destea
department of
economic, small business development,
tourism and environmental affairs
FREE STATE PROVINCE

(For official use only)

File Reference Number:	
Application Number:	
Date Received:	

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

1. This **environmental impact assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 as amended and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. This report format is current as of **13 February 2020**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. 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.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. 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.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
15. Shape files (.shp) for maps must be included in the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?	YES	NO ✓

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

Mang Geoenviro Services was appointed by Mangaung Metropolitan Municipality to conduct an Environmental Impact Assessment for the proposed township establishment on the ERF 77, ERF 1689, ERF 1690 and the remainder of the farm Botshabelo 826 in Botshabelo, Free State Province.

The project entails establishment of Botshabelo township for residential purposes on the Erf 77, Erf 1689, Erf 1690 and the remainder of the farm Botshabelo 826 within Mangaung Local Municipality in Free State Province. The proposed development involves clearing and preparing an area of approximately 86.06 hectares which will include the following infrastructures:

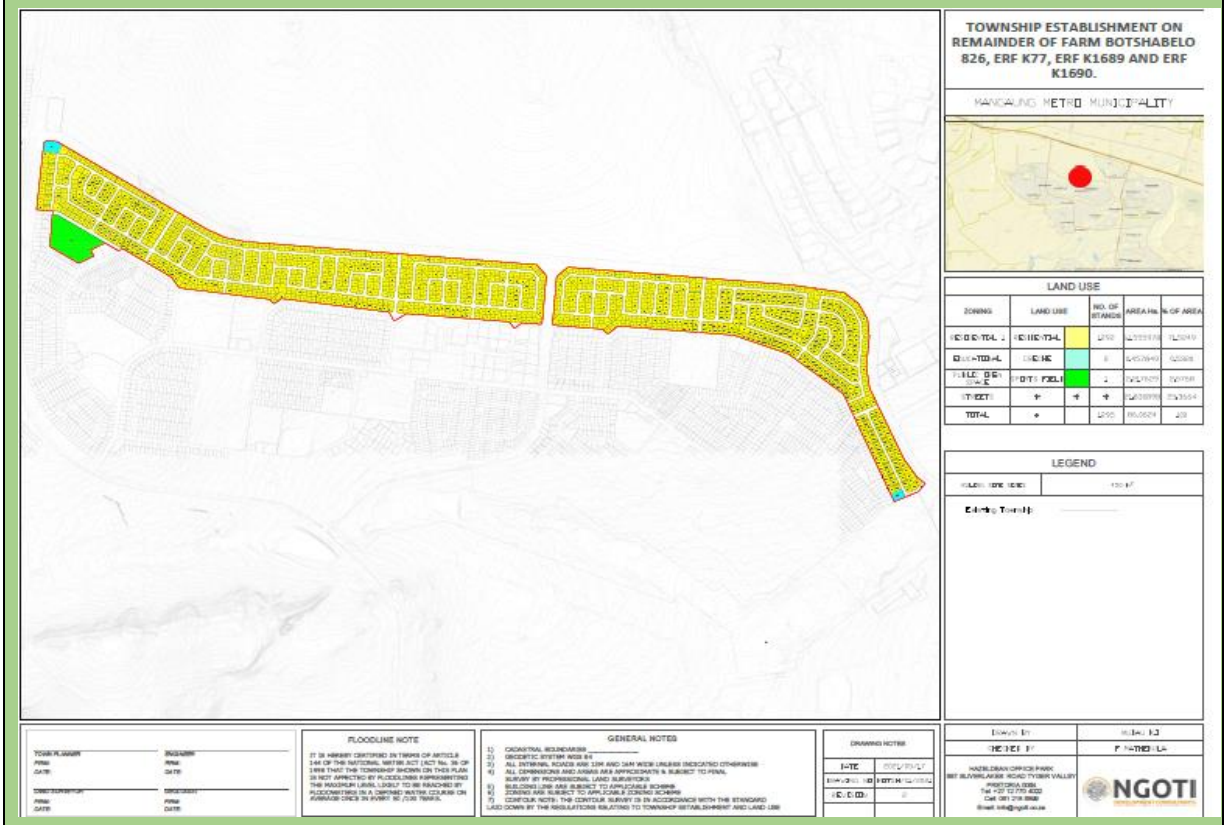
- 1292 Residential 1 - residential
- 2 Educational – crèche
- 1 Public open space – sports field
- Streets

The Scoping and EIA Process is being undertaken in terms of the National Environmental Management Act (Act no. 107 of 1998) (NEMA) read with the Environmental Impact Assessment Regulations, 2017 (GNR 326 of 7 April 2017).

LAND USE

ZONING	LAND USE		NO. OF STANDS	AREA Ha.	% OF AREA
RESIDENTIAL 1	RESIDENTIAL		1292	61.555978	71.5249
EDUCATIONAL	CRECHE		2	0.457849	0.5320
PUBLIC OPEN SPACE	SPORTS FIELD		1	2.217629	2.5768
STREETS	*	*	*	21.830898	25.3664
TOTAL	*		1295	86,0624	100

Locality Map



Due to land availability and service connections, the proposed sites are the only sites that has been identified for establishing a township during the consultation process with the Local Municipality. Therefore, no alternative site has been identified or considered during this study.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN 327,325 and 324	Description of project activity
Example: ***GN 327 Item xx xx): The construction of a bridge where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.***	***A bridge measuring 5 m in height and 10m in length, no wider than 8 meters will be built over the Orange river***
GN R325: Activity 15 - The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan	The proposed establishment of a township occupies an area of approximately 86 hectares.
GN R327: Activity 28 - Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	The proposed development is to establishment an area for residential purposes on different areas zoned transport, public open space and agriculture.

