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**FINAL BASIC ASSESSMENT REPORT FOR
THE PROPOSED ESTABLISHMENT OF A
CEMETERY ON PORTION 51(A PORTION OF
PORTION 31) ZUURFONTEIN FARM 591 IN
VANDERBIJLPARK.**

GAUT 002/12-13/E0284



**Gauteng Department of Agriculture and
Rural Development (GDARD)**
**Basic Assessment Report in terms of the National
Environmental Management Act, 1998 (Act No. 107 of
1998), as amended, and the Environmental Impact
Assessment Regulations, 2010 (Version 1)**

List of all organs of state and State Departments where the draft report has been submitted, their full contact details and contact person

Kindly note that:

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2010.
2. This application form is current as of 2 August 2010. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
3. **A draft Basic Assessment Report must be submitted to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken. The draft reports must be submitted to the relevant State Departments and on the same day, two CD's of draft reports must also be submitted to the Competent Authority (GDARD) with a signed proof of such submission of draft report to the relevant State Departments.**
4. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
5. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.
6. An incomplete report shall be rejected.
7. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
8. Five (5) copies (3 hard copies and 2 CDs-PDF) of the final report and attachments must be handed in at offices of the relevant competent authority, as detailed below.
9. No faxed or e-mailed reports will be accepted. Only hand delivered or posted applications will be accepted.
10. Unless protected by law, and clearly indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/EAP must provide any interested and affected party with the information contained in this application on request, during any stage of the application process.

DEPARTMENTAL DETAILS

Gauteng Department of Agriculture and Rural Development
Attention: Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch
P.O. Box 8769
Johannesburg
2000

Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch
18th floor Glen Cairn Building
73 Market Street, Johannesburg

Admin Unit telephone number: (011) 355 1345
Department central telephone number: (011) 355 1900

BASIC ASSESSMENT REPORT [REGULATION 23(1)]

(For official use only)

File Reference Number:						
Application Number:						
Date Received:						

(I) SUBMISSION TO STATE DEPARTMENT (SECTION 3 ABOVE)

(A) HAS A DRAFT REPORT FOR THIS APPLICATION BEEN SUBMITTED TO ALL STATE DEPARTMENT ADMINISTERING A LAW RELATING TO A MATTER LIKELY TO BE AFFECTED AS A RESULT OF THE ACTIVITY? NO

(B) IS A LIST OF STATE DEPARTMENTS REFERRED TO IN SECTION A ABOVE BEEN ATTACHED TO THIS REPORT, NO

IF NO, STATE REASONS FOR NOT ATTACHING THE LIST.

THE REPORT WAS ONLY SUBMITTED TO EMFULENI LOCAL MUNICIPALITY WHO ARE HANDLING THE REZONING AND LICENCE APPLICATION

SECTION A: ACTIVITY INFORMATION

1. ACTIVITY DESCRIPTION

Project title (must be the same name as per application form):

The Establishment of a Cemetery on Portion 51(A portion of portion 31) Zuurfontein Farm 591 in Vanderbijlpark.

Select the appropriate box

The application is for an upgrade of an existing development

The application is for a new development

Other, specify

Describe the activity and associated infrastructure, which is being applied for, in detail

The proposed project includes the establishment of a cemetery and associated structures. These include the following:

- A security wall enclosing the cemetery
- A chapel
- Security Offices
- Parking Area
- Ablution facilities

The development is not anticipated to produce large quantities of waste. The proposed ground burial has the following advantages:

ADVANTAGES

- ❖ Religious tradition
- ❖ Family tradition
- ❖ A place to return to and to care for which can give comfort to the survivors
- ❖ A place for a permanent memorial to be erected

2. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations:

<u>Title of legislation, policy or guideline:</u>	<u>Administering authority:</u>	<u>Promulgation Date:</u>
National Environmental Management Act No. 107 of 1998	National & Provincial	27 November 1998
National Heritage Resource Act No. 25 of 1999	South African Heritage Resource Agency	28 April 1999

The Occupational Health and Safety Act no.85 of 1993	Department of Health	23 June 1993
National Environmental Management Act (Biodiversity act no. 10 of 2004)	Department of Environmental Affairs and Tourism.	07 June 2004
National Water Act 36 of 1998	National/Provincial	26 August 1998
White paper on Integrated pollution and waste management of South Africa	National/Provincial	17 March 2000
Constitution of South Africa : Act No.108 of 1996	Parliament	18 December 1996
The Conservation of Agricultural Resource Act, No. 43 of 1983	Department of Agriculture	1983
Physical Planning Act, No. 125 of 1991	Department of Land Affairs	1991
The Hazardous Substances Act, No. 15 of 1973	Department of Minerals and Energy	1973

3. ALTERNATIVES

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment

The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. **Do not** include the no go option into the alternative table below.

Note: After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Provide a description of the alternatives considered

No.	Alternative type, either alternative: site on property, properties, activity, design, technology, operational or other(provide details of "other")	Description
1	Proposal	Natural burial is the interment of the body of a dead person in the soil in a manner that does not inhibit decomposition but allows the body to recycle naturally. It is an alternative to other contemporary Western burial methods. The body may be prepared without chemical preservatives or disinfectants such as embalming fluid, which might destroy the microbial decomposers that break the body down. It may be buried in a biodegradable coffin, casket, or shroud. The grave does not use a burial vault or outer burial container that would prevent the body's contact with soil. The grave should be shallow enough to allow microbial activity similar to that found in composting.

		<p>Natural burials can take place both on private land (subject to regulations) and in any cemetery that will accommodate the vault-free technique. A wide variety of land management techniques, such as sustainable agriculture, restoration ecology, habitat conservation projects, and permaculture, may be used to maintain the burial area in perpetuity. Landscaping methods may accelerate or slow down the decomposition rate of bodies, depending on the soil system.</p>
2	Process Alternative	<p>Cremation</p> <p>Cremation is the use of high-temperature burning, vaporization, and oxidation to reduce dead animal or human bodies to basic chemical compounds, such as gases and mineral fragments retaining the appearance of dry bone. Cremation may serve as a funeral or post-funeral rite that is an alternative to the interment of an intact dead body in a coffin or casket. Cremated remains, which do not constitute a health risk, may be buried or interred in memorial sites or cemeteries, or they may be legally retained by relatives and dispersed in various ways. Cremation is not an alternative to a funeral, but rather an alternative to burial or other forms of disposal.</p>

		<p>Cremation might be preferable for environmental reasons. Burial is a known source of certain environmental contaminants, with the coffin itself being the major contaminant, however in some countries e.g. the UK, legislations now requires that cremators are fitted with abatement equipment (filters) that remove serious pollutants such as mercury. Other practical approaches such as using cremators for longer periods and not cremating on the same day as the coffin is received reduces the use of fossil fuel and hence reduces carbon emissions. Cremation is therefore becoming friendlier toward the environment though natural burials are also possible. Another environmental concern is that traditional burial takes up a great deal of space. In a traditional burial, the body is buried in a casket made from a variety of materials. In the United States, the casket is often placed inside a concrete vault or liner before burial in the ground. While individually this may not take much room, combined with other burials, it can over time cause serious space concerns. Many cemeteries, particularly in Japan and Europe as well as those in larger cities have run</p>
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		<p>out of permanent space. In Tokyo, for example, traditional burial plots are extremely scarce and expensive, and in London, a space crisis led Harriet Harman to propose reopening old graves for "double-decker" burials</p>
3	Design alternative	<p>Use of Durawall in place of a Pallisade Fence</p> <p>Consideration of different designs for aesthetic purposes or different construction materials in an attempt to optimise local benefits and sustainability would constitute design alternatives. Appropriate applications of design alternatives are communication towers. In such cases, all designs are assumed to have different impacts. Generally, the design alternatives could be incorporated into the project proposal and so be part of the project description, and need not be evaluated as separate alternatives.</p>

