GAUTENG PROVINCE
AGRICULTURE AND RURAL DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

MUNELUVHA (PTY) LTD

Ekurhuleni
METROPOLITAN MUNICIPALITY

DRAFT BASIC ASSESSMENT REPORT FOR THEPROPOSED CONSTRUCTION OF HOUSING ESTBLISH-MENT ON THE PORTION 296 OF THE FARM ZUURFONTEIN 33-IR, GAUTENG PROVINCE

SHUMA AFRICA PROJECTS (PTY) LTD

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Dear Sir / Madam

BA Application & Draft Basic Assessment Report: Proposed construction of housing establishment in Kempton Park on the Remainder of Portion 153 of Farm Zuurfontein 33-IR, Ekurhuleni Metropolitan Municipality Municipality

The Department acknowledges having received the BA Application & Draft Basic Assessment Report for environmental authorisation of the above-mentioned project on 23/05/2017.

You are required to submit five (5) copies (**3 full colour hard copies and 2 CDs-PDF**) of the Final Basic Assessment Report as well as a copy of the previously submitted application form for environmental authorisation.

In terms of Regulation 45 of the EIA Regulations 2014, this application will lapse should you fail to meet any of the time-frames prescribed in terms of these regulations, unless an extension has been granted in terms of regulation 3(7).

Please draw the applicant's attention to the fact that the activity may not commence prior to an environmental authorisation being granted by the Department.

Yours faithfully

Boniswa Belot
Deputy Director: Strategic Administration Support
Date: 24/05/2017

CC: Ekurhuleni Metropolitan Municipality: Human Settlements Department
Att: P Nyatlo
Email/Fax: Phumzile.Nyatlo@ekurhuleni.gov.za; Chalotta.Mokhethi@ekurhuleni.gov.za

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, 2014 (Version 1)

Kindly note that:

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2014.

2. This application form is current as of 8 December 2014. 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, for purposes of comments within a period of thirty (30) days, to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken.**

4. **A draft Basic Assessment Report (1 hard copy and two CD's) must be submitted, for purposes of comments within a period of thirty (30) days, to a Competent Authority empowered in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended to consider and decide on the application.**

5. 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.

6. 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.

7. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.

8. An incomplete report may lead to an application for environmental authorisation being refused.

9. **Any report that does not contain a titled and dated full colour large scale layout plan of the proposed activities including a coherent legend, overlain with the sensitivities found on site may lead to an application for environmental authorisation being refused.**

10. 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 application for environmental authorisation being refused.

11. No faxed or e-mailed reports will be accepted. Only hand delivered or posted applications will be accepted.

12. 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.

13. Although pre-application meeting with the Competent Authority is optional, applicants are advised to have these meetings prior to submission of application to seek guidance from the Competent Authority.

DEPARTMENTAL DETAILS

Gauteng Department of Agriculture and Rural Development
Attention: Administrative Unit of the of the Environmental Affairs Branch
P.O. Box 8769
Johannesburg
2000

Administrative Unit of the of the Environmental Affairs Branch
Ground floor Diamond Building
11 Diagonal Street, Johannesburg

Administrative Unit telephone number: (011) 240 3377
Department central telephone number: (011) 240 2500

(For official use only)

NEAS Reference Number:	
File Reference Number:	
Application Number:	
Date Received:	

If this BAR has not been submitted within 90 days of receipt of the application by the competent authority and permission was not requested to submit within 140 days, please indicate the reasons for not submitting within time frame.

Not Applicable

Is a closure plan applicable for this application and has it been included in this report? **NO** X

if not, state reasons for not including the closure plan.

The proposed development will be formal residential structures and would not require demolishing after a period of time. A closure plan is therefore not applicable to this type of development

Has a draft report for this application been submitted to a competent authority and all State Departments administering a law relating to a matter likely to be affected as a result of this activity? **YES** X

Is a list of the State Departments referred to above attached to this report including their full contact details and contact person? **NO** X

If no, state reasons for not attaching the list.

This is a Draft BAR, therefore, the State Department is expected to send through their comments during the Review and Comment Period. However, all comments received will be appended herein in the Comment and Response Report (CRR).

Have State Departments including the competent authority commented? **NO** X
If no, why?

This is a Draft BAR, therefore, the competent authority is expected to send through their comments during the Review and Comment Period. However, all comments received will be appended herein in the Comment and Response Report (CRR).

