
PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

**PROPOSED CONSTRUCTION OF THE BALMORAL - FLORIDA
COLLECTOR SEWERAGE SYSTEM NEAR UITENHAGE AND
DESPATCH, EASTERN CAPE, SOUTH AFRICA**

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1) TERMS OF REFERENCE

FieldWork and Terreceo Consulting have been appointed by Jaffares and Green Consulting Engineers on behalf of the project proponent, the Nelson Mandela Bay Municipality (NMBM), to undertake the environmental authorization process, including the Environmental Impact Assessment (EIA) and the Environmental Management Plan (EMP) for the proposed construction of the Balmoral collector sewerage system near Uitenhage and the proposed construction of the Florida collector sewerage system near Despatch, collectively referred to as the *Balmoral–Florida Collector Sewerage System*, in the Eastern Cape. ArchaeoMaps Archaeological Consultancy has been appointed by FieldWork and Terreceo Consulting to conduct the Phase 1 Archaeological Impact Assessment (AIA) as specialist sub-section to the EIA.

1.1) *Development Location, Details & Impact*

PROJECT LOCALITY: The proposed *Balmoral-Florida Collector Sewerage System* project is located approximately 3km east of Uitenhage and 2km north of Despatch in the Eastern Cape [1:50,000 map reference – 3325DD]. The study site is accessible via the R334 east of Uitenhage, the R333 linking Uitenhage and Despatch or the MR461 which divides the Balmoral site from the Florida site. The Balmoral site can also be accessed by way of the R75 (FieldWork & Terreceo 2010a).

DEVELOPMENT DETAILS: Both the Balmoral and Florida catchment areas are proposed for future development: The developable area for Balmoral, taking into account the proposed extension of the Koedoeskloof landfill site (Fieldwork & Terreceo 2010b; Van Ryneveld 2010) is estimated at around 980ha while the Florida catchment area covers approximately 1,520ha. It is estimated that the Balmoral site will make 15,000-16,000 erven available for development and the Florida site probably slightly more. However, a water reticulation system must be installed before any development takes place. With full development unlikely to be completed for the next 12-15 years a phased development approach is planned (FieldWork & Terreceo 2010a).

The preferred option is that both the Balmoral and the Florida collector sewerage systems will direct sewerage to the Despatch Waste Water Treatment Works (WWTW), because of better flow gravity dynamics, an existing license to expand the Despatch WWTW and the fact that the Despatch WWTW has more space for expansion than the Uitenhage WWTW (FieldWork & Terreceo 2010a).

The Balmoral component of the project will comprise of gravity collector sewers, an inverted sewer siphon with a self flushing tank at the head of the siphon, a jacked pipe sleeve under Trunk Road 63 (if the preferred option is not implemented and sewerage is directed to the Uitenhage WWTW), a river / bridge crossing on the Swartkops River (in order to access the Despatch WWTW) and a pump station. Pipe diameters will vary from 315-500mm. Estimated peak throughputs of 36-260 liters per second are expected (FieldWork & Terreceo 2010a).

The Florida component will direct sewerage to the Despatch WWTW, situated south of the catchment area. The component will comprise of gravity collector sewer pipes with a total length of approximately 15km. Pipe diameters will vary between 200-800mm (with required bush clearance being 16m). The main collector will cross the Swartkops River by means of a siphon bellow the river, a pipeline fixed to the road bridge or the construction of a separate pipe bridge (FieldWork & Terreceo 2010a).

DEVELOPMENT IMPACT: Development impact can be described as localized but total; implying the loss of all surface and sub-surface heritage resources situated within the proposed line route development areas.



Figure 1: Uitenhage and Despatch, Eastern Cape



Figure 2: General locality of the Balmoral and Florida catchment areas in relation to Uitenhage and Despatch (after FieldWork & Terreco 2010a)

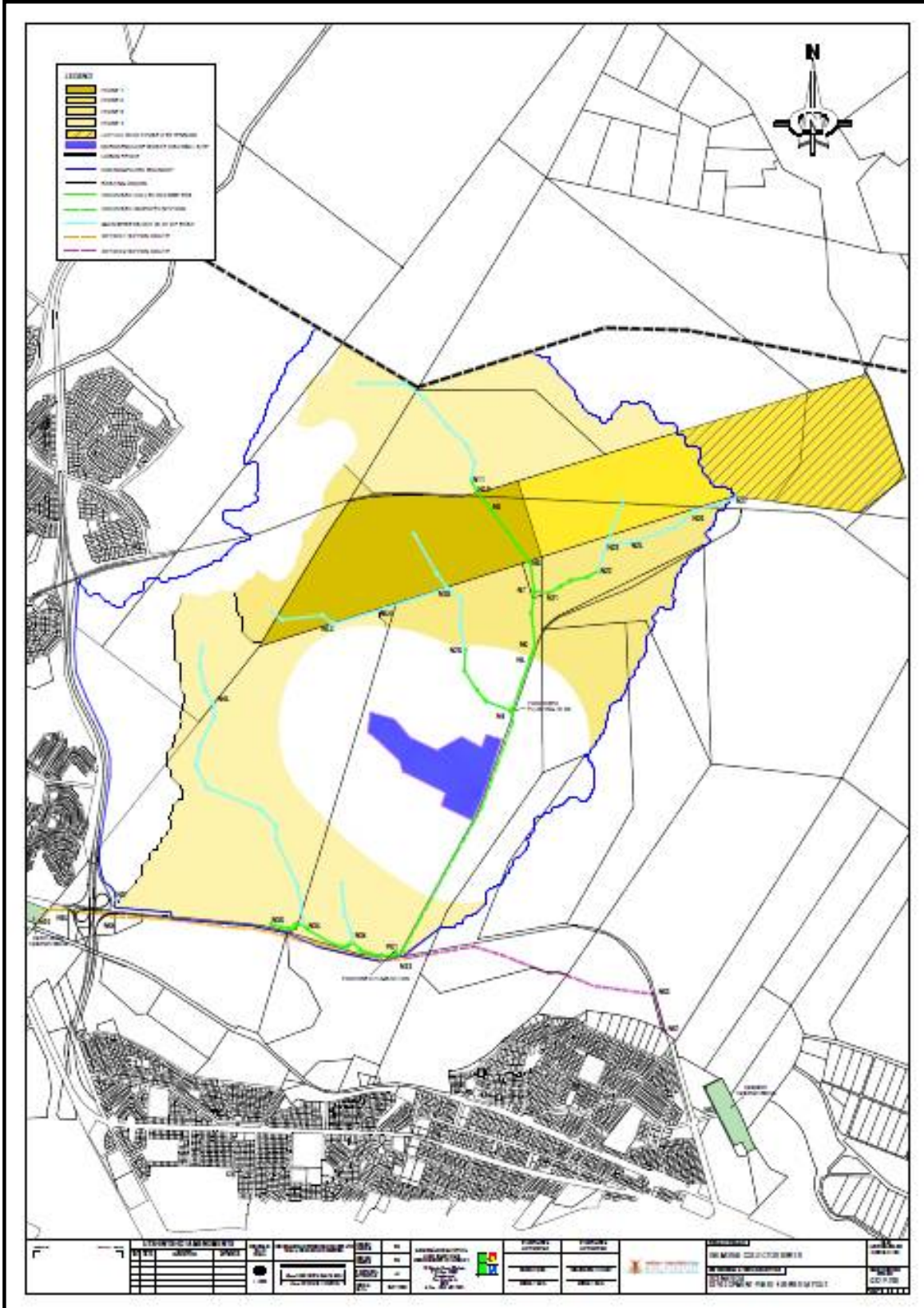


Figure 3: Design plan for the Balmoral collector sewerage system (courtesy FieldWork and Terreco)