NOTE: The numbering in the above table must be consistently applied throughout the application report and process

4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the total physical size (footprint) of the proposal as well as alternatives. Footprints are to include all new infrastructure (roads, services etc), impermeable surfaces and landscaped areas:

Alternative:

Alternative 1(Proposed activity)

Size of the activity:

8.5ha

Alternative 2 (if any)
Alternative 3 (if any)

[Redacted]
[Redacted]
Ha/ m²

or, for linear activities:

Alternative:

Length of the activity:

Alternative 1 (Proposed activity)
Alternative 2 (if any)
Alternative 3 (if any)

[Redacted]
m/km

Indicate the size of the site(s) or servitudes (within which the above footprints will occur):

Alternative:

Size of the site/servitude:

Alternative 1 (Proposed activity)
Alternative 2 (if any)
Alternative 3 (if any)

[Redacted] 8.5ha
[Redacted]
Ha/m²

5. SITE ACCESS

Alternative 1 (Proposal)

Does ready access to the site exist, or is access directly from an existing road?

YES [Redacted]

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

[Redacted]

Include the position of the access road on the site plan.

Alternative 2

Does ready access to the site exist, or is access directly from an existing road?

[Redacted]

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned: _____



Include the position of the access road on the site plan.

Alternative 3

Does ready access to the site exist, or is access directly from an existing road?



If NO, what is the distance over which a new access road will be built

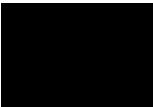
Describe the type of access road planned:



Include the position of the access road on the site plan.

PLEASE NOTE: Points 6 to 8 of Section A must be duplicated where relevant for alternatives

Section A 6-8 has been duplicated



Number of times

(only complete when applicable)

6. SITE OR ROUTE PLAN

A detailed site or route (for linear activities) plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document. The site or route plans must indicate the following:

- the scale of the plan, which must be at least a scale of 1:2000 (scale can not be larger than 1:2000 i.e. scale can not be 1:2500 but could where applicable be 1:1500)
- the property boundaries and numbers of all the properties within 50m of the site;
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- the exact position of each element of the application as well as any other structures on the site;

- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, septic tanks, storm water infrastructure and telecommunication infrastructure;
- walls and fencing including details of the height and construction material;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites including (but not limited thereto):
 - Rivers and wetlands;
 - the 1:100 and 1:50 year flood line;
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or infested with alien species);
- for gentle slopes the 1m contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- the positions from where photographs of the site were taken.
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the 32m position from the bank to be clearly indicated)

7. SITE PHOTOGRAPHS

Colour photographs from the center of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under the appropriate Appendix. It should be supplemented with additional photographs of relevant features on the site, where applicable.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity. To be attached in the appropriate Appendix.

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

Note: Complete Section B for the proposal

Further:

Instructions for completion of Section B for linear activities

- 1) For linear activities (pipelines etc) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
- 2) Indicate on a plan(s) the different environments identified
- 3) Complete Section B for each of the above areas identified
- 4) Attach to this form in a chronological order
- 5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section B has been duplicated for times
sections of the route

Instructions for completion of Section B for location/route alternatives

- 1) For each location/route alternative identified the entire Section B needs to be completed
- 2) Each alternative location/route needs to be clearly indicated at the top of the next page
- 3) Attach the above documents in a chronological order

Section B has been duplicated for times
location/route alternatives
(complete only when appropriate)

Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application

Section B is to be completed and attachments order in the following way

- All significantly different environments identified for Alternative 2 is to be completed and attached in a chronological order; then
- all significantly different environments identified for Alternative 3 is to be completed and attached chronological order
- etc

Section B - Section of Route  (complete only when appropriate for above)

Section B – Location/route Alternative No.  (complete only when appropriate for above)

1. PROPERTY DESCRIPTION

Property description:

Portion 51 Zuurfontein Farm 591







(Farm name, portion etc.)

2. ACTIVITY POSITION


Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Alternative:	Latitude (S):	Longitude (E):
	-26.798	27.789

In the case of linear activities:

Alternative:	Latitude (S):	Longitude (E):
• Starting point of the activity		
• Middle point of the activity		
• End point of the activity		

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Appendix

Addendum of route alternatives attached 

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat	
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4. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site.

	Plain	
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5. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

a) Is the site located on any of the following?

Shallow water table (less than 1.5m deep)		NO
Dolomite, sinkhole or doline areas		NO
Seasonally wet soils (often close to water bodies)		NO
Unstable rocky slopes or steep slopes with loose soil		NO
Dispersive soils (soils that dissolve in water)		NO
Soils with high clay content (clay fraction more than 40%)		NO
Any other unstable soil or geological feature		NO
An area sensitive to erosion		NO

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

b) are any caves located on the site(s)

	NO
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If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):

Longitude (E):

c) are any caves located within a 300m radius of the site(s)

	NO
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If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):

Longitude (E):

d) are any sinkholes located within a 300m radius of the site(s)

	NO
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If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):

Longitude (E):

If any of the answers to the above are “YES” or “unsure”, specialist input may be requested by the Department

6. AGRICULTURE

Does the site have high potential agricultural soils as contemplated in the Gauteng Agricultural Potential Atlas (GAPA)?

	NO
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Please note: The Department may request specialist input/studies depending on the nature of the soil type and location of the site

7. GROUNDCOVER

To be noted that the location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

BASIC ASSESSMENT REPORT [REGULATION 23(1)]

Indicate the types of groundcover present on the site and include the estimated percentage found on site

Natural veld - good condition % =83	Natural veld with scattered aliens % =1	Natural veld with heavy alien infestation % =0	Veld dominated by alien species % =0	Landscaped (vegetation) % =0
Sport field % =0	Cultivated land % 0	Paved surface (hard landscaping) % =0	Building or other structure % =1	Bare soil % =25

Please note: The Department may request specialist input/studies depending on the nature of the groundcover and potential impact(s) of the proposed activity/ies.

Are there any rare or endangered flora or fauna species (including red list species) present on the site

	NO
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If YES, specify and explain:

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban edge, May 2002) or within 600m (if outside the urban edge, May 2002) radius of the site

	NO
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If YES, specify and explain:

Are there any special or sensitive habitats or other natural features present on the site?