SECTION A: ACTIVITY INFORMATION

1. PROPOSAL OR DEVELOPMENT DESCRIPTION

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

PROPOSED CONSTRUCTION OF HOUSING ESTABLISHMENT IN KEMPTON PARK ON THE REMAINDER OF PORTION 153 OF FARM ZUURFONTEIN 33-IR, EKURHULENI METROPOLITAN MUNICIPALITY, GAUTENG PROVINCE.

Select the appropriate box

The application is for an upgrade of an existing development		The application is for a new development	X	Other, specify	

Does the activity also require any authorisation other than NEMA EIA authorisation?

YES	
X	

If yes, describe the legislation and the Competent Authority administering such legislation

Building plans in terms of Town planning Act would be submitted to Ekurhuleni Metropolitan Municipality for review and approval. All buildings structures and services would adhere to the minimum standards of the Municipality.

If yes, have you applied for the authorisation(s)?	NO X
If yes, have you received approval(s)? (attach in appropriate appendix)	NO X

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:

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended).	National & Provincial	1998
Section 28 of the Town Planning & Townships Ordinance	National	1986
National Heritage Resources Act 25 of 1999	SAHRA	2000
National Water Act (Act No: 36 of 1998)	DWA	1998
Occupational Health and Safety Act (Act No: 58 of 1993)	National & Provincial	2014
National Environmental Management Act: Air Quality, 2004	National & Provincial	2004

National Environmental Management Act: Biodiversity Act (Act No: 10 of 2004)	National and Provincial	2004
Requirements for biodiversity assessments Version 2. Directorate of Nature Conservation, Department of Agriculture and Rural development.	Provincial	2012
Development Facilitation Act (Act No. 67 of 1995)	National & Provincial	1997
Environmental Nature Conservation Act (Act No: 100 of 1996)	National & Provincial	1983
National Environmental Management: Waste Act (Act 59 of 2009)	National & Provincial	2009
DEA Guidelines on Public Participation	National (DEA)	2012
DEA Guidelines on Need and Desirability	National (DEA)	2004
DEA Guidelines on Alternatives	National (DEA)	2004

Description of compliance with the relevant legislation, policy or guideline:

Legislation, policy of guideline	**Description of compliance**
National Environmental Management Act No.107 of 1998 as amended.	A Basic Assessment process is required to obtain authorization for the activities, as per the EIA Regulations (2014) promulgated in terms of NEMA.
Section 28 of the Town Planning & Townships Ordinance	The proposed housing establishment will be done in accordance with Section 28 of the Town Planning & Townships ordinance. Even though there was no land rezoning as the proposed location is within a residential area

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.

Please describe the process followed to reach (decide on) the list of alternatives below

Provide a description of the alternatives considered

No.	**Alternative type**, either alternative: site on property, properties, activity, design, technology, energy, operational or other(provide details of "other")	**Description**
1	Proposal	Proposed township development which entails "Residential 4" with 95 dwelling units per hectare (652 dwelling units), public open space that include play parks, parks, gardens, sports and recreation and roads with a total of 8,29 hectares in extent. The proposed development will consider Sustainable development in terms of the use of energy efficient like Gas stoves, solar geysers and solar energy for households use.
2	Alternative 1 layout plan	Proposed township development which entails "Residential 4" with 95 dwelling units per hectare (652 dwelling units), public open space that include play parks, parks, gardens, sports and recreation, "Business 1" with variety of business purposes, community facility for places of institution and education and roads/street with a total of 8,29 hectares in extent. The proposed development will consider Sustainable development in terms of the use of energy efficient like Gas stoves, solar geysers and solar energy for households use.
3	No go Alternative	The no go alternative of no development at all cannot be considered as the area is currently zoned residential development within urban areas, there is a need for housing development in Gauteng as its population increases every month due to the fact that Gauteng is an economic hub of South Africa. Formalising the site into a sustainable housing development will benefit those people living in and around the area and also avoid land invasion by informal settlement as a great challenge in Gauteng.

In the event that no alternative(s) has/have been provided, a motivation must be included in the table below.

No site alternative would be considered and assessed for the proposed development, only technology alternatives would be considered as an aim to introduce sustainable development and adhere to the Green House Gasses regulations and to promote more Green Building Houses. All considered technologies would be discussed in detail.

