GEM science
(No. 2002/007510/23)

Basic Assessment Report

Kliparani Grain Bunker

DEDECT Ref: NWP/EIA/136/2010

August 2011

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the DEDECT

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	(For official use only)
File Reference Number:	
Application Number:	
Date Received:	

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2010, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 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. 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.
3. Where applicable **tick** the boxes that are applicable in the report.
4. An incomplete report may be returned to the applicant for revision.
5. 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.
6. This report must be handed in at offices of the relevant competent authority as determined by each authority.
7. No faxed or e-mailed reports will be accepted.
8. The report must be compiled by an independent environmental assessment practitioner.
9. 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.
10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

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 appointment of a specialist for each specialist thus appointed:
Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail[1]:

Prima Pasta and Biscuits (Pty) Ltd intends to establish a grain storage bunker on the remainder of portion 1 of the farm Kliparani 519 IO (hereafter refered to as "the site"), in the Ratlou Local Municipality within the Ngaka Modiri Molema District Municipality in the North-West Province (Appendix A - Figure 1).

A grain silo bag, also called a grain tunnel, is used to store dry grain (Appendix C - Figure 16 and Figure 17). A silo bag is simply a polyethylene bag that is filled with grain and then closed. The bag is sealed airtight with a life of 1 to 1.5 years in the open, preventing the development and reproduction of fungus and insects. This airtight environment can eliminate the need for chemicals. A grain bunker will, in future, be established on the area adjacent to the site. An environmental authorisation application for this area is still pending.

Additional structures required as part of the storage area, include a weighbridge and office space. The established access road (Appendix B - Figure 14) will be made available for trucks to transport the grain to and from the storage area. All structures are removable once the grain silo bags is no longer required.

The site has been used for maize production in recent years but due to the proposed development (Appendix A - Figure 2), no maize has been planted since 2010 and the soil compacted to limit dust generation from the empty agricultural fields. No vegetation clearing will thus take place for the proposed development.

Temporary infrastructure includes fencing the area and constructing temporary offices, stores, a workshop, a weighbridge and ablution facilities. This has already taken place (Appendix B - Figure 10). A hopper (Appendix C - Figure 18) has also been constructed to fill grain bags before loading the grain onto trucks.

[1] Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government Notice, but should be a brief description of activities to be undertaken as per the project description.

Please see Appendix A for full size maps.

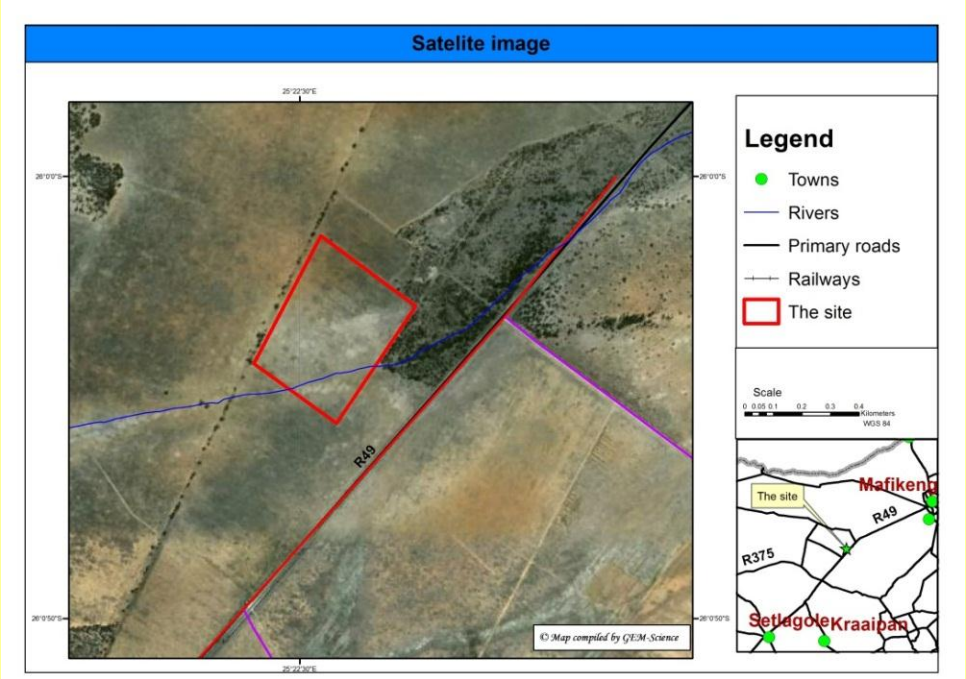

Figure 1. Site locality (Please see Appendix A for enlarged map).

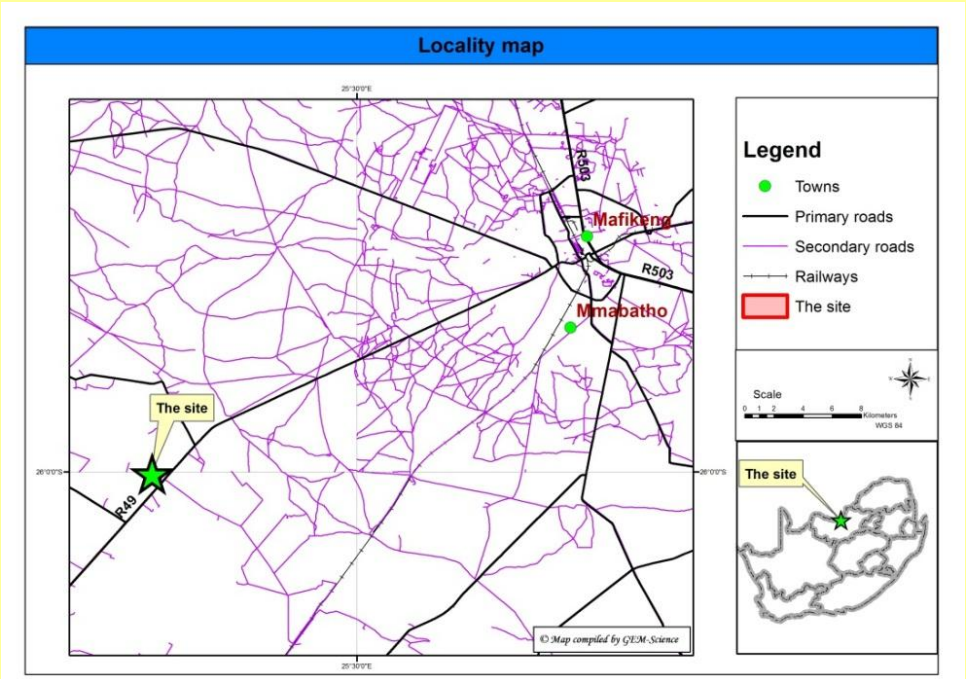

Figure 2. Satellite image of the site (Please see Appendix A for enlarged map).

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. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity 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.

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

3. 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 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.

List alternative sites, if applicable.

Alternative:	**Latitude (S):**		**Longitude (E):**	
Alternative S1[2] (preferred or only site alternative)	° -26	‘ 0.215	° 25	‘ 22.654
Alternative S2 (if any)	°	‘	°	‘
Alternative S3 (if any)	°	‘	°	‘

In the case of linear activities:

[2] "Alternative S.." refer to site alternatives.

Alternative:	Latitude (S):		Longitude (E):	
Alternative S1 (preferred or only route alternative)				
• 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.

4. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:	**Size of the activity:**
Alternative A1[3] (preferred activity alternative)	± 150 000 m^2
Alternative A2 (if any)	m^2
Alternative A3 (if any)	m^2

or, for linear activities:

Alternative:	**Length of the activity:**
Alternative A1 (preferred activity alternative)	m

[3] “Alternative A..” refer to activity, process, technology or other alternatives.

Alternative A2 (if any)	m
Alternative A3 (if any)	m

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)	m^2
Alternative A2 (if any)	m^2
Alternative A3 (if any)	m^2

5. 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	m	

Describe the type of access road planned:

Access to the application site will be from the R49, tuning off onto an existing dirt road (farm road). No additional access roads to the site are required.

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.

6. SITE OR 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:

6.1 the scale of the plan which must be at least a scale of 1:500;
6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
6.4 the exact position of each element of the application as well as any other structures on the site;
6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
6.6 all trees and shrubs taller than 1.8 metres;
6.7 walls and fencing including details of the height and construction material;

6.8 servitudes indicating the purpose of the servitude;
6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
- rivers;
- the 1:100 year flood line (where available or where it is required by DWA);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or invested with alien species);

6.10 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
6.11 the positions from where photographs of the site were taken.

7. 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 form. It must be supplemented with additional photographs of relevant features on the site, if applicable.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 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.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R 9 million	
What is the expected yearly income that will be generated by or as a result of the activity?	R 5.7 million	
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 phase of the activity?	± 30	
What is the expected value of the employment opportunities during the development phase?	R 990 000	
What percentage of this will accrue to previously disadvantaged individuals?	80 %	
How many permanent new employment opportunities will be created during the operational phase of the activity?	± 20	
What is the expected current value of the employment opportunities during the first 10 years?	R 9.9 million	
What percentage of this will accrue to previously disadvantaged individuals?	± 70 % (will be based on qualifications)	

9(b) Need and desirability of the activity

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

NEED: The establishment of the grain bunker (grain storage facility) will provide various advantages for Prima Pasta and Biscuits (Pty) Ltd whom provide maize to Namib Mills in Namibia as well as other NMI group subsidiaries such as Bolux Milling in Botswana. The bunker will have a storage capacity of approximately 60,000 tons of maize of which 30,000 tons will be exported to Namibia and Botswana. A privately owned grain storage area and the purchasing of raw product (maize) directly from the South African farmers, provides various advantages including the optimisation of loading times (in terms of transport) and a decrease in expenses to local farmers.			
1.	Was the relevant provincial planning department involved in the application?	YES	NO ✓
2.	Does the proposed land use fall within the relevant provincial planning framework?	YES ✓	NO
3.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:		
	The project is a privately initiated development.		
DESIRABILITY:			
1.	Does the proposed land use / development fit the surrounding area?	YES ✓	NO
2.	Does the proposed land use / development conform to the relevant structure plans, SDF and planning visions for the area?	YES ✓	NO
3.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES ✓	NO
4.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation:		
5.	Will the proposed land use / development impact on the sense of place?	YES	NO ✓
6.	Will the proposed land use / development set a precedent?	YES	NO ✓
7.	Will any person's rights be affected by the proposed land use / development?	YES	NO ✓
8.	Will the proposed land use / development compromise the "urban edge"?	YES	NO ✓
9.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation.		
BENEFITS:			
1.	Will the land use / development have any benefits for society in general?	YES ✓	NO
2.	Explain:		
	Due to the food shortage in South Africa, Namibia and Botswana, a grain bunker for maize storage near the borders of all three countries, will facilitate the transport, export and import of maize. This will result in grain (maize) and grain products reaching consumers faster and cheaper which could result in a decrease in the pricing of the produce for the consumer.		

3.	Will the land use / development have any benefits for the local communities where it will be located?	YES ✔	NO
4.	Explain:		
	A grain bunker will not only provide direct employment opportunities to the local community but due to the grain bunker in close proximity to maize producing farms, farmers might decide to increase their yield by planting more fields. This will result in further employment opportunities for the local communities.		

10. 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:	Administering authority:	Date:
Regulation 544, 18 June 2010 **Activity 8:** The construction of a hatchery or Agri-industrial infrastructure outside industrial complexes where the development footprint covers an area of 2000 square meters or more.	Department of Economic Development, Environment, Conservation and Tourism (DEDECT)	June 2010
National Water Act 36 of 1998	Department of Water Affairs	1998
DEAT Guideline 4: Public Participation	Department of Environmental Affairs	June 2006
DEAT Guideline 5: Assessment of Alternatives and Impacts	Department of Environmental Affairs	June 2006
Conservation of Agricultural Resources Act 43 of 1983	Department of Agriculture, Forestry and Fisheries	1983

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?	YES ✔	NO
If yes, what estimated quantity will be produced per month?	m^3	

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

During the construction phase the disposal of solid waste will be the responsibility of the developer. An area on the application site will be earmarked for dumping of solid waste to be disposed of during construction. This area must be situated carefully not to be visible from the surrounding residents or amenities. The demarcated area must be easily accessible for dumping trucks to collect waste. The waste will be transported to registered landfill site.

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

All construction solid waste will be disposed of at the nearest registered dumping site (Mafikeng). No solid waste will be dumped on surrounding open areas or adjacent properties.

Will the activity produce solid waste during its operational phase?	YES	NO ✔
If yes, what estimated quantity will be produced per month?	m^3	

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

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

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 relevant legislation?	YES	NO ✔
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?	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.

11(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:

Uncontrolled storm water run-off could lead to sedimentation in the water resources and soil erosion. Everything will be done to prevent storm water run-off from entering the environment in any uncontrolled manner.

11(c) Emissions into the atmosphere

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

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

The proposed development will not generate any emissions. The additional vehicle traffic and exhaust fumes may have an influence, but is regarded as insignificant.

11(d) 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

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 noise in terms of type and level:

Noise associated with normal construction activities can be anticipated during the construction phase. This would include noise generated by earth moving equipment and other general construction activities. Construction activities will, as far as practically possible, be limited to normal working hours (Monday to Friday, 7am to 5pm).

During the operational phase, noise will be generated by the tractors on site as well as trucks that collect grain from the bunker. The noise from these sources will be limited and all measures will be taken to ensure that the vehicles are serviced on a regular basis in order to ensure that no unacceptable noise levels occur.

Noise levels will be kept within legislated limits for the area, in accordance with the requirements of the relevant national and local noise control statutes.

12. 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 permit from the Department of Water Affairs?

YES	NO ✔

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

13. ENERGY EFFICIENCY

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

Energy is needed to provide the infrastructure with lighting and electricity. Energy-saving light bulbs will be fitted in all buildings and all electronic devices will be switched off when not in use. The hopper also requires energy. The hopper is switched off during times that it is not in use in order to save energy. All energy requirements of the site will be provided by a on-site generator.

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

No alternative energy sources have been included due to the relative small energy demand of the proposed project.

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 C and indicate the area, which is covered by each copy No. on the Site Plan.

Section C Copy No. (e.g. 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:
All specialist reports must be contained in Appendix D.

Property description/physical address:

Kliparani 519 IO on the Remainder of Portion 1

(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

Ratlou Local Municipality
Ngaka Modiri Molema District, near Mafikeng

In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

Current land-use zoning: 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.

	YES	NO
Is a change of land-use or a consent use application required?	✔	
Must a building plan be submitted to the local authority?		✔

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 indication of the project site position as well as the positions of the alternative sites, if any;
- 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)

See Appendix A for the locality and other maps.

