



## BASIC ASSESSMENT REPORT

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(For official use only)

**File Reference Number:**

**Application Number:**

**Date Received:**


# **BASIC ASSESSMENT REPORT**

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## **Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2010.**

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**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 are 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 or **black out** the boxes that are not 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 form XX 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:

A technical training college will be developed on Erf 5529 Kuruman, with a total development footprint of 15ha. The development and associated infrastructure proposed shall include *inter alia*:

College - single and double storey buildings (3 ha) with:

- Parking facilities;
- Workshops;
- Recreational area including a swimming pool;
- Administrative area;
- Media and computer area;
- Relevant services (water, sanitation and electrical);
- Relevant road and storm water infrastructure; and
- Student accommodation / housing (small units) will also be provided on site.

The proposed site is located National Route 14, next to El Dorado Hotel and the Kuruman Country Club, Northern Cape.

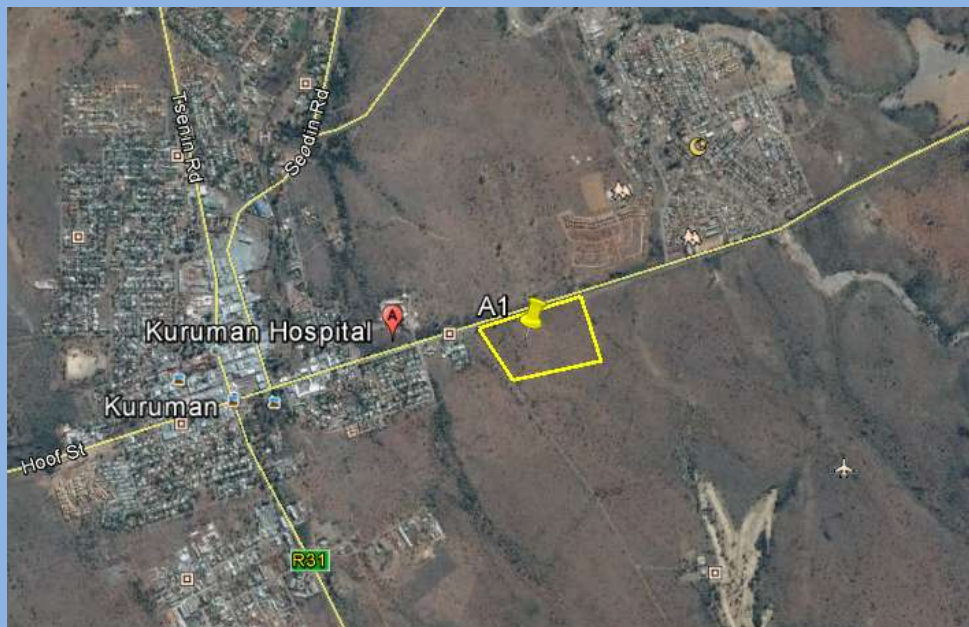


Figure 1: Locality Plan

### 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

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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.

Alternatives are defined in the NEMA EIA Regulations (2010) as “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”. For the purpose of this Application, the following Alternatives were investigated.

1. Location / Property Alternatives [Erf 5529 (*Alternative A1 – preferred and only alternative assessed*), Kuruman vs. a site next to Moffat mission (*Alternative A2*)
2. Design / Layout Alternatives [Eastern layout (*Alternative A1 – preferred and only alternative assessed*) of training college vs. Western layout (*Alternative A2*)]
3. Technology Alternatives [Green building and design (*Alternative A1 – preferred and only alternative assessed*) vs. conventional building and design (*Alternative A2*)]
4. No-Go Alternative: Compulsory (*assessed*).

### Location / Property Alternatives:

ALTERNATIVE A1 – PREFERRED AND ONLY ALTERNATIVE ASSESSED	ALTERNATIVE A2 – A site next to Moffat Mission
(GPS: 27°27'37.13"S; 23°27'20.09"E) on N14 towards Vryburg	(GPS: 27°25'41.48"S; 23°25'38.50"E) on R 31 towards Hotazel
Approx. 1.5km from the CBD of Kuruman	Approx. 4.5 km from the CBD of Kuruman

Property Alternative A1 is located on Erf 5529 Kuruman on the N14 towards Vryburg. The alternative has a better general location in relation to the Kuruman town CBD (approx. 1.5km) which is also on-route to various mines and residential areas. This will alleviate commuting of the students. Alternative A1 has a better layout configuration in terms of orientation and size to accommodate the technical college and associated infrastructure (Refer to Figure 2 below). Alternative A1 also has an existing access point just off the N14 thus; the traffic impacts associated with the construction activities will be of lesser concern. Furthermore, there is existing service infrastructure (water and power supply) available at Alternative A1. Alternative is therefore the preferred and only alternative assessed in this BAR.



Figure 2: Property Alternatives A1 and A2

### Layout Alternatives

Western Layout Alternative A1 vs. Eastern Layout Alternative A2. Refer to Figure 3 below.

The findings of the Geotechnical Investigation (BGC, June 2013) [as attached in Annexure D] were taken into consideration for the Layout Alternatives. According to the geotechnical specialist, Geotechnical Zone B which is Layout Alternative A1 (western side of the site) is preferred.