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:

	Size of the activity:
Proposed activity ***(Total environmental (landscaping, parking, etc.) and the building footprint)***	±82850m² (±8.285ha)
Alternatives:	
Alternative 1 (if any)	±8.285ha (±8.285ha)
Alternative 2 (if any)	

or, for linear activities:

	Length of the activity:
Proposed activity	
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	

m/km

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

	Size of the site/servitude:
Proposed activity	
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	

Ha/m²

5. SITE ACCESS

Proposal

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

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

Describe the type of access road planned:

The proposed site can be accessed from the R25 via Rienert avenue, Fehrsen drive and Colin Paul street.

Include the position of the access road on the site plan (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

Alternative 1

Does ready access to the site exist, or is access directly from an existing road? YES X / NO

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. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

Alternative 2

Does ready access to the site exist, or is access directly from an existing road?	YES X	NO
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. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

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. LAYOUT 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 to this document. The site or route plans must indicate the following:

- the layout plan is printed in colour and is overlaid with a sensitivity map (if applicable);
- layout plan is of acceptable paper size and scale, e.g.
  - A4 size for activities with development footprint of 10sqm to 5 hectares;
  - A3 size for activities with development footprint of > 5 hectares to 20 hectares;
  - A2 size for activities with development footprint of >20 hectares to 50 hectares);
  - A1 size for activities with development footprint of >50 hectares);

- The following should serve as a guide for scale issues on the layout plan:
  - A0 = 1: 500
  - A1 = 1: 1000
  - A2 = 1: 2000
  - A3 = 1: 4000
  - A4 = 1: 8000 (±10 000)
- shapefiles of the activity must be included in the electronic submission on the CD's;
- the property boundaries and Surveyor General numbers of all the properties within 50m of the site;
- the exact position of each element of the activity 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, sewage pipelines, septic tanks, storm water infrastructure;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites (including the relevant buffers as prescribed by the competent authority) 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);
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the position of the relevant buffer from the bank to be clearly indicated)

FOR LOCALITY MAP (NOTE THIS IS ALSO INCLUDED IN THE APPLICATION FORM REQUIREMENTS)

- the scale of locality map must be at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map;
- the locality map and all other maps must be in colour;
- locality map must show property boundaries and numbers within 100m of the site, and for poultry and/or piggery, locality map must show properties within 500m and prevailing or predominant wind direction;
- for gentle slopes the 1m contour intervals must be indicated on the map and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the map;
- areas with indigenous vegetation (even if it is degraded or infested with alien species);
- locality map must show exact position of development site or sites;
- locality map showing and identifying (if possible) public and access roads; and
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites.

Locality maps are appended hereto as Appendix 1

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.

Eight (8) directional photographs are appended hereto as Appendix 2

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.

Facility illustrations of the proposed development are appended hereto as Appendix 3

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

Note: Complete Section B for the proposal and alternative(s) (if necessary)

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 sections of the route | 0 | times

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 alterative 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 location/route alternatives | 0 | times (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 1 is to be completed and attached in a chronological order; then
- ☐ All significantly different environments identified for Alternative 2 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: (Including Physical Address and Farm name, portion etc.)	Remainder of Portion 153 of the farm Zuurfontein 33-IR, Kempton Park.

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°05'26.08"	28°11'45.63"

In the case of linear activities:

Alternative:

- ☐ Starting point of the activity
- ☐ Middle point of the activity
- ☐ End point of the activity

Latitude (S):	Longitude (E):
	°
°	°
°	°

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 ☐

The 21 digit Surveyor General code of each cadastral land parcel

PROPOSAL	T	0	J	R	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0
ALT. 1	T	0	J	R	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0
ALT. 2																				
etc.																				

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat X	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5

4. LOCATION IN LANDSCAPE

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

Ridgeline	Plateau	Side slope of hill/ridge	Valley	Plain X	Undulating plain/low hills	River front

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

(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) YES | NO

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) YES | NO

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) YES | NO

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 agriculture as contemplated in the Gauteng Agricultural Potential Atlas (GAPA 4)?		NO X

Please note: The Department may request specialist input/studies in respect of the above.

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).