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:

NB: Indicate by highlighting/ticking

2.1 Ridgeline

2.2 Plateau

2.3 Side slope of hill/mountain

2.4 Closed valley

2.5 Open valley

2.6 Plain ✔

2.7 Undulating plain / low hills

2.8 Dune

2.9 Seafront

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

	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. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that does 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:

NB: Indicate by highlighting/ticking

5.1 Natural area 

5.2 Low density residential

5.3 Medium density residential

5.4 High density residential

5.5 Informal residential[A]

5.6 Retail commercial & warehousing

5.7 Light industrial

5.8 Medium industrial [AN]

5.9 Heavy industrial [AN]

5.10 Power station

5.11 Office/consulting room

5.12 Military or police base/station/compound

5.13 Spoil heap or slimes dam[A]

5.14 Quarry, sand or borrow pit

5.15 Dam or reservoir

5.16 Hospital/medical centre

5.17 School

5.18 Tertiary education facility

5.19 Church

5.20 Old age home

5.21 Sewage treatment plant[A]

5.22 Train station or shunting yard [N]

5.23 Railway line [N]

5.24 Major road (4 lanes or more) [N]

5.25 Airport [N]

5.26 Harbour

5.27 Sport facilities

5.28 Golf course

5.29 Polo fields

5.30 Filling station [H]

5.31 Landfill or waste treatment site

5.32 Plantation

5.33 Agriculture ✔

5.34 River, stream or wetland ✔

5.35 Nature conservation area

5.36 Mountain, koppie or ridge

5.37 Museum

5.38 Historical building

5.39 Protected Area

5.40 Graveyard

5.41 Archaeological site

5.42 Other land uses (specify)

If any of the features marked with an "[N] "are highlighted or ticked, how this impact will / be impacted upon by the proposed activity?

If any of the features marked with an "[An]" are highlighted or ticked, how will this impact / be impacted upon by the proposed activity?

If YES, specify and explain:
If YES, specify:

If any of the features marked with an "[H]" are highlighted or ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:
If YES, specify:

6. 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	YES	NO ✔
Archaeological or palaeontological sites, on or close (within 20m) to the site?		
If YES, explain:		
If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.		
Briefly explain the findings of the specialist:		
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 submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.		

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

(a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—

(i) the site where the activity to which the application relates is or is to be undertaken; and

(ii) any alternative site mentioned in the application;

(b) giving written notice to—

(i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;

(ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;

(iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;

(iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;

(v) the municipality which has jurisdiction in the area;

(vi) any organ of state having jurisdiction in respect of any aspect of the activity; and

(vii) any other party as required by the competent authority;

(c) placing an advertisement in—

(i) one local newspaper; or

(ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;

(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and

(e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—

(i) illiteracy;

(ii) disability; or

(iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

(a) indicate the details of the application which is subjected to public participation; and

(b) state—

(i) that the application has been submitted to the competent authority in terms of these Regulations, as the case may be;

(ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;

(iii) the nature and location of the activity to which the application relates;

(iv) where further information on the application or activity can be obtained; and

(iv) the manner in which and the person to whom representations in respect of the application may be made

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE MEASURES

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

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application 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 this application. The comments and response report must be attached under Appendix E.

6. AUTHORITY PARTICIPATION

Please note that a complete list of all organs of state and or any other applicable authority with their contact details must be appended to the basic assessment report or scoping report, whichever is applicable.

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.

List of authorities informed:

Ratlou Local Municipality – Mr PE Motoko
Ward Councillor – Clr J Gaobotse
Ngaka Modiri Molema District Municipality – Cllr P Mokoto and Ms K Mbali
SANRAL – Mr I van der Linde
AGRI SA North West – Mr B du Toit
Landbou Unie Mareetsane – Mr L Dreyer

List of authorities from whom comments have been received:

The authorities listed below were contacted telephonically on 25 to 27 July 2011. During this contact all parties listed below stated that they have no problems, issues or input to the draft Basic Assessment Report or the application.

SANRAL – Mr M Yorke-Hart

AGRI SA North West – Mr B du Toit

7. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or 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.

Has any comment been received from stakeholders?

YES	NO
✓	

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

Mr W Bloem: Concern about construction phase's impact on animals in a game farm located nearby.

EAP: Construction phase noise and dust levels will be monitored daily and will not exceed the allowable limits as set by the relevant National and Provincial Departments.

Mr W Bloem: Commented that construction started without their consent and without being contacted.

EAP: Only temporary structures have been placed on site.

All the parties listed below indicated that they have no objections or comments regarding this application:

Mr P Vorster
Mr E van Wyk
Mr J Gouws
Mr G Dreyer
Mr E Botha

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2010, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

No official or written issues have been raised by I&APs.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report as Annexure E):

2. 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

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) 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.

Planning and design phase:

Alternative (preferred alternative)

No impacts are expected to occur for this phase of the development.

Construction phase:

Alternative (preferred alternative)

Direct impacts:

Invasion and establishment of alien and/or invasive vegetation.

The site has already been cleared from vegetation and this bare soil area may be prone to the invasion and establishment of invasive and/or exotic species.

Extent: Site Specific
Duration: Medium
Probability: Probable
Intensity: Medium
Degree of confidence: Medium
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Immediate revegetation of all bare soil areas must take place. The species utilized must be determined by a suitably qualified specialist.
- A monitoring program should be implemented to enforce continual eradication of alien and

invasive species, especially on wetland and open space systems.

Significance and status with mitigation: Low Negative (-)

Increased sediment load in the valley bottoms due to soil and dust runoff as well as storm water being released into the environment.

Extent: Site Specific/Local
Duration: Medium
Probability: Probable
Intensity: Medium
Degree of confidence: Medium
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Immediate revegetation of all bare soil areas must take place. The species utilized must be determined by a suitably qualified specialist.
- Where possible, storm water must be conveyed through grassed swales rather than concrete channels to aid infiltration and reduce run-off.
- Berms and/or drainage channels must be constructed around all infrastructures and must be checked regularly for any structural damage or blockages.

Significance and status with mitigation: Low Negative (-)

Noise generation and disturbance during construction activities.

Construction activities are generally associated with a greater than normal level of noise and disturbance.

Extent: Site Specific
Duration: Temporary
Probability: Probable
Intensity: Medium
Degree of confidence: High
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Limit construction activities, as far as practically possible, to normal working hours, i.e. 7am to 5pm weekdays.
- Should work take place after hours, nearby residents should be notified.
- Signage with the contact details of the responsible person should be provided at the site for residents with complaints in this regard.
- A complaints register should be kept to document complaints and the corrective action taken.
- No loud music to be allowed on site.

Significance and status with mitigation: Very Low Negative (-)

Increase in dust during construction.

Areas of unconsolidated soil will be present in the footprint and soil stockpiles. These soils will be prone to wind erosion with associated generation of dust and windblown sand during high

wind velocities. Construction and other vehicles on the gravel access road will also generate dust during this phase.

Extent: Site Specific/Local
Duration: Temporary
Probability: Probable
Intensity: Medium
Degree of confidence: High
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Limit vegetation disturbance outside the site/construction footprint.
- Topsoil should be cleared in a phased manner to avoid large areas of unconsolidated soils.
- Soil stockpiles should be covered, wetted or otherwise stabilised to prevent wind erosion and dust generation.
- Topsoil should be replaced on undeveloped portions of the site and the footprints re-vegetated immediately after construction.
- A water cart or sufficient watering equipment should be available to wet soils during windy days if wind-blown sand and dust becomes a problem.
- Speed limits on the access road should be limited to 30 km/h and strictly enforced.