	NO
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If YES, specify and explain:

Was a specialist consulted to assist with completing this section

	NO
--	----

If yes complete specialist details

Name of the specialist:

Qualification(s) of the specialist: [REDACTED]

Postal address: [REDACTED]

Postal code: [REDACTED]

Telephone: [REDACTED] Cell: [REDACTED]

E-mail: [REDACTED] Fax: [REDACTED]

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: [REDACTED]

If YES, is such a report(s) attached? YES NO

If YES list the specialist reports attached below

[REDACTED]

Signature of specialist: _____ Date: [REDACTED]

Please note; If more than one specialist was consulted to assist with the filling in of this section then this table must be appropriately duplicated

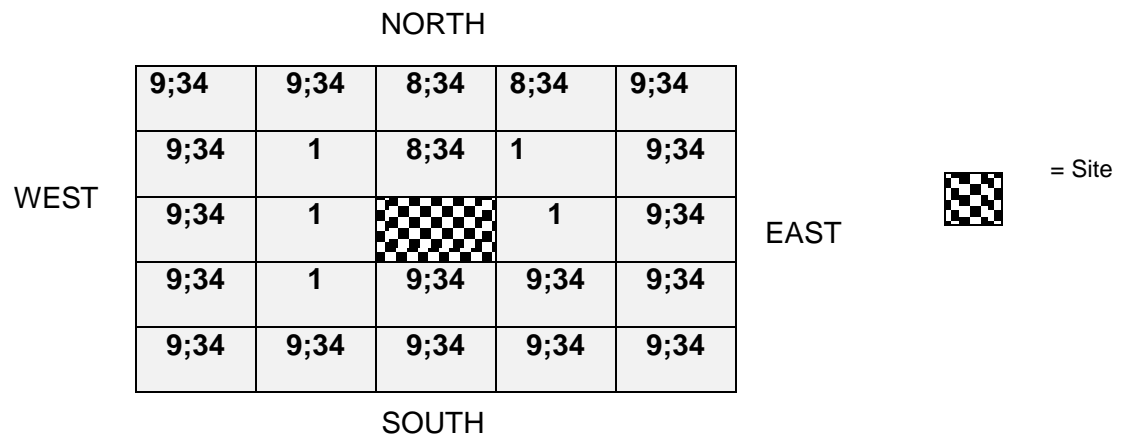
8. LAND USE CHARACTER OF SURROUNDING AREA

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

1. Vacant land	2. River, stream, wetland	3. Nature conservation area	4. Public open space	5. Koppie or ridge
6. Dam or reservoir	7. Agriculture	8. Low density residential	9. Medium to high density residential	10. Informal residential
11. Old age home	12. Retail	13. Offices	14. Commercial & warehousing	15. Light industrial
16. Heavy industrial ^{AN}	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities

21. Golf course/polo fields	22. Airport ^N	23. Train station or shunting yard ^N	24. Railway line ^N	25. Major road (4 lanes or more) ^N
26. Sewage treatment plant ^A	27. Landfill or waste treatment site ^A	28. Historical building	29. Graveyard	30. Archeological site
31. Open cast mine	32. Underground mine	33. Spoil heap or slimes dam ^A	34. Residential Area	
Other land uses (describe):				

NOTE: Each block represents an area of 250m X250m



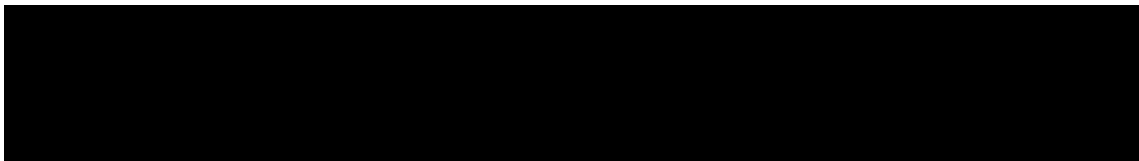
Note: More than one (1) Land-use may be indicated in a block

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an “A” and with an “N” respectively.

Have specialist reports been attached

YES	
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If yes indicate the type of reports below



9. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the area and the community condition as baseline information to assess the potential social, economic and community impacts.

The site is located in a small holding area which comprise mostly of residential areas. Housing type is mostly RDPs and some shacks which are located approximately 500m to the west of the site. To the north of the site there are some medium density houses.

The community of Bophelong was established to cater for the black community workers working in the industrial areas of Vanderbijlpark. The community has expanded to include recently developed Bophelong extension comprising of RDP houses.

The population in Bophelong is approximately 37,779 and the number of households is estimated to stand at 12,352. The average household size in Bophelong, calculated from Statistics SA data (2007), is three persons per household. The average household size for Emfuleni, as a whole, is 3.52 individuals. Bophelong is approximately 9 square kilometers in size. Its residents are mainly employed as domestic or industrial workers in the nearby town of Vanderbijlpark. Previous studies have found seemingly high poverty levels in the area, where 67% of the households were found to be poor in 2003 (Slabbert, 2003). A study by Sekhampu (2004) reported that 62% of the households were poor using income measures of poverty. A similar study by Slabbert (2009) revealed increasing levels of poverty where 69% of the sampled population in Bophelong was found to be poor.

10. CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposal or alternatives, then you are requested to furnish this Department with written comment from the South African Heritage Resource Agency (SAHRA) – Attach comment in appropriate annexure

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 300m in length;*
 - (b) *the construction of a bridge or similar structure exceeding 50m 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 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 heritage resources authority;*
 - (d) *the re-zoning 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.*

Are there any signs of culturally (aesthetic, social, spiritual, environmental) or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?

If YES, explain:

	NO
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If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

A Phase 1 Heritage Impact Assessment Study was done, and no evidence of archaeological or heritage value were identified

Will any building or structure older than 60 years be affected in any way?

	NO
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Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

	NO
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If yes, please attached the comments from SAHRA in the appropriate Appendix

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The Environmental Assessment Practitioner must follow any relevant guidelines adopted by the competent authority in respect of public participation and must at least –

- 1(a) Fix a notice in a conspicuous place, on the property where it is intended to undertake the activity which states that an application will be submitted to the competent authority in terms of these regulations and which provides information on the proposed nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations on the application may be made.
- 1(b) inform landowners and occupiers of adjacent land of the applicant's intention to submit an application to the competent authority
- 1(c) inform landowners and occupiers of land within 100 metres of the boundary of the property where it is proposed to undertake the activity and whom may be directly affected by the proposed activity of the applicant's intention to submit an application to the competent authority;
- 1(d) inform the ward councillor and any organisation that represents the community in the area of the applicant's intention to submit an application to the competent authority;
- 1(e) inform the municipality which has jurisdiction over the area in which the proposed activity will be undertaken of the applicant's intention to submit an application to the competent authority; and
- 1(f) inform any organ of state that may have jurisdiction over any aspect of the activity of the applicant's intention to submit an application to the competent authority; and
- 1(g) place a notice in one local newspaper and any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of these regulations.

2. LOCAL AUTHORITY PARTICIPATION

Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application.

Has any comment been received from the local authority?

YES

If “YES”, briefly describe the comment below (also attach any correspondence to and from the local authority to this application):

The local ward councillor is in support of the proposed development.

If “NO” briefly explain why no comments have been received

3. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

YES

If “YES”, briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

The following comments were raised:

- There was concern on property devaluation
- Cemeteries create very few job opportunities

If “NO” briefly explain why no comments have been received

4. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees and ratepayers associations. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

The practitioner must record all comments and respond to each comment of the public / interested and affected party before the application is submitted. The comments and responses must be captured in a Comments and Responses Report as prescribed in the regulations and be attached to this application.