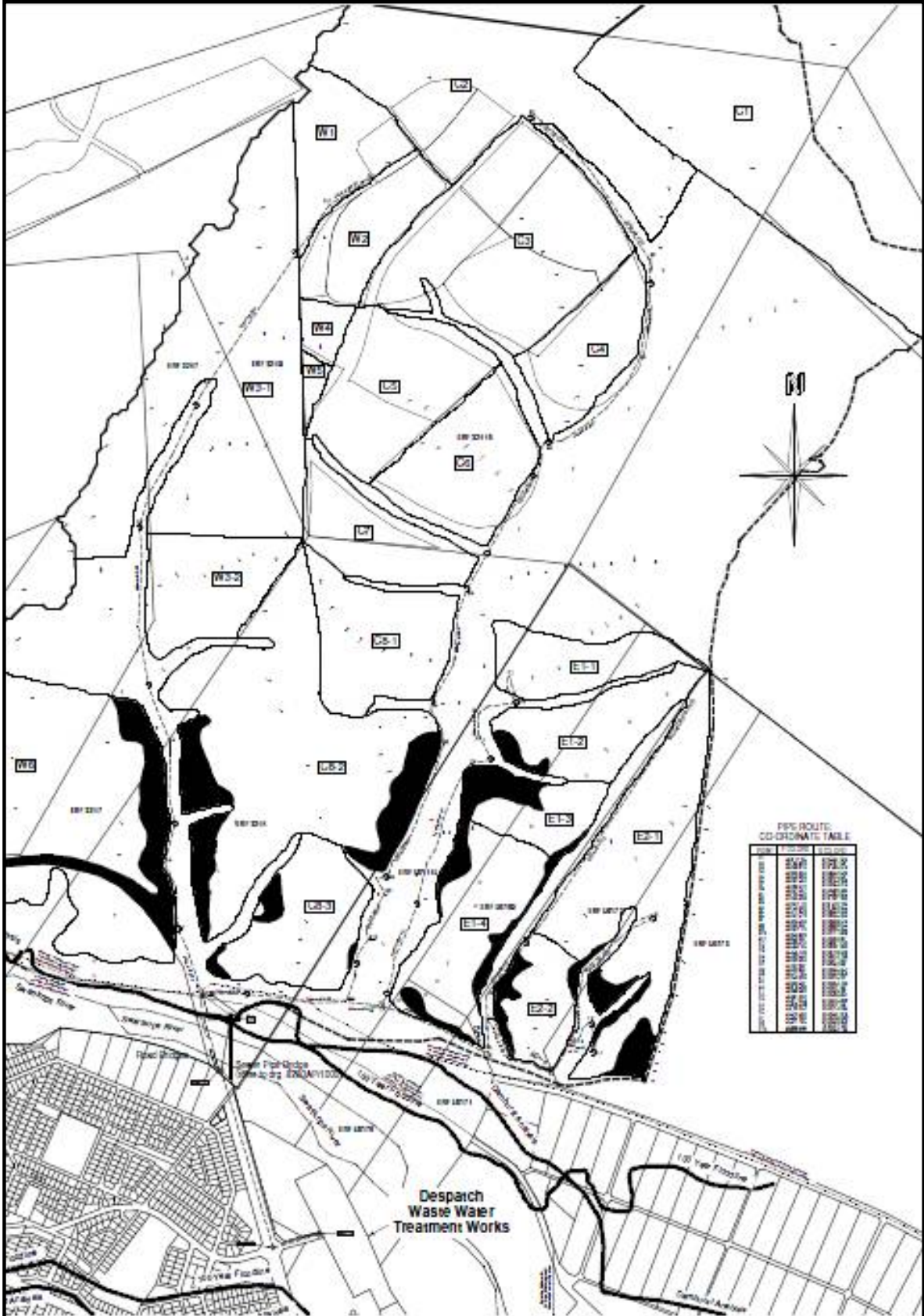


Figure 4: Design plan for the Florida collector sewerage system (courtesy FieldWork and Terreco)

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 & 2010), 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 views as defined and protected by the NHRA 1999, that may be affected by the proposed development.

- Palaeontological deposits / sites as defined and protected by the NHRA 1999 are not included as subject to this report.
- Comments on potential socio-cultural aspects with reference to the identification of intangible heritage resources or sites of cultural significance associated with oral histories are included in the AIA section of the report.

2.2) *Methodology & Assessor Accreditation*

The Phase 1 AIA was conducted over a 4 day period (2010-12-09, 2010-12-10, 2010-12-27 and 2010-12-28) by one archaeologist. The assessment was done by foot and limited to a Phase 1 surface survey; no excavation or sub-surface testing was done. GPS co-ordinates were taken with a Garmin GPSmap 60CSx GPS (Datum: WGS84). Photographic documentation was done with a Pentax K20D camera. A combination of Garmap and Google Earth software was used in the display of spatial information.

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 1: SAHRA archaeological and cultural heritage site significance assessment

2.3) Phase 1 AIA Assessment Findings

Phase 1 AIA assessment findings are presented in 2 parts:

1. The Balmoral Collector Sewerage System; and
2. The Florida Collector Sewerage System.

Four classes of archaeological and cultural heritage resources were identified during the assessment, namely contemporary resources, Colonial Period resources, Iron Age resources, including the possibility of human remains / graves and Stone Age resources. In total 6 formally protected sites were identified:

- The Balmoral Collector Sewerage System – 5 sites (Sites BS1, BS2, I1, S1 and S2); and
- The Florida Collector Sewerage System – 1 site (Sites S3).

2.3.1) *The Balmoral Collector Sewerage System*

The Balmoral component of the *Balmoral-Florida Collector Sewerage System* project was done over a 2 day period (2010-12-09 and 2010-12-10). All proposed line routes were covered including the Option 1 siphon route (orange), the Option 2 siphon route (purple) and the proposed collector sewers (green). Main sewers (turquoise) do not form part of the Balmoral collector sewer project (BCSP) and were not assessed (see Figure 3). The majority of the proposed line routes follow existing line route developments; primarily along major road alignments while a large portion of the interior Balmoral catchment area was covered during a previous Phase 1 AIA entitled '*Phase 1 Archaeological Impact Assessment – Development of the Koedoeskloof Landfill Site, Uitenhage, Eastern Cape, South Africa*' (Van Ryneveld 2010). Dense vegetation (Sundays Valley Thicket) did hamper assessment towards the northern interior of the study site at line route N21-N22 and N4-N28.