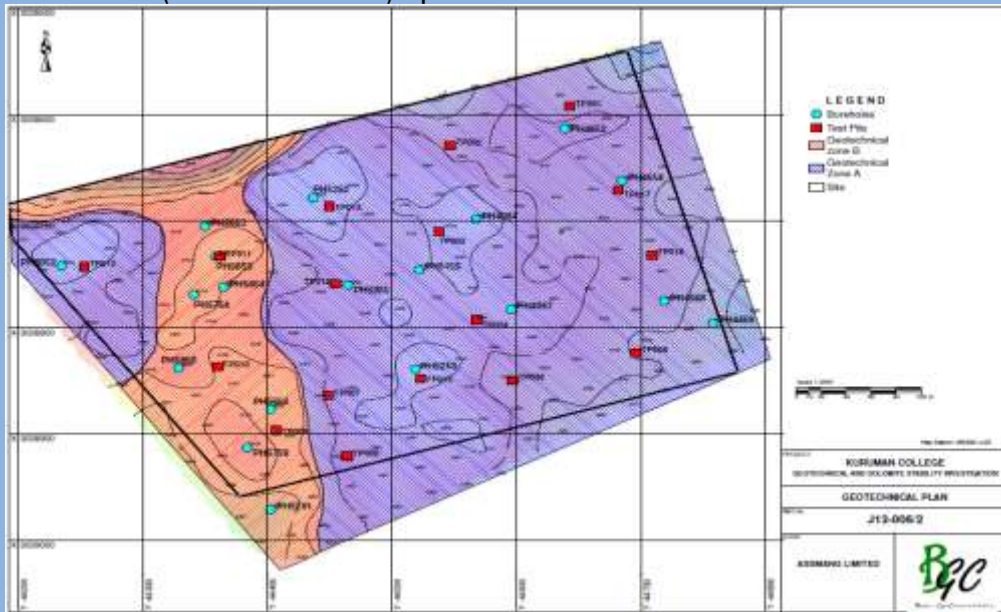


Figure 3: Geotechnical Zones A & B (BGC, June 2013)

According to the specialist the geotechnical problems associated with the eastern area (Geotechnical Zone A) includes the potential for small sinkholes to develop and the presence of an abundance of shallow dolomite pinnacles and flat areas of outcrop which will impede excavations for foundations and services.

In conclusion, the specialist noted that there are no adverse conditions prohibiting the construction of structures for residential, commercial and industrial purposes were observed on this site in Zone B. From a geotechnical perspective, the site is considered economically and practically developable. Western Layout (Alternative A1) is therefore the preferred and only alternative assessed in this BAR.

### Technology Alternatives

**Sustainable buildings and design** (Alternative A1 - preferred and only alternative assessed) vs. conventional building and design (Alternative A2)

Sustainable building and design entails the construction of structures which has been built through processes which are environmentally responsible and resource efficient throughout the life-cycle of the structure. Sustainable building designs further expand and complements the classic design concerns of economy, utility, durability and comfort. The common objective is that “green” buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by:

- Efficiently using energy, water and other resources;
- Protecting occupant health and improving employee productivity; and
- Reducing waste, pollution and environmental degradation.

The following social and financial benefits are associated with sustainable buildings:

- Lower operating costs (through energy savings);
- Create, expand and shape markets for green product services;
- Higher return on assets;
- Increased property values;
- Enhanced marketability;
- Reduced liability and risk;
- Responsible investing;
- Increased productivity;
- Attracting and retaining talent;
- Enhance occupant comfort and health;
- Heighten aesthetic qualities; and

- Minimize strain on local infrastructure.

The architects has advised the following in support of the actual design:

One of the main priorities has been the preservation of the environment and the sustainability of the buildings that lie within this area and the need for the building's to have a visual impact on the surrounding areas so that it becomes a recognised feature that stands apart from the landscape.

The extreme climates that befall the Kalahari and are using that to our advantage based on calculations that are governed by the use of the building regulations : SANS 10400 part XA (Environmental sustainability and Energy usage in buildings) as well as SANS 204 Energy efficiency in buildings.

A "building envelope" has been considered and as a whole when we calculate the energy efficiencies of the buildings and we do this by calculating the energy demands on the building from the way it sits on the ground, how the sun can penetrate the facade via the fenestration elements and the walls all the way to the roof construction; how the energy is absorbed or dissipated. We then run these values through a series of calculations and come up with specific values that must be applied.

Once we have calculated the energy requirements on the building envelope, we then have to look at the type of energy demand that is placed on the building. so, we look at lighting, and again refer to the guidelines that specify exactly what our allowable lighting requirement is based on a value of Watts per square metre.

If the building is to be mechanically ventilated, then we must take that into account too, and will liaise with the mechanical engineers as to what there allowable energy demand will be on the building and they need to ensure that they do not exceed that specified limit.

Our requirement is for the need for hot water. We are, as set out by law, required to specify a hot water system that uses 50% of the volume of water by any means other than electric. So we look at the option of installing solar water heaters or heat pumps in order for us to achieve this.

As noted before, these values must be achieved in order for the buildings to pass the energy requirements as set out by law.

Sustainable building and design (Alternative A1) is therefore the preferred and only alternative assessed in this BAR.

No-Go Alternative

The No-Go Alternative refers to the option of not implementing the activity (no construction and operation of the technical training college) and ultimately the continuation of the current *status quo*. The development and operation of the technical training college will significantly contribute to skills development for historically disadvantaged individuals (HDI's) from the local communities in the Northern Cape Province. Should the training college not be developed, HDI's will not have the opportunity to, through worked based learning, acquire specific transferable skills and knowledge to ensure that they are more employable in the future. All students will after training be more employable which will in turn ensure that they are successful in their future occupations, which will benefit themselves, the workforce, the community and the economy. This is of great importance in South Africa, more so in the Northern Cape province where the rate of unemployment and unskilled individuals from HDI is high.

