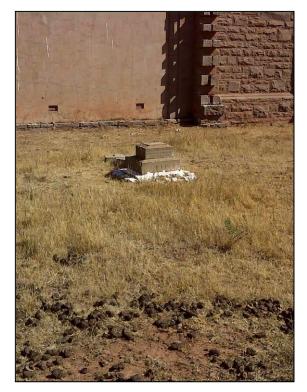
Figure 66. Close-up aerial view of the location of the historical Anglican Church at St Marks Village.

SVR BE1 is situated about 4 km along route from St Mark's Village turn off the R61 between the villages of Kwa Manzi, and Nontengo (Figure 66). It is located on the northern side of the DR 08376 road. The structure is the historical Anglican Church once part of the St Mark's mission station established in 1855 (Figure 67). The church is still being used by the local community. A monument dedicated to the first black Anglican priest in South African, Peter (Petrus) K. Masiza and the possible headstone of Henry Waters who established the St Mark's mission in 1855 are located in from of the Anglican Church within its property boundary (Figures 68-69).

The church's property is fenced and should not be negatively affected by the proposed development.



Figure 67. View of the historical Anglican Church at St Marks Village.





Figures 68-69. View of the headstone and memorial of significant members of the St Marks historical Mission Station.

iii. SVR BE3:



Figure 70. Close-up aerial view of the location of the abandoned structures situated on the property St Marks Mission.

SVR BE3 is situated about 6.5 km along route from St Mark's Village turn off the R61 between the villages of Nontengo and Luncwini (Figure 70). It is located about 45 m on southern side of the DR 08376 road. The roofs, doors, and windows have been stripped and only the abandoned structures remains (Figure 71). The buildings may be associated with the St Marks mission station. It is likely that the buildings should not be negatively affected by the proposed development.



Figure 71. View of the abandoned buildings on the property St Marks Mission.

6.2.9.2. DR 08376 - Dry Packed Stone Walling



i. SVR SW1:

Figure 72. Close-up aerial view of the location of the dry packed stone wall along the route for the proposed DR 08376 provincial road upgrade.

SVR SW1 is situated about 1.5 km south of the position of Borrow Pit 171 (BP171) where dry packed stone walling features were recorded during this survey along route from St Mark's Village turn off the R61 south of the village of Luncwini (Figure 72). Several dry packed stone walling features including rectangular and circular stone walling enclosures occur within the complex (Figures 73-76). This area is most probably an abandoned homestead as several more dry packed stone walling features occur on the landscape and the foundation remains of hut was identified within the area.

It is unlikely that the dry packed stone walling features will be negatively affected by the proposed development given the distance of the road to the features.



Figure 73. View of the dry packed stone walling complex (SVR SW1) situated along the route for the proposed DR 08376 provincial road upgrade.



Figure 74. View of one the rectangular enclosures situated within the complex SVR SW1.



Figure 75. View of one of the circular enclosures situated within the complex SVR SW2.



Figure 76. View of one of the remains of a possible hut floor / foundation.

6.2.9.3. DR 08376 – Informal Burial Grounds



i. SVR G1:

Figure 77. Close-up aerial view of the location of the informal burial area along the route for the proposed DR 08376 provincial road upgrade.

An informal burial ground is situated immediately adjacent to the DR 08376 within 50 m of the position of Borrow Pit 171 (BP171) (Figure 77). The burial ground comprises 132 burials, seven of the burials have been 'built up' and the remaining burials are stone packed with informal headstones (Figure 78-79).

The appropriate mitigation and conservation measures must be considered. Informal burial areas are protected under the National Heritage Resources Act 25 of 1999. The first option is that the area be considered a no-go development zone is strongly recommended. Alternatively, consultative processes with the affected family members must be conducted to suggest the possibility of exhumation and reburial (see section 11 for full recommendations).



Figure 78. View of the informal burial ground situated immediately next to the route proposed for the upgrade of the DR 08376 road facing north.



Figure 79. View of the informal burial ground situated immediately next to the route proposed for the upgrade of the DR 08376 road facing south.