Significance and status with mitigation: Low Negative (-)

Soil erosion of disturbed and unconsolidated soil in construction footprints.

All vegetation has already been cleared from the proposed development site. This could lead to erosion of the soil by wind as well as water. The stockpiles of soil and excavated material may also be prone to erosion.

Extent: Site Specific
Duration: Temporary
Probability: Probable
Intensity: Low
Degree of confidence: High
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Site offices, storage area, construction areas, material lay-down areas, access routes, infrastructure footprints and No-Go areas should be clearly demarcated.
- Limit vegetation disturbance outside the demarcated site.
- Storm water on the site must be controlled for the duration of construction by employing appropriate temporary storm water control structures e.g. cut-off berms.
- Topsoil should be cleared in a phased manner to avoid large areas of unconsolidated soils.
- Topsoil should be removed and stockpiled in an appropriate manner: Stockpiled separately from subsoil, monitored for- and protected from erosion and kept clear from exotic vegetation.
- Topsoil should be replaced on undeveloped portions of the site and the footprints revegetated immediately after construction.
- Re-vegetated areas should be watered until vegetation has become established.
- Should erosion scars begin to form on the landscape, erosion counter measures should be implemented immediately.

- Erosion control and construction disturbance should be an important monitoring facet falling under the control of the Environmental Control Officer (ECO), who should be appointed to implement the environmental management program (EMPr) during the construction and site rehabilitation phases of the project.

Significance and status with mitigation: Very Low Negative (-)

Soil compaction.

Due to the fact that infrastructure development has already started on the site, soil compaction has already occurred throughout the site footprint. Vehicles are also presently moving freely on all areas of the site which further adds to soil compaction of the site.

Extent: Site Specific
Duration: Long Term
Probability: Highly Probable
Intensity: Medium
Degree of confidence: Medium
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Site offices, storage area, construction areas, material lay-down areas, access routes, infrastructure footprints and No-Go areas should be clearly demarcated.
- Vehicles should only move in those areas clearly demarcated as roads.
- All areas outside the demarcated areas must be ripped and revegetated.
- Revegetation species must be determined by a suitably qualified specialist.
- A monitoring program for the revegetated areas must be put in place.

Significance and status with mitigation: Low Negative (-)

The outbreak of fire on the site during construction.

It is possible that a runaway veld fire could begin as a result of an unattended open fire used by construction personnel for cooking. With the presence of dry grass in the winter months, it is possible that such a fire will spread rapidly. Such a fire would also be likely to spread to adjacent properties.

Extent: Specific/Local
Duration: Temporary
Probability: Improbable
Intensity: Medium
Degree of confidence: Medium
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Open fires used for cooking should be avoided where possible.
- If such a fire is truly necessary, it should be made in demarcated areas (within the construction camp) that have little vegetation or other flammable substances in close proximity.
- Cigarette butts must be disposed of in one of the litter bins provided.
- Exotic vegetation on the site must be eradicated.

Significance and status with mitigation: Very Low Negative (-)

Generation of waste during construction.

Extent: Site Specific
Duration: Temporary
Probability: Highly Probable
Intensity: Medium
Degree of confidence: High
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Construction waste (e.g. packaging material, unused materials) must be disposed of at a registered waste disposal facility.
- No construction waste should be stockpiled on site.
- Adequate litter bins should be provided at the site for waste generated by construction personnel.
- Litter bins should be emptied on a regular basis and waste disposed of at a registered waste disposal facility.

Significance and status with mitigation: Very Low Negative (-)

Pollution of surface and groundwater due to chemical, oil and fuel spills.

Extent: Site Specific
Duration: Temporary
Probability: Probable
Intensity: Medium
Degree of confidence: High
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Generators and fuel supply needed during construction must be placed on trays, which rest on clean soil.
- If generators are to be used throughout the operational phase, they should be placed on dripping trays on cement blocks.
- No cement/concrete mixing is to take place on the soil surface. Cement mixers should be mixed on plastic sheets or large trays to prevent accidental spills from coming into contact with the soil surface.
- Vehicles and construction equipment should be serviced at a demarcated workshop area that is properly roofed and has a concrete floor.
- Vehicles should be checked for leaks to ensure no fuel, oil or other similar pollutants pollute the soils.
- Ensure secure, bunded storage of materials on site, particularly hazardous materials such as chemicals and fuels.
- Already established chemical toilets on the site should be suitably maintained.

Significance and status with mitigation: Very Low Negative (-)

A number of temporary employment and skills development opportunities will be

created during the construction phase.

Extent: Local
Duration: Temporary
Probability: Probable
Intensity: High
Degree of confidence: High
Significance and status without mitigation: Medium Positive (+)

Mitigation:

- Source local labour as far as possible.
- Employ previously disadvantage people as far as possible.

Significance and status with mitigation: High Positive (+)

Indirect impacts:

Risk to human health and safety due to moving construction machinery.

Extent: Site Specific/Local
Duration: Temporary
Probability: Probable
Intensity: High
Degree of confidence: Medium
Significance and status without mitigation: High Negative (-)

Mitigation:

- Construction footprints, including site offices, storage areas, materials lay-down areas, stockpile area, and workers rest areas should be clearly demarcated.
- All construction activities should be limited to the demarcated area.
- Access to the demarcated construction area should be strictly controlled.
- Entry points and access routes to the site must be clearly marked and traffic limited to those areas.
- Suitable information and warning signage should be erected before construction commences.
- Speed travelled by vehicles must be kept to a minimum and speed limits enforced.
- Ensure that there is a first aid facility and trained first aiders at the site.

Significance and status with mitigation: Low Negative (-)

Cumulative impacts:

None anticipated.

Operational phase:
Alternative (preferred alternative)

Direct impacts:

Pollution of surface and groundwater due to chemical, oil and fuel spills.

Extent: Site Specific

Duration: Long Term
Probability: Probable
Intensity: Medium
Degree of confidence: High
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- If generators are to be used throughout the operational phase, they should be placed on dripping trays on cement blocks.
- Vehicles and construction equipment should be serviced at a demarcated workshop area that is properly roofed and has a concrete floor.
- Vehicles should be checked for leaks to ensure no fuel, oil or other similar pollutants pollute the soils.
- Ensure secure, bunded storage of materials on site, particularly hazardous materials such as chemicals and fuels.
- Already established chemical toilets on the site should be suitably maintained.

Significance and status with mitigation: Very Low Negative (-)

Invasion and establishment of alien and/or invasive vegetation.

The site has already been cleared from vegetation and this bare soil area may be prone to the invasion and establishment of invasive and/or exotic species.

Extent: Site Specific
Duration: Medium
Probability: Probable
Intensity: Medium
Degree of confidence: Medium
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Immediate revegetation of all bare soil areas must take place. The species utilized must be determined by a suitably qualified specialist.
- A monitoring program should be implemented to enforce continual eradication of alien and invasive species, especially on wetland and open space systems.

Significance and status with mitigation: Low Negative (-)

Increased sediment load in the valley bottoms due to soil and dust runoff as well as storm water being released into the environment.

Extent: Site Specific/Local
Duration: Long Term
Probability: Probable
Intensity: Medium
Degree of confidence: Medium
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Immediate revegetation of all bare soil areas must take place. The species utilized must be determined by a suitably qualified specialist.
- Where possible, storm water must be conveyed through grassed swales rather than concrete channels to aid infiltration and reduce run-off.
- Berms and/or drainage channels around all infrastructures must be checked regularly for any structural damage or blockages.