Four classes of cultural heritage resources were identified during assessment of the Balmoral component of the *Balmoral-Florida Collector Sewerage System's* Phase 1 AIA, not all of which are formally protected under the NHRA 1999 and included:

1. **Contemporary Resources:** Identified contemporary resources comprise primarily of residential and business structures, located adjacent to the MR461 dividing the Balmoral and Florida catchment areas. In addition contemporary structures were present in the vicinity of co-ordinate N63 with contemporary building rubble characterizing, in places, the line route between N33 and N63 (see Figure 5). Structures post-date 60 years of age and are not formally protected under the NHRA 1999: Application to or approval from SAHRA and the Eastern Cape Provincial Heritage Resources Agency (EC PHRA) is not necessary prior to impact on or destruction of these structures. It is not envisaged that the Balmoral collector sewerage system will impact on any contemporary built structures.
2. **Colonial Period Resources:** Two Colonial Period sites (Sites BS1 & BS2) are situated towards the south of the general study site. Both sites were reported on in Van Ryneveld (2010). These Colonial Period sites are testimony to early Colonial occupation of the area. Both sites comprise of Built Structures pre-dating 60 years of age and are formally protected under the NHRA 1999.
 - **Site BS1** will not be impacted on by the development; current conservation measures (fenced within the farm portion) are adequate for purposes of development.
 - The current development design cuts through **Site BS2**, not impacting on any of the individual structures, but on the protected heritage resource as a whole. It is recommended that the site be either formally conserved (fenced with an access gate), implying rerouting of the line route either north or south of the site; or that the site be subjected to Phase 2 Archaeological Mitigation (spatial documentation and test pit excavations) after which development can proceed according to the current layout across the general site locale.
3. **Iron Age Resources (with associated graves):** Site I1 comprises of a Colonial Period Iron Age tradition site. The site is inferred to represent the locality of graves reported on in Van Ryneveld (2010). The site is situated within the north-eastern part of the general Balmoral catchment study site and towards the general east of the proposed Balmoral collector sewer line route development. Site I1 with inferred associated graves is formally protected under the NHRA 1999.

- The current development design cuts through the north-western part of **Site I1**. It is recommended that the site be either formally conserved (fenced with an access gate), implying rerouting of the line route to the north-west of the site; or that the site be subjected to Phase 2 Archaeological Mitigation (spatial documentation and excavation of Iron Age remains) prior to development impact and on-site Archaeological Monitoring (mitigation of additional graves) at the time of construction.

[No graves were identified at Site I1, but graves can reasonably be inferred to form a component part of the site features. 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).]

[Despite the fact that Site I1 will not be impacted on during development of the Balmoral collector sewer system, the site will most possibly be impacted on by proposed future residential development, the EIA of which does not form part of this study. Final recommendations regarding the future of Site I1 (formal conservation and inclusion of a heritage conservation area within the residential development or Phase 2 archaeological mitigation prior to residential impact) should be made at the time of the Phase 1 AIA for the EIA of the residential development.]

4. **Stone Age Resources:** Two areas of low density Middle Stone Age (MSA) deposits were identified located in close proximity to the proposed Balmoral line route. Collections are indicative of Pre-colonial occupation of the greater Uitenhage / Despatch area. The 1st area (Site S1) was reported on in Van Ryneveld (2010), while a 2nd area (Site S2) is present towards the north-eastern part of the Balmoral line route study site. Both areas are characterized by exceptionally low densities of MSA lithic artefacts, of general poor technology and typology and roughly dated to ≤ 250 kya. Both assemblages comprise of archaeological sites as defined and protected by the NHRA 1999; but both Sites S1 and S2 are ascribed a SAHRA *Low Significance* and a *Generally Protected C* field rating. It is recommended that development proceed across these site locales without the developer having to apply for SAHRA *Site Destruction Permits* prior to impact.

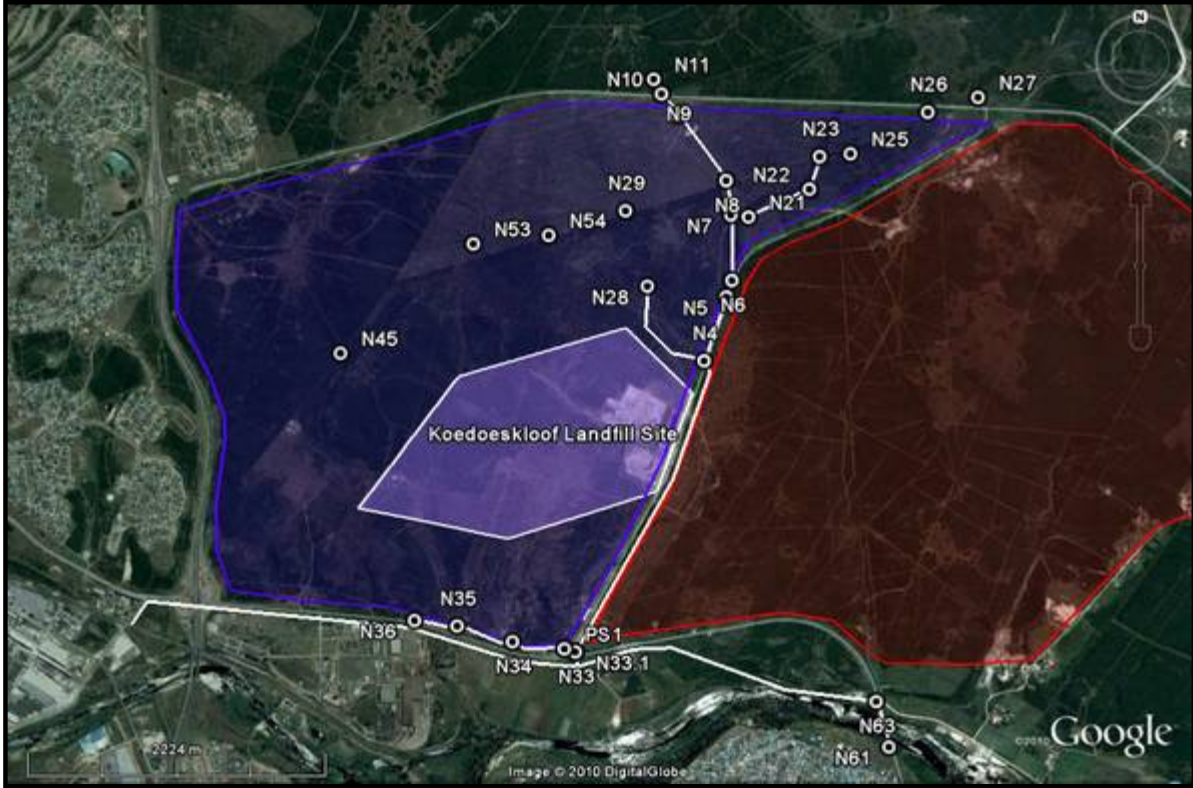


Figure 5: The Balmoral collector sewerage system line route (white) in relation to the Balmoral catchment area (blue) and the Koedoeskloof landfill site.