5. APPENDICES FOR PUBLIC PARTICIPATION

All public participation information is to be attached in the appropriate Appendix. The information in this Appendix is to be ordered as detailed below

Appendix 1 – Proof of site notice

Appendix 2 – written notices issued to those persons detailed in 1(b) to 1(f) above

Appendix 3 – Proof of newspaper advertisements

Appendix 4 – Communications to and from persons detailed in Point 2 and 3 above

Appendix 5 – minutes of any public and or stakeholder meetings

Appendix 6 - Comments and Responses Report

Appendix 7 –Comments from I&APs on Basic Assessment (BA) Report

Appendix 8 –Comments from I&APs on amendments to the BA report

Appendix 9 – Copy of the register of I&APs

Appendix 10 – Comments from I&APs on the application

Appendix 11 - Other

SECTION D: RESOURCE USE AND PROCESS DETAILS

Note: Section D is to be completed for the proposal

Instructions for completion of Section D for alternatives

- 1) For each alternative under investigation, where such alternatives will have different resource and process details (e.g. technology alternative), the entire Section D needs to be completed
- 4) Each alternative needs to be clearly indicated in the box below
- 5) Attach the above documents in a chronological order

Section D has been duplicated "insert No. of duplicates" times for alternatives (complete only when appropriate)

Section D Alternative No. "insert alternative number" (complete only when appropriate for above)

1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES	
±0.005m ³	

If yes, what estimated quantity will be produced per month?

How will the construction solid waste be disposed of (describe)?

Construction phase: Most waste is expected to be packaging materials (shrink wrap, cardboard) and litter generated by the construction staff. Waste will be recycled as far as possible. Non-recyclable waste will be sorted into different types and disposed of at a suitably licensed waste disposal facility. Disposal of solid waste will be inline with that of the landfill personnel; however onsite there will be a skip in which waste will be stored before transportation to the landfill for disposal. A licensed waste management company will be contracted to manage the waste during the construction period.

Where will the construction solid waste be disposed of (describe)?

Solid waste will be disposed of at a local landfill site. Waste considered unsuitable for municipal waste disposal sites will be disposed of at a suitably licensed waste disposal facility.

Will the activity produce solid waste during its operational phase?

YES	<input checked="" type="checkbox"/>
If yes, what estimated quantity will be produced per month?	±0.01 m ³

If yes, what estimated quantity will be produced per month?

How will the solid waste be disposed of (describe)?

Waste will be recycled as far as possible. Non-recyclable waste will be sorted into different types and disposed of at a suitably licensed waste disposal facility.

Has the municipality or relevant service provider confirmed that sufficient air space exists for treating/disposing of the solid waste to be generated by this activity?

<input checked="" type="checkbox"/>	NO
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Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

Confirmation will be obtained from the municipality that sufficient space exists for the waste prior to construction.

Note: If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?

<input checked="" type="checkbox"/>	NO
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If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?

<input checked="" type="checkbox"/>	NO
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If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Describe the measures, if any, that will be taken to ensure the optimal reuse or recycling of materials:

General Waste Management

- Litter and rubble on the construction site and in the construction camp will be monitored strictly by a dedicated housekeeping team.
- All waste generated on site will be separated into metal, paper, plastic, glass & contaminated paper, glass, plastic and polystyrene and will be recycled.

Construction rubble

- All rubble from demolition activities will be used on site as part of the existing development, or will be taken off the construction site and disposed at an appropriate landfill.
- No material shall be left on site that may harm man or animals. Broken, damaged and unused nuts, bolts and washers shall be picked up and removed from site.
- Surplus concrete will not be dumped indiscriminately.
- Concrete water will be re-used in the batching process

Liquid effluent (other than domestic sewage)

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

	NO
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If yes, what estimated quantity will be produced per month?

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If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)?

	NO
--	----

Will the activity produce any effluent that will be treated and/or disposed of on site?

	NO
--	----

If yes, what estimated quantity will be produced per month?

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If yes describe the nature of the effluent and how it will be disposed.

[REDACTED]

Note that if effluent is to be treated or disposed on site the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA

Will the activity produce effluent that will be treated and/or disposed of at another facility?

	NO
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If yes, provide the particulars of the facility:

Facility name:

[REDACTED]

Contact person:
Postal address:
Postal code:
Telephone:
E-mail:

Cell:
Fax:

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

Liquid effluent (domestic sewage)

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?

YES	
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If yes, what estimated quantity will be produced per month?

±0.002 m ³	
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If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the domestic effluent to be generated by this activity(ies)?

	NO
--	----

Will the activity produce any effluent that will be treated and/or disposed of on site?

	NO
--	----

If yes describe how it will be treated and disposed off.

Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

	NO
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If yes, is it controlled by any legislation of any sphere of government?

	NO
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If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

Emissions may be produced by construction vehicles during the construction phase of the project. Dust may also be created during the construction phase. The EMP will however address mitigation measures. No emissions will be produced during operation of the facility.

2. WATER USE

Indicate the source(s) of water that will be used for the activity

municipal	
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If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate

the volume that will be extracted per month:

If Yes, please attach proof of assurance of water supply, e.g. yield of borehole, in the appropriate Appendix

Does the activity require a water use permit from the Department of Water Affairs and Forestry? NO

If yes, list the permits required

If yes, have you applied for the water use permit(s)?

If yes, have you received approval(s)? (attached in appropriate appendix)

3. POWER SUPPLY

Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

Municipality

If power supply is not available, where will power be sourced from?

Renewable energy sources such as the use of solar power will be investigated as an alternative energy source.

4. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

None has been determined yet, but the designs will take into account energy efficiency.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

None is anticipated since the development will not consume lots of energy

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2006, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

- Why is the Environmental Impact Assessment has to be done before construction and how long does it take to finish?
- Will the local community be considered for employment when the development is fully operational?

Summary of response from the practitioner to the issues raised by the interested and affected parties

(A full response must be provided in the Comments and Response Report that must be attached to this report):

- ❖ The Environmental Impact Assessment has to be done so that identified impacts are mitigated to avoid harm on the natural environment. A full Environmental Impact Assessment will take up to 6 months to complete but a Basic Assessment will take up to 3 months to finish.
- ❖ Since the development is taking place within your local area, local labour will be given first priority.

2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts

The impacts are evaluated on the parameters of **nature, extent, duration, intensity** and **probability** from which the significance of the impact is derived.

Nature of Impact

This is an appraisal of the type of effect the activity would have on the affected environment, as well as a description of what is being affected and how.

Extent

This determines the impact on:

- ❖ **Site** - impacts occurring only within the boundaries of the site, e.g.: loss of vegetation.
- ❖ **Local** - impacts occurring within the boundaries of the site and outside the boundaries of the site but restricted to the immediate surrounding area e.g.: noise created by the construction process.
- ❖ **Regional** – impacts that occur on a regional scale e.g.: excessive surface water pollution impacting on communities a significant distance downstream of the site.