Significance and status with mitigation: Low Negative (-)

Generation of waste from day-to-day activities.

Extent: Site Specific
Duration: Long Term
Probability: Highly Probable
Intensity: Medium
Degree of confidence: High
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Adequate litter bins should be provided at the site for waste generated by construction personnel.
- Litter bins should be emptied on a regular basis and waste disposed of at a registered waste disposal facility.

Significance and status with mitigation: Very Low Negative (-)

Employment opportunities (long term).

Extent: Local
Duration: Temporary
Probability: Probable
Intensity: High
Degree of confidence: High
Significance and status without mitigation: Medium Positive (+)

Mitigation:

- Source local labour as far as possible.
- Employ previously disadvantage people as far as possible.

Significance and status with mitigation: High Positive (+)

Potential contamination of groundwater due to sewage leaks and spills.

Sewage leaks from malfunctioning infrastructure, and accidental spills during the emptying and maintenance of the conservancy tanks may result in the contamination of surface or groundwater.

Extent: Site Specific/Local
Duration: Long Term
Probability: Improbable

Intensity: Medium
Degree of confidence: Medium
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- Ensure that the conservancy tanks and associated infrastructure are designed and constructed in accordance with DWA and municipal standards.
- Conduct pressure tests on the infrastructure in order to detect and repair any leaks before the infrastructure is commissioned.
- No industrial, trade or manufacturing waste, refuse or effluent shall be discharged into any conservancy tanks.
- Provide proper training to maintenance personnel in the management and operation of conservancy tanks.
- Ensure that a reputable service provider with a proven track record is appointed to empty conservancy tanks.
- The access road to the conservancy tanks must be maintained in order to provide access for vacuum tankers.
- Groundwater should be tested every six months for potential contamination and remedial action taken if necessary.

Significance and status with mitigation: Low Negative (-)

Indirect impacts:

Potential impact on the character and "sense of place" of the surrounding area.

The development is in keeping with the character of the surrounding area. It is thus unlikely to have a significant effect on people's "sense of place".

Extent: Local
Duration: Long Term
Probability: Probable
Intensity: Low
Degree of confidence: Low
Significance and status without mitigation: Neutral (o)

Mitigation:

- None proposed.

Significance and status with mitigation: Neutral (o)

Cumulative impacts:

None anticipated.

Operational phase:
Alternative (preferred alternative)

It is not anticipated that this project will be decommissioned in the near future. Should the facility be decommissioned in the future, the Environmental Procedures and statutory requirements applicable at the time must be complied with, and the area restored to its original

condition.

No-Go Alternative

Direct impacts:

Continued and increased invasion by exotic weeds.

Extent: Site Specific
Duration: Long Term
Probability: Probable
Intensity: High
Degree of confidence: High
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- None proposed.

Continued soil erosion.

Extent: Site Specific
Duration: Long Term
Probability: Probable
Intensity: Medium
Degree of confidence: Medium
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- None proposed.

Persistence of the remaining indigenous vegetation patches may be compromised if the site is left vacant (alien plant invasion, fire risk, dumping).

Extent: Site Specific
Duration: Long Term
Probability: Probable
Intensity: Medium
Degree of confidence: Medium
Significance and status without mitigation: Medium Negative (-)

Mitigation:

- None proposed.

Indirect impacts:

A number of potential employment opportunities will not be realised.

Extent: Local
Duration: Long Term
Probability: Definite
Intensity: Medium

Degree of confidence: High
Significance and status without mitigation: High Negative (-)

Mitigation:

- None proposed.

Cumulative impacts:

None anticipated.

3. 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)

Construction phase:

- Construction phase impact on the biophysical environment can be mitigated to ***Low to Very Low Negative***.
- The impacts of the dust, noise, waste and pollution are *Medium Negative* but can all be mitigated to ***Very Low Negative.***
- Negative socio impacts (i.e. health and safety issues) can be mitigated to ***Low Negative.***

The project will create a number of temporary employment opportunities which is considered a ***Medium Positive*** impact.

Alternative A (preferred alternative)

Operational phase:

- Operational phase impacts associated with potential long term employment opportunities are considered a ***Medium to High Positive*** impact.
- Negative operational phase impacts associated with increased waste generation, and increased storm water runoff can be mitigated to ***Low and Very Low Negative.***

Alternative A (preferred alternative)

Decommissioning phase:

No decommissioning activities and/or associated impacts are foreseeable.

No-go alternative (compulsory)

- Continued and increased invasion by exotic plants, uncontrolled waste dumping on the site, fire risk and soil erosion are all considered ***Medium Negative*** impacts which will persist or possibly escalate at the site in the No-Go alternative.
- The unrealised employment opportunities should the development not proceed is considered a ***High Negative*** impact.

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:

All the recommended mitigation measures outlined in this report should be considered for inclusion in the Environmental Authorisation.

Is an EMPr attached?	YES ✔	NO

The EMPr must be attached as Appendix F.

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information

Appendix A: Site plan(s)