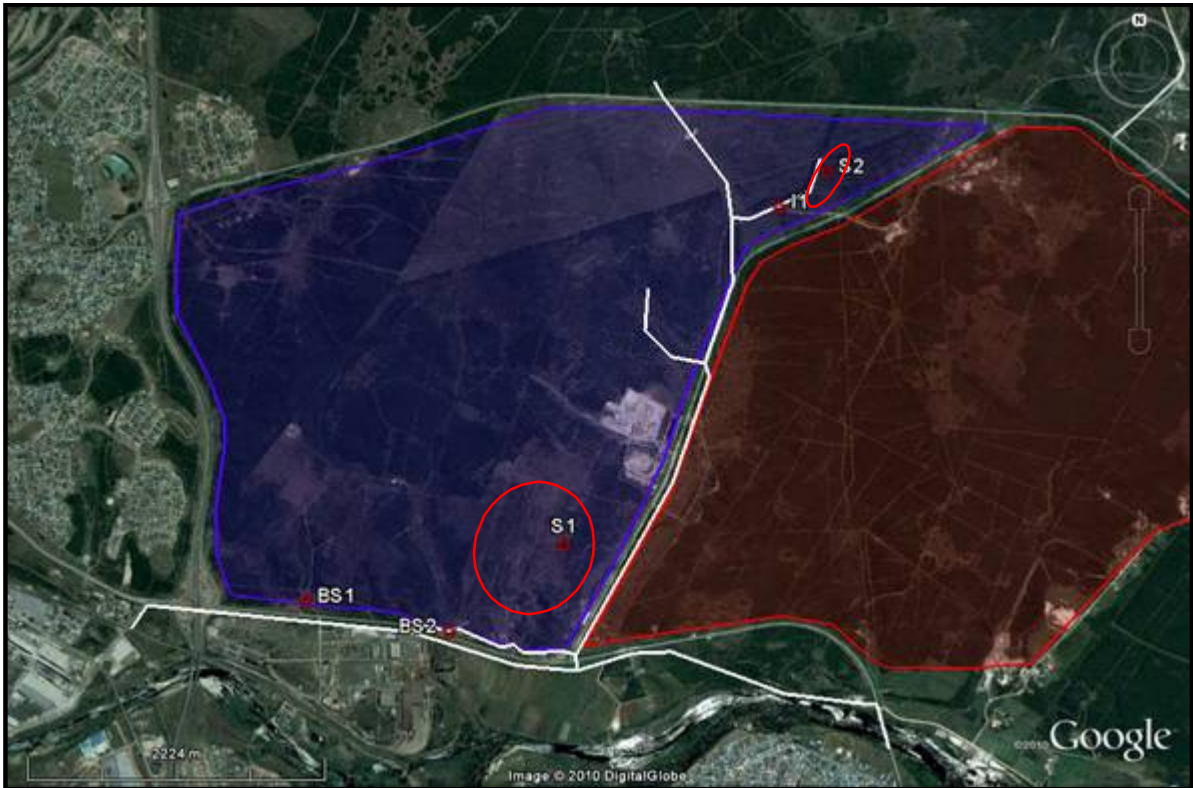


Figure 6: Phase 1 AIA assessment findings: The Balmoral Collector Sewerage System



Figure 7: View from the east toward N33 (Option 2 siphon route)



Figure 8: General view between N33-N63 (Option 2 siphon route)



Figure 9: Contemporary structures in the vicinity of N63 (Option 2 siphon route)



Figure 10: General view of the Option 2 siphon route alignment between N61 and N63



Figure 11: General view between N34 and N36 (Option 1 siphon route)



Figure 12: General view of the Option 1 siphon route alignment west of N36



Figure 13: General view of the collector sewer alignment route between PS1 and N35



Figure 14: General view of the collector sewer alignment route between N4 and PS1



Figure 15: View of the collector sewer alignment route from N6 southwards



Figure 16: View of the collector sewer alignment route from N8-N9 northwards



Figure 17: General view of the collector sewer alignment route in the vicinity of N7



Figure 18: View of an accessible track along the general N4-N28 development alignment

2.3.1.1) Site BS1 – Colonial Period (Homestead) – S33°46'54.8"; E25°26'28.9"

Site BS1, the Hopgoode Homestead situated at S33°46'54.8"; E25°26'28.9", comprises of a Built Structure pre-dating 60 years of age and by implication formally protected under the NHRA 1999. The main farmhouse, related farming infrastructure and a number of outbuildings including workers residences located slightly east and west of the homestead proper are still in use, with component parts thereof particularly well maintained. The site was 1st recorded and reported on in Van Ryneveld (2010).

Site BS1 is situated north of the proposed Option 1 siphon route and north of the R367 dividing the Balmoral catchment area from the line route and possible development impact spill-over. Site BS1 is situated approximately 800m west of N35, the western most extent of the collector sewer line route development north of the R367 (see Figure 5).

RECOMMENDATIONS: Site BS1 comprises of a Built Structure pre-dating 60 years of age, thus formally protected under the NHRA 1999. The site is ascribed a SAHRA *Medium Significance* and a *Generally Protected B* field rating (general protection as a Provincial Heritage Resource). The site is situated north of the R367 dividing the site from the proposed Option 1 siphon route and approximately 800m west of the western extremity of the collector sewer line route located north of the R367. The site will not be impacted on by the development, based on proximity from proposed line route alignments. The site is at present fenced with an access gate. Current conservation measures comply with SAHRA *Minimum Site Conservation Standards*.



Figure 19: General view of the Site BS1 farmhouse

2.3.1.2) Site BS2 – Colonial Period (Workers’ Village) – S33°47’02.3”; E25°27’10.8”

Site BS2, originally recorded and reported on in Van Ryneveld (2010), is inferred to represent the original Hopgoode Worker’s Village. The site is situated at S33°47’02.3”; E25°27’10.8” on a municipal owned portion of the study site, currently leased to William Sokwe. The site comprises of the ruined remains of 5 worker’s residences (erroneously 1st reported on as 7, instead of 5). Structures are in varying stages of decay; doors and window frames are long gone while the corrugated iron of one structure’s roof has been removed. No associated Colonial Period middens or cemeteries were found in association with the general site terrain, but associated stock encampments are still visible. Site BS2 pre-dates 60 years of age and is by implication formally protected under the NHRA 1999. The site is at present fenced with an access gate but within the general confines of the farm portion.

The current development design cuts through Site BS2, not impacting on any of the individual structures, but on the protected heritage resource as a whole. The following management options may be considered by the developer:

1. Formal Conservation (no development option); implying in the case of Site BS2 realignment of the line route in the vicinity of the site to ensure the conservation thereof; or
2. Phase 2 Archaeological Mitigation (recording and excavation); after which development may proceed as per the current development design.

RECOMMENDATIONS: Site BS2 comprises of 5 Built Structures pre-dating 60 years of age. The site is by implication formally protected under the NHRA 1999. The site is ascribed a SAHRA *Medium Significance* and a *Generally Protected B* field rating (general protection as a Provincial Heritage Resource). The current development design cuts through site BS2, not impacting on any site features but on the protected heritage resource as a whole, necessitating either Formal Conservation or Phase 2 Archaeological Mitigation as management options prior to development impact.

- FORMAL CONSERVATION: It is recommended that the immediate area containing the 5 Site BS2 structures be formally fenced (recommended conservation area: co-ordinates 1-5), with an approximate 5m conservation buffer between site features and the fence and an access gate prior to development impact. The line route should be realigned to run either north or south of the Site BS2 conservation area.

OR

- PHASE 2 ARCHAEOLOGICAL MITIGATION: It is recommended that Site BS2 be subjected to Phase 2 archaeological mitigation prior to development impact cross-cutting the site. Mitigation should at minimum include inter-site spatial documentation and detailed recording of site features. Test pit excavations should attempt to locate possible middens or buried site features. Phase 2 archaeological mitigation should be done by an ASAPA accredited CRM archaeologist, under a SAHRA Excavation Permit. Phase 2 mitigation should precede development impact in the vicinity of Site BS2.



Figure 20: One of the workers village residences from Site BS2



Figure 21: General view of the Site BS2 workers village



Figure 22: View of the Site BS2 structures from the west



Figure 23: Close-up of Site BS2 and the proposed conservation area (co-ordinates 1-5)

2.3.1.3) Site I1 – Iron Age (Homestead) – S33°45'20.0"; E25°28'46.8"

Site I1 comprises of a Colonial Period Iron Age tradition site. The site is inferred to represent the locality of graves reported on in Van Ryneveld (2010). The site is situated within the north-eastern part of the general Balmoral catchment study site and generally east of the proposed Balmoral collector sewer line route development, with the proposed development cutting through the north-western portion of the site. Site extent measures approximately 100x50m in extent.