2. FEASIBLE AND REASONABLE ALTERNATIVES

"alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

(a) the property on which or location where it is proposed to undertake the activity;

(b) the type of activity to be undertaken;
(c) the design or layout of the activity;
(d) the technology to be used in the activity;
(e) the operational aspects of the activity; and
(f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by Appendix 1 (3)(h) of GN 326, Regulation 2014 as amended. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

The determination of whether 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. 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.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
The proposed development sites are located within the boundaries of an existing residential area with existing services and amenities; therefore, the proposed residential establishment will easily access those services and it will also have an easy access since it is located close to a main road.	29°12'19.12"S	26°41'27.32"E
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

In the case of linear activities:

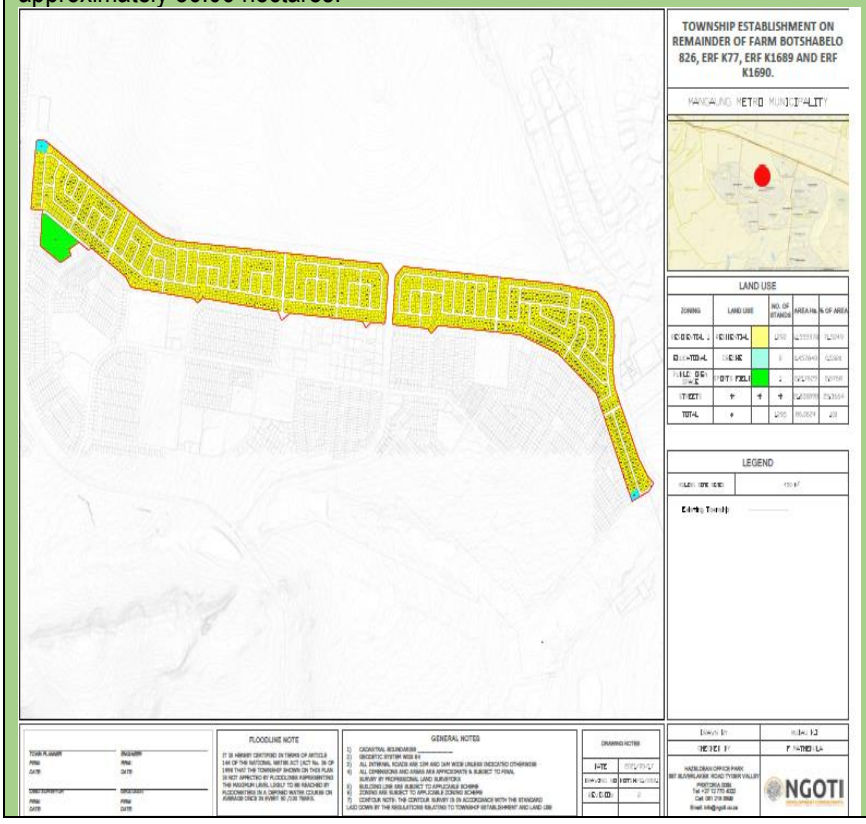
Alternative:	**Latitude (S):**	**Longitude (E):**
Alternative S1 (preferred)		
• Starting point of the activity		
• Middle/Additional point of the activity		

• End point of the activity		
Alternative S2 (if any)		
• Starting point of the activity		
• Middle/Additional point of the activity		
• End point of the activity		
Alternative S3 (if any)		
• Starting point of the activity		
• Middle/Additional point of the activity		
• End point of the activity		

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

b) Lay-out alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
The layout of the proposed development consists of 3 erven and 1 farm name which will be utilized for an establishment of 1295 sites on an area of approximately 86.06 hectares. 	29°12'19.12"S	26°41'27.32"E

Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

c) Technology alternatives

Alternative 1 (preferred alternative)
Alternative 2
Alternative 3

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)		
Scheduling alternative These are also known as sequencing or phasing alternative. In essence, this means rescheduling parts of an activity to occur at times when impacts are less. In this case an activity may comprise a number of components, which can be scheduled in a different order or at different times and as such produce different impacts. For example, activities that produce noise could be from 06:00 to 18:00 to minimise impacts. **Input alternative** Input alternative is most applicable where different raw materials or energy sources will be utilised. In this proposed project alternatives that could be considered could be using solar energy for power supply and using ground water for water supply to reduce the pressure from the Mangaung Metropolitan Municipality to supply service. **Design and Layout alternative** The design and the layout of the development must take into consideration the type of slope of the sites, especially during the construction phase so that no excessive dust particles are emitted, as it may have serious negative impacts among workers and the local residents. The Mangaung Metropolitan Municipality has identified Engineering designers who will be responsible for designing the development so as		

to avoid unpleasant aesthetic impacts which may be unacceptable to the community. **Demand alternative** Demand alternative occurs when the demand for housing can be met by alternative means. Establishment of township will reduce the demand of housing to people of Mangaung. If the demand of service increase beyond the capacity of housing, then operational cost will also increase. **Process alternative** The process alternative is also an engineering issue, therefore the Mangaung Metropolitan Municipality has appointed a specialist to assist in identifying the process alternative and has considered both technology and equipment alternatives to achieve the same goal.		
Alternative 2		
Alternative 3		

e) No-go alternative

The no-go alternative is the option not to go ahead with the development. The no-go alternative will only be considered as an alternative if it is concluded that the preferred alternative will have significant negative impacts on the environment which cannot be reduced or managed to an acceptable level. As there it has already been indicated that there is a need and desirability for the proposed development it is anticipated that this development will relieve the demand for housing and basic services in the region. It is anticipated that the no-go alternative will constrain the development planning of the Local Municipality.

Paragraphs 3 – 13 below should be completed for each alternative.

3. PHYSICAL SIZE OF THE ACTIVITY

a) Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:	**Size of the activity:**
Alternative A1[1] (preferred activity alternative)	86.06 hectares
Alternative A2 (if any)	m^2
Alternative A3 (if any)	m^2

or, for linear activities:

[1] "Alternative A.." refer to activity, process, technology or other alternatives.

Alternative:	Length of the activity:
Alternative A1 (preferred activity alternative)	M
Alternative A2 (if any)	M
Alternative A3 (if any)	M

b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:	Size of the site/servitude:
Alternative A1 (preferred activity alternative)	86.06 hectares
Alternative A2 (if any)	m^2
Alternative A3 (if any)	m^2

4. SITE ACCESS

Does ready access to the site exist?	YES ✓	NO
If NO, what is the distance over which a new access road will be built		N/A

Describe the type of access road planned:

The location of the proposed development can be accessed through the unnamed road from the main road (N8).

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (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 map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s;)
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (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 degrees and decimal

minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

6. LAYOUT/ROUTE PLAN

A detailed site or route 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 property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

8. SITE PHOTOGRAPHS

Colour photographs from the centre 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 Appendix B to this report**.** It must be supplemented with additional photographs of relevant features on the site, if applicable.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix C 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.