7. DESCRIPTION OF SITES

7.1. Stone Artefact Scatters

7.1.1. Borrow Pit 190 (BP190):

BP190 SA1: This is the only encounter of stone artefacts for the area proposed for the upgrade of the DR 08376 provincial road and associated borrow pits. This artefact scatter comprised very few Middle Stone Age stone artefacts. It is likely that the artefacts may not be *in situ*.

The historical artefacts and distribution are considered as having a medium-low cultural significance and have been allocated a heritage grading of:

'*General' Protection C (Field Rating IV C):* This site has been sufficiently recorded (in the Phase 1). It requires no further recording before destruction (usually Low significance).

7.2. Built Environment

7.2.1. DR 08376 Road Upgrade:

SVR BE1: Concrete remains of an unidentifiable structure. It is likely that these remains are younger than 60 years and therefore is not of heritage or historical importance.

No heritage grading.

SVR BE2: St Mark's Anglican Church. It is unlikely that the proposed development will impact negatively of the structure and associated memorials.

Local: This site is suggested to be *Grade IIIA significance*. This site should be retained as a heritage register site (High significance) and so mitigation as part of the development process is not advised.

SVR BE3: Abandoned dwellings that could possibly associated with the St Mark's mission station. It is unlikely that these structures would be negatively affected by the proposed development.

However, if it is deemed necessary that these structures be demolished for the proposed development to proceed, it is recommended that a specialist historical archaeologist or historical architect be appointed to assess the significance of the built environment structure.

'*General' Protection B (Field Rating IV B)*: This site should be recorded before destruction (usually Medium significance).

7.3. Dry Packed Stonewalling Structures

7.3.1. Borrow Pit 171 (BP191):

BP171 SW1: A dry packed stone walling complex comprising of one rectangular and one circular enclosure.

7.3.2. Borrow Pit 190 (BP190):

BP190 SW1: A dry packed stone walling complex comprising of one relatively intact rectangular enclosure, one smaller circular enclosure, the possible remains of the foundation of a hut floor.

7.3.3. DR 08376 Road Upgrade:

SVR SW1: A dry packed stone walling complex comprising of relatively intact rectangular and circular enclosure as well as the possible remains of the foundation of a hut floor.

It is unlikely that the dry packed stone walling complex at SVR SW1 would be negatively impacted by the proposed development. The dry packed stone walling complexes BP171 SW1 and BP190 SW1 are situated within the proposed quarrying area and would probably be negatively affected by the proposed development. Therefore, the appropriate recommended mitigation measures must be considered before development may proceed. However, if it is deemed necessary that these structures be demolished for the proposed development to proceed, it is recommended that a specialist oral historian be appointed to assess the significance of the dry packed stone walling complexes.

'*General' Protection B (Field Rating IV B)*: These sites should be recorded before destruction (usually Medium significance).

7.4. Informal Burial Areas

7.4.1. Borrow Pit 183 (BP183):

BP183 G1: The burial area is situated immediately east of the access road to the borrow pit and to the neighbouring village. The area is not fenced and it is possible that the burials closest to the road may be negative affected during the quarrying activities. The appropriate recommended mitigation measures must be considered before development may proceed.

7.4.2. DR 08376 Road Upgrade:

SVR G1: The burial area is situated immediately next to the road proposed for the upgrade. It is highly likely that the burials will be negatively affected by the proposed development owing to the close proximity to the road. The appropriate recommended mitigation measures must be considered before development may proceed.

Local: This site is suggested to be *Grade IIIB significance*. It could be mitigated and (part) retained as a heritage register site (High significance).

8. GPS CO-ORDINATES AND SITES FOR THE PROPOSED ROAD UPGRADE OF THE DR 08376 FROM THE R61 AT ST MARKS TO SABALELE VILLAGE AND ASSOCIATED BORROW PITS, NEAR COFIMVABA, INTSIKI YETHU LOCAL MUNICIPALITY, EASTERN CAPE PROVINCE

Table 1. Coordinates and Sites for the Proposed Road Upgrade of the DR 08376 from the R61 at St Marks to Sabalele Village and Associated Borrow Pits, Near Cofimvaba, Intsika Yethu Local Municipality, Eastern Cape Province.