The site is characterized by 7 clearly identified circular wall features identifiable primarily by prickly pear (*Opuntia*) tree growth, with outer stone and rubble infill visible in some areas. (Thick prickly pear growth did hamper the identification of site features towards the perimeter of the site, forming part of the Sundays Valley Thicket that characterizes the general terrain). Circular features have an approximate diameter of 4m, inferred to have been huts. Smaller mounds covered with prickly pears may well be indicative of either small middens or graves, but designation remains difficult due to vegetation. No stock enclosure(s) was identified, but should this have been built of branch or another less durable material traces thereof may only be visible upon vegetation clearing, as a change in soil color and texture. Surface artefacts were very limited: A few pieces of very contemporary metal, fabric, plastic and the remains of a metal bed-base. These may well reflect a last-phase occupation at the site. However, with the remains of the bed next to a hut feature, and most of the contemporary rubble in the immediate vicinity thereof, later period artefacts may simply have been dumped at the site; thus not reflecting an occupation member. Origin or date of the site thus remains unknown. Aside from the fact that nearby residents were aware of 'graves', they had no additional information on the site, not to whom the graves belonged to, or whom lived at the site (Van Ryneveld 2010). Graves may well be present adjacent to identified site features, within cattle or stock enclosures, middens, or even in the case of children's graves, within the huts demarcations.

The following management options may be considered by the developer:

- 1) Formal Conservation (no development option); implying in the case of Site I1 realignment of the line route to the north-west of the site to ensure the conservation thereof; or
- 2) Phase 2 Archaeological Mitigation (recording and excavation); after which development may proceed as per the current development design together with on-site archaeological monitoring at the time of development impact to ensure mitigation of any graves should additional graves be uncovered during the course of development.

RECOMMENDATIONS: Site I1 comprises of a Colonial Period Iron Age Homestead of unknown age. The site is formally protected under the NHRA 1999. The site is ascribed a SAHRA *Medium Significance* and a *Generally Protected B* field rating. The current development design cuts through the north-western part of Site I1. The developer may consider either of the following site management options prior to development: 1) Formal Conservation or 2) Phase 2 Archaeological Mitigation together with on-site archaeological monitoring at the time of development impact.

- **FORMAL CONSERVATION:** It is recommended that the Site I1 area be formally fenced (recommended conservation area: co-ordinates 6-13) with an access gate prior to development impact. The line route should be realigned to run towards the north west of the proposed Site I1 conservation area.

OR

- PHASE 2 ARCHAEOLOGICAL MITIGATION: It is recommended that Site I1 be subjected to Phase 2 archaeological mitigation prior to development impact cross-cutting the site. Mitigation should at minimum include inter-site spatial documentation, feature excavation and detailed recording. Test pit excavations should attempt to locate possible middens or buried site features, including graves. Exhumation of graves should follow minimum social consultation procedures as prescribed by SAHRA. Phase 2 archaeological mitigation should be done by an ASAPA accredited CRM archaeologist, under a SAHRA Excavation Permit. Phase 2 mitigation should precede development impact in the vicinity of Site I1.



Figure 24: General view of Site I1 with selected circular hut remains identified by prickly pear growth



Figure 25: Close-up of one of the hut features



Figure 26: View of selected on-site residential feature remains



Figure 27: A clearly identifiable earth hut mound



Figure 28: Smaller clusters of prickly pear may be indicative of sub-surface site features



Figure 29: Close-up of Site BS2 and the proposed conservation area (co-ordinates 1-5)

2.3.1.4) Site S1 – Middle Stone Age (Knapping) – S33°46'41.2"; E25°27'44.3"

Site S1 was first identified and described in Van Ryneveld (2010). The site comprises of an approximate 1x0.8km area towards the south-eastern part of the Balmoral catchment area, generally characterized by fairly hilly terrain and thick vegetation, where a low density of Middle Stone Age (MSA) artefacts were present, primarily within cleared access roads amongst high concentration of raw material. Artefact quantities were particularly low with approximate ratios (artefacts: m²) of 1:25 being the highest recorded. Typical MSA flakes and cores were typologically and technologically of an inferior quality. The absence of exposed sections prohibited possible stratigraphic interpretation. Low artefact quantities, with identified samples of inferior technology and typology, together with a lack of surface organic material renders the site of little archaeological significance. Development of the collector sewer line routes may well impact on the perimeter of the recorded site.

RECOMMENDATIONS: Site S1 comprises of an archaeological Middle Stone Age (MSA) site, as defined and protected under the NHRA 1999. Particularly low artefact ratios together with inferior typology and technology designate the site a SAHRA *Low Significance* and a *Generally Protected C* field rating. It is recommended that relevant portions of the site be destroyed in lieu of the development without the developer having to apply for a SAHRA Site Destruction Permit.



Figure 30: MSA artefacts were identified amongst raw material in scraped road sections across in the general Site S1 area

2.3.1.5) Site S2 – Middle Stone Age (Knapping) – S33°45'11.5"; E25°29'00.4"

Site S2 is characterized by exposed calcrete like sides, sections, and surface areas intersecting the general vegetation cover and covering a rough approximate 300x40m area east of the proposed Balmoral line route in the general area between N22-N23. A low quantity of artefacts, primarily flakes, ascribed to the MSA, was found: Artefact ratios (artefacts: m²) approximated $\leq 1:25$. Artefacts were of a low technological quality and of a fairly ambiguous MSA typology. Very degraded shallow quarry-like sections may indicate a sub-surface component to the low density Stone Age occurrence. Development of the collector sewer line route may well impact on the perimeter of the recorded site extent, but the majority of artefacts were found east of the site with the few samples extending to the access road, and by implication the proposed development line route, inferred to already be in a disturbed, secondary context.

RECOMMENDATIONS: Site S2 comprises of an archaeological Middle Stone Age (MSA) site, as defined and protected under the NHRA 1999. Particularly low artefact ratios together with inferior typology and technology designate the site a SAHRA *Low Significance* and a *Generally Protected C* field rating. It is recommended that relevant portions of the site be destroyed in lieu of the development without the developer having to apply for a SAHRA Site Destruction Permit.



Figure 31: General view of Site S2



Figure 32: A few artefacts present in the road surface

2.3.2) The Florida Collector Sewerage System

The Florida component of the *Balmoral-Florida Collector Sewerage System* project was done over a 2 day period (2010-12-27 and 2010-12-28). Thick Sundays Valley Thicket characterized the majority of the area, prohibiting access to the exact proposed line routes: Assessment along line routes A1-8, B1-11 and E1-3 proved particularly difficult and interpretations regarding potential heritage resources are primarily based on general observations where cleared pathways in the vicinity of the line routes were accessible. Access along line routes C1-5, D1-3 and F1-10 proved to be the most accessible, being situated in part along cleared pathways or simply areas characterized by more open vegetation. However, even where cleared pathways were present, vegetation covering the pathways often did not allow surface visibility.

One class of cultural heritage resources, formally protected under the NHRA 1999, were identified during assessment of the Balmoral component of the *Balmoral-Florida Collector Sewerage System's* Phase 1 AIA, and included:

1. **Stone Age Resources:** One low density Middle Stone Age (MSA) site (S3) was identified at a quarry north of the C1-5 line route, while continuing low densities of Stone Age artefacts were encountered from time to time along pathways allowing surface visibility. Despite dense vegetation, greatly hampering assessment, it can be inferred that more low density Stone Age occurrences will be encountered during the course of development, but recorded particularly low densities do not indicate significant deposits, specifically when considered in conjunction with data collected for the Balmoral catchment area; but not ruling out the possibility that more significant densities may be encountered during the course of vegetation clearing or development.