**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:**

- Alternative S1<sup>1</sup> (preferred or only site alternative)
- Alternative S2 (if any)
- Alternative S3 (if any)

**In the case of linear activities: N/A**

**Alternative:**

- Alternative S1 (preferred or only route alternative)

Latitude (S): Longitude (E):

27°	27 '40.64"	23°	27 '23.01"

Latitude (S): Longitude (E):

<sup>1</sup> "Alternative S.." refer to site alternatives.

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

For route alternatives that are longer than 500m, please provide 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):

<b>Alternative:</b>	<b>Size of the activity:</b>
Alternative A1 <sup>2</sup> (preferred activity alternative)	150 000m <sup>2</sup>
Alternative A2 (if any)	
Alternative A3 (if any)	
or, for linear activities: <b>N/A</b>	
<b>Alternative:</b>	<b>Length of the activity:</b>
Alternative A1 (preferred activity alternative)	
Alternative A2 (if any)	
Alternative A3 (if any)	

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

<b>Alternative:</b>	<b>Size of the site/servitude:</b>
Alternative A1 (preferred activity alternative)	
Alternative A2 (if any)	
Alternative A3 (if any)	

## 5. SITE ACCESS

Does ready access to the site exist?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> 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:

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<sup>2</sup> "Alternative A.." refer to activity, process, technology or other alternatives.

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## **ACCESS ROAD:**

IT WAS INITIALLY PLANNED THAT THE FORMALISED ACCESS TO THE SITE WOULD HAVE BEEN OF THE N14. HOWEVER, SANRAL HAS CONFIRMED THAT NO ACCESS SHALL BE GRANTED DIRECTLY OF THE N14 FOR A SINGLE DEVELOPMENT. THE ACCESS WILL BE OF THE UNNAMED ROAD RUNNING ADJACENT ON THE WESTERN INTERFACE OF THE SITE LEADING TO THE KURUMAN GOLF CLUB. THE ROAD IN QUESTION IS IN A DERELICT CONDITION AND IT WILL BE UPGRADED. REFER TO ANNEXURE A & C RESPECTIVELY FOR SITE LAYOUT AND FOR SITE ACCESS ILLUSTRATIONS.

## **STORMWATER:**

ALL ROADS AND STORMWATER WILL BE DESIGNED ACCORDING TO "THE GUIDELINES FOR THE PROVISION OF ENGINEERING SERVICES AND AMENITIES IN RESIDENTIAL TOWNSHIP DEVELOPMENT" ALSO KNOWN AS THE "RED BOOK". THE FOLLOWING HYDROLOGICAL DATA WAS USED IN THE DESIGN OF THE STORMWATER DRAINAGE SYSTEM:

- a) Flood return period : 1:5 years for stormwater systems (Minor system)  
1:25 years for stormwater systems (Major system)
- b) Average yearly rainfall : 450 mm
- c) Minimum time of concentration and runoff coefficient according to : The Guidelines for the Provision of Engineering Services and Amenities in Residential Township Development" also known as the "Red Book".
- d) Design method : Rational method for smaller catchment areas

STORMWATER WOULD DRAIN VIA NEW STORMWATER OPEN CHANNELS TOWARD THE EXISTING CULVERT UNDERNEATH THE N14 PROVINCIAL ROAD ON THE NORTHERN BOUNDARY OF THE SITE. REFER TO APPENDIX A FOR THE PROPOSED SERVICES LAYOUT DRAWING.

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);
- 6.9 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
- 6.10 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 1000 000 000 (1bn)	
R 0	
XYES	NO
XYES	NO
100	
R 800 000 000 (800ml)	
15%	
35 (college) 245 (students)	
R 500 000 000 (500 ml)	
60%	

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development phase of the activity?

What is the expected value of the employment opportunities during the development phase?

What percentage of this will accrue to previously disadvantaged individuals?

How many permanent new employment opportunities will be created during the operational phase of the activity?

What is the expected current value of the employment opportunities during the first 10 years?

What percentage of this will accrue to previously disadvantaged individuals?

**9(b) Need and desirability of the activity**

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

The proposed technical training college will significantly contribute to skills development for historically disadvantaged individuals (HDI's) from the local communities in the Northern Cape Province. The college will be managed by the Artisan Training Institute (ATI). ATI is an independent artisan training provider, specializing in the engineering discipline. Students will have the opportunity to receive quality technical skills training in the engineering field which would include *inter alia* the following training :

- Automotive (Diesel, Tractor, Auto-Electrical, Earth Moving Equipment)
- Electrical (Domestic & Industrial, Millwright)
- Mechanical (Fitting & Turning, Tool Jig and Die Maker)
- Welding Courses (Plater-Welder, Welding, Boilermaker, Sheet Metal Worker, and Coded Welder)
- Instrumentation
- Rigging

According to ATI's website, their vision is to "be a principle-driven, technical training provider, investing in Engineering; proudly contributing to the development of skills in Southern Africa." The ATI is accredited by the South African Bureau of Standards (SABS) and undergoes accreditation audits annually to determine quality of service. Their primary accreditation, though, is with the Mining Qualifications Authority (MQA) who audits them every two years (ATI, 2013). ATI's programmes are approved by the Manufacturing, Engineering and Related Services Sectoral Education and Training Authority (MERSETA).

At the training college, through worked based learning, individuals will be given the opportunity to acquire the required specific transferable skills and knowledge which will in the future make them more employable at reputable companies in the engineering field.

All students will after training be more employable which will in turn ensure that they are successful in their future occupations, which will benefit themselves, the workforce, the community and the economy. This is of great importance in South Africa, more so in the Northern Cape province where the rate of unemployment and unskilled individuals from HDI is high.