10. ACTIVITY MOTIVATION

Motivate and explain the need and desirability of the activity (including demand for the activity):

1. Is the activity permitted in terms of the property's existing land use rights?	YES	NO✓	Please explain
The proposed development sites are located within areas zoned as Public Open Space, Transport and Agriculture; however, they are all boarded by an existing residential area. A SPLUMA application is being lodged by Ngoti Town planners for the zoning to change in the with the various land uses for the proposed development.			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES✓	NO	Please explain
This project is in line with PSDF Pillar 2: Spatial Planning - Integrated spatial planning and land use management in line with Category D of the special planning categories (Dm) Mixed used developments.			
(b) Urban edge / Edge of Built environment for the area	YES✓	NO	Please explain
The proposed development is located within boundaries of a residential area of Botshabelo.			
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES✓	NO	Please explain
South Africa has been experiencing rapid urbanization for decades, and this will continue to happen particularly in metropolitan areas and major towns. Combined with increasing urban poverty, chronic shortages of serviced land and adequate housing and inadequate urban policies and planning approaches, large numbers of urban dwellers have had few other options than to settle in life and at times health threatening conditions. This situation is posing a significant threat to the social, economic, and environmental sustainability of cities. The City of Mangaung is not immune to all these challenges. It has a huge housing backlog compared to other municipalities in the Free State. One of the IDP (2017-2022) objectives is to evolve integrated human settlements with varied housing typologies. Furthermore, the municipality will strive to ensure that its future built environment must at least provide for development of suitably located and affordable housing (shelter) and decent human settlements. It is evident that the development is in line with the IDP of the Mangaung Metropolitan Municipality.			
(d) Approved Structure Plan of the Municipality	YES✓	NO	Please explain
Erf 77, Erf 1689, Erf 1690 and the remainder of the farm Botshabelo 826 which is proposed for future residential development according to the Approved North Western Structure Plan of the Mangaung Metropolitan Municipality.			

(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES	NO✓	Please explain
The development is within an area earmarked for future residential development, the environmental management priorities of the area have been set in line with the anticipated impacts. From the Environmental Assessment, the proposed development will not result in any major negative impacts on the environment. It is anticipated that sound environmental management measures will be put in place as well as continuing monitoring of the operations. These will further ensure that the environmental priorities set for the area are maintained**.**			
(f) Any other Plans (e.g. Guide Plan)	YES	NO✓	Please explain
It is not anticipated that the development will affect any other local or provincial plans.			
3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES✓	NO	Please explain
One of the IDP (2017-2022) objectives is to evolve integrated human settlements with varied housing typologies. Furthermore, the municipality will strive to ensure that its future built environment must at least provide for development of suitably located and affordable housing (shelter) and decent human settlements. It is evident that the development is in line with the IDP of the Mangaung Metropolitan Municipality. It is therefore inline within the timeframes intended.			
4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES✓	NO	Please explain
As per discussions above, the Free State Province, especially Mangaung, has a major housing backlog which the all relevant departments prioritise to enhance. There is major public need in Mangaung and Bloemfontein for housing opportunities.			
5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES	NO✓	Please explain
The proposed water demand for the proposed development is estimated between 2500.00 KL/day and 1520.00 KL and the municipality is still in the process of confirming available capacity for the proposed demands. should there be inadequate capacity there will be a need to improve.			

6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES✓	NO	Please explain
All necessary services and infrastructure are already in place for the proposed development, mainly due to the area already earmarked for residential development and also due to other residential developments adjacent and near the proposed sites.			
7. Is this project part of a national programme to address an issue of national concern or importance?	YES✓	NO	Please explain
The proposed development constitutes the development for residential purposes. As discussed above, housing is a major issue of concern due the housing backlog in the Free State Province and Mangaung Metropolitan Municipality. Not only is there a housing backlog in the Free State province, but in South Africa as a whole. As a result, the project will address a national concern.			
8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES✓	NO	Please explain
The proposed property is earmarked by the Approved Mangaung Structural plan as a property for future Residential Development. As a result, location factors favour the proposed property.			
9. Is the development the best practicable environmental option for this land/site?	YES✓	NO	Please explain
The proposed development sites are currently vacant and close to residential. However, due to the low-agricultural potential of the property, the land was/is left dormant for years. As a result, and as per the Mangaung`s IDP, low potential agricultural land should be rezoned for residential development.			
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES✓	NO	Please explain
Due to the property being located on an area earmarked for residential development, and mainly due to the area located already in a residential area with adjacent residential townhouses, the property has very little, none, negative environmental impacts. The low-agricultural potential on the property makes the proposed sites ideal to be rezoned for residential purposes. The proposed project will hold massive positive socio-economic impacts mainly as a result of housing opportunities during the operational phase and also job creation during the construction phase of the project. Therefore, the potential positive impacts outweigh the possible negative impacts.			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES✓	NO	Please explain
The proposed development will prompt other developments in the area as there will be decentralisation of services into the main central business areas of the Mangaung metropolitan area which will benefit the society in having access to services in close proximity. it will also improve and aid in more business opening in the areas			

12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO✓	Please explain
No person`s rights will be negatively affected. The property is earmarked for residential development by the municipality and the majority of the surrounding area is already developed for residential use.			
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO✓	Please explain
The activity is situated within the urban edge of the Bloemfontein.			
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO✓	Please explain
The project contributes to SIP 7 Integrated urban space and public transport programme. Coordinate planning and implementation of public transport, human settlement, economic and social infrastructure and location decisions into sustainable urban settlements connected by densified transport corridors. This will focus on the 12 largest urban centres of the country, including all the metros in South Africa. Significant work is underway on urban transport integration.			
15. What will the benefits be to society in general and to the local communities?			Please explain
Job creation will be created during the construction phase of the project. One of the EMP conditions stipulate that local labour are to be used during the construction phase. The project will also hold major positive socio-economic benefits during the operational phase mainly due to the provision of housing opportunities.			
16. Any other need and desirability considerations related to the proposed activity?			Please explain
The development will address the issue of resettlement of people in informal settlements. there is also a high risk of encroachment on this land should the development not be approved as planned for by the MLM.			
17. How does the project fit into the National Development Plan for 2030?			Please explain
It will contribute towards the achievement of the following enabling milestones of the NDP 2030: • Increase employment. • Ensure that skilled, technical, professional and managerial posts better reflect the country's racial and gender and disability makeup. • Broaden social cohesion and unity while redressing the inequalities of the past.			
18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.			
Through the undertaking of this Assessment Process by a competent EAP, informed by guidelines, the consideration of impacts and alternatives (advantages and disadvantages coupled thereto) has been made. Moreover, the conducting of public participation and specialist investigations form part of the process, whilst mitigation measures and the need and desirability of the proposed project were interrogated. This ensured that all provisions of the Act were considered and as such Integrated Environmental Management were accounted for.			