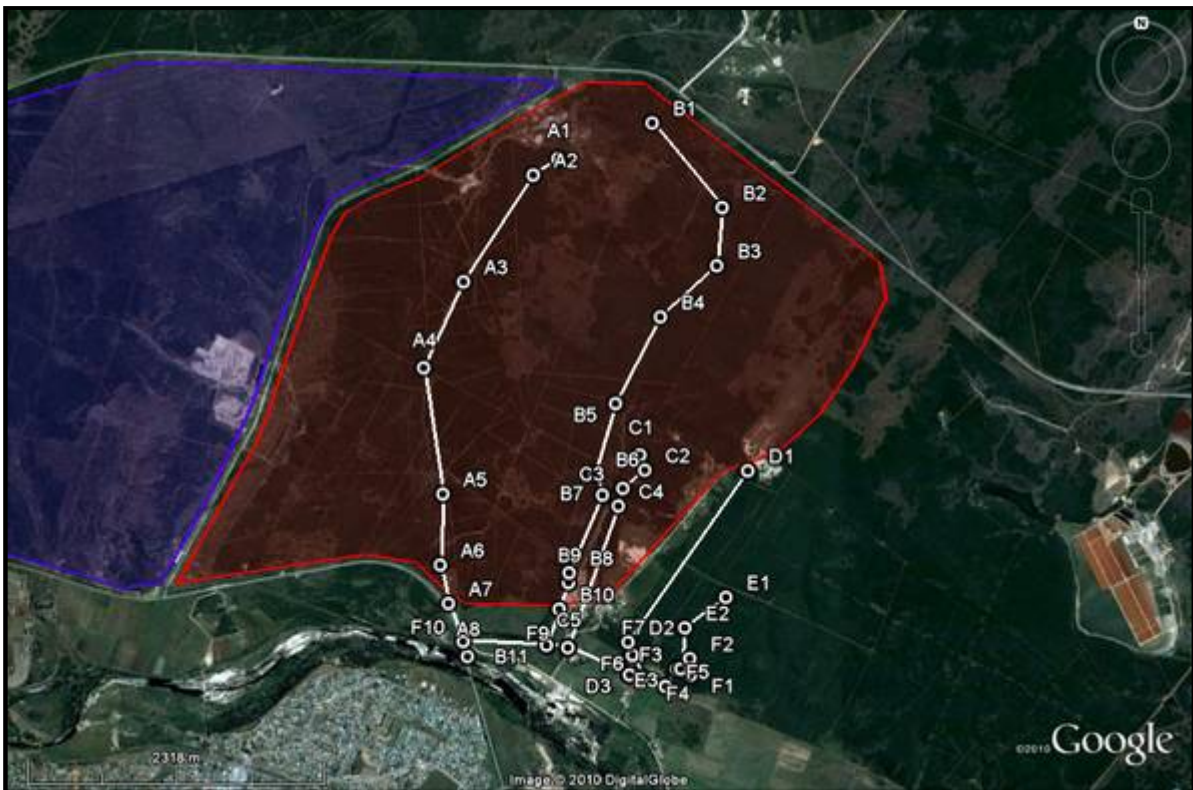


Figure 33: The Florida collector sewerage system line route (white) in relation to the Florida catchment area (red).



Figure 34: Phase 1 AIA assessment findings: The Florida Collector Sewerage System



Figure 35: An accessible access road in the vicinity of line route A1-8, but not directly following the Florida Collector Sewer development alignment



Figure 36: An accessible access road in the vicinity of line route A1-8



Figure 37: General view over the B1-11 line route valley



Figure 38: Fairly open vegetation characterizing the northern part between the A1-8 and B1-11 line routes



Figure 39: General view of the C1-5 line route with Despatch in the background



Figure 40: General view of the D1-3 line route



Figure 41: More open vegetation along line route F1-10 did not necessarily allow better surface visibility

2.3.2.1) Site S3 – Middle Stone Age (Knapping) – S33°6'29.1"; E25°30'21.8"

Site S3 comprises of a fairly small quarry area of approximately 30x30m in size. Calcrete rich sub-surface sections yielded a low density of Middle Stone Age (MSA) artefacts also present in the scraped access road. Artefact types, comprising primarily of amorphous flakes are of poor technological quality and very similar to Stone Age occurrences identified in the Balmoral catchment area (Sites S1 and S2). Low artefact densities with ratios (artefacts: m²) approximating 1:25 were recorded. The quarry site is situated roughly 300m north-west of the C1-5 line route and will not be impacted on by development. [Similar types of low density Stone Age occurrences was found within cleared pathways travelled during the survey, but concentrations remained of low archaeological significance].

RECOMMENDATIONS: Site S3 comprises of an archaeological Middle Stone Age (MSA) site, as defined and protected under the NHRA 1999. Based on low artefact ratios together with poor typology and technology the site is ascribed a SAHRA *Low Significance* and a *Generally Protected C* field rating. The site will not be impacted on by the proposed Florida collector sewerage system development. Additional site conservation measures are not recommended based on the low archaeological significance of the site.



Figure 42: General view of Site S3



Figure 43: Selected Stone Age artefacts from Site S3

3) CONCLUSION AND RECOMMENDATIONS

It is recommended that, with reference to cultural heritage compliance requirements as per the NHRA 1999, the proposed *Balmoral–Florida Collector Sewerage System*, to be developed near Uitenhage and Despatch in the Eastern Cape proceeds as applied for provided the developer complies with the following requirements:

Six archaeological and cultural heritage resources as defined and protected under the NHRA 1999 were identified during the Phase 1 AIA: 5 sites (Sites BS1, BS2, I1, S1 and S2) were identified along the Balmoral Collector Sewer System alignment and 1 site (Site S3) in proximity to the Florida Collector Sewer System alignment.

- Balmoral Collector Sewerage System:

Site BS1 – Colonial Period (Homestead) – S33°46'54.8"; E25°26'28.9"

Proximity as well as current conservation measures ensures conservation of the site. No additional conservation measures are recommended.

Site BS2 – Colonial Period (Workers' Village) – S33°47'02.3"; E25°27'10.8"

The current development layout impacts directly on the site. The developer may consider one of the following heritage management options prior to development impact:

1. *Formal Site Conservation*: It is recommended that the site be formally conserved by means of fence and access gate (recommended heritage conservation area: co-ordinates 1-5), implying realignment of the line route either to the north or south of the heritage conservation area; or
2. *Phase 2 Archaeological Mitigation*: Development should be preceded by a Phase 2 mitigation project including inter-site spatial recording and test-pit excavations. Phase 2 archaeological mitigation should be done by an ASAPA accredited CRM archaeologist under a SAHRA Site Excavation Permit.

Site I1 – Iron Age (Homestead) – S33°45'20.0"; E25°28'46.8"

The current development layout impacts directly on the site. The developer may consider one of the following heritage management options prior to development impact:

1. *Formal Site Conservation*: It is recommended that the site be formally conserved by means of fence and access gate (recommended heritage conservation area: co-ordinates 6-13), implying realignment of the line route to the north-west of the heritage conservation area; or
2. *Phase 2 Archaeological Mitigation and on-site archaeological monitoring*: Development should be preceded by a Phase 2 mitigation project including inter-site spatial recording, excavation and test-pit excavations. Phase 2 archaeological mitigation should be done by an ASAPA accredited CRM archaeologist under a SAHRA Site Excavation Permit. On site archaeological monitoring is recommended at the time of development impact to ensure exhumation of graves that may be impacted on or discovered and not removed during the Phase 2 archaeological project. (Phase 2 archaeological excavations always focus on sample collection, after which the remainder of the site is destroyed under a SAHRA Site Destruction Permit).