Indicate any benefits that the activity will have for society in general:

Refer to point 9b above.

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Indicate any benefits that the activity will have for the local communities where the activity will be located:

**Refer to point 9b above.**

<b>DESIRABILITY:</b>			
1.	Does the proposed land use / development fit the surrounding area?	<b>X YES</b>	NO
2.	Does the proposed land use / development conform to the relevant structure plans, SDF and planning visions for the area?	<b>X YES</b>	NO
3.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	<b>X YES</b>	NO
4.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation: <b>N/A</b>		
5.	Will the proposed land use / development impact on the sense of place?	YES	<b>X NO</b>
6.	Will the proposed land use / development set a precedent?	YES	<b>X NO</b>
7.	Will any person's rights be affected by the proposed land use / development?	YES	<b>X NO</b>
8.	Will the proposed land use / development compromise the "urban edge"?	YES	<b>X NO</b>
9.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation. <b>N/A</b>		

<b>BENEFITS:</b>			
1.	Will the land use / development have any benefits for society in general?	<b>X YES</b>	NO
2.	Explain: Refer to point		
3.	Will the land use / development have any benefits for the local communities where it will be located?	<b>X YES</b>	NO
4.	Explain: <b>Refer to point 9b above.</b>		

### 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	APPLICABILITY TO THIS PROJECT	ADMINISTERING AUTHORITY	DATE
National Environmental Management Act, 107 of 1998  NEMA EIA Regulations (Government Notices 543; 544; 546)	This Basic Assessment Report and Environmental Management Programme meets the requirements of the NEMA EIA Regulations of 2010.	<b>NCDENC</b>	1998  2010/ 2012
National Water Act, 36 of 1998	The proposed development (construction and operational phases) will conform to the objectives of the National Water Act, 36 of 1998.	Department of Water Affairs	1998
National Heritage Act, 25 of 1999	The proposed development is subject to the requirements of the Section 38 of the National Heritage Act 25 of 1999. Authorisation in terms of Section 38 as been applied for with SAHRA.	SAHRA	1999
National Environmental Management: Waste Act (Act 59 of 2008)  Waste Classification and Management Regulations (GNR: 634 - 635) 23 August 2013	The management of waste during the construction and operational phases will be in accordance with the requirement and provisions of the Waste Act and Regulations.	Department of Waste Management	2008  2013

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Northern Cape Provincial Spatial Development Framework (2012)	This framework was consulted to inform whether the proposed development is aligned with the objectives and strategies of the Northern Cape's Policies and Spatial Planning. The PSDF accordingly recognises and is aligned with the applicable statutes, policies, protocols and agreements that regulate land-use at all levels throughout the biosphere, including: Relevant international agreements, protocols and conventions. National and provincial legislation and policy. Regional and local SDFs, structure plans and other policy.	Northern Cape Provincial Administration	2012
National Forests Act, 84 of 1998	The development is subject to the provisions and requirements of the Act. A permit for the removal of protected trees will be applied for.	Department of Agriculture, Forestry and Fisheries	1998
Northern Cape Nature Conservation Act, 9 of 2009	The proposed development will conform to the objectives, provisions and requirements of the Northern Cape Nature Conservation Act, 9 of 2009.	Northern Cape Provincial Administration	2009
Ga-Segonyana Local Municipality Integrated Development Plan 2012-16	This plan was consulted to inform the Need and Desirability of the proposed development as the Socio-Economic characteristics of the area. In addition, this plan was consulted to inform whether the proposed development is aligned with the objectives and strategies of the municipalities' planning objectives.	Ga-Segonyana Local Municipality	2012
John Taolo Gaetsewe Integrated Development Plan 2012-17	This plan was consulted to inform the Need and Desirability of the proposed development as the Socio-Economic characteristics of the area. In addition, this plan was consulted to inform whether the proposed development is aligned with the objectives and strategies of the municipalities' planning objectives.	John Taolo Gaetsewe District Municipality	2012
DEA&DP and DEA Guidelines on Public Participation	Used as a guide to inform of the public participation process.	Department of Environmental Affairs and Development Planning  Department of Environmental Affairs	2012
DEA&DP and DEA Guidelines on Alternatives	Used as a guide to inform on the use and presentation of alternatives in the IA process.	Department of Environmental Affairs and Development Planning  Department of Environmental Affairs	2012
DEA&DP and DEA Guidelines on Need and Desirability	Used as a guide to inform on the need and desirability of the upgrade in conjunction with the above mentioned SDF's and IDP's.	Department of Environmental Affairs and Development Planning  Department of	2012

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		Environmental Affairs	
The Vegetation of South Africa, Lesotho and Swaziland. Mucina & Rutherford (2006). SANBI, Pretoria	Utilised as a reference guide for the identification of upgrade-specific environmental information	CapeNature	2006

### 11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

#### 11(a) Solid waste management

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

<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
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If yes, what estimated quantity will be produced per month?

24 m <sup>3</sup>
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How will the construction solid waste be disposed of (describe)?

**REFER TO ANNEXURE D5 – ENGINEERING DESIGN REPORT FOR MUNICIPAL SERVICES (DESTTECH CONSULTING (PTY) LTD DATED APRIL 2014)**

The following philosophy will be implemented during the construction phase of the College:

- Minimise generation of waste material;
- Increase the efficiency of the use of raw material;
- Reuse, reduce or recycle material where feasible;
- Treat/dispose and handling of waste in such a manner that surrounding environment is minimally impacted upon;
- Promote awareness of and adhere to proper waste management procedures;
- Managing waste as close to the source as practicable;
- Take cognizance of our Duty of Care to the environment; and
- Take responsibility for causing pollution by internalising the cost of decontamination and rehabilitation (Polluter pays principle).