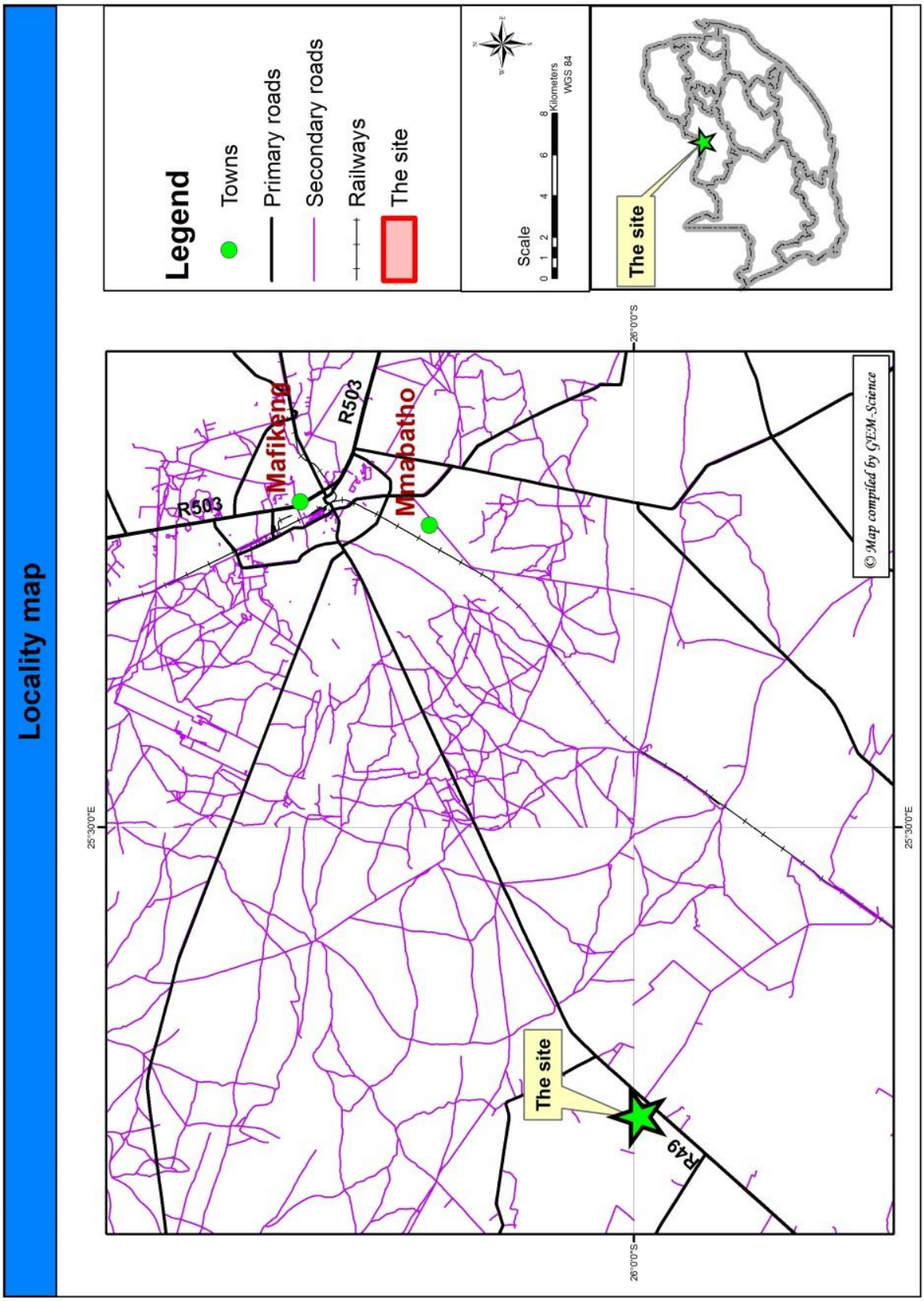

Figure 1. Locality map of the site in relation to roads and towns.

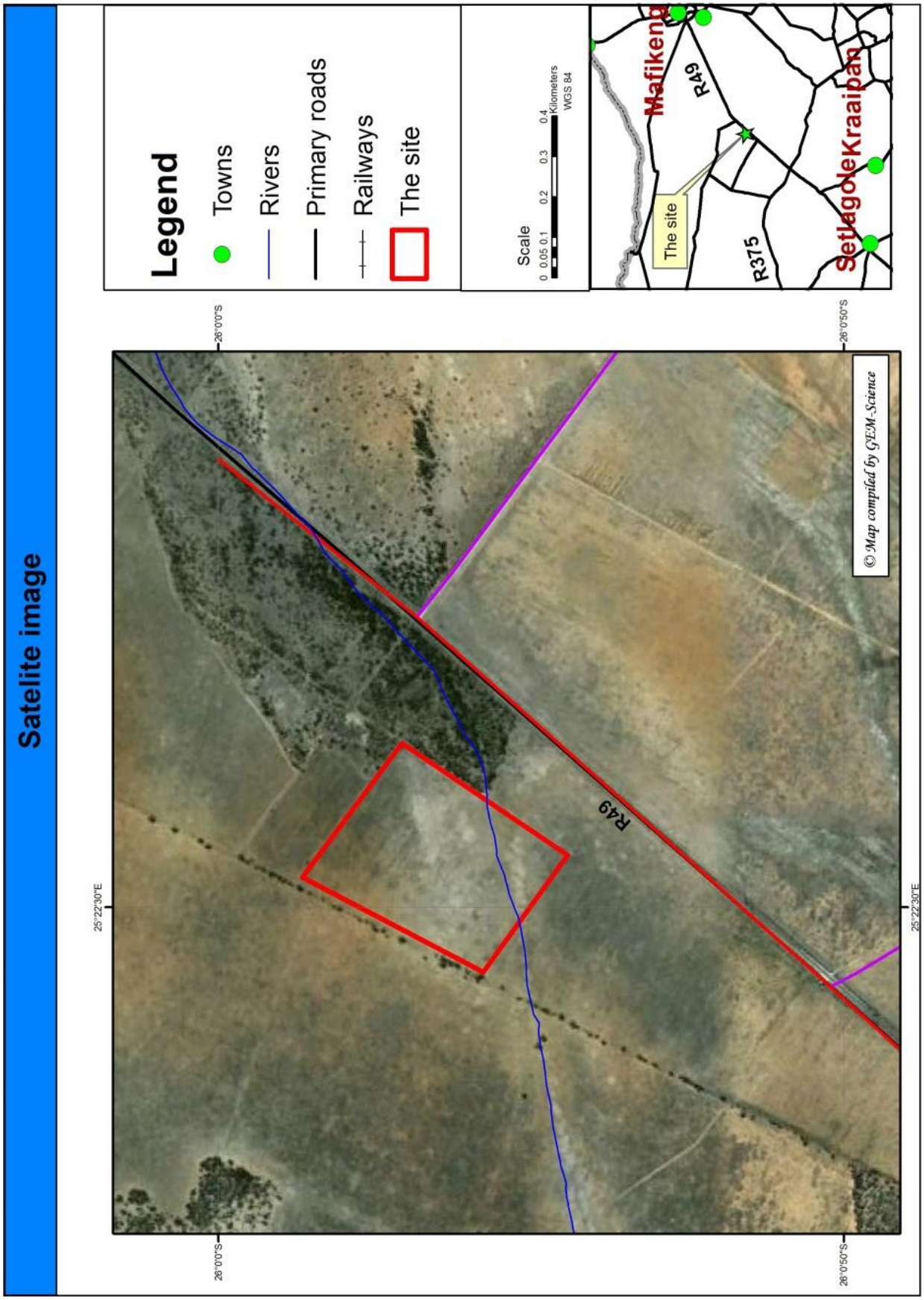

Figure 2. Google image showing the access road to the site as well as the land use of the site and surrounding area.