19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

Through the undertaking of the Assessment process by a competent EAP, informed by guidelines, the consideration of impacts and alternatives (advantages and disadvantages coupled thereto) has been made. Moreover, the conducting of a public participation process and specialist investigations formed part of this basic assessment process, whilst mitigation measures and the needs and desirability of the proposed project were interrogated. This ensured that all provisions of the Act were considered and as such integrated environmental management were accounted for as follow:

(2) Environmental Management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural heritage and social interests equitably.

The goal of this EIAR is to identify and mitigate potential socio-economic impacts in order to meet the terms of Section 24 of the Constitution.

(3) Development must be socially, environmentally and economically sustainable.

The overall goal of this EIAR is to predict, identify and manage potential positive and negative impacts in the socio-economic, cultural-heritage and biophysical environments in order to meet the needs of present generations without compromising the needs of future generations which will give effect to sustainable development.

(4)(a) Sustainable development requires the consideration of all relevant factors including the following:

i. That the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
ii. that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
iii. that the disturbance of landscapes and sites that constitute the nation´s cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied;
iv. that waste is avoided, or where it cannot be altogether avoided, minimised and reused or recycled where possible and otherwise disposed of in a responsible manner;
v. that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;
vi. that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised;
vii. that a risk averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions; and
viii. that negative impacts on the environment and on people´s environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.

An Environmental Management Program Report (EMP`r) was compiled to mitigate and manage all activities during the planning, construction and operational phases.

(b) Environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option.

All aspects, including socio-economic, cultural-heritage and biophysical was evaluated and assessed in order to minimize potential negative impacts which will give effect to Integrated Environmental Management, as set out in Chapter 5 of NEMA, 1998.

> *(c) Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.*

A public participation process was undertaken in terms of Section 41 of the NEMA EIA Regulations, which came into effect on 4 December 2014, in order to give effect to Section 32 of the Constitution in such a way that adherence is given to Section 24 of the Constitution.

> *(d) Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination.*

The proposed project will ensure housing opportunities in the Bloemfontein area which will assist in reducing the housing backlog in the Bloemfontein area.

> *(e) Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle.*

The EMPr will be applicable throughout the lifecycle of the project.

> *(f) The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.*

A public participation process was undertaken in terms of Section 41 of the NEMA EIA Regulations, which came into effect on 4 December 2014, in order to give effect to Section 32 of the Constitution in such a way that adherence is given to Section 24 of the Constitution.

> *(g) Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.*

The Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA) decision making process has to be in accordance with the above.

> *(h) Community wellbeing and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means.*
> *(i) The social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment.*

This Impact Assessment report does give effect to Section 5 of NEMA whereby all social, economic and environmental impacts of activities were considered, assessed and evaluated.

> *(j) The right of workers to refuse work that is harmful to human health or the environment and to be informed of dangers must be respected and protected.*

Human rights will be taken into account during all phases of the proposed project.

(k) Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.

The decision will take place in an open and fair manner and to give effect to Section 32 of the Constitution. I&AP's will be notified of the decision in terms of the requirements as set out in Section 41 of the NEMA EIA Regulations, 2014.

(l) There must be intergovernmental coordination and harmonisation of policies, legislation and actions relating to the environment.

All relevant Governmental Authorities will be considered during the EIA process to give their inputs on the project.

(m) Actual or potential conflicts of interest between organs of state should be resolved through conflict resolution procedures.

Actual or potential conflicts of interest between organs of state should/will be resolved through conflict resolution procedures.

(n) Global and international responsibilities relating to the environment must be discharged in the national interest.
(o) The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people´s common heritage.

Through the appointment of various specialists, mitigation measures have been drawn up to ensure that the proposed project does not harm the environment. Architectural plans were designed according to South African Norms and Standards.

(p) The costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.

An EMPr were compiled in order to prevent or minimize any potential negative impacts to the environment. It will be the responsibility of the Applicant and Contractor to adhere to all measures set out in the EMPr, in order to give effect to Section 28 (1) of NEMA.

(q) The vital role of women and youth in environmental management and development must be recognised and their full participation therein must be promoted.
(r) Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.

11. 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, if applicable:

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
National Environmental Management Act, 1998 (Act 107 of 1998).	The Project triggers activity 28 of listing Notice 1 and activity 15 of the Listing Notice 2 of the Environmental Impact Assessment Regulations published under the National Environmental Management Act.	Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs	This application
Constitution of the Republic of South Africa 108 of 1996	Provision for access to safe environment, housing and education	Mangaung Metropolitan municipality	1996
Municipal Systems Act 32 of 2000	Provision of proper settlements and utilities infrastructure	Mangaung Metropolitan municipality	2000
Mangaung Metropolitan Municipality, draft built environment performance plan	Township development	Mangaung Metropolitan Municipality	2019/2020 – 2020/2021
Spatial Planning and Land Use Management Act 16 of 2013	Provision of land for township establishment	Mangaung Metropolitan Municipality	
Spatial Development Framework	Township Establishment	Metropolitan Municipality	2005 - 2006

POLICY/ GUIDELINES	ADMINISTERING AUTHORITY
Guidelines for EIA Regulations	DESTEA
Guidelines for Specialists	DESTEA
Guidelines for Public Participation	DESTEA
Guidelines for Need and Desirability	DESTEA
Guideline for Involving Biodiversity Specialists in EIA Processes	DESTEA
Guideline for Environmental Management Plans	DESTEA
Regulations relating to the management of human remains.	NDH

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?
If YES, what estimated quantity will be produced per month?

YES✓	NO
The quantity of waste produced will be determined during the construction phase	

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

Waste generated during the construction phase will be temporarily stored in waste skips and disposed of at a designated landfill site. Where possible, any recyclable waste will be transported to the recycling facility.

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

Construction waste will be disposed of at a designated landfill site.

Will the activity produce solid waste during its operational phase?
If YES, what estimated quantity will be produced per month?

YES✓	NO
The quantity of waste produced will be determined during the operational phase	

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

Solid waste generated during the operational phase will be disposed of at the municipal landfill site.

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Southern Landfill site

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

Waste will be disposed at other available landfill sites within the municipality.

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, then 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 NEM:WA? YES / NO✓
If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility?	YES	NO✓

If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	YES	NO✓
If YES, what estimated quantity will be produced per month?		m^3
Will the activity produce any effluent that will be treated and/or disposed of on site?	YES	NO✓

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.

Will the activity produce effluent that will be treated and/or disposed of at another facility?	YES	NO✓

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:

All waste water that will be generated will be in the form of sewerage from the operational phase of the proposed development. This waste will be connected and disposed to municipal sewer system.