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

Natural veld - good condition % =	Natural veld with scattered aliens % =	Natural veld with heavy alien infestation % =	Veld dominated by alien species % =100	Landscaped (vegetation) % =
Sport field % =	Cultivated land % =	Paved surface (hard landscaping) % =	Building or other structure % =	Bare soil % =

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 X

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 area as defined in the Regulations) or within 600m (if outside the urban area as defined in the Regulations) radius of the site.		NO X

If YES, specify and explain:

Are there any special or sensitive habitats or other natural features present on the site?		NO X

If YES, specify and explain:

Was a specialist consulted to assist with completing this section	YES	NO X

If yes complete specialist details

Name of the specialist:			
Qualification(s) of the specialist:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	
Are any further specialist studies recommended by the specialist?		YES	NO X
If YES, specify:			
If YES, is such a report(s) attached?		YES	NO

If YES list the specialist reports attached below

Signature of specialist: _____ Date:

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. Small Holdings	
Other land uses (describe):				

NOTE: Each block represents an area of 250m X 250m, if your proposed development is larger than this please use the appropriate number and orientation of hashed blocks

NORTH

1,2	14,13	12,18	8	9
1	25	25,9	1	9
29	34		9	8
2	12	25,9	13	18
9	19	19	20	24

WEST

EAST

SOUTH

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 NO X

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 Kempton Park, on R25, Fehrsen drive and Colin Paul street in Kempton Park that falls within the jurisdiction of the Ekurhuleni Metropolitan Municipality. The population in Ekurhuleni is growing at 2.2% (year-on-year) per year. The population growth rate is the highest when compared to the other metropolitan municipalities. Ekurhuleni - as well as the other metropolitan areas - is a highly urbanized area (96%). These areas are the economic hub centres of industrial development in South Africa, where rapid industrialization is taking place and an inflow of workers outside the borders come to seek employment.

The proposed development would be located in a well medium income established area. The development would fit in perfectly as the proposed houses to be developed fit into the criteria of the existing structures in the area.

The proposed development would benefit the society with the following:

- ✓ More jobs would be created during the construction phase;
- ✓ New and affordable houses that would be constructed
- ✓ Houses with a green building technology that consumes less of electricity would be constructed

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.		NO X

25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?	

If YES, explain:

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:

There are no known archaeological and or cultural heritage sites known to exist in the proposed area of development. In addition, the area was generally found to be disturbed by activity related to past farming and residential.

Will any building or structure older than 60 years be affected in any way?	NO X
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	NO X

If yes, please attached the comments from SAHRA in the appropriate Appendix

SECTION C: PUBLIC PARTICIPATION (SECTION 41)

1. The Environmental Assessment Practitioner must conduct public participation process in accordance with the requirement of the EIA Regulations, 2014.

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 thirty (30) calendar days before the submission of the application to the competent authority.

Was the draft report submitted to the local authority for comment?	NO X

This is a Draft BAR, therefore, draft report will be submitted and any comment that would be received during the review period would be included in the Comment and Response Report (CRR)

If yes, has any comments been received from the local authority?	NO X

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

If "NO" briefly explain why no comments have been received or why the report was not submitted if that is the case.

The Draft Report is under review, anticipating to get comments before the commenting period elapses. However, all comments received would be included in the Comment and Response Report (CRR).

3. CONSULTATION WITH OTHER STAKEHOLDERS

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

Has any comment been received from stakeholders?	YES X

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

From I&APs	Response
Brett Renou Busisiwe Mlambo Jacobus M Adlam Nice Barnardt etc, Most of I&AP requested BID to be sent.	A Background Information Document (BID) was sent to all I&AP as requested.
Most of objections are not based on Environmental issues, but most are social and economic factors. Decrease the value of house, crime, area was zoned for school, high density.	All I&AP would be invited to the public meeting during Draft BAR, so the engineers and the proponent could respond to such technical questions and EAP to respond to other issues.

If "NO" briefly explain why no comments have been received

However, a Draft BAR is under review.

4. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation process 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 flawed.

The EAP must record all comments and respond to each comment of the public / interested and affected party before the application report 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 as required in terms of the regulations
Appendix 3 – Proof of newspaper advertisements
Appendix 4 –Communications to and from interested and affected parties
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

SECTION D: RESOURCE USE AND PROCESS DETAILS

Note: Section D is to be completed for the proposal and alternative(s) (if necessary)

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 alterative needs to be clearly indicated in the box below
5) Attach the above documents in a chronological order

Section D has been duplicated for alternatives | 2 | times (complete only when appropriate)

Section D Alternative No. | 2 | (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 X
If yes, what estimated quantity will be produced per month?	Unknown – will only be quantified once the final development plan is approved and a quantity surveyor is appointed.

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

	The Contractor must appoint a registered waste removal company such as enviro serve or skip waste to remove all construction waste and general waste form the site during the construction period.

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

To a registered landfill site. All waste skips will be kept on site for inspection purposes.