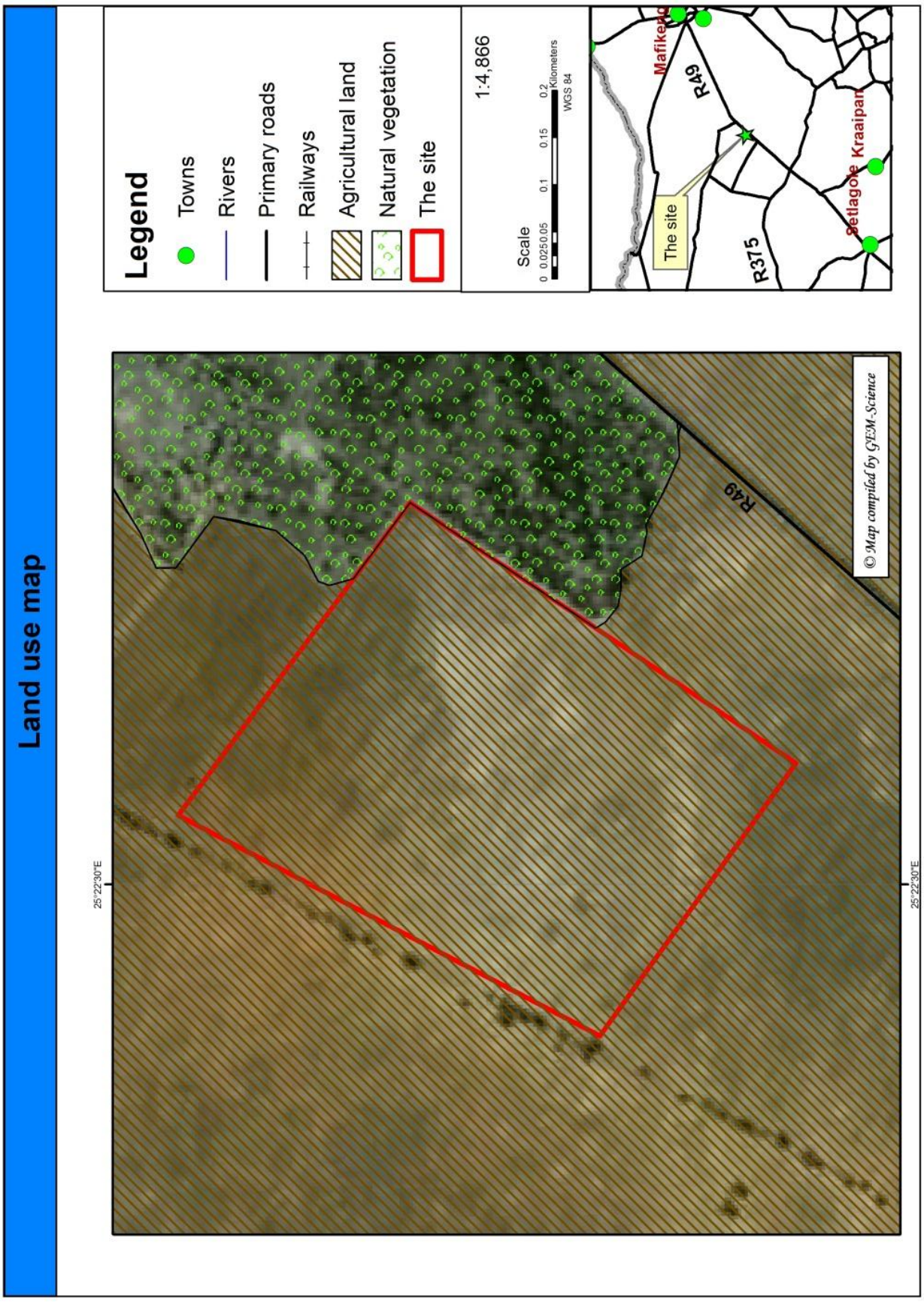

Figure 3. Land use of the site and surrounding area (whole area is zoned as agricultural).

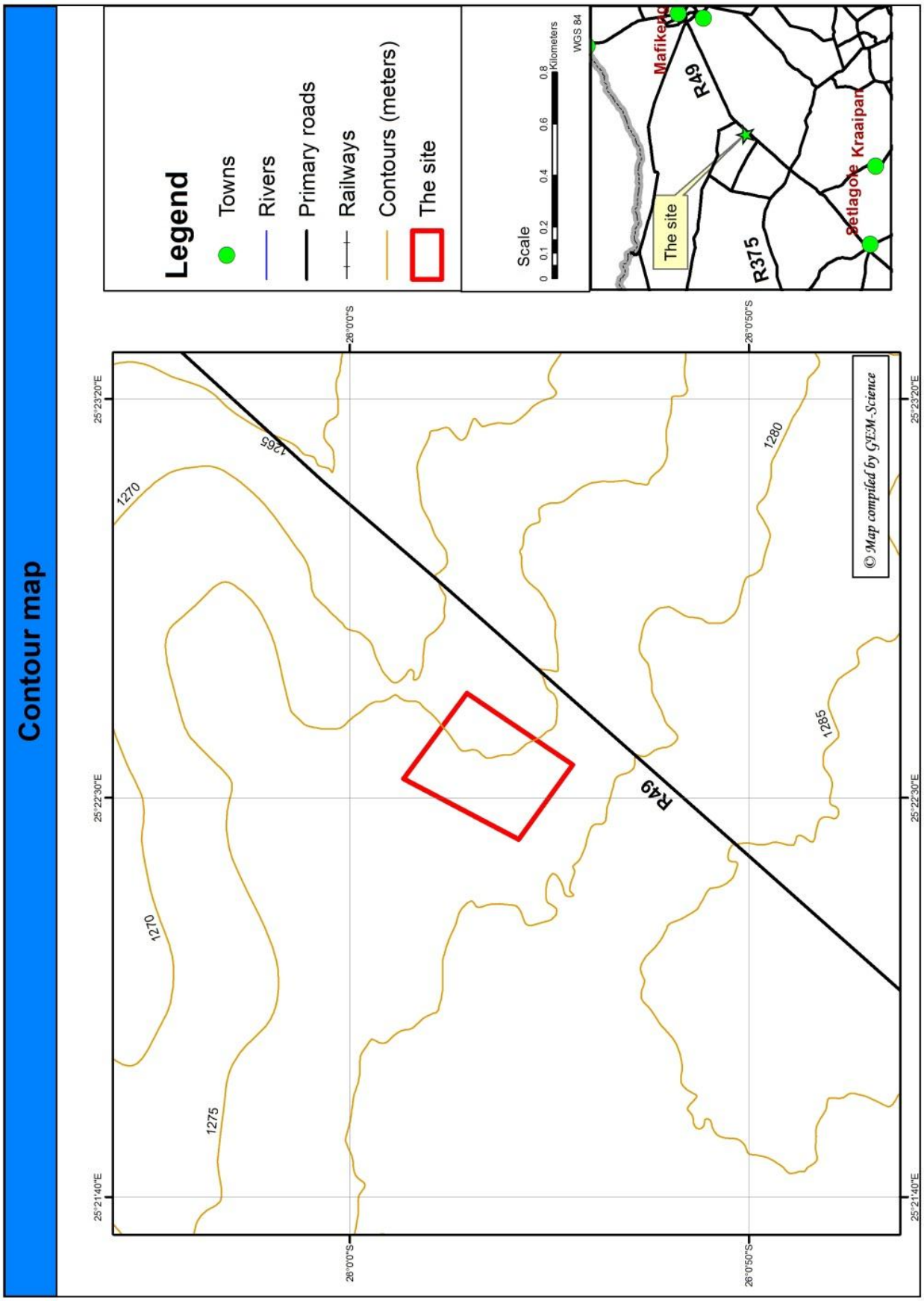

Figure 4. Contour map of the site and surrounding area.