Intensity

- ❖ **Low** – the impact does not affect physical, biophysical or socio-economic functions and processes.
- ❖ **Medium** – the impact has an effect on physical, biophysical and socio economic functions and processes, but in such a way that these processes can still continue to function albeit in a modified fashion.
- ❖ **High** – where the physical, bio-physical and socio economic functions and processes are impacted on in such a way as to cause them to temporarily or permanently cease.

Duration

- ❖ **Short term** – impacts occurring within 0-2 years.
- ❖ **Medium term** – impacts occurring within 2-10 years.
- ❖ **Long term** – impacts that will only cease after the operational phase.

Probability

This determines the likelihood of the impact occurring:

- ❖ **Improbable** – the probability of the impact occurring is low.
- ❖ **Probable** – there is a distinct probability of the impact occurring.
- ❖ **Highly probable** – where it is most likely that the impact will occur.
- ❖ **Definite** – where the impact will occur regardless of any prevention measures.

Significance

Significance of the impact is determined by evaluating the cumulative impact of nature, extent, duration, intensity and probability. Significance will be described as:

- ❖ **Low** – where it will not have a significant impact on the environment.
- ❖ **Medium** – where it will have a medium significance on the environment.
- ❖ **High** – where it will have a high significance on the environment.

Fatal flaw – where it will cause the planning for development to be suspended.

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

PROPOSED DEVELOPMENT

Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:
<p>Visual Environment</p> <ul style="list-style-type: none"> The movement of construction vehicles through the camp may be associated with a visual impact. 	<p>Medium</p>	<ul style="list-style-type: none"> Construction traffic must stick to designated routes 	<p>Low</p>
<p>Soil</p> <ul style="list-style-type: none"> Spillage of fuel or oil leaks from construction vehicles may result in the contamination of soil and groundwater. Stormwater runoff may cause erosion of topsoil and concomitant siltation of watercourses, if not carefully controlled. 	<p>Medium</p>	<p>Fuel Storage:</p> <ul style="list-style-type: none"> Topsoil and subsoil to be protected from contamination. Fuel and material storage must be away from stockpiles. Contaminated soil must be contained and disposed of off site at a licensed landfill site. 	<p>Low</p>

		<p>Earthworks:</p> <ul style="list-style-type: none"> All earthworks must be adequately controlled and managed. Any excavations must be clearly marked and demarcated. <p>Soil Erosion:</p> <ul style="list-style-type: none"> Only topsoil in the footprint should be removed and soil disturbance to areas outside the construction footprint must be avoided. Bare areas must be revegetated as soon as possible after construction. 	
<p>Noise</p> <ul style="list-style-type: none"> Noise generated during construction can result in health and nuisance impacts to neighbouring property owners 	<p>Medium</p>	<ul style="list-style-type: none"> SANS 10103 and the National Noise Control Regulations should be used as the main guidelines for addressing the potential noise 	<p>Low</p>

		<p>impact on this project.</p> <ul style="list-style-type: none"> • With regard to unavoidable very noisy construction activities in the vicinity of noise sensitive areas, these should be screened off with acoustic screens, where possible. If no acoustic screening is used during exceptionally noisy construction times, prior warning to community members would be extremely important. • As construction workers operate in a very noisy environment, it must be ensured that their working conditions comply with the requirements of the Occupational Health and 	
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		<p>Safety Act (Act No 85 of 1993). Where necessary ear protection gear should be worn.</p>	
<ul style="list-style-type: none"> Accumulated contamination of soil and groundwater due to inappropriate disposal of construction waste and other construction debris Accumulation of construction debris on site 	<p>Low</p>	<p>Construction Rubble:</p> <ul style="list-style-type: none"> All rubble must either be used on site as part of the existing development or must be taken off the site and disposed off at an approved site. Rubble must not be dumped on the ground but must be placed within a skip bin for regular removal, insofar as possible. <p>Litter Management:</p> <ul style="list-style-type: none"> Refuse bins must be placed at strategic positions to ensure that litter does not accumulate within the construction site. These should be 	<p>Low</p>

		<p>kept covered and arrangements made for them to be collected regularly from the site.</p> <ul style="list-style-type: none"> • A housekeeping team should be appointed to regularly maintain the litter and rubble situation on the construction site 	
<p>Flora and Fauna</p> <ul style="list-style-type: none"> • Minor construction related impacts are anticipated, it is however not expected to impact endangered or threatened species due to the location of the site within an existing impacted, transformed area. • The spread of exotic species may result from construction activities. This may have implications in the area as a whole if this is not controlled. 	<p>Medium</p>	<p>Existing Vegetation</p> <ul style="list-style-type: none"> • Materials should not be delivered to the site prematurely which could result in additional areas being cleared or affected. • Construction site office and laydown areas must be clearly demarcated and no encroachment must occur beyond demarcated areas. • All impacted 	<p>Low</p>

		<p>areas during construction must be rehabilitated with locally indigenous plants.</p> <ul style="list-style-type: none"> • Design of the landscaped areas shall consider aspects such as habitat provision for a range of bird species, amphibians, reptiles and small mammals, as well as the (long term) restoration of trees that were removed in the construction of the proposed building and associated infrastructure. <p>Exotic Vegetation</p> <ul style="list-style-type: none"> • All exotic vegetation must be removed from site. • Alien vegetation on the site will need to be controlled in terms of 	
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		<p>Government Notice R1048.</p> <ul style="list-style-type: none"> • The contractor should be responsible for implementing a programme of weed control (particularly in areas where soil has been disturbed); and grassing of any remaining stockpiles to prevent weed invasion. • The spread of exotic species occurring throughout the site should be controlled. <p>Herbicides</p> <ul style="list-style-type: none"> • Herbicide use shall only be allowed with the approval of the developer and according to contract specifications. The application shall be according to set specifications 	
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		<p>and under supervision of a qualified technician. The possibility of leaching into the surrounding environment shall be properly investigated and only environmentally friendly herbicides shall be used.</p> <p>FAUNA</p> <ul style="list-style-type: none"> • The contractor as well as his construction workers must be sympathetic towards any fauna present on site. • All construction staff must attend a training workshop during which the dangers of certain faunal species (especially snakes) will be explained. This workshop must 	
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		<p>be conducted by a qualified personnel.</p> <p>Workers must be instructed not to kill any snakes encountered on the site, but rather to call a suitably qualified park person to remove it off the site.</p>	
<p>TRAFFIC</p> <ul style="list-style-type: none"> • If vehicles are not maintained it may lead to contamination and unnecessary noise. • Slow moving vehicles, if utilising public access routes, could cause congestion at peak visitor times. • If delivery of equipment and materials are not planned carefully it may lead to a visual and noise impacts 	<p>Medium</p>	<ul style="list-style-type: none"> • Delivery of equipment must be undertaken with the minimum reasonable amount of trips. • Planning of site delivery hours must be scheduled to avoid weekends and evenings, in so far as possible. • Wheel washing and damping down of un-surfaced roads must be implemented to reduce dust. • Routes should be 	<p>Low</p>