Will the activity produce solid waste during its operational phase?	YES X	
If yes, what estimated quantity will be produced per month?	Unknown – will only be quantified once the final development plan is approved and a quantity surveyor is appointed	

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

The waste will be integrated into the municipal waste stream and will be removed by the appointed municipal waste removal company.

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?		NO X

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

N/A

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?		NO X

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?		NO X

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:

- ✓ Separation of waste during the construction phase: The Eco will monitor the separation of waste during the construction phase:
  - ➢ Cement bags will be placed in a separate container and will be taken to a registered landfill site. Waste slips will be kept on site for inspection purposes.
  - ➢ Plastic material will be removed from waste stockpiles and placed in separate containers. Recycling bins will be placed at the eating area to encourage workers to separate waste and contribute to recycling. Toolbox tools will be sued to educate workers and explain the concept of recycling to them

- ✓ Separation of waste during the operational phase: separation of waste will be done as per the municipal guidelines.

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 X
If yes, what estimated quantity will be produced per month?	m^3	
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)?	YES	NO

Will the activity produce any effluent that will be treated and/or disposed of on site?		NO X
If yes, what estimated quantity will be produced per month?	m^3	

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

N/A

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 X
If yes, provide the particulars of the facility:			
Facility name:			
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

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

No specific methods or grey water systems have been reviewed.

Liquid effluent (domestic sewage)

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?	YES	NO
If yes, what estimated quantity will be produced per month?	m^3	
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the domestic effluent to be generated by this activity(ies)?	YES	NO

Will the activity produce any effluent that will be treated and/or disposed of on site?	YES	NO

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

Will the activity release emissions into the atmosphere?	YES X	
If yes, is it controlled by any legislation of any sphere of government?		NO X

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:

Construction Phase:

- ✓ Emission released by construction vehicles – the volume of emissions released is minimal will not impact negatively on the emission concentration within the area. The impact will be for a short period of time and the impact will be insignificant.
- ✓ Dust – dust will be mitigated through dust suppression methods. A water truck will be on site and the site will be damped regularly. The impact will be of a low significance and will only be present during the construction phase.
- ✓ Fires – no open fires will be allowed on site during the construction phase. The burning of construction waste is not permissible and will be monitored by the Eco and the Health and Safety Officer.

Operational Phase:

- ✓ No significant impact is expected during the operational phase. Normal vehicular emissions will be generated

2. WATER USE

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

Municipal	Directly from water board	groundwater	river, stream, dam or lake	other	the activity will not use water
X					

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: liters

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?	NO X

If yes, list the permits required

If yes, have you applied for the water use permit(s)?	YES / NO
If yes, have you received approval(s)? (attached in appropriate appendix)	YES / NO

3. POWER SUPPLY

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

Municipal. Further investigations are still underway as to how would the power be supplied.

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

4. ENERGY EFFICIENCY

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

The proponent and the Engineers would discuss measures to ensure that the activity is energy efficient.

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

The proponent and the Engineers would discuss alternative energy sources. However, a Solar Geyser, Gas Stove and Solar heat as energy will form part of the development.

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, 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 as well as the impacts of not implementing the activity (Section 24(4)(b)(i).

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

No issues or objection were raised related to environmental issues by I&APs regarding the proposed development. The DBAR is under public review.

Summary of response from the practitioner to the issues raised by the interested and affected parties (including the manner in which the public comments are incorporated or why they were not included)
(A full response must be provided in the Comments and Response Report that must be attached to this report):

N/A

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

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

NATURE		
Include a brief description of the impact of environmental parameter being assessed in the context of the project. This criterion includes a brief written statement of the environmental aspect being impacted upon by a particular action or activity.		
GEOGRAPHICAL EXTENT		
This is defined as the area over which the impact will be expressed. Typically, the severity and significance of an impact have different scales and as such bracketing ranges are often required. This is often useful during the detailed assessment of a project in terms of further defining the determined.		
1	Site	The impact will only affect the site
2	Local/district	Will affect the local area or district
3	Province/region	Will affect the entire province or region
4	International and National	Will affect the entire country
PROBABILITY		
This describes the chance of occurrence of an impact		
1	Unlikely	The chance of the impact occurring is extremely low (Less than a 25% chance of occurrence).
2	Possible	The impact may occur (Between a 25% to 50% chance of occurrence).
3	Probable	The impact will likely occur (Between a 50% to 75% chance of occurrence).
4	Definite	Impact will certainly occur (Greater than a 75% chance of occurrence).