The management of waste during the construction phase will be in accordance with the requirement and provisions of the following:

- National Environmental Management: Waste Act (Act 59 of 2008)
- National Environmental Management: Waste Act: Waste Classification and Management Regulations (GNR: 634 – 635) 23 August 2013
- National Water Act (Act 36 of 1998)
- Hazardous Substances Act (Act 15 of 1993)
- National Environmental Management: Air Quality Act (Act 39 of 2004)
- Occupational Health and Safety Act (Act 85 of 1993)
- SANS 10228
- SANS 10234

Solid waste (construction waste and builders rubble) will be collected by independent contractors and disposed of at the registered licensed municipal landfill site with proof of safe disposal required. Furthermore, the Contractor will reuse selected excavated material as fill material provided the material meets the required specification.

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

**Solid waste shall be collected by independent contractors and disposed of at the registered licensed municipal landfill site with proof of safe disposal required**

Will the activity produce solid waste during its operational phase?

<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
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If yes, what estimated quantity will be produced per month?

8 m <sup>3</sup>
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How will the solid waste be disposed of (describe)?

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The following philosophy will be implemented during the operational phase of the College:

- Minimise generation of waste material;
- Increase the efficiency of the use of raw material;
- Reuse, reduce or recycle material where feasible;
- Treat/dispose and handling of waste in such a manner that surrounding environment is minimally impacted upon;
- Promote awareness of and adhere to proper waste management procedures;
- Managing waste as close to the source as practicable;
- Take cognizance of our Duty of Care to the environment; and
- Take responsibility for causing pollution by internalising the cost of decontamination and rehabilitation (Polluter pays principle).

The management of waste during the operational phase will be in accordance with the requirement and provisions of the following:

- National Environmental Management: Waste Act (Act 59 of 2008)
- National Environmental Management: Waste Act: Waste Classification and Management Regulations (GNR: 634 – 635) 23 August 2013
- National Water Act (Act 36 of 1998)
- Hazardous Substances Act (Act 15 of 1993)
- National Environmental Management: Air Quality Act (Act 39 of 2004)
- Occupational Health and Safety Act (Act 85 of 1993)
- SANS 10228
- SANS 10234

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

N/A

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

**REFER TO ANNEXURE D5 – ENGINEERING DESIGN REPORT FOR MUNICIPAL SERVICES (DESTTECH CONSULTING (PTY) LTD DATED APRIL 2014). THE SEWER DESIGN WILL BE DONE ACCORDING TO THE DESIGN GUIDELINES WHICH ARE BASED ON THE REQUIREMENTS OF “THE GUIDELINES FOR THE PROVISION OF ENGINEERING SERVICES AND AMENITIES IN RESIDENTIAL TOWNSHIP DEVELOPMENT” ALSO KNOWN AS THE “RED BOOK”. BASED ON THE LAND USE AS PER THE LATEST SITE DEVELOPMENT PLAN, THE WATER DEMAND FOR THE ERF IS CALCULATED AS FOLLOW:**

LAND USE	NUMBER OF Units	AREA (m <sup>2</sup> )	SEWER DEMAND	AVERAGE DAILY SEWER DEMAND
College building		4 500	600 l /100 m <sup>2</sup> /day	27 000
Living units (8 rooms each)	10		400 l / room /day	32 000
Gardens and landscaping				

**59 000** l/day

**NEW INTERNAL 160MM DIAMETER GRAVITY SEWERLINE WOULD BE INSTALLED WHICH WOULD DRAIN TOWARDS THE NORTH WESTERN CORNER OF THE SITE WHERE A CONNECTION TO THE MUNICIPAL SEWER SYSTEM WOULD BE PROVIDED. REFER TO APPENDIX A FOR THE PROPOSED SERVICES LAYOUT DRAWING.**

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<sup>3</sup>

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

# BASIC ASSESSMENT REPORT

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:

## 11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

YES	<b>X NO</b>
-----	-------------

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:

## 11(d) Generation of noise

Will the activity generate noise?

YES	<b>X NO</b>
-----	-------------

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:

## 12. WATER USE

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

<b>X Municipal</b>	water board	groundwater	river, stream, dam or lake	other	the activity will not use water
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**REFER TO ANNEXURE D5 – ENGINEERING DESIGN REPORT FOR MUNICIPAL SERVICES (DESTech CONSULTING (PTY) LTD DATED APRIL 2014)**

**THE DESIGN OF THE INTERNAL WATER RETICULATION NETWORK WILL BE DONE ACCORDING TO THE DESIGN GUIDELINES WHICH ARE BASED ON THE REQUIREMENTS OF “THE GUIDELINES FOR THE PROVISION OF ENGINEERING SERVICES AND AMENITIES IN RESIDENTIAL TOWNSHIP DEVELOPMENT” ALSO KNOWN AS THE “RED BOOK”. BASED ON THE LAND USE AS PER THE LATEST SITE DEVELOPMENT PLAN, THE WATER DEMAND FOR THE ERF IS CALCULATED AS FOLLOWS**

LAND USE	NUMBER OF Units	AREA (m <sup>2</sup> )	WATER DEMAND	AVERAGE DAILY WATER DEMAND
College building		4 500	600 l /100 m <sup>2</sup> /day	27 000
Living units (8 rooms each)	10		400 l / room /day	32 000
Gardens and landscaping		10 000	15 kl / ha / day	15 000

74 000 l/day

**THE INTERNAL WATER RETICULATION WOULD CONSIST OUT OF A 160MM DIAMETER SUPPLY LINE WITH VARIOUS 110MM DIAMETER DISTRIBUTION LINES WITH FIRE HYDRANTS IN-BETWEEN THE BUILDINGS. A MUNICIPAL WATER CONNECTION POINT WOULD BE PROVIDED IN THE NORTH WESTERN CORNER OF THE SITE. REFER TO APPENDIX A OF SERVICES REPORT FOR THE PROPOSED SERVICES LAYOUT DRAWING.**

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		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">YES</td> <td style="width: 50%; text-align: center;"><b>X NO</b></td> </tr> </table>	YES	<b>X NO</b>
YES	<b>X NO</b>	

Does the activity require a water use permit from the Department of Water Affairs?