REFERENCE	DESCRIPTION	COORDINATES	HERITAGE RATING		
Borrow Pit 171 (BP 171)					
BP171-1	General location	32°03′39.10″E; 27°27′16.40″S	N/A		
BP171 SW1	Stonewalling kraals	32°03′47.90″E; 27°27′16.10″S	'General' Protection B (Field Rating IV B) <i>Medium significance</i>		
Borrow Pit 183 (BP183)					
BP183-1	General location	32°06′23.30″E; 27°27′26.50″S	N/A		
BP183 G1	Burial ground	32°06′23.40″E; 27°27′29.20″S	Grade IIIB significance <i>High significance</i>		
Borrow Pit 185 (BP 185)					
BP185-1	General location	32°08′07.40″E; 27°28′47.30″S	N/A		
Borrow Pit 186 (BP186)					
BP186-1	General location	32°08′28.30″E; 27°30′58.60″S	N/A		
BP186 SW1	Stonewalling	32°08′31.00″E; 27°30′59.90″S	'General' Protection B (Field Rating IV B) Medium significance		
Borrow Pit	188 (BP188)				
BP188-1	General location	32°06′26.30″E; 27°32′36.50″S	N/A		
Borrow Pit 190 (BP190)					
BP190-1	General location	32°05′52.70″E; 27°33′42.80″S	N/A		
BP190 SW1	Stonewalling complex	32°05′51.30″E; 27°33′39.30″S	'General' Protection B (Field Rating IV B) Medium significance		
BP190 SA1	Stone artefacts	32°05′52.90″E; 27°33′43.40″S	Field Rating IV C Low significance		
Borrow Pit 192 (BP192)					
BP192-1	General location	32°03′46.40″E; 27°33′45.10″S	N/A		
Borrow Pit 193 (BP193)					
BP193-1	General location	32°02′11.00″E; 27°33′44.20″S	N/A		

Sabalele Village Road Upgrade					
SVR BE1	Remains of concrete foundations	32°01′21.10″E; 27°23′33.80″S	N/A		
SVR BE2	Historical Anglican Church	32°01′34.30″E; 27°23′54.30″S	Grade IIIA High significance		
SVR BE3	Abandoned dwellings	32°02′36.80″E; 27°24′34.50″S	'General' Protection B (Field Rating IV B) <i>Medium significance</i>		
SVR SW1	Stone walling complex	32°04′27.20″E; 27°26′53.60″S	<i>'General' Protection B (Field Rating IV B):</i>		
SVR G1	Burial ground	32°03′59.10″E; 27°26′58.10″S	Grade IIIB significance High significance		

9. CULTURAL LANDSCAPE

Cultural landscapes are increasingly becoming a significant considering factor when conducting various archaeological and other heritage impact assessments for proposed developments. The area proposed for the upgrade of the DR 08376 from the turn-off at St Mark's Village to Sabalele Village and associated borrow pits and quarries has a low-high heritage significance range. This significance attests to the importance of the tangible heritage resources as well as the intangible heritage associated with area.

This section gives a brief introduction to the concept of cultural landscape and its relation to various aspects of the dynamic interaction of humans as cultural agents and the landscape as a medium. A description of the interwoven relationships of humans with the landscape over time will be given including the archaeological, historical, and contemporary connections. Lastly, the living heritage makes up a small part of the study undertaken, its significance will be highlighted in relation to the communities who still identify with the area and retain a sense of identity to the landscape.

9.1. Concept of Cultural Landscape

Cultural landscapes can be interpreted as complex and rich extended historical records conceptualised as organisations of space, time, meaning, and communication moulded through cultural process. The connections between landscape and identity and, hence, memory are fundamental to the understanding of landscape and human sense of place. Cultural landscapes are the interface of culture and nature, tangible and intangible heritage, and biological and cultural diversity. They represent a closely woven net of relationships, the essence of culture and people's identity. They are symbol of the growing recognition of the fundamental links between local communities and their heritage, human kind, and its natural environment. In contemporary society, particular landscapes can be understood by taking into consideration the way in which they have been settled and modified including overall spatial organisation, settlement patterns, land uses, circulation networks, field layout, fencing, buildings, topography, vegetation, and structures. The dynamics and complex nature of cultural landscapes can be regarded as text, written and read by individuals and groups for very different purposes and with very many interpretations. The messages embedded in the landscape can be read as signs about values, beliefs, and practices from various perspectives. Most cultural landscapes are living landscapes where changes over time result in a montage effect or series of layers, each layer able to tell the human story and relationships between people and the natural processes.