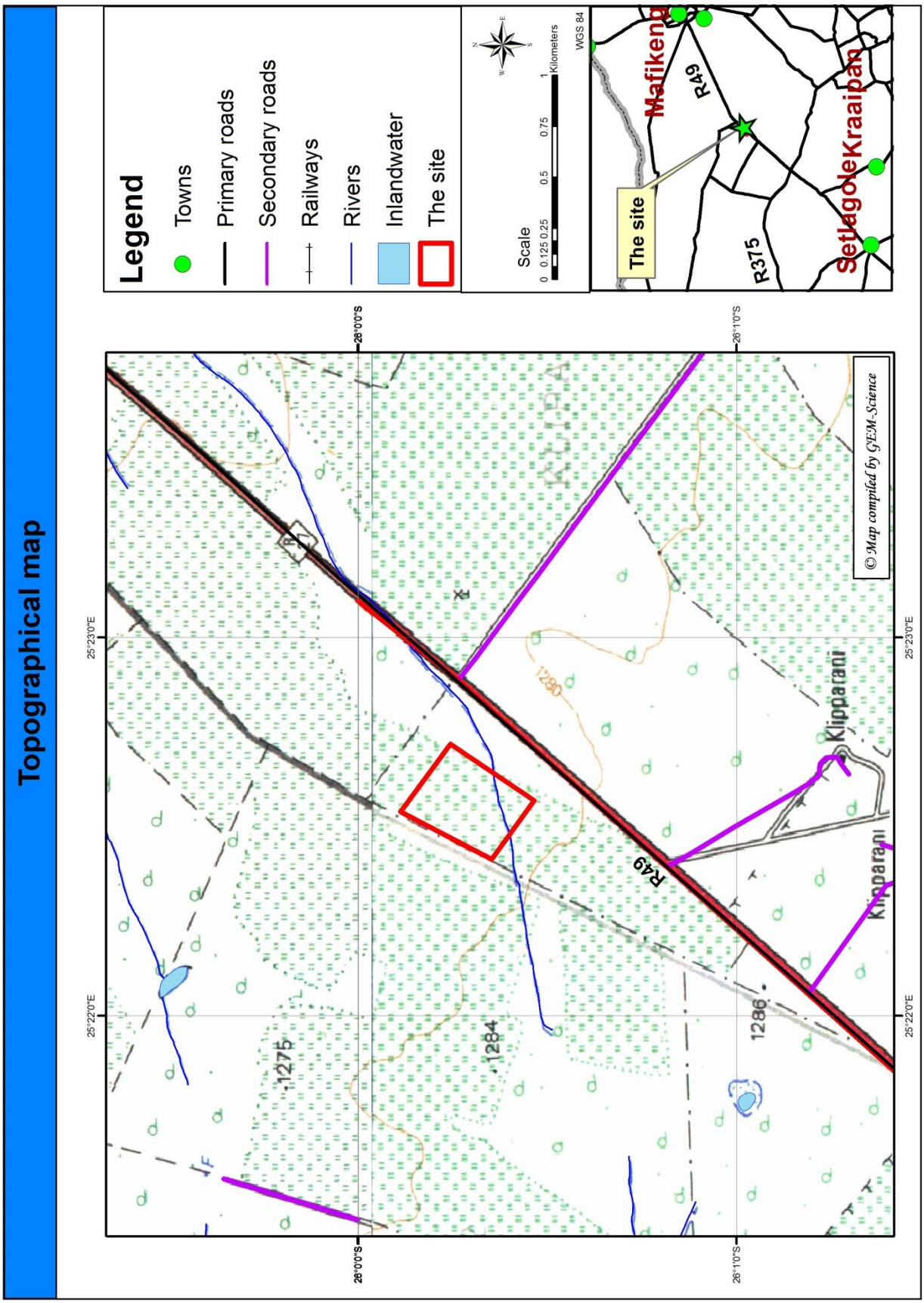

Figure 5. Topographical map of the site and surrounding area.

Appendix B: Photographs

Figure 6. Northern view of the site showing the cleared area of the site with natural vegetation present beyond the site perimeter.

Figure 7. North-eastern view of the site. Natural vegetation is present just beyond the perimeter of the site.

Figure 8. Eastern view of the site. Natural vegetation can be seen just beyond the perimeter of the site.

Figure 9. South-eastern view of the site. Construction material, possibly for paving, can be seen next to mechanical equipment.

Figure 10. Southern view of the site showing the temporary infrastructures as well as mechanical equipment present on the site.

Figure 11. South-western view of the site showing bare soil on the site and soybean crops bordering the site.

Figure 12. Western view of the site. Empty silo bags can be seen (black sheets) with *Acacia spp.* just beyond the perimeter of the site.

Figure 13. North-western view of the site. Silo bags can be seen (white tunnels) with *Acacia spp*. just outside the perimeter of the site.

Figure 14. Access road leading to the site.

Figure 15. Security house and gate at the entrance of the site (Southern corner).

Appendix C: Facility illustration(s)

Figure 16. Example of a filled grain silobags.

Figure 17. Close-up photo of a filled silobag.

Figure 18. A hopper used to fill grain bags for transport off the site has been constructed.

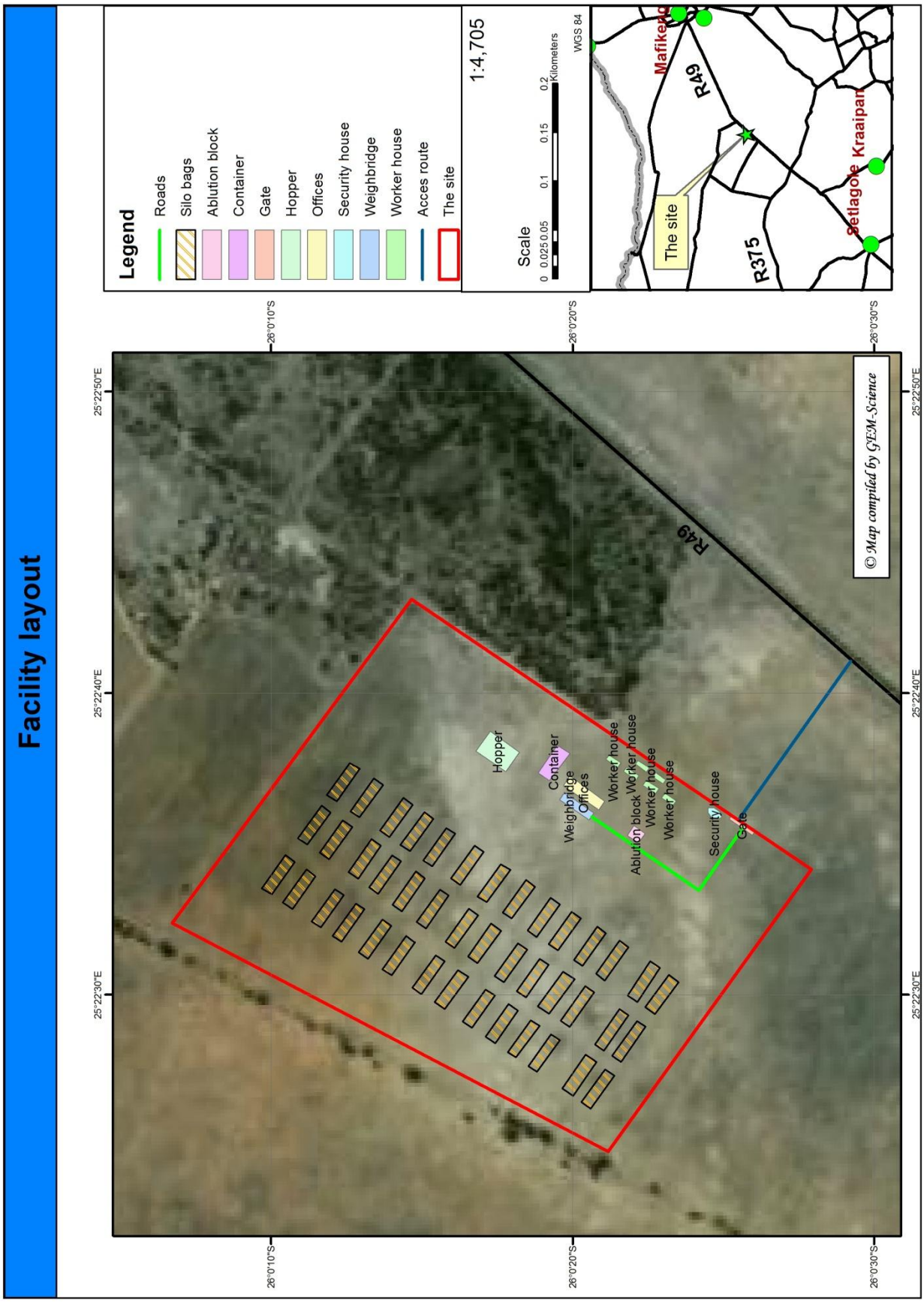

Figure 19. Facility illustration for the site.

Appendix D: Specialist reports

No specialist studies were conducted for this basic assessment.

Appendix E: Comments and responses report

Please see next page for the complete Public Participation Process report.

Appendix F: Environmental Management Programme (EMPr)

Please see next page for the EMPr.

Appendix G: Other information

No additional information is available at present.