REVERSIBILITY		
This describes the degree to which an impact on an environmental parameter can be successfully reversed upon completion of the proposed activity.		
1	Completely reversible	The impact is reversible with implementation of minor mitigation measures
2	Partly reversible	The impact is partly reversible but more intense mitigation measures are required.
3	Barely reversible	The impact is unlikely to be reversed even with intense mitigation measures.
4	Irreversible	The impact is irreversible and no mitigation measures exist.
IRREPLACEABLE LOSS OF RESOURCES		
This describes the degree to which resources will be irreplaceably lost as a result of a proposed activity.		
1	No loss of resource.	The impact will not result in the loss of any resources.
2	Marginal loss of resource	The impact will result in marginal loss of resources.
3	Significant loss of resources	The impact will result in significant loss of resources.
4	Complete loss of resources	The impact is result in a complete loss of all resources.
DURATION		
This describes the duration of the impacts on the environmental parameter. Duration indicates the lifetime of the impact as a result of the proposed activity		
1	Short term	The impact and its effects will either disappear with mitigation or will be mitigated through natural process in a span shorter than the construction phase (0 – 1 years), or the impact and its effects will last for the period of a relatively short construction period and a limited recovery time after construction, thereafter it will be entirely negated (0 – 2 years).
2	Medium term	The impact and its effects will continue or last for some time after the construction phase but will be mitigated by direct human action or by natural processes thereafter (2 – 10 years).
3	Long term	The impact and its effects will continue or last for the entire operational life of the development, but will be mitigated by direct human action or by natural processes thereafter (10 – 50 years).
4	Permanent	The only class of impact that will be non-transitory. Mitigation either by man or natural process will not occur in such a way or such a time span that the impact can be considered transient (Indefinite).
CUMULATIVE EFFECT		
This describes the cumulative effect of the impacts on the environmental parameter. A cumulative effect/impact is an effect which in itself may not be significant but may become significant if added to other existing or potential impacts emanating from other similar or diverse activities as a result of the project activity in question.		

1	Negligible Cumulative Impact	The impact would result in negligible to no cumulative effects
2	Low Cumulative Impact	The impact would result in insignificant cumulative effects
3	Medium Cumulative impact	The impact would result in minor cumulative effects
4	High Cumulative Impact	The impact would result in significant cumulative effects

INTENSITY/ MAGNITUDE

Describes the severity of an impact

1	Low	Impact affects the quality, use and integrity of the system/component in a way that is barely perceptible.
2	Medium	Impact alters the quality, use and integrity of the system/component but system/ component still continues to function in a moderately modified way and maintains general integrity (some impact on integrity).
3	High	Impact affects the continued viability of the system/ component and the quality, use, integrity and functionality of the system or component is severely impaired and may temporarily cease. High costs of rehabilitation and remediation.
4	Very high	Impact affects the continued viability of the system/component and the quality, use, integrity and functionality of the system or component permanently ceases and is irreversibly impaired (system collapse). Rehabilitation and remediation often impossible. If possible rehabilitation and remediation often unfeasible due to extremely high costs of rehabilitation and remediation.

SIGNIFICANCE

Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. This describes the significance of the impact on the environmental parameter. The calculation of the significance of an impact uses the following formula:

(Extent + probability + reversibility + irreplaceability + duration + cumulative effect) x magnitude/intensity.

The summation of the different criteria will produce a non-weighted value. By multiplying this value with the magnitude/intensity, the resultant value acquires a weighted characteristic which can be measured and assigned a significance rating.

Points	Impact Significance Rating	Description
6 to 28	Negative Low impact	The anticipated impact will have negligible negative effects and will require little to no mitigation.
6 to 28	Positive Low impact	The anticipated impact will have minor positive effects.
29 to 50	Negative Medium impact	The anticipated impact will have moderate negative effects and will require moderate mitigation measures.

29 to 50	Positive Medium impact	The anticipated impact will have moderate positive effects.
51 to 73	Negative High impact	The anticipated impact will have significant effects and will require significant mitigation measures to achieve an acceptable level of impact.
51 to 73	Positive High impact	The anticipated impact will have significant positive effects.
74 to 96	Negative Very high impact	The anticipated impact will have highly significant effects and are unlikely to be able to be mitigated adequately. These impacts could be considered "fatal flaws".
74 to 96	Positive Very high impact	The anticipated impact will have highly significant positive effects.

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.