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:

The architects has advised the following in support of the actual design:

One of the main priorities has been the preservation of the environment and the sustainability of the buildings that lie within this area and the need for the building's to have a visual impact on the surrounding areas so that it becomes a recognised feature that stands apart from the landscape.

The extreme climates that befall the Kalahari and are using that to our advantage based on calculations that are governed by the use of the building regulations : SANS 10400 part XA (Environmental sustainability and Energy usage in buildings) as well as SANS 204 Energy efficiency in buildings.

A "building envelope" has been considered and as a whole when we calculate the energy efficiencies of the buildings and we do this by calculating the energy demands on the building from the way it sits on the ground, how the sun can penetrate the facade via the fenestration elements and the walls all the way to the roof construction; how the energy is absorbed or dissipated. We then run these values through a series of calculations and come up with specific values that must be applied.

Once we have calculated the energy requirements on the building envelope, we then have to look at the type of energy demand that is placed on the building. so, we look at lighting, and again refer to the guidelines that specify exactly what our allowable lighting requirement is based on a value of Watts per square metre.

If the building is to be mechanically ventilated, then we must take that into account too, and will liaise with the mechanical engineers as to what there allowable energy demand will be on the building and they need to ensure that they do not exceed that specified limit.

Our requirement is for the need for hot water. We are, as set out by law, required to specify a hot water system that uses 50% of the volume of water by any means other than electric. So we look at the option of installing solar water heaters or heat pumps in order for us to achieve this.

As noted before, these values must be achieved in order for the buildings to pass the energy requirements as set out by law.

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

See above.

## SECTION B : SITE/AREA/PROPERTY DESCRIPTION

### Important notes:

- 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):

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

- Has a specialist been consulted to assist with the completion of this section?

YES  NO

If YES, please complete form XX for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

### 1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

#### Alternative S1:

<input checked="" type="checkbox"/> Flat	<input checked="" type="checkbox"/> 1:50 – 1:20	<input type="checkbox"/> 1:20 – 1:15	<input type="checkbox"/> 1:15 – 1:10	<input type="checkbox"/> 1:10 – 1:7,5	<input type="checkbox"/> 1:7,5 – 1:5	<input type="checkbox"/> Steeper than 1:5
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#### Alternative S2 (if any):

<input type="checkbox"/> Flat	<input type="checkbox"/> 1:50 – 1:20	<input type="checkbox"/> 1:20 – 1:15	<input type="checkbox"/> 1:15 – 1:10	<input type="checkbox"/> 1:10 – 1:7,5	<input type="checkbox"/> 1:7,5 – 1:5	<input type="checkbox"/> Steeper than 1:5
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#### Alternative S3 (if any):

<input type="checkbox"/> Flat	<input type="checkbox"/> 1:50 – 1:20	<input type="checkbox"/> 1:20 – 1:15	<input type="checkbox"/> 1:15 – 1:10	<input type="checkbox"/> 1:10 – 1:7,5	<input type="checkbox"/> 1:7,5 – 1:5	<input type="checkbox"/> Steeper than 1:5
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# BASIC ASSESSMENT REPORT

## 2. LOCATION IN LANDSCAPE

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

- 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	<b>X NO</b> **	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	<b>X YES</b> **	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	<b>X NO</b> **	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	<b>X NO</b> **	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	<b>X NO</b> **	YES	NO	YES	NO
Any other unstable soil or geological feature	<b>X YES</b> **	NO	YES	NO	YES	NO
An area sensitive to erosion	<b>X YES</b> **	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).

**\*\* Reference is made to the findings of the Geotechnical Investigation (BGC, June 2013) [as attached in Annexure D]:**

### 1. Site Geology

The site is underlain by dolomite and chert formations of the Campbell Rand Subgroup, Ghaap Group, Transvaal Supergroup. Kuruman lies on the southern edge of the Kalahari Group sedimentary deposits and these are present in places within the general areas. These deposits consist of beds of gravel, red and brown clays with scattered pebbles, calcrete and at the top unconsolidated sand. It is therefore likely that much of the overburden above the dolomite consists of the Kalahari Group sediments (Cenozoic age). Alluvial deposits associated with the Kuruman River, and possibly other older river systems, occur extensively with this area.

For detailed information relating to the stratigraphy (transported soils, pedogenic horizon and residual soils and rock) refer to the Geotechnical Investigation (BGC, June 2013).

### 2. Groundwater

#### *Regional*

The site is located within the Kuruman A Eye Groundwater Compartment. Within this, the original water level appears to be located at an elevation of approx. 1320 m.

#### *Site*

Water levels measured in the boreholes drilled at the site had elapsed after 24hours. No water was found in any of the boreholes which is not surprising as the majority of them were terminated at elevations which are likely above the regional water table. Dolomite bedrock is well above the water table at this site.