		<p>clearly defined as not to endanger fauna, flora and residents.</p> <ul style="list-style-type: none"> • Damping down of roads and wheel washing should be done using water with discretion, so as not to waste water unnecessarily. • Planning of access routes to the site for construction purposes shall be done in conjunction between the Contractor and the developer. All agreements reached should be documented and no verbal agreements should be made. The Contractor shall properly mark all access roads. Roads not to be used shall be marked with a "NO ENTRY" 	
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		<p>sign.</p> <ul style="list-style-type: none"> A site speed limit of 20km/h must not be exceeded. 	
<p>AIR QUALITY</p> <ul style="list-style-type: none"> Short-term negative impacts on the air quality will occur from dust and exhaust fumes during construction. 	Medium	<p>Dust Control:</p> <ul style="list-style-type: none"> Wheel washing and damping down of un-surfaced and un-vegetated areas, taking water saving into account Retention of vegetation where possible will reduce dust travel. Excavations and other clearing activities must only be done during agreed working times and permitting weather conditions to avoid drifting of sand and dust into adjacent areas. Any complaints or claims emanating from the lack of dust 	Low

		control shall be attended to immediately by the Contractor and ECO.	
<p>GROUNDWATER AND STORMWATER</p> <ul style="list-style-type: none"> Local groundwater quality deterioration due to oil and fuel spills. Stormwater may carry pollutants to other parts of the site if not carefully controlled. Fatal flow during the operation of the cemetery may also contaminate groundwater 	Low	<p>Groundwater:</p> <ul style="list-style-type: none"> Water usage, land use, waste management, and on-site sanitation associated with the proposed new development must be designed and managed so as not to impact, insofar as possible negatively on the groundwater resources on the site. Facilities for the collection and disposal of waste on the site should occur in sealed surfaces which would ensure that there is no waste entering the soil profile. Regular water 	Low

		<p>samples will be collected periodically to determine the groundwater quality.</p> <p>Hydrology and Stormwater:</p> <ul style="list-style-type: none"> • The site must be managed in order to prevent pollution of drains, groundwater, due to suspended solids, silt or chemical pollutants. • Promote water saving mind set with construction workers in order to ensure less water wastage. • Grids / Litter traps should be placed at the entry point to drains and should be cleaned on a regular basis 	
<p>WASTE GENERATION</p> <ul style="list-style-type: none"> • Increased waste generation during construction and 	<p>Medium</p>	<ul style="list-style-type: none"> • Care should be taken not to dump waste indiscriminately 	<p>Low</p>

<p>operational phases.</p>		<p>as this could have a negative impact on the ecosystem and may lead to injury to humans and animals.</p> <p>Construction Rubble:</p> <ul style="list-style-type: none"> • All rubble must either be used on site as part of the existing development or must be taken off the site and disposed off at an approved site. • Rubble must not be dumped on the ground but must be placed within a skip bin for regular removal, insofar as possible. <p>Litter Management:</p> <ul style="list-style-type: none"> • Refuse bins must be placed at strategic positions to ensure that litter does not accumulate within the construction site. These should be 	
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		<p>kept covered and arrangements made for them to be collected regularly from the site.</p> <ul style="list-style-type: none"> • A housekeeping team should be appointed to regularly maintain the litter and rubble situation on the construction site. • Waste disposal will need to take place in terms of Section 20 of the Environment Conservation Act (Act No. 73 of 1989). • Littering by the employees of the Contractor shall not be allowed under any circumstances. <p>The ECO shall monitor the neatness of the construction site.</p>	
<p>SOCIO-ECONOMIC</p> <ul style="list-style-type: none"> • Employing and training local labour will result in the 			

<p>availability of skilled labour force in the area.</p>			
<p>Storm water Management</p> <ul style="list-style-type: none"> • Hardened surfaces, as opposed to undeveloped areas natural vegetation, will lead to an increase in runoff, which in turn may lead to increased pressure being exerted in storm water control system. 	<p>Medium</p>	<ul style="list-style-type: none"> • New stormwater construction must be developed strictly according to specifications from engineers in order to ensure efficiency. • The site must be managed in order to prevent pollution of drains, downstream watercourses or groundwater, due to suspended solids, silt or chemical pollutants 	<p>Low</p>
<p>Increase Demand on Water and Energy Resources</p>	<p>Medium</p>	<ul style="list-style-type: none"> • To monitor proper management of resources, water and electricity metres will be installed. 	<p>Low</p>
<p>Fire Risk</p> <p>Ignorance on the part of the workers might result in fires, especially in winter when the vegetation is dry or during the operational phase.</p>	<p>Medium</p>	<ul style="list-style-type: none"> • Hold fire prevention talks and reminders regularly with the staff on fire prevention. • Ensure adequate 	<p>Low</p>

		<p>firefighting equipment on site and in all major working areas and train workers on how to use it.</p> <ul style="list-style-type: none"> • Ensure that all workers on site know the proper procedure in case of a fire incidence on site. • Smoking must not be permitted in those areas considered a fire hazard. • Smoking should only be allowed in designated areas. • “No-smoke” signs must be placed at areas with high fire risk. 	
<p>Security risk An increased number of personnel on site might threaten the security in the area.</p>	<p>Medium</p>	<ul style="list-style-type: none"> • Workers must be identified by overalls or the logo of the contractor. • Workers must not be allowed to trespass on private and commercial property in the neighbouring areas. • The site should 	<p>Low</p>

		<p>be fenced and there must be controlled access to the site during construction and operation phase.</p> <ul style="list-style-type: none"> • No unauthorized personnel should access the construction site. • Weapons must not be allowed on site, except for a security guard that may be allowed to carry a weapon. 	
<p>Health and safety The health and safety of workers and other personnel utilizing the site and adjacent sites might be at risk if proper preventive measures are not put in place.</p>	<p>Medium</p>	<ul style="list-style-type: none"> • The contractor must implement the standards set out in the OHS Act (No. 85 of 1993). This act aims at protecting workers with regards to their activities at work. • The Contractors must ensure that emergency procedures applicable to the construction phase are set up prior to 	<p>Low</p>

		<p>commencing work. Emergency procedures shall include, but are not limited to, fire, spills, contamination of the ground, accidents involving employees, use of hazardous substances, etc.</p> <ul style="list-style-type: none"> • Workers must be provided with appropriate Personal Protection Equipment (PPE). • Proper signage must be strategically placed in the area of the construction site. • Workers must be supplied with hearing protection if noise levels exceed 85 decibels. • Workers are not allowed to drink alcohol during working hours. 	
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		<ul style="list-style-type: none"> • The contractor must respect the workers' right to refuse to work in an unsafe and unhealthy environment. • Material stockpiles or stacks must be stable and well secured to prevent collapse of the stockpile and possible injury to workers. • Provide first aid equipment and have a qualified first aid practitioner on site during construction. • All work to be carried out under strict supervision and according to best practices. • All dangerous or no-go-areas on site should be clearly marked as such, including areas for storing dangerous materials. 	
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		<ul style="list-style-type: none"> • Keep record of injuries on site. 	
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ALTERNATIVE 1: CREMATION

Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:
<p>Air Pollution:</p> <p>Cremation utilizes natural gas, propane or diesel to generate energy and results in emissions; it's difficult to precisely calculate the carbon footprint of a cremation. Varying quantities of energy and resources are consumed depending on factors like time of day, body size and type of container.</p>	<p>High</p>	<p>The latest cremators are computerized and optimized for efficiency and emissions reduction. Potentially toxic substances such as radioactive isotopes used to treat some forms of cancer as well as other materials are removed from bodies before processing. Residual metals from dental fillings or hip replacements are also separated and potentially recycled. In a traditional burial, these items might not be typically removed.</p>	<p>Medium</p>