The impact of human action of the landscape occurs over time so that a cultural landscape is the result of a complex history and creates the significance of place in shaping historical identities by examining a community's presence or sense of place. The deeply social nature of relationships to place has always mediated people's understanding of their environment and their movements within it, and is a process which continues to inform the construction of people's social identity today. Social and spatial relationships are dialectically interactive and interdependent. Cultural landscape reflects social relations.

Cultural landscapes tell the story of people, events, and places through time, offering a sense of continuity, a sense of the stream of time. Landscapes reflect human activity and are imbued with cultural values. They combine elements of space and time, and represent political as well as social and cultural constructs. Culture shapes the landscape through day-to-day routine and these practices become traditions incorporated with a collective memory the ultimate embodiments of memorial consciousness', examples such as monuments, annual events and, archives. As they have evolved over time, and as human activity has changed, they have acquired many layers of meaning that can be analysed through archaeological, historical, geographical, and sociological study.

Indigenous people, European explorers, missionaries, pastoralists, international and domestic travellers all looked or look at similar landscapes and experience different versions of reality. Regardless of the power of different cultural groups, however, all groups create cultural landscape and interpret them from their own perspectives. This gives rise to tensions and contradictions between groups, invariably expressed in landscape forms as well.

The dynamics and complex nature of cultural landscapes can be regarded as text, written and read by individuals and groups for very different purposes and with very many interpretations. The messages embedded in the landscape can be read as signs about values, beliefs, and practices from various perspectives.

Most cultural landscapes are living landscapes where changes over time result in a montage effect or series of layers, each layer able to tell the human story and relationships between people and the natural processes. A common theme underpinning the concept of ideology of landscape itself it the setting for everything we do is that of the landscape as a repository of intangible values and human meaning that nurture our very existence. Intangible elements are the foundation of the existence of cultural landscapes, and that are still occupied by contemporary communities, Landscape, culture and collective memory of a social group are intertwined and that this binds the individuals to their community. Culture shapes their everyday life, the values bind gradually, change slowly, and transfer from generation to generation – culture is a form of memory. We see landscapes as a result of our shared system of beliefs and ideologies. In this way landscape is a cultural construct, a mirror of our memories and myths encoded with meanings which can be read and interpreted. Pivotal to the significance of cultural landscapes and the ideas of the ordinarily sacred is the realisation that it is the places, traditions, and activities of ordinary people that create a rich cultural tapestry of life, particularly through our recognition of the values people attach to their everyday places and concomitant sense of place and identity.

Living heritage means cultural expressions and practices that form a body of knowledge and provide for continuity, dynamism, and meaning of social life to generations of people as individuals, social groups, and communities. It also allows for identity and sense of belonging for people as well as an accumulation of intellectual capital current and future generation in the context of mutual respect for human, social and cultural rights.

Protection of these cultural landscapes involves some management issues such as successful conservation is based on the continuing vital link between people and their landscapes. This link can be disrupted or affected by for instance economical reasons. Other threats can also be attributed to urban expansion and development, tourism, war and looting and something beyond our human intervention: natural disasters and climate change. Cultural landscape management and conservation processes bring people together in caring for their collective identity and heritage, and provide a shared local vision within a global context. Local communities need, therefore, to be involved in every aspect of identification, planning and management of the areas as they are the most effective guardians of landscape heritage.

Most elements of living heritage are under threat of extinction due to neglect, modernisation, urbanisation, globalisation, and environmental degradation. Living heritage is at the centre of people's culture and identity, it is importance to provide space for its continued existence. Living heritage must not be seen as merely safeguarding the past, but it must be seen as safeguarding the logic of continuity of what all communities or social groups regard as their valuable heritage, shared or exclusive.

In some instances, villages may capitalise on local landscape assets in order to promote tourism. Travel and tourism activities are built around the quest for experience, and the experience of place and landscape is a core element of that quest. It is a constant desire for new experiences that drives tourism, rather than a quest for authenticity. It is, therefore, important to engage actively with the tourism industry so that aspects of life and landscape important to cultural identity, including connection with place are maintained.