[Based on proposed future residential development, should site conservation be opted for, for purposes of the collector sewer development, then a heritage conservation area can be accommodated or planned for within the residential layout, or the site can be conserved for now but subjected to Phase 2 Archaeological Mitigation prior to residential impact, after which residential development can proceed across the site locale. Should the developer opt for Phase 2 Archaeological Mitigation for purposes of the collector sewer

development, then a 2nd Phase 2 Archaeological Mitigation project would not be required prior to residential development impact.]

Site S1 – Middle Stone Age (Knapping) – S33°46'41.2"; E25°27'44.3"

The site is of low archaeological significance. Development may impact on the perimeter of the site. It is recommended that such impact proceed without the developer having to apply for a SAHRA Site Destruction Permit prior to impact.

Site S2 – Middle Stone Age (Knapping) – S33°45'11.5"; E25°29'00.4"

The site is of low archaeological significance. Development may impact on the perimeter of the site. It is recommended that such impact proceed without the developer having to apply for a SAHRA Site Destruction Permit prior to impact.

- Florida Collector Sewerage System:

Site S3 – Middle Stone Age (Knapping) – S33°6'29.1"; E25°30'21.8"

Proximity of the site to the collector sewer development will ensure conservation of the site. In situ conservation (no additional conservation measures on behalf of the developer) is recommended.

- General:

1. No intangible heritage resources or sites associated with oral history were identified, situated within the proposed *Balmoral–Florida Collector Sewerage System* study site.
2. 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.
3. 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.
4. 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).

BALMORAL – FLORIDA COLLECTOR SEWERAGE SYSTEM

UITENHAGE & DESPATCH, EASTERN CAPE

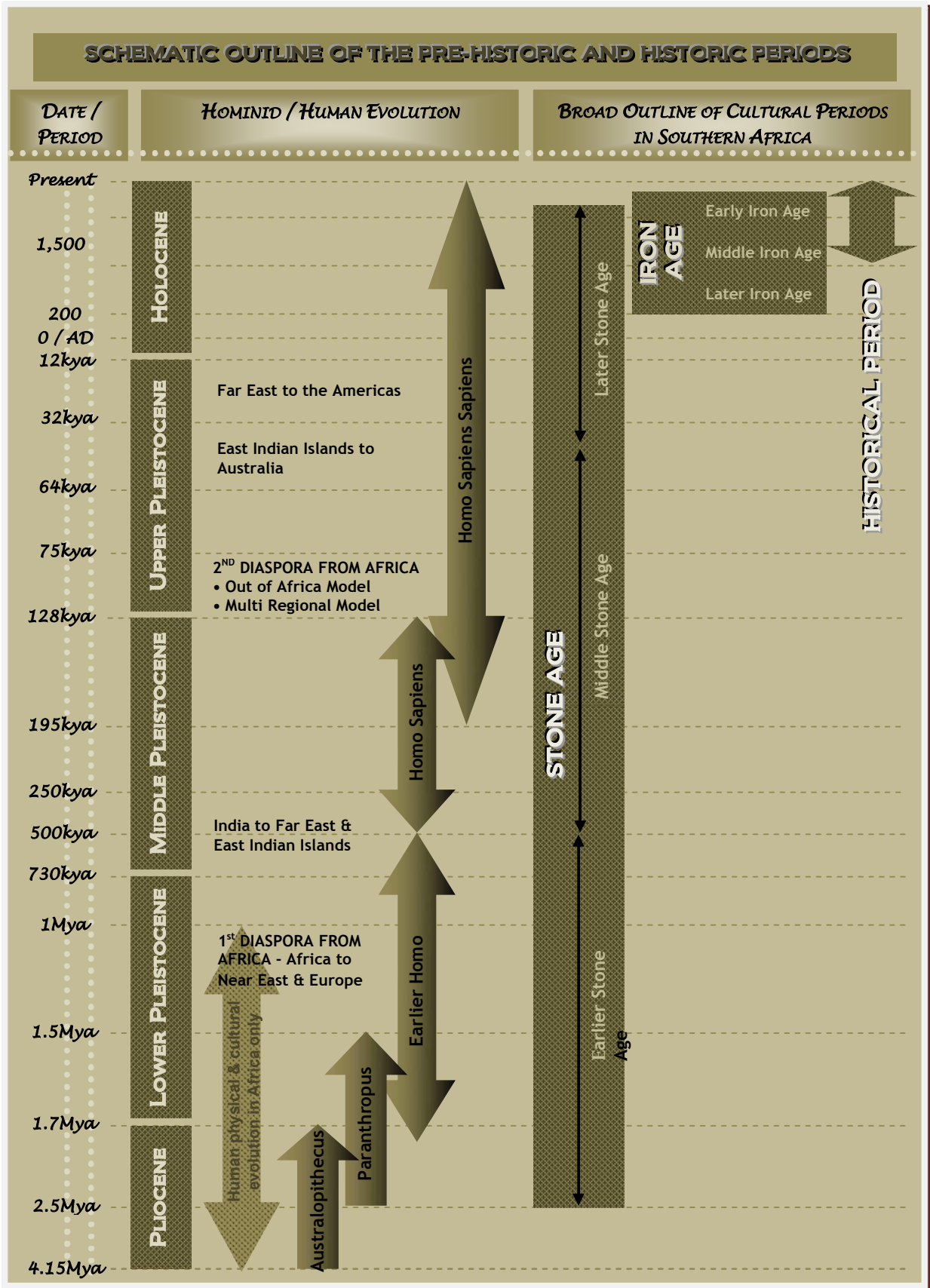
MAP CODE	SITE	TYPE / PERIOD	DESCRIPTION	CO-ORDINATES	PRELIMINARY RECOMMENDATIONS
BALMORAL COLLECTOR SEWERAGE SYSTEM – DEVELOPMENT CO-ORDINATES					
N10	-	-	-	S33°44'53.3"; E25°28'12.8"	N/A
N11	-	-	-	S33°44'49.8"; E25°28'10.6"	N/A
N21	-	-	-	S33°45'22.9"; E25°28'38.1"	N/A
N22	-	-	-	S33°45'16.3"; E25°28'55.6"	N/A
N23	-	-	-	S33°45'08.5"; E25°28'58.5"	N/A
N25	-	-	-	S33°45'07.9"; E25°29'07.2"	N/A
N26	-	-	-	S33°44'58.3"; E25°29'29.1"	N/A
N27	-	-	-	S33°44'54.8"; E25°29'43.5"	N/A
N28	-	-	-	S33°45'39.5"; E25°28'08.8"	N/A
N29	-	-	-	S33°45'21.4"; E25°28'02.4"	N/A
N33	-	-	-	S33°47'07.9"; E25°27'47.8"	N/A
N34	-	-	-	S33°47'05.4"; E25°27'29.5"	N/A
N35	-	-	-	S33°47'01.7"; E25°27'13.3"	N/A
N36	-	-	-	S33°47'00.3"; E25°27'00.8"	N/A
N4	-	-	-	S33°45'57.4"; E25°28'25.3"	N/A
N45	-	-	-	S33°45'55.7"; E25°26'40.0"	N/A
N5	-	-	-	S33°45'42.0"; E25°28'31.7"	N/A
N53	-	-	-	S33°45'29.5"; E25°27'18.5"	N/A
N54	-	-	-	S33°45'27.5"; E25°27'40.2"	N/A
N6	-	-	-	S33°45'38.1"; E25°28'33.3"	N/A
N61	-	-	-	S33°47'31.3"; E25°29'19.6"	N/A
N63	-	-	-	S33°47'20.1"; E25°29'15.8"	N/A
N7	-	-	-	S33°45'22.3"; E25°28'33.0"	N/A
N8	-	-	-	S33°45'14.1"; E25°28'31.6"	N/A
N9	-	-	-	S33°44'58.4"; E25°28'17.6"	N/A
PS1	-	-	-	S33°47'07.1"; E25°27'44.6"	N/A
FLORIDA COLLECTOR SEWERAGE SYSTEM – DEVELOPMENT CO-ORDINATES					
A1	-	-	-	S33°45'19.9"; E25°29'46.5"	N/A
A2	-	-	-	S33°45'24.0"; E25°29'39.0"	N/A
A3	-	-	-	S33°45'50.1"; E25°29'17.9"	N/A
A4	-	-	-	S33°46'11.5"; E25°29'05.8"	N/A
A5	-	-	-	S33°46'43.1"; E25°29'11.4"	N/A
A6	-	-	-	S33°47'00.9"; E25°29'10.5"	N/A
A7	-	-	-	S33°47'10.6"; E25°29'12.9"	N/A
A8	-	-	-	S33°48'24.1"; E25°29'18.6"	N/A
B1	-	-	-	S33°45'10.9"; E25°30'14.6"	N/A
B2	-	-	-	S33°45'31.7"; E25°30'35.7"	N/A
B3	-	-	-	S33°45'46.1"; E25°30'34.2"	N/A
B4	-	-	-	S33°45'58.8"; E25°30'17.2"	N/A
B5	-	-	-	S33°46'20.4"; E25°30'03.7"	N/A
B6	-	-	-	S33°46'38.1"; E25°29'57.4"	N/A
B7	-	-	-	S33°46'43.3"; E25°29'59.7"	N/A
B8	-	-	-	S33°47'02.8"; E25°29'49.6"	N/A
B9	-	-	-	S33°47'05.4"; E25°29'49.4"	N/A
B10	-	-	-	S33°47'12.0"; E25°29'46.6"	N/A
B11	-	-	-	S33°47'21.2"; E25°29'42.7"	N/A
C1	-	-	-	S33°46'33.3"; E25°30'11.0"	N/A
C2	-	-	-	S33°46'37.1"; E25°30'12.5"	N/A
C3	-	-	-	S33°46'41.7"; E25°30'05.9"	N/A
C4	-	-	-	S33°46'46.1"; E25°30'04.5"	N/A
C5	-	-	-	S33°47'21.7"; E25°29'49.2"	N/A
D1	-	-	-	S33°46'37.1"; E25°30'43.3"	N/A