Proposal (Preferred)

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
1. **Soil Erosion:** due to the different soil types at the proposed site area	High	✓ Limited traffic during construction ✓ constant rehabilitation during construction ✓ Contractor must have maintenance strategy as part of the EMPr	Low	If no maintenance is done, the impact will have a compounding impact on the environment
2. **Construction-material** by products and construction sites. This includes accommodation, storage of material and ablution facilities for all workers during construction. It is recommended that no workers stay within construction sites	Medium	✓ proper ablution facilities on site ✓ constant management during construction ✓ contractor must have rehabilitation strategy as part of the EMPr	Low	If no maintenance done, the impact will have compounding impact on the environment. This refers to the storage of material, ablution facilities and rehabilitation of construction sites at the completion of the project.
3. **Pollution:** that can be caused by hydrocarbon spills, and ablution facilities	Medium	✓ Proper ablution facilities should be installed on site ✓ Constant rehabilitation of erosion problems ✓ Proper storage facilities of construction	Low	If no maintenance done, the impact will have compounding impact on the environment. This refers to the storage of material, ablution facilities and rehabilitation of construction sites at the completion of the project.

		materials ✓ Waste management is very important. proper and removal strategy must be in place ✓ Contractor must have rehabilitation strategy as part of their EMPr		
4. **Removal of natural vegetation** should only be limited to the footprint of development	High	✓ Limited plants need to be removed when clearing the footprint of development. Clear guidelines and proper plans must be given to the contractor ✓ Daily inspections are needed to prevent problems ✓ Exposed areas should be rehabilitated must rehabilitation strategy as part of EMPr	Low	Not Applicable
5. **Wood collection**. This is envisaged as there would be massive vegetation removal on site which might draw	High	✓ Suggested that no workers stay on site and must be limited to the construction site as far as possible	Low	

6. **Cultural and Heritage Sites:** There are no known archaeological and or cultural heritage sites known to exist in the proposed area of development	**Not applicable**	**Not applicable**	**Not applicable**	**Not applicable**
7. **Air Quality:** The proposed construction phase may have a negative impact on the air quality as a result of increased emissions from construction vehicles and equipment as well as the generation of dust during construction activities	Medium	✓ Clear vegetation only from areas where construction will start right away ✓ Apply water or other dust suppressive methods to temporary road surfaces during construction; ✓ Lower speed limits on construction site. This can reduce dust emissions by 22%; ✓ Upgrade entrance and exit roads to be used by construction vehicles by: improving the particle size, shape and mineral types that make up the surface and base materials of the entrance and exit	Low	

		roads and (2) add surface gravel to reduce the source of dust emission; ✓ Minimise the volume of material tracked-out onto road surfaces by construction vehicles ✓		
8. **Increased Traffic in R25, Rienert avenue and M39:** Heavy trucks and frequent traffic would increase during construction phase	Medium	✓ A road safety programme should be implemented in order to inform all relevant parties of the possible risks of the construction site. ✓ Develop an information campaign regarding the hazards associated with increased heavy vehicle traffic, and precautionary measures to be taken by Construction Company. ✓ Heavy trucks should be directed to deliver all construction material	Low	Should the mitigation be implemented, the increased traffic would cause drastic traffic impact to local residents causing a hindrance of traffic flow during peak hours

		after peak hours each day (i.e. 09:00-15:00)		
9. **Employment Creation:**	Medium-High	✓ The proposed development will create more employment opportunity during construction	Medium	
10. **Visual Impact:** The visual character of the area is that of developed area, urban area with low to high density residential developments located throughout the area. Taking the above into account, potentially negative impacts can still be expected in terms of the aesthetic quality of the surrounding area as a result of the proposed development. However, the impact of the development will be positive in the light of the proposed quality of the development as well as the proposed landscaping program.	Medium	✓ Construction site to be clearly demarcated and secured; ✓ No individuals to be allowed on construction site without the permission the permission of the project manager ✓ All waste material to be collected on a daily basis and stored within designated containers; ✓ Area where equipment would be stored to be fenced off and secured;	Low	
11. **Crime, safety and security:** Crime is anticipated to increase in	Medium	✓ No building activities to be allowed after hours during	Low	

the area as a result of new contractors who will in the area		weekdays, or over weekends. ✓ Only a limited number of two night watchmen to be allowed to overnight on the property to ensure safety of equipment stored on site.		
12. **Noise** caused by the heavy trucks and building construction	Medium	✓ Residents and surrounding business owners should be notified well in advance of the construction schedule. ✓ Construction should be limited to working hours during the week 08:00- 17:00 and between 08:00 –13:00 on Saturdays. ✓ No construction activities to take place on Sundays and other religious holidays which may occur during the construction phase.	Medium	