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other that exhaust emissions and dust associated with construction phase activities?	YES	NO✓
If YES, is it controlled by any legislation of any sphere of government?	YES	NO✓

If YES, the applicant must 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:

The only emission that will result from the construction phase of the proposed development which will be dust from movement of heavy machinery.

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?	YES	NO✓

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?	YES	NO✓
If YES, is it controlled by any legislation of any sphere of government?	YES	NO

Describe the noise in terms of type and level:

There will be no noise generating activities other than noise from the movement of construction equipment. This noise will not be for prolonged periods.

13. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

Municipal✓	Water board	Groundwater	River, stream, dam or lake	Other	The activity will not use water

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:		litres
Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?	YES	NO✓

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

14. ENERGY EFFICIENCY

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

Energy measures such as LED lights and solar power will be considered for the township development.

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

The services report which details the energy requirements was not yet available during the compilation of this draft Environmental Impact Assessment Report. However, the use of LED lights and solar power should be considered as an alternative for energy source.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A): **N/A**

2. Paragraphs 1 - 6 below must be completed for each alternative.

3. Has a specialist been consulted to assist with the completion of this section? YES✓ | NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physical address:

Province	Free State
District Municipality	Mangaung Metropolitan Municipality
Local Municipality	Mangaung Metropolitan Municipality
Ward Number(s)	
Farm name and number	Erf 77, Erf 1689, Erf 1690 and the remainder of the farm Botshabelo 826
Portion number	Remainder of the farm Botshabelo 826
SG Code	F03200130000007700000 F03200130000168900000 F03200130000169000000 F03200000000082600000

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

Public Open Space, Transport and Agriculture.

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Is a change of land-use or a consent use application required? YES | NO✓

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat✓	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

Alternative S2 (if any):

Flat	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

Alternative S3 (if any):

Flat	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

2. LOCATION IN LANDSCAPE

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

2.1 Ridgeline		2.4 Closed valley		2.7 Undulating plain / low hills	
2.2 Plateau		2.5 Open valley		2.8 Dune	
2.3 Side slope of hill/mountain		2.6 Plain	✓	2.9 Seafront	
2.10 At sea					

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following?

	Alternative S1:		**Alternative S2 (if any):**		**Alternative S3 (if any):**	
Shallow water table (less than 1.5m deep)	YES	NO✓	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO✓	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO✓	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO✓	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO✓	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO✓	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO✓	YES	NO	YES	NO
An area sensitive to erosion	YES	NO✓	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted.

4. GROUNDCOVER

Indicate the types of groundcover present on the site. The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition[E]	Natural veld with scattered aliens[E] ✓	Natural veld with heavy alien infestation[E]	Veld dominated by alien species[E]	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil✓

If any of the boxes marked with an "[E] "is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	YES	NO✓	UNSURE
Non-Perennial River	YES	NO✓	UNSURE
Permanent Wetland	YES	NO✓	UNSURE
Seasonal Wetland	YES	NO✓	UNSURE
Artificial Wetland	YES	NO✓	UNSURE
Estuarine / Lagoonal wetland	YES	NO✓	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

Natural area✓	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station [H]

Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential[A]	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant[A]	Nature conservation area
Medium industrial [AN]	Train station or shunting yard [N]	Mountain, koppie or ridge
Heavy industrial [AN]	Railway line [N]	Museum
Power station	Major road (4 lanes or more) [N]	Historical building
Office/consulting room	Airport [N]	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam[A]	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

If any of the boxes marked with an "N "are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO✓
Core area of a protected area?	YES	NO✓
Buffer area of a protected area?	YES	NO✓
Planned expansion area of an existing protected area?	YES	NO✓
Existing offset area associated with a previous Environmental Authorisation?	YES	NO✓
Buffer area of the SKA?	YES	NO✓

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:	YES	NO✓
	Uncertain	

The proposed development sites have no heritage attributes were identified; however, they falls under a very high sensitive paleontological area.

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

The palaeontological assessment was considered for the proposed development to investigate any possible attributes present within the vicinity of the site since the heritage sensitive was low. There were no outcrops identified during the site visit; however, a chance protocol must be implemented.

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

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

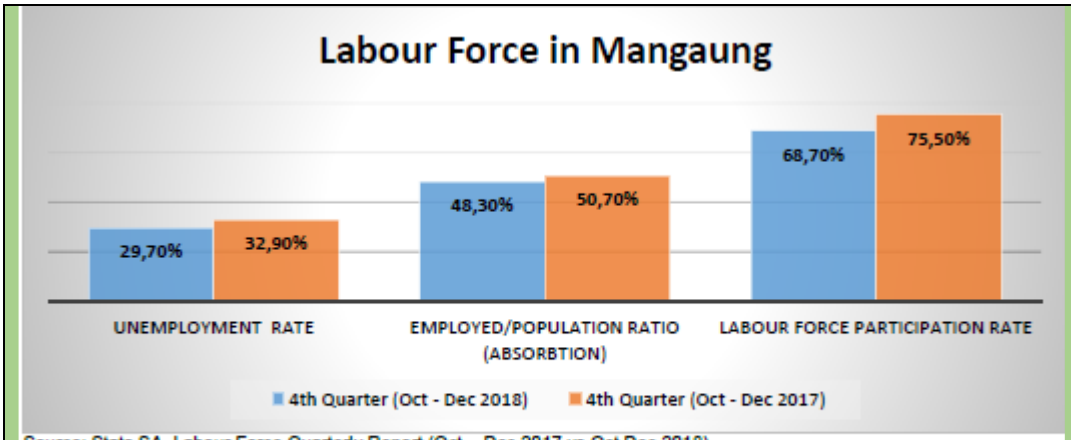
Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

In the case of Mangaung the following Table is key as a guide of how many people from which district are working on a gender basis. A note should be taken that there has not been any rigorous attempt to calculate the numbers since the incorporation of outlying towns in 2016.

Area	Male	Female	Total
Botshabelo	51 026	54 758	105 784
Bloemfontein	103 270	103 198	206 468
ThabaNchu	34 084	34 557	68 641
Soutpan	1 003	895	1 898
Dewetsdorp	14 297	13 200	27 497
Wepener	13 288	10 998	24 286
vanStadensrus	2 945	1 900	4 845

The above Table shows that in Mangaung more men are working than women and the biggest centre of employment remains Bloemfontein followed by Botshabelo. Approximately 439 500 people or 49% of the population in Mangaung are economically active. This number is twice the number of 260 900 that was recorded two decades ago and was 38% of the total population.