9.2. Archaeological Landscape

Although very little archaeological heritage remains have been documented within the proposed development area, the area was once part of an ancient landscape inhabited by various families of genus *Homo*. Various studies recording archaeological sites and occurrences within the wider region stretching between Queenstown, Cathcart, Cofimvaba and further afield have reported on the evidence of the presence of *Homo erectus* (Early Stone Age), *Homo sapiens* (Middle Stone Age), and *Homo sapiens sapiens* (Later Stone Age). The only remains dating to the Early and Middle Stone Ages are stone artefacts as the organic evidence and sites have not been preserved. The influence of natural, environmental and climatic conditions, as well as human intervention may also attribute to much archaeological site information being lost. Rock paintings left of the landscape in caves and rock shelters piece together insights into the worldviews of the San hunter-gatherers that occupied this landscape.

There is evidence of Early Iron Age communities who settled in the Kei River Valley about 50 km south of the proposed development area from about AD 1 250. The current burials and dry packed stone walling complexes and homesteads may be long standing traditions by the descendants of the pre-colonial communities who once occupied the landscape.

9.3. Historical Landscape

The archaeological interpretation of the cultural landscape relies solely on the presence and surface visibility of artefacts left behind on the landscape by the populations who occupied and migrated through the proposed development area. A more comprehensive historical layer is able to be fitted onto the cultural landscape owing to the availability of written documents and the continuing existence of the traces left behind by European Settlers and the moulding of these traces used to shape the contemporary communities that occupies and regards itself attached to its present cultural landscape.

The proposed development area fits into a greater cultural landscape and the moulding of a historically significant area which produced significantly important members South African society and which may now be considered rural and lacking economic wealth and development.

9.4. Contemporary Landscape

The contemporary cultural landscape is the product of centuries of human interaction, more so when the European Settlers entered the area. Remnants of these cultural conflicts and interaction remain on the landscape, with only oral histories and stories handed down from one generation to the next to remain in the collective memory of the community/ies and through generational farmers living on the landscape.

The remains of dry packed stone walling complexes and the traditional burials are indications of long standing traditional practices passed down from generation to the next. Therefore, these features recorded during the survey make up a significant aspect of the cultural landscape that may still be important to the local communities whether abandoned or not.

10. CONCLUSION

The phase 1 archaeological impact assessment (AIA) was conducted as requirement of the National Heritage Resources Act (NHRA 25 of 1999) triggered by Section 38(1)(c)(i). A literature review was conducted focusing on the archaeological literature resources available. Historical research was conducted to establish the significance of the historical artefact scatter. The survey was conducted to establish the range and importance of the exposed and *in situ* archaeological material remains, sites and features; to establish the potential impact of the development; and to make recommendations to minimise the possible damage to the archaeological heritage. The report follows the minimum standards guidelines required by the South African Heritage Resources Agency (SAHRA) and the Eastern Cape Provincial Heritage Resources Agency (ECPHRA).

The study was conducted to establish the range and importance of the exposed and *in situ* archaeological heritage material remains, sites and features; to establish the potential impact of the development; and to make recommendations to minimize possible damage to the archaeological heritage.

Several archaeological sites have been documented within the surrounding area between Queenstown, Cathcart, Cofimvaba, and surrounds. The proposed area for the proposed DR 08376 has an extensive pre-colonial and historical development possibly dating back to as early as the AD 1250.

The area proposed for the road upgrade and associated borrow pits was mainly covered in low grass vegetation that allowed for good archaeological visibility. Some area comprised slightly denser grass vegetation that obscured archaeological visibility. Only one occurrence of stone artefacts were documented on the area proposed for Borrow Pit 190 (BP190). No other archaeological heritage, organic or material, was encountered on the remaining proposed borrow pit and quarry areas assessed during the survey. However, it is possible that arechaeological heritage remains may be encountered between the surface and 50-80 cm below ground.

Several built environment structures, dry packed stone walling features and abandoned homesteads, were encountered during the survey. The dry packed stone walling

complexes situated within the areas proposed for the borrow pits (BP 171 and BP190) may be negatively affected by the proposed development.