### 3. Erodability of soil profile



The soil profile in the upper reaches of the profile is probably erodible if subjected to high water velocity, as it is cohesionless. Although no significant erosion channels were encountered during the site assessment, it is possible that erosion could become a problem at this site if the soil is stripped of vegetation. This is however not likely to pose a significant problem to the proposed development provided that storm water run-off is properly controlled and managed.

**4. Steep / unstable natural slopes**

This site does not have any steep slopes and is therefore unaffected by this constraint. In addition, no unstable natural slopes were found at the site during the investigation.

**5. Areas subject to flooding**

It is unlikely that the site will be flooded as no drainage channels of significance occur within site or close to it.

**Conclusions and recommendations**

**No adverse conditions prohibiting the construction of structures for residential, commercial and industrial purposes were observed on the site. From a geotechnical perspective, the site is considered economically and practically developable.**

**4. GROUNDCOVER**

Indicate the types of groundcover present on the site:

- 4.1 Natural veld – good condition <sup>E</sup>
- 4.2 Natural veld – scattered aliens <sup>E</sup>
- 4.3 Natural veld with heavy alien infestation <sup>E</sup>**
- 4.4 Veld dominated by alien species <sup>E</sup>**
- 4.5 Gardens
- 4.6 Sport field
- 4.7 Cultivated land
- 4.8 Paved surface
- 4.9 Building or other structure
- 4.10 Bare soil**

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 <sup>E</sup>	<b>X Natural veld with scattered aliens<sup>E</sup></b>	Natural veld with heavy alien infestation <sup>E</sup>	<b>X Veld dominated by alien species<sup>E</sup></b>	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	<b>X Bare soil</b>

If any of the boxes marked with an “<sup>E</sup>” 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.

**\*\* Reference is made to the findings of the Ecological Assessment (ENVASS, March 2014) [as attached in Annexure D]:**

The site is situated in an arid Savanna region. The structural diversity in plants is largely determined by solitary tree patches and shrubs, these are key elements in the typical homogenous landscape. Thus, the site offers limited plant diversity. There were two representatives of plant communities namely trees and shrubs. Trees were represented by *Acacia erioloba* and *Acacia heamatoxylon* whereas the shrubs were represented by *Tarchonanthus camphoratus*, *Acacia karroo*, *Acacia mellifera subsp. Detinens*, *Searsia lancea*, *Acacia hebeclada* and *Gnidia polycephala*. Alien trees were represented by the gum tree *Eucalyptus* species.

The ecologist confirmed a total of 29 protected tree species onsite: consisting of 17 (seventeen) *Acacia erioloba* (Camel thorn tree) and 12 (twelve) *Acacia haematoxylon* (Grey Camel thorn tree). All infrastructure has been designed as to accommodate the protected trees found in site (i.e. incorporating them into the landscaping where possible). A permit for the removal / destruction of protected trees will be applied for with the Department of Agriculture, Forestry and Fisheries (DAFF) in terms of the NFA.

The study area is a typical Kalahari area which possesses endemic plants that are regarded as important and also problematic. However, the site has been degraded through grazing and previous clearing. The main impact that the proposed project will impose will be the clearing of vegetation for the infrastructure construction. Clearance of

vegetation often affect the soil as it expose it to harsh environmental conditions whilst total removal of vegetation may disturbed species functionality and rob animals of their habitat and also changes ecosystem functioning structure. The extent of this proposed project impacts has a potential to be confined in a small area thus being localized and of low significance.

## 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:

### 5.1 Natural area

### 5.2 Low density residential

### 5.3 Medium density residential

5.4 High density residential

5.5 Informal residential<sup>A</sup>

### 5.6 Retail commercial & warehousing

5.7 Light industrial

5.8 Medium industrial<sup>AN</sup>

5.9 Heavy industrial<sup>AN</sup>

5.10 Power station

5.11 Office/consulting room

5.12 Military or police base/station/compound

5.13 Spoil heap or slimes dam<sup>A</sup>

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<sup>A</sup>

5.22 Train station or shunting yard<sup>N</sup>

5.23 Railway line<sup>N</sup>

5.24 Major road (4 lanes or more)<sup>N</sup>

5.25 Airport<sup>N</sup>

5.26 Harbour

5.27 Sport facilities

### 5.28 Golf course

5.29 Polo fields

5.30 Filling station<sup>H</sup>

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 (describe)

Refer to Figure 4 below. The following prominent features and land use features occur within a 500m radius of the proposed development site:

- Kuruman Hospital (Approx. 450 m north- west of the site boundary)
- Wrenchville residential area and school (Approx. 450 m north to north-east of the site boundary)
- Kuruman Country Club (Approx. 800 m south of the site boundary)
- El Dorado Hotel (Approx. 100m west of the site boundary)
- Kuruman Tributary (Approx. 1.5km east of the development area)

# BASIC ASSESSMENT REPORT



Figure 4: Surrounding land uses

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

If YES, specify and explain:	N/A
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If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, 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.

If YES, specify and explain:	N/A
------------------------------	-----

## 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 Archaeological or paleontological sites, on or close (within 20m) to the site?	YES	<b>X NO</b>
If YES, explain:	N/A	
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.	Uncertain	
Briefly explain the findings of the specialist:	<p><b>Reference is made to the Archaeological Impact Assessment undertaken by Coetzee and George in September 2013 (attached in Annexure D):</b></p> <p><b>The specialist assessment concluded that <u>no archaeological material of heritage significance was observed on site during the assessment.</u> The small building structure observed on site was found not to be older than 60 years and therefore a permit for destruction in terms of the National Heritage Resources Act, 1999 is not required. The proposed development is therefore recommended to proceed on the proposed site.</b></p> <p><b>Comment received from SAHRA – Please refer to ANNEXURE E</b></p>	

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

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.