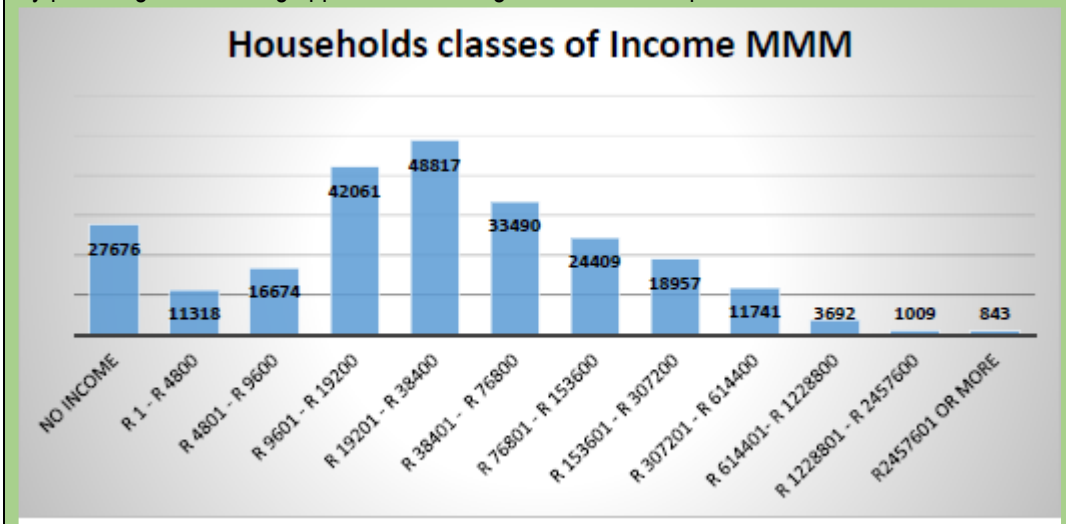


Source: Stats SA. Labour Force Quarterly Report (Oct – Dec 2017 vs Oct Dec 2018)

The unemployment rate fell by 3.2% in 2018 from 32.9% in 2017 which is encouraging, however the job loses where also recorded at 2.4% from the 50.7% in 2017 and economically active or looking for work fell by 6.8% from 75.5% in 2017.

Economic profile of local municipality:

In line with the merging of other towns the city has a total number of 265 414 households in Mangaung. The Economic Profile of the Mangaung metropolitan Municipality is summarized below. This project will contribute by providing new working opportunities during the construction phase.



Source: Stats SA, Community Survey 2016

Level of education:

According to the Community Survey, 2016, Mangaung Metropolitan Municipality has a population of approximately 787 930, and as far as the population distribution is concerned, more than half of the population is concentrated in the Bloemfontein area (63%), followed by Botshabelo (24%), Thaba Nchu (9%), Dewetsdorp and Wepener (1.5%) respectively with Soutpan (0.8%) and Van Stadensrus at (0.2%).

Distribution of population (20 years and above) by level of education,340 have no schooling, 778 completed

some primary education, 315 have completed primary,2385 have completed the secondary education, 1884 have completed Grdae 12/ std 10, 402 have completed higher education and 7 others have completed tertiary education.

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	Unknown	
What is the expected yearly income that will be generated by or as a result of the activity?	Unknown	
Will the activity contribute to service infrastructure?	YES✓	NO
Is the activity a public amenity?	YES	NO✓
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	Unknown	
What is the expected value of the employment opportunities during the development and construction phase?	Unknown	
What percentage of this will accrue to previously disadvantaged individuals?	Unknown	
How many permanent new employment opportunities will be created during the operational phase of the activity?	Unknown	
What is the expected current value of the employment opportunities during the first 10 years?	Unknown	
What percentage of this will accrue to previously disadvantaged individuals?	Unknown	

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult http://bgis.sanbi.org or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

a) Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)

Systematic Biodiversity Planning Category				**If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan**
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA) ✓	No Natural Area Remaining (NNR)	

b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	60%	The footprint of the land on the proposed development is bare natural exposed soil, with little vegetation as some of the areas are used as grazing field.
Near Natural (includes areas with low to moderate level of alien invasive plants)	30%	On the boundary near the main road invader plants can be noted with a lot of litter from the informal settlements. This waste consists of general household waste and few rubble materials within the project area.
Degraded (includes areas heavily invaded by alien plants)	%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	10%	A gravel road is present on the Northern site which passes the proposed development sites.

c) Complete the table to indicate:

(i) the type of vegetation, including its ecosystem status, present on the site; and

(ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems						
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and unchanneled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline	
	Endangered							
	Vulnerable							
	Least Threatened✓	YES	NO✓	UNSURE	YES	NO✓	YES	NO ✓

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

The Mangaung area is dominant of grasslands. The Bloemfontein dry grassland cover the largest area. Other vegetation in the area includes riparian thickets and pan associated vegetation.

There are no critical endangered ecosystems within the jurisdiction of the municipality.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Noordkaap Bulletin	
Date published	30 September 2021	
Site notice position	**Latitude**	**Longitude**
	29°12'22.03"S	26°40'40.22"E
Date placed	08 September 2021	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 326

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 326

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Hannes Maree	Department of Police, Road and Transport	051 409 8606
Registry	Department of Human Settlement	
Ward Councillor Doctor Nikelo	Mangaung Metropolitan Municipality Ward Councillor	076 282 9254
Registry	Department of Water and Sanitation	015 405 9000
Moswana Mashego	SANRAL	
Thobile Duma	SANRAL	033 392 8167
Fundiswa Mkalali	Department of Agriculture and Rural Development	060 978 3255

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft Scoping Report is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to the Final BAR as Appendix E3.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
Vivian Minaar	Mangaung Metropolitan Municipality	051 405 8429		vivian.minaar@mangaung.co.za	P O Box 3704 Bloemfontein 9300
Hannes Maree	Department of Police, Road and Transport	051 409 8606		fsroadplanning@gmail.com	
Registry	Department of Human Settlement				
Ward Councillor Doctor Nikelo	Mangaung Metropolitan Municipality Ward Councillor	076 282 9254			P O Box 3704 Bloemfontein 9300
Registry	Department of Water and Sanitation	015 405 9000			
Moswana Mashego	SANRAL				
Thobile Duma	SANRAL	033 392 8167		dumat@nra.co.za	58 van Eck Place Mkondeni Pietermaritzburg KwaZulu-Natal 3200

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 as amended 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. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.
A complete impact assessment in terms of Regulation 19(3) of GN 326 must be included as Appendix F.