The informal burial areas (BP183 G1 and SVR G1) may be negatively affected during the development and quarrying activities.

In general, the proposed development would have negative implications on the possible archaeological heritage remains, historical archaeological, historical structures as well as the unmarked burials and informal grave areas documented within the proposed area. The negative implications include the destruction of the sites and surface scatters of stone artefacts and historical artefacts, as well as further occurrences that are not immediately visible. The recommendations must be considered as appropriate mitigation measures to protect and conserve the archaeological, historical archaeological and historical heritage remains well as the unmarked burials and informal graves observed within the proposed development area and further archaeological remains that may occur and are not immediately visible on the surface.

The impacts on the significance of the cultural landscape must also be considered, therefore the proposal to conduct an additional study to assess the social impact of the development on the interested and affected parties and the resident community who are attached to area whether it be for generational, spiritual, or aesthetic purposes. The study should aim to collect the oral histories focusing on locating additional unmarked graves to avoid a negative impact on the social implications of the greater community.

11. RECOMMENDATIONS

The areas investigated (DR 08376 and associated borrow pits) are of a low pre-colonial archaeological cultural sensitivity. Two of the stonewalling features are likely to be impacted by the construction activities. The informal burial area along the DR 08376 will be negatively affected and the informal burial area on the site proposed for Borrow Pit 183 (BP183) may be negatively affected if the appropriate mitigation measures are not followed. In cases where the development may impede negatively on these heritage resources the appropriate mitigation and conservation measures must be considered and implemented before development commences and continue during the development, construction, and quarrying activities. The following recommendations must be considered (see Section 11 for full recommendations and mitigation measures):

 Dry packed Stone Walling Complexes (BP171, BP190, BP193, and SVR SW1): A 20 m no development buffer zone should be established and clearly demarcated around the dry packed stone walling features. However, if it is deemed necessary that these structures be demolished for the proposed development to proceed, it is recommended that a specialist oral historian be appointed to assess the significance of the dry packed stone walling complexes.

- 2. SVR BE3: It is unlikely that these buildings would be negatively impacted by the proposed development. However, if it is deemed necessary that these structures be demolished for the proposed development to proceed, it is recommended that a specialist historical archaeologist or historical architect be appointed to assess the significance of the built environment structure.
- 3. **BP183 G1:** No development may take place with 20 m of the burial ground, therefore, a 20 m no development buffer zone should be established from the western side of the burial ground. However, if it is deemed necessary that these structures be relocated for the proposed development to proceed, it is recommended that the communities are consulted and an archaeologist who specialises in grave relocation be appointed to assess the significance of the built environment structure.
- 4. SVR G1: No development may take place with 20 m of the burial ground, therefor, a 20 m no development buffer zone should be established from the western side of the burial ground. However, if it is deemed necessary that these structures be relocate for the proposed development to proceed, it is recommended that the communities are consulted and an archaeologist who specialises in grave relocation be appointed to assess the significance of the built environment structure.
- 5. If concentrations of archaeological heritage material and human remains are uncovered during construction, all work must cease immediately and be reported to the Albany Museum and/or the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) so that systematic and professional investigation/ excavation can be undertaken.
- 6. Construction managers/foremen and/or the Environmental Control Officer (ECO) should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.

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13. RELEVANT ARCHAEOLOGICAL IMPACT ASSESSMENTS

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- Van Ryneveld, K. 2013a. Phase 1 Archaeological Impact Assessment: Xonxa Bulk and Reticulation Water Supply Scheme (CHDM Cluster 2 – RS1, RS2 and RS6), near Queenstown, Eastern Cape, South Africa.
- Van Ryneveld, K. 2013b. Phase 1b Archaeological Monitoring Final Report: The Xashimba Abattoir, near Queenstown, Eastern Cape, South Africa.

14. GENERAL REMARKS AND CONDITIONS

NOTE: This report is a phase 1 archaeological impact assessment (AIA) only and does not include or exempt other required specialist assessments as part of the heritage impact assessments (HIAs).