D2	-	-	-	S33°47'20.2"; E25°30'07.5"	N/A
D3	-	-	-	S33°47'28.6"; E25°30'08.0"	N/A
E1	-	-	-	S33°47'08.7"; E25°30'36.9"	N/A
E2	-	-	-	S33°47'16.5"; E25°30'24.6"	N/A
E3	-	-	-	S33°47'27.0"; E25°30'22.2"	N/A
F1	-	-	-	S33°47'28.5"; E25°30'26.5"	N/A
F2	-	-	-	S33°47'24.3"; E25°30'26.2"	N/A
F3	-	-	-	S33°47'27.0"; E25°30'23.5"	N/A
F4	-	-	-	S33°47'27.0"; E25°30'22.2"	N/A
F5	-	-	-	S33°47'31.5"; E25°30'18.8"	N/A
F6	-	-	-	S33°47'29.3"; E25°30'11.8"	N/A
F7	-	-	-	S33°47'23.5"; E25°30'08.8"	N/A
F8	-	-	-	S33°47'28.6"; E25°30'08.0"	N/A
F9	-	-	-	S33°47'21.7"; E25°29'49.2"	N/A
F10	-	-	-	S33°47'20.3"; E25°29'17.3"	N/A
ARCHAEOLOGICAL AND CULTURAL HERITAGE SITES					
BS1	Site BS1	Colonial Period	Homestead	S33°46'54.8"; E25°26'28.9"	No Impact – <i>In situ conservation</i>
BS2	Site BS2	Colonial Period	Worker's Village	S33°47'02.3"; E25°27'10.8"	Impact – <i>Formal Conservation (alteration to current development design)</i> OR <i>Phase 2 Archaeological Mitigation</i>
			Conservation Area: 1 -	S33°47'00.2"; E25°27'09.6"	
			2 -	S33°47'01.1"; E25°27'13.0"	
			3 -	S33°47'02.9"; E25°27'12.4"	
			4 -	S33°47'01.9"; E25°27'08.1"	
			5 -	S33°47'01.1"; E25°27'09.2"	
I1	Site I1	Iron Age	Homestead	S33°45'20.0"; E25°28'46.8"	Impact – <i>Formal Conservation (alteration to current development design)</i> OR <i>Phase 2 Archaeological Mitigation</i>
			Conservation Area: 6 -	S33°45'19.4"; E25°28'45.6"	
			7 -	S33°45'20.2"; E25°28'48.6"	
			8 -	S33°45'20.8"; E25°28'48.6"	
			9 -	S33°45'21.1"; E25°28'47.6"	
			10 -	S33°45'21.1"; E25°28'46.6"	
			11 -	S33°45'21.3"; E25°28'45.9"	
			12 -	S33°45'21.1"; E25°28'45.2"	
			13 -	S33°45'20.1"; E25°28'44.6"	
S1	Site S1	Stone Age (MSA)	Knapping	S33°46'41.2"; E25°27'44.3"	Impact (limited) – <i>Destruction without a SAHRA Site Destruction Permit</i>
S2	Site S2	Stone Age (MSA)	Knapping	S33°45'11.5"; E25°29'00.4"	Impact (limited) – <i>Destruction without a SAHRA Site Destruction Permit</i>
S3	Area S1	Stone Age (MSA)	Knapping	S33°6'29.1"; E25°30'21.8"	No Impact – <i>In situ conservation</i>

Table 2: Development co-ordinates and Phase 1 AIA assessment findings

4) REFERENCES CITED

1. FieldWork & Terreco. 2010. *Background Information Document - Nelson Mandela Bay Municipality: Proposed Construction of Balmoral Collector Sewerage System near Uitenhage and Proposed Construction of Florida Collector Sewerage System near Despatch*. Unpublished document.
2. South African Government. (No. 65) of 1983. *Human Tissues Act*.
3. South African Government. (No. 51) of 1989. *Human Tissues Amendment Act*.
4. South African Government. (No. 107) of 1998. *National Environmental Management Act*.
5. South African Government. (No. 25) of 1999. *National Heritage Resources Act*.
6. South African Heritage Resources Agency. 2007. *Minimum standards for the archaeological and heritage components of impact assessments*. Unpublished guidelines.
7. South African Government. (No. 62) of 2008. *National Environmental Management Second Amendment Act*.
8. Van Ryneveld, K. 2010. *Phase 1 Archaeological Impact Assessment – Development of the Koedoeskloof Landfill Site, Uitehage, Eastern Cape, South Africa*. Unpublished document.



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 traces;
- 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.