Alternative (preferred alternative) Design/ Planning Phase			
Identified Impacts- Planning Phase			
Impact	Significance rating of impact before mitigation	Proposed mitigation	Significance rating of impact after mitigation
Direct Impacts			
Poor Design- Structural failures	High (Negative)	Ensure compliance with the industry standards	Low (Negative)
Indirect Impacts			
Disregard of legislative requirement	High (Negative)	Ensure compliance with relevant legislation and legal standards	Low (Negative)
Construction Phase			
Identified Impacts- Construction Phase			
Impact	Significance rating of impact before mitigation	Proposed mitigation	Significance rating of impact after mitigation
Direct Impacts			
Loss of vegetation and faunal habitat	Medium (Negative)	Maintain the viability of the indigenous seed bank in excavated soil so that it can be used for subsequent re-vegetation of any disturbed areas. • Prevent impact of construction activities to extend on to neighbouring	Low (Negative)

		land demarcated and fenced construction camp; strict control of labourers. • Avoid unnecessary loss of indigenous trees.	
Increased risk of dust and erosion from clearing of vegetation and earth moving vehicles	Medium (Negative)	All vehicles must be along existing lines or tracks. • Erosion protection measures must be implemented on the site to reduce erosion and sedimentation of the receiving environment. Measures could include: • Sediment traps • Sandbags • Bunding around soil stockpiles. • Adequate dust control strategies should be applied to minimise dust disposition; they can include periodic spraying of roads with water, cover trucks to prevent dust emission during transportation	Low (Negative)
Waste collection services	High	Confirmation from the municipality must be sought to ensure the municipal waste collection service will collect the waste generated by the proposed development/ activity	Low (Negative)
Potential noise impact from the use of construction equipment	Medium (Negative)	Limit construction activities to day time hours. • Construction personnel must wear personal protective equipment where appropriate. • All machineries to be utilised on the site must be fitted with buffers and must be maintained in	Low (Neutral)

		good working conditions in order to minimize noise. • The contractor shall warn all local community that could be affected by the noise generation from construction activities.	
Increase in stormwater runoff resulting from construction activities	Medium (Negative)	To prevent stormwater damage, the increase stormwater runoff resulting from construction activities must be estimated and drainage patterns accessed accordingly. • Temporary cut off drains and berms may be required to capture stormwater and promote infiltration.	Low (Negative)
Potential health injuries to construction personnel as a result of construction work.	Medium (Neutral)	The contractor must ensure that all construction personnel are provided with adequate PPE for use where appropriate.	Low (Negative)
Disturbance of Heritage Resources from construction activities.	Low (Negative)	SAHRA must immediately be alerted in case evident or artefacts, paleontological fossils, additional graves or heritage resources are discovered during the course of development.	Negligible
Socio-economic Impact: Employment creation and skills development opportunities during the construction phase, which is expected to give rise to new jobs. This impact is rated as positive.	Medium (Positive)	Enhance the use of local labour and local skills as far as reasonably possible. • Where the required skills do not occur locally, and where appropriate and applicable, ensure that relevant local individuals are trained. • Ensure that an equitable percentage allocation is provided for local labour employment	High (Positive)

		as well as specify the use of small-to-medium enterprises and training specifications in the Contractors contract. • Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible.	
Air quality impact: Emissions from construction vehicles and generation of dust as a result of earthworks	Medium (Negative)	Ensure that cleared areas and unpaved surfaces are sprayed with water (obtained from an approved source) to minimise dust generation. • Approved soil stabilizers may be utilised to limit dust generation. • Ensure that construction vehicles travelling on unpaved roads do not exceed a speed limit of 40 km/hour. • Adequate dust control strategies should be applied to minimise dust deposition, for example: Periodic spraying of the entrance road and environmentally friendly dust control measures (e.g. mulching and wetting) where and when dust is problematic	Low (Negative)
No-go alternative			
Direct Impacts: • None of the impacts mentioned above will occur. • If the proposed project does not proceed, increased income and economic spin-off activities will not be realised. **Indirect Impacts:** There are no indirect impacts during the construction phase for the No-go Option. **Cumulative Impacts:** There are no cumulative impacts during the construction phase for the No-go Option.			

Operational Phase			
Identified Impacts- Operational Phase			
Impact	Significance rating of impact before mitigation	Proposed mitigation	Significance rating of impact after mitigation
Direct Impacts			
Visual impacts will increase during the operation phase due to development and lighting	High	Lighting and layout to be maintained as per the layout plan to ensure bright street lighting is not permitted	Low
Lack of road maintenance will lead to a deterioration in the internal and access roads	High	Road maintenance must be done regularly by the Mangaung Metropolitan Municipality	Low
Risk of fire explosion	Medium (Negative)	• Prevent spread of fire to surrounding buildings or vegetation • Adequate firefighting training must be given to staff. • Ensure that relevant signage e.g. no smoking, is displayed in potentially dangerous areas and is abided by.	Low (Negative)
Socio-economic Impact: Skills development opportunities and economic spin off activities will also occur during the operational phase. This impact is rated as positive.	Medium (Positive)	• Enhance the use of local labour and local skills as far as reasonably possible. • Where the required skills do not occur locally, and where appropriate and applicable, ensure that relevant local individuals are trained. • Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible.	High (Positive)
Indirect Impacts			
Impact on the surrounding community in terms of visibility and great environment	Medium (Negative)	• Ensure that surrounding gardens are well maintained. The planting of indigenous vegetation is encouraged.	Low (Negative)

		• Use water sparingly in maintaining gardens. • Institute an appropriate building and site maintenance programme.	
No-go alternative			
Direct Impacts: • None of the impacts mentioned above will occur. • If the proposed project does not proceed, increased income and economic spin-off activities will not be realised. **Indirect Impacts:** There are no indirect impacts during the construction phase for the No-go Option. **Cumulative Impacts:** There are no cumulative impacts during the construction phase for the No-go Option.			