# BASIC ASSESSMENT REPORT

## 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.

**The Public Participation Process is undertaken in accordance with the requirements of Regulation 54-57. Please refer to Annexure E for proof of advertisement placement.**

### 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
  - (v) the manner in which and the person to whom representations in respect of the application may be made.

**The Public Participation Process is undertaken in accordance with the requirements of Regulation 54-57. Please refer to Annexure E for proof of advertisement placement.**

### 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.

# BASIC ASSESSMENT REPORT

Advertisements and notices must make provision for all alternatives.

**The Public Participation Process has been undertaken in accordance with the requirements of Regulation 54-57. Please refer to Annexure E for proof of advertisement placement.**

## 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.

**The Public Participation Process has been undertaken in accordance with the requirements of Regulation 54-57. Please refer to Annexure E for comments and responses.**

## 6. AUTHORITY PARTICIPATION

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

List of authorities informed:

- Northern Cape Province: Department of Environment and Nature Conservation
- Department of Water Affairs
- Department of Sports, Arts And Culture: Ngwao Boswa Kapa Bokoni \_ Provincial Heritage Resources Authority
- Department of Agriculture
- Department of Roads and Stormwater
- Department of Health
- Department of Mineral Resources
- Local Municipality
- District Municipality

List of authorities from whom comments have been received:

**Refer to Comments and Responses report attached in Annexure E**

## 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.

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

Has any comment been received from stakeholders?

YES  NO

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

**Refer to Comments and Responses report attached in Annexure E**

## SECTION D: IMPACT ASSESSMENT

# BASIC ASSESSMENT REPORT

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.

**Refer to Comments and Responses Report attached in Annexure E.**

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):

**Refer to Comments and Responses Report attached in 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.

**Alternative (preferred alternative)**

**Refer to Appendix G1 and G2:**

**G1 – ENVASS Impact Rating Methodology**

**G2 – Impact Assessment (Preferred alternatives assessed - construction, operational phases as well as the No-Go Alternative).**

## 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.

NATURE OF IMPACT	DESCRIPTION OF IMPACT	STATUS	SIGNIFICANCE POST-MITIGATION
<b>PREFERRED ALTERNATIVE A1 - CONSTRUCTION PHASE</b>			
<b>GEOLOGICAL</b>	Potential for sinkholes to develop and the presence of an abundance of shallow dolomite pinnacles and flat areas of outcrop which will impede excavations for foundations and services.	<b>Negative</b>	Low
<b>GEOLOGICAL</b>	Contamination of soils through indiscriminate disposal of construction waste and accidental spillage of petroleum products.	<b>Negative</b>	Low
<b>GEOLOGICAL</b>	Soil erosion through vegetation clearance and soil compaction by heavy duty construction vehicles.	<b>Negative</b>	Low
<b>BOTANICAL / ECOLOGICAL</b>	Potential loss of species and diversity through removal and clearance of vegetation.	<b>Negative</b>	Low
<b>VISUAL</b>	Visibility from sensitive receptors / visual scarring of the landscape as a result of the construction activities.	<b>Negative</b>	Low

## BASIC ASSESSMENT REPORT

HERITAGE / ARCHAEOLOGICAL	Damage to or destruction of archaeological resources during the construction.	Negative	Low
DUST	Dust impacts on the surrounding environmental associated with construction activities.	Negative	Low
NOISE	Noise impacts on surrounding environment associated with construction activities (construction vehicles and equipment).	Negative	Low
WASTE	Generation of additional waste/ litter and building rubble/hazardous material during the construction phase.	Negative	Low
SOCIO-ECONOMIC	Employment opportunities during the construction phase for local people.	Positive	Medium
HEALTH AND SAFETY	Health and safety impacts associated with training in the workshops.	Negative	Low
TRAFFIC	Temporary disruption of traffic due to construction vehicles.	Negative	Low
<b>PREFERRED ALTERNATIVE A1 - OPERATIONAL PHASE</b>			
WASTE	Generation of additional general waste/ litter hazardous material (workshops) during the operational phase.	Negative	Low
SOCIO-ECONOMIC	Skills development for historically disadvantaged individuals (HDI's) from the local communities in the Northern Cape Province. Individuals will be more employable which will benefit themselves, the workforce, the community and the economy.	Positive	High
VISUAL	Heightening of aesthetic qualities of the receiving area through modern green building.	Positive	Medium
HEALTH AND SAFETY	Health and safety impacts associated with training in the workshops.	Negative	Low
NOISE AND LIGHTING	Noise and lighting impacts associated with operations of the college.	Negative	Low
<b>NO-GO ALTERNATIVE</b>			
SOCIO-ECONOMIC	No skills development for historically disadvantaged individuals (HDI's) for the local communities in the Northern Cape Province. No net benefit to the community or industry.	Negative	High

SECTION E. RECOMMENDATION OF PRACTITIONER

## BASIC ASSESSMENT REPORT

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)?

<input checked="" type="checkbox"/> YES	NO
<input checked="" type="checkbox"/> YES	NO

Is an EMPr attached?

The EMPr must be attached as Appendix F.

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):

N/A

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:

**The negative environmental impacts associated with the proposed development are generally considered to be local and of low significance and can be mitigated in accordance with the detailed EMP. The proposed development will however, result in positive cumulative impacts and has an overall positive benefit to the local community and socio-economic development the province. The proposed development is aligned with the objectives of the policies and frameworks at both provincial and local level.**

**Refer to EMP in Appendix F for mitigation measures.**

### 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