<p>Visual Environment</p> <ul style="list-style-type: none"> The movement of construction vehicles through the camp may be associated with a visual impact. 	<p>Medium</p>	<ul style="list-style-type: none"> Construction traffic must stick to designated routes 	<p>Low</p>
<p>Soil</p> <ul style="list-style-type: none"> Spillage of fuel or oil leaks from construction vehicles may result in the contamination of soil and groundwater. Stormwater runoff may cause erosion of topsoil and concomitant siltation of watercourses, if not carefully controlled. 	<p>Medium</p>	<p>Fuel Storage:</p> <ul style="list-style-type: none"> Topsoil and subsoil to be protected from contamination. Fuel and material storage must be away from stockpiles. Contaminated soil must be contained and disposed of off site at a licensed landfill site. <p>Earthworks:</p> <ul style="list-style-type: none"> All earthworks must be adequately controlled and managed. Any excavations must be clearly marked and demarcated. <p>Soil Erosion:</p> <ul style="list-style-type: none"> Only topsoil in the footprint should be 	<p>Low</p>

		<p>removed and soil disturbance to areas outside the construction footprint must be avoided.</p> <ul style="list-style-type: none"> • Bare areas must be revegetated as soon as possible after construction. 	
<p>Noise</p> <ul style="list-style-type: none"> • Noise generated during construction can result in health and nuisance impacts to neighbouring property owners 	<p>Medium</p>	<ul style="list-style-type: none"> • SANS 10103 and the National Noise Control Regulations should be used as the main guidelines for addressing the potential noise impact on this project. • With regard to unavoidable very noisy construction activities in the vicinity of noise sensitive areas, these should be screened off with acoustic screens, where possible. If no acoustic screening is used 	<p>Low</p>

		<p>during exceptionally noisy construction times, prior warning to community members would be extremely important.</p> <ul style="list-style-type: none"> As construction workers operate in a very noisy environment, it must be ensured that their working conditions comply with the requirements of the Occupational Health and Safety Act (Act No 85 of 1993). Where necessary ear protection gear should be worn. 	
<ul style="list-style-type: none"> Accumulated contamination of soil and groundwater due to inappropriate disposal of construction waste and other construction debris Accumulation of 	<p>Low</p>	<p>Construction Rubble:</p> <ul style="list-style-type: none"> All rubble must either be used on site as part of the existing development or must be taken off the site and 	<p>Low</p>

<p>construction debris on site</p>		<p>disposed off at an approved site.</p> <ul style="list-style-type: none"> Rubble must not be dumped on the ground but must be placed within a skip bin for regular removal, insofar as possible. <p>Litter Management:</p> <ul style="list-style-type: none"> Refuse bins must be placed at strategic positions to ensure that litter does not accumulate within the construction site. These should be kept covered and arrangements made for them to be collected regularly from the site. A housekeeping team should be appointed to regularly maintain the litter and rubble situation on the construction site 	
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<p>EMPLOYMENT OPPORTUNITIES</p> <p>Few employment opportunities will be created if only cremation is developed</p>	<p>High</p>		
<p>GROUNDWATER</p> <p>During operational phase there are likely to be less.</p>	<p>Low</p>	<p>Water samples will be taken for testing on a periodic bases to check the water chemistry and bacteria in order to determine if the groundwater is being contaminated and to figure out necessary precautions and measures to avoid or reduce contamination</p>	<p>Low</p>

ALTERNATIVE 2 Use of Durawall in place of a Pallisade Fence

<p>Potential impacts:</p>	<p>Significance rating of impacts:</p>	<p>Proposed mitigation:</p>	<p>Significance rating of impacts after mitigation:</p>
<p>Air Pollution:</p> <p>Cremation utilizes natural gas, propane or diesel to generate energy and results in emissions; it's difficult to precisely calculate the carbon footprint of a cremation. Varying quantities of energy and resources are consumed depending on factors like time of day, body size and type of container.</p>	<p>High</p>	<p>The latest cremators are computerized and optimized for efficiency and emissions reduction. Potentially toxic substances such as radioactive isotopes used to treat some forms of cancer as well as other materials are removed from bodies before processing.</p>	<p>Medium</p>

		Residual metals from dental fillings or hip replacements are also separated and potentially recycled. In a traditional burial, these items might not be typically removed.	
<p>Visual Environment</p> <ul style="list-style-type: none"> The movement of construction vehicles through the camp may be associated with a visual impact. 	Medium	<ul style="list-style-type: none"> Construction traffic must stick to designated routes 	Low
<p>Soil</p> <ul style="list-style-type: none"> Spillage of fuel or oil leaks from construction vehicles may result in the contamination of soil and groundwater. Stormwater runoff may cause erosion of topsoil and concomitant siltation of watercourses, if not carefully controlled. 	Medium	<p>Fuel Storage:</p> <ul style="list-style-type: none"> Topsoil and subsoil to be protected from contamination. Fuel and material storage must be away from stockpiles. Contaminated soil must be contained and disposed of off site at a licensed landfill site. <p>Earthworks:</p> <ul style="list-style-type: none"> All earthworks must be adequately 	Low

		<p>controlled and managed.</p> <ul style="list-style-type: none"> Any excavations must be clearly marked and demarcated. <p>Soil Erosion:</p> <ul style="list-style-type: none"> Only topsoil in the footprint should be removed and soil disturbance to areas outside the construction footprint must be avoided. Bare areas must be revegetated as soon as possible after construction. 	
<p>Noise</p> <ul style="list-style-type: none"> Noise generated during construction can result in health and nuisance impacts to neighbouring property owners 	<p>Medium</p>	<ul style="list-style-type: none"> SANS 10103 and the National Noise Control Regulations should be used as the main guidelines for addressing the potential noise impact on this project. With regard to unavoidable very noisy 	<p>Low</p>

		<p>construction activities in the vicinity of noise sensitive areas, these should be screened off with acoustic screens, where possible. If no acoustic screening is used during exceptionally noisy construction times, prior warning to community members would be extremely important.</p> <ul style="list-style-type: none"> As construction workers operate in a very noisy environment, it must be ensured that their working conditions comply with the requirements of the Occupational Health and Safety Act (Act No 85 of 1993). Where necessary ear protection gear should be 	
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		worn.	
<ul style="list-style-type: none"> Accumulated contamination of soil and groundwater due to inappropriate disposal of construction waste and other construction debris Accumulation of construction debris on site 	Low	<p>Construction Rubble:</p> <ul style="list-style-type: none"> All rubble must either be used on site as part of the existing development or must be taken off the site and disposed off at an approved site. Rubble must not be dumped on the ground but must be placed within a skip bin for regular removal, insofar as possible. <p>Litter Management:</p> <ul style="list-style-type: none"> Refuse bins must be placed at strategic positions to ensure that litter does not accumulate within the construction site. These should be kept covered and arrangements made for them to be collected regularly from the 	Low

		<p>site.</p> <ul style="list-style-type: none"> • A housekeeping team should be appointed to regularly maintain the litter and rubble situation on the construction site 	
<p>EMPLOYMENT OPPORTUNITIES</p> <p>Few employment opportunities will be created if only cremation is developed</p>	High		
<p>VISUAL IMPACT</p> <p>With palisade fence the visual impact will be high because graves will be exposed to the community</p>	High	Construction of a brickwall round the site will not expose the graves to the community	Low

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.



3. IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING AND CLOSURE PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Alternative 1 (Proposal)			
Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:
Visual Environment <ul style="list-style-type: none"> The presence of graves will distort the natural visual environment 	Medium	<ul style="list-style-type: none"> Indigenous trees will be planted around the cemetery to shade off graves from the public. Landscaping and maintenance will continue to keep the site clean A wall surrounding the cemetery will not be removed and will constantly be maintained and repaired if the need arises. 	Low
Groundwater <ul style="list-style-type: none"> There is a possibility of groundwater contamination 	Low	<ul style="list-style-type: none"> Water samples will be taken for testing on a periodic bases to check the water chemistry and bacteria in order to determine if the groundwater is being contaminated and to figure out necessary precautions and measures to avoid or reduce contamination. 	Low
Socio-Economic <ul style="list-style-type: none"> Loss of burial space 	High	<ul style="list-style-type: none"> A plan will be adopted to absorb some of the 	Medium

<ul style="list-style-type: none"> Loss of employment 		<p>labourers to other existing cemeteries around the area</p>	
<p>Health and Safety</p> <ul style="list-style-type: none"> If the cemetery is not properly looked after, a problem of Phorid flies may occur on the cemetery. 	<p>Low</p>	<ul style="list-style-type: none"> Although not much is known regarding the impacts of phorid flies on human health, good housekeeping of the cemetery is necessary to avoid flies. 	<p>Low</p>
<p>Security</p> <ul style="list-style-type: none"> Thieves might dig up corpses for muthi purposes or looking for valuables. 	<p>Low</p>	<ul style="list-style-type: none"> The cemetery will have lighting which will provide visibility during the night and security personnel will guard the cemetery during the day and at night. 	<p>Low</p>
<p><i>Include an assessment of the significance of all impacts and Mitigation</i></p>			
<p>Alternative 2</p>			
<p>Potential impacts: Air Pollution</p> <p>Cremation utilizes natural gas, propane or diesel to generate energy and results in emissions; it's difficult to precisely calculate the carbon footprint of a cremation. Varying quantities of energy and resources are consumed depending on factors like time of day, body size and type of container.</p>	<p>Significance rating of impacts:</p> <p>High</p>	<p>Proposed mitigation:</p> <p>The latest cremators are computerized and optimized for efficiency and emissions reduction. Potentially toxic substances such as radioactive isotopes used to treat some forms of cancer as well as other materials are removed from bodies before processing. Residual metals from dental fillings or hip replacements are</p>	<p>Significance rating of impacts after mitigation:</p> <p>Medium.</p>

		also separated and potentially recycled. In a traditional burial, these items might not be typically removed.	
<p>Socio-Economic</p> <p>Since the proposed project is directed to the black community, their cultural beliefs prohibits them from cremation practices. The project will run at low capital income since no or less support will arise from the local community. Its highly computerized nature will result in fewer employment opportunities to the native community.</p>	High	Educating the general public about advantages of cremation and a detailed procedural guideline on how cremation process is operated.	High

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.



4. CUMULATIVE IMPACTS

Describe potential impacts that, on their own may not be significant, but is significant when added to the impact of other activities or existing impacts in the environment.

Substantiate response:

- During operation there could be a possibility of groundwater pollution due to human body decomposition.
- Employment creation could improve a few household incomes in the long term.

5. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposal and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative 1 (Proposal)

With our experience in dealing with similar activities in such environments we do not foresee any major negative environmental impacts, however it should be noted that the identified impacts have the potential to environmentally degrade the site if not properly managed and therefore we recommend the EMP should be implemented and be treated as a binding document on site. The site is suitable for the proposed development and the construction activities would pose less harm to the well-being of the surrounding industries.

Alternative 2

The site is close to small holding residential areas and the problem of emission and bad odour will likely impact heavily on these areas hence posing a high environmental risk.

Alternative 3

Pallisade fence could compromise the visual of the community by exposing graves to the community.

No-go (compulsory)

- This will involve no development of any infrastructure and will present both direct and indirect negative environmental and socio-economic impacts such as:
 - Lower capital investment in the area.
 - No employment opportunities will be created.
 - Unemployment will result in high levels of crime in the area
 - Shortage of burial space

6. IMPACT SUMMARY OF PREFERRED PROPOSAL

Identify preferred proposal

The proposal is the establishment of a cemetery on portion 51(A portion of portion 31) Zuurfontein farm 591 In Vanderbijlpark

Having assessed the significance of impacts of the proposal and various alternatives, please provide an overall summary and reasons for selecting the preferred project proposal.

The preferred proposal will:

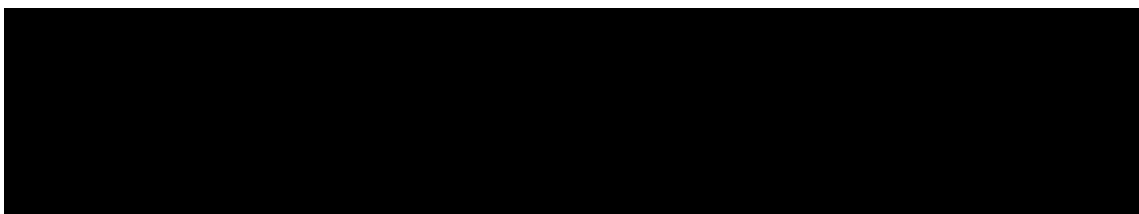
- Provide job opportunities close in and around the area
- Will provide burial ground for the local communities
- Will improve household income in the local community
- The site has suitable geological structure and flat terrain that will suit the establishment of a cemetery will very minimum environmental impacts.

7. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the Environmental Assessment Practitioner).

YES	
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If “NO”, indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):



If “YES”, please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

After careful evaluation of the proposed activity and the site where it’s proposed to take place, it is evident that no substantial environmental impacts that could not be

mitigated to ambient levels will result. The attached EMP demonstrates this in detail.
Proper care should be taken of the rehabilitated areas to ensure success thereof.
The EMP should be available on site at all times during the construction and rehabilitation phases and should be strictly adhered to.
The appointed Environmental Control Officer for the development must ensure that the EMP is being adhered to during construction and rehabilitation phases.
Quarterly Environmental Monitoring Reports should be submitted to GDARD during construction and rehabilitation phase.

8. ENVIRONMENTAL MANAGEMENT PLAN (EMP)

If the EAP answers yes to Point 7 above then an EMP is to be attached to this report as an Appendix

EMP attached

YES

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

It is required that if more than one item is enclosed that a table of contents is included in the appendix

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Route position information

Appendix E: Public participation information

Appendix F: Water use license(s), SAHRA information, service letters from municipalities, water supply information

Appendix G: Specialist reports

Appendix H: EMP

Appendix I: Other information