The National Heritage Resources Act (Act No. 25 of 1999, Section 35 [Brief Legislative Requirements]) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources including all places or objects of aesthetics, architectural, historic, scientific, social, spiritual, linguistic, or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

It must be emphasized that the conclusions and recommendations expressed in this phase 1 archaeological impact assessment (AIA) are based on the visibility of archaeological remains, features and, sites and may not reflect the true state of affairs. Many archaeological remains, features and, sites may be covered by soil and vegetation and will only be located once this has been removed. In the event of such archaeological heritage being uncovered (such as during any phase of construction activities), archaeologists or the relevant heritage authority must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed. The onus is on the developer to ensure that this agreement is honoured in accordance with the National Heritage Resources Act No. 25 of 1999 (NHRA 25 of 1999).

Archaeological Specialist Reports (desktops and AIA's) will be assessed by the relative heritage resources authority. The final decision rests with the heritage resources authority that may confirm the recommendations in the archaeological specialist report and grant a permit or a formal letter of permission for the destruction of any cultural sites.

APPENDIX A: GRADING SYSTEM

The NHRA stipulates the assessment criteria and grading of archaeological sites. The following categories are distinguished in Section 7 of the Act and the South African Heritage Resources Agency:

- National: This site is suggested to be considered of Grade 1 significance and should be nominated as such. Heritage resources with qualities so exceptional that they are of special national significance.
- Provincial: This site is suggested to be considered of Grade II significance and should be nominated as such. Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region
- Local: This site is suggested to be Grade IIIA significance. This site should be retained as a heritage register site (High significance) and so mitigation as part of the development process is not advised.
- Local: This site is suggested to be Grade IIIB significance. It could be mitigated and (part) retained as a heritage register site (High significance).
- 'General' Protection A (Field Rating IV A): This site should be mitigated before destruction (usually High/Medium significance).
- 'General' Protection B (Field Rating IV B): This site should be recorded before destruction (usually Medium significance).
- 'General Protection C (Field Rating IV C): This site has been sufficiently recorded (in the Phase 1). It requires no further recording before destruction (usually Low significance).

APPENDIX A: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM INLAND AREAS: guidelines and procedures for developers

1. Human Remains:

All human remains exposed during all the phases of the construction activities must be reported to the archaeologist, nearest museum or relevant heritage resources authority. Construction must be halted until the archaeologist has investigated and removed the human remains. Human remains may be exposed when a grave or informal burial has been disturbed. In general, the remains are buried in a flexed position on the side and may also be buried in a sitting position with a flat stone capping the location of the burial. Developers are requested to be aware of the exposing human remains.

2. Stone Artefacts:

Stone artefacts are difficult for the layman to identify. Large accumulations of flaked stones that do not appear to have been distributed naturally must be reported. If the stone artefacts are associated with bone / faunal remain or any other associated organic and material cultural artefacts development must be halted immediately and reported to the archaeologist, nearest museum or relevant heritage resources authority.

3. Large Stone Features:

Large stone features occur in different forms and sizes, however, are relatively easy to identify. The most common features are roughly circular stone walls (mostly collapsed), usually dry packed stone, and may represent stock enclosures, the remains of wind breaks or, cooking shelters. Other features consist of large piles of stones of different sizes and heights are known as *isisivane*. These features generally occur near river and mountain crossings. The purpose and meaning of the *isisivane* are not fully understood, however, interpretations include the representation of burial cairns and symbolic value.

4. Freshwater Shell Middens:

Accumulations of freshwater shell middens comprising mainly freshwater mussel occur along the muddy banks of rivers and streams and were collected by pre-colonial communities as a food resource. The freshwater shell middens generally contain stone artefacts, pottery, bone and, sometimes even human remains. Freshwater shell middens may be of various sizes and depths, an accumulation that exceeds 1m² in extent must be reported to the archaeologist, nearest museum or, relevant heritage resources authority. 5. Historical Artefacts and Features:

These are relatively easy to identify and include the foundations and remains of buildings, packed dry stone walling representing domestic stock kraals. Other items include historical domestic artefacts such as ceramics, glass, metal and military artefacts and dwellings.

6. Fossil Bone:

Fossil bones may embedded in geological deposits. Any concentrations of bone whether fossilized or not must be reported.