Alternative 1 *(REPEAT THIS TABLE FOR EACH ALTERNATIVE)*

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
1. **Soil Erosion:** due to the different soil types at the proposed site area	High	✓ limited traffic during construction ✓ constant rehabilitation during construction ✓ Contractor must have maintenance strategy as part of the EMPr	Low	If no maintenance is done, the impact will have a compounding impact on the environment
2. **Construction-material** by products and construction sites. This includes accommodation, storage of material and ablution facilities for all workers during construction. It is recommended that no workers stay within construction sites	Medium	✓ proper ablution facilities on site ✓ constant management during construction ✓ contractor must have rehabilitation strategy as part of the EMPr	Low	If no maintenance done, the impact will have compounding impact on the environment. This refers to the storage of material, ablution facilities and rehabilitation of construction sites at the completion of the project.
3. **Pollution:** that can be caused by hydrocarbon spills, and ablution facilities	Medium	✓ Proper ablution facilities should be installed on site ✓ Constant rehabilitation of erosion problems ✓ Proper storage facilities of construction	Low	If no maintenance done, the impact will have compounding impact on the environment. This refers to the storage of material, ablution facilities and rehabilitation of construction sites at the completion of the project.

		materials ✓ Waste management is very important. proper and removal strategy must be in place ✓ Contractor must have rehabilitation strategy as part of their EMPr		
4. **Removal of natural vegetation** should only be limited to the footprint of development	High	✓ Limited plants need to be removed when clearing the footprint of development. Clear guidelines and proper plans must be given to the contractor ✓ Daily inspections are needed to prevent problems ✓ Exposed areas should be rehabilitated must rehabilitation strategy as part of EMPr	Low	Not Applicable
5. **Wood collection** This is envisaged as there would be massive vegetation removal on site which might draw	High	Suggested that no workers stay on site and must be limited to the construction site as far as possible	Low	

6. **Cultural and Heritage Sites:** There are no known archaeological and or cultural heritage sites known to exist in the proposed area of development	**Not applicable**	**Not applicable**	**Not applicable**	**Not applicable**
7. **Air Quality:** The proposed construction phase may have a negative impact on the air quality as a result of increased emissions from construction vehicles and equipment as well as the generation of dust during construction activities	Medium	✓ Clear vegetation only from areas where construction will start right away ✓ Apply water or other dust suppressive methods to temporary road surfaces during construction; ✓ Lower speed limits on construction site. This can reduce dust emissions by 22%; ✓ Upgrade entrance and exit roads to be used by construction vehicles by: improving the particle size, shape and mineral types that make up the surface and base materials of the entrance and exit	Low	

		roads and (2) add surface gravel to reduce the source of dust emission; ✓ Minimise the volume of material tracked-out onto road surfaces by construction vehicles ✓		
8. **Increased Traffic in R25 and M39 Roads:** Heavy trucks and frequent traffic would increase during construction phase	Medium	✓ A road safety programme should be implemented in order to inform all relevant parties of the possible risks of the construction site. ✓ Develop an information campaign regarding the hazards associated with increased heavy vehicle traffic, and precautionary measures to be taken by Construction Company. ✓ Heavy trucks should be directed to deliver all construction material	Low	Should the mitigation be implemented, the increased traffic would cause drastic traffic impact to local residents causing a hindrance of traffic flow during peak hours

		after peak hours each day (i.e. 09:00-15:00)		
9. **Employment Creation:**	Medium-High	✓ The proposed development will create more employment opportunity during construction	Medium	
10. **Visual Impact:** The visual character of the area is that of developed area, urban area with low to high density residential developments located throughout the area. Taking the above into account, potentially negative impacts can still be expected in terms of the aesthetic quality of the surrounding area as a result of the proposed development. However, the impact of the development will be positive in the light of the proposed quality of the development as well as the proposed landscaping program.	Medium	✓ Construction site to be clearly demarcated and secured; ✓ No individuals to be allowed on construction site without the permission the permission of the project manager ✓ All waste material to be collected on a daily basis and stored within designated containers; ✓ Area where equipment would be stored to be fenced off and secured;	Low	
11. **Crime, safety and security:** Crime is anticipated to increase in	Medium	✓ No building activities to be allowed after hours during	Low	