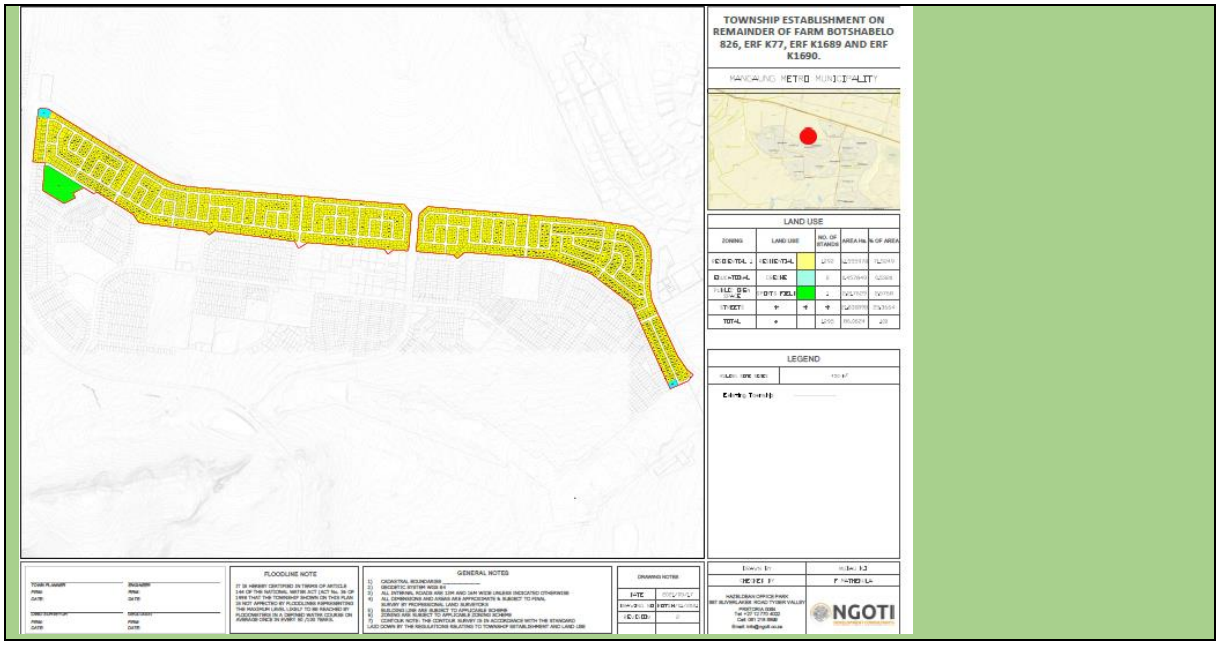
2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity 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 A (preferred alternative)

Site alternative can be either for the entire development where the activity is proposed on a totally different site, or for certain components of it. In terms of the proposed development, the site alternative will not be further investigated since the applicant is the landowner and has no other land available for residential development in the area, which results in the proposed development occurring on Erf 77, Erf 1689, Erf 1690 and the remainder of the farm Botshabelo 826 or not occurring at all in such instances the no-go alternative will play an important role.

Layout of the proposed development.



Alternative B

Alternative C

No-go alternative (compulsory)

The no-go alternative is the option not to go ahead with the development. The no-go alternative will only be considered as an alternative if it is concluded that the preferred alternative will have significant negative impacts on the environment which cannot be reduced or managed to an acceptable level. As there it has already been indicated that there is a need and desirability for the proposed development it is anticipated that this development will relieve the demand for housing and basic services in the region. It is anticipated that the no-go alternative will constrain the development planning of the Local Municipality.

SECTION E. 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✓	NO

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.

GENERAL ENVIRONMENTAL MANAGEMENT STATEMENT

Roles and Responsibilities

- An EMPr for site establishment, construction and operational phase must be finalized and approved by DESTEA prior to the contractor moving onto site.
- The Environmental Control Officer (ECO) must be appointed prior to site development and construction to prevent contravention of the approved EMPr and Environmental Authorization.
- An Environmental Liaison Officer (ELO) must inspect the site during the construction phase on a weekly basis.
- The working areas must be clearly demarcated by the ECO prior to commencement of the construction and no access is to be allowed in sensitive areas.
- The ECO is to conduct monthly audits and prepare monthly audit reports. Copies of these reports are to be provided by the ECO to the developer and DESTEA. The ECO duties extend to the end of the construction phase.
- The proponent will ultimately be responsible for the implementation of the operational EMPr.

DESIGN PHASE

Engineering Design

- Must accommodate spills containment slabs to assist in the containment of accidental spillage during construction phase (concrete and cement batching on site).
- A storm water management plan must be prepared once the engineering design of the site has been finalized.

CONSTRUCTION PHASE

Noise pollution

- Regular maintenance of machinery must be done, as per the manufacturer's instruction.
- Working hours should be limited from 07:00 to 17:00 on weekdays, from 07:00 to 13:00 on Saturday and no work must be conducted on Sundays.
- Construction employees should be encouraged to not generate noise, which is not essential to construction.
- In the event of employment being noisy during lunch breaks It could impact neighbouring properties.

Air Pollution

- Water should be sprayed on the construction access road during the dry/windy periods
- Construction phase stockpiles which have the potential of generating dust must be covered with tarpaulin/plastic sheeting.
- Maintain construction vehicles and machinery to control exhaust emissions.

Water Pollution

- Construction activities must remain within the footprint of the development.
- Construction machinery must be maintained by a suitably qualified mechanic, at an appropriately lined site, during working hours, so that diesel and /or oil leaks are avoided.
- Prevent run-off by constructing diversion berms and / or placing straw bales on denuded areas.

Erosion Measures

- Should erosion become a problem during the construction phase then diversion berms and drains shall be constructed to divert run-off away from exposed area.
- During this phase, bales can be used as filters across run-off pathways

Accidental Spillage

- Spills shall be cleared up immediately
- The contaminated soils and the spilled material shall be taken to the nearest registered landfill site capable of receiving such spills
- A registered of all incidents shall be kept on site showing measures taken to clear up the spillages

Heritage Issues

- During construction, if heritage findings are made (graves, archaeological objects, etc), SAHRA should be contacted and works to be stopped immediately.
- A chance find protocol must be implemented, as the site has a high paleontological sensitivity. Mitigation measures contained in the Environmental Management Plan as well as the specialist recommendations to be implemented of "find chance protocol"

Health and Safety

- Traffic signage shall be erected to advice people of machinery/ construction vehicles, driving in the area.
- Pollution that could be detrimental to humans, flora and fauna shall be prevented as much as possible.
- Construction employees must be restricted to the development area; they must be warned not to trespass on the neighbouring properties
- Point's men must be used at areas where children will be crossing to ensure their safety to school or their homes/households
- Emergency contact numbers must be available on site, and an emergency kit to assist if someone get injured before help arrives
- Fire protection equipment such as, fire extinguisher and hose.

Ecology and biodiversity

There are various plant species found in the footprint area. Of these species, none was found to be of conservation concern (red data species).

There must be an alien invasive species plan that must be in place to prevent re-invasion of these alien plants

Is an EMPr attached?	YES✓	NO

The EMPr must be attached as Appendix G.

The details of the EAP who compiled the EIAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this EIAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

Phakwago M. Kabelo

_____

NAME OF EAP

15 November 2021

_____ _____

SIGNATURE OF EAP DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information