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Department: Environment & Nature Conservation NORTHERN CAPE PROVINCE REPUBLIC OF SOUTH AFRICA

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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, 2014, 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, 2014 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
- 2. This report format is current as of **08 December 2014**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
- 3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
- 4. Where applicable **tick** the boxes that are applicable in the report.
- 5. An incomplete report may be returned to the applicant for revision.
- 6. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
- 7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 8. No faxed or e-mailed reports will be accepted.
- 9. The signature of the EAP on the report must be an original signature.
- 10. The report must be compiled by an independent environmental assessment practitioner.
- 11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
- 12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.

#### SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section? YESX NO If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

#### 1. ACTIVITY DESCRIPTION

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

The development of Calvinia Garden of Remembrance

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

Listed activity as described in GN 734, 735 and 736	Description of project activity
Example: GN 734 Item xx xx): The construction of a bridge where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	A bridge measuring 5 m in height and 10m in length, no wider than 8 meters will be built over the Orange river
GN R.983 Item 19 (i): The infilling or deposit of any material of more than 5 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic meters from (i) a watercourse	The stabilization of the river bank with gabion structures The rehabilitation of the river bank through the removal of soil burdens and landscaping and revegetation in line with the post construction rehabilitation plan
GN R.983 Item 12 (iii)(a): The development of bridges exceeding 100 square meters in size within a watercourse	Construction of a bridge over a non-perennial stream on the Western part of the proposed site to link the amphitheatre and the coffee shop
GN R.983 Item 12 (x) (c ): The development of buildings exceeding 100 square metres in size where such development occurs if no development setback exists, within 32metres of a watercourse, measured from the edge of a watercourse	Construction of amphitheatre stage, boom and guard house, coffee shop plaza, parking etc within 32 metres of a watercourse

#### 2. FEASIBLE AND REASONABLE ALTERNATIVES

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

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

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

The determination of whether site or activity (including different processes, etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the, competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

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, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

#### a) Site alternatives

Alternative 1 (preferred alternative)			
Description	Lat (DDMMSS)	Long (DDMMSS)	
Calvinia, Erf no. 2560	31°28',2040"	19°45,55'61"	
Alternative 2			
Description	Lat (DDMMSS)	Long (DDMMSS)	
Alternative 3			
Description	Lat (DDMMSS)	Long (DDMMSS)	

In the case of linear activities:

#### Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (preferred)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative S2 (if any)

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

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

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

#### b) Lay-out alternatives

Alternative 1 (preferred alternative)			
Description	Lat (DDMMSS)	Long (DDMMSS)	
Alternative 2			
Description	Lat (DDMMSS)	Long (DDMMSS)	
Alternative 3			
Description	Lat (DDMMSS)	Long (DDMMSS)	

#### c) Technology alternatives

Alternative 1 (preferred alternative)		
	Alternative 2	
	Alternative 3	

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

Alternative 1 (preferred alternative)		
Alternative 2		
Alternative 3		

#### e) No-go alternative

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

#### 3. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative A1<sup>1</sup> (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any)

or, for linear activities:

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

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

Alternative:	Size of the site/servitude:
Alternative A1 (preferred activity alternative)	m <sup>2</sup>
Alternative A2 (if any)	m <sup>2</sup>
Alternative A3 (if any)	m <sup>2</sup>

#### 4. SITE ACCESS

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

Describe the type of access road planned:

YES X	NO
	m

Size of the activity:

34000m<sup>2</sup>

m<sup>2</sup> m<sup>2</sup>

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

#### 5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of

<sup>&</sup>lt;sup>1</sup> "Alternative A.." refer to activity, process, technology or other alternatives.

more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s;)
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

#### 6. LAYOUT/ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

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

#### 7. SENSITIVITY MAP

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

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

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

#### 8. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

#### 9. FACILITY ILLUSTRATION

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

#### 10. ACTIVITY MOTIVATION

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

Inline with the current PSDF         (b) Urban edge / Edge of Built environment for the area       YES X       NO       Please explain         (c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).       YES X       NO       Please explain         (d) Approved Structure Plan of the Municipality Structure plan must be submitted to the municipality for approval       YES X       NO       Please explain         (e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)       YES NO       Please explain         (f) Any other Plans (e.g. Guide Plan)       YES NO       Please explain		the activity permitted in terms of the property's existing d use rights?	YES X	NO	Please explain
(a) Provincial Spatial Development Framework (PSDF)YES XNOPlease explainInline with the current PSDF(b) Urban edge / Edge of Built environment for the areaYES XNOPlease explain(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).YES XNOPlease explain(d) Approved Structure Plan of the Municipality adopted by the Department (e.g. Would the approvalYES XNOPlease explain(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)YES XNOPlease explain(f) Any other Plans (e.g. Guide Plan)YESNOPlease explain	2. Wil	I the activity be in line with the following?			
(b)Urban edge / Edge of Built environment for the areaYES XNOPlease explain(c)Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).YES XNOPlease explain(d)Approved Structure Plan of the Municipality Structure plan must be submitted to the municipality for approvalYES XNOPlease explain(e)An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)YES NOPlease explain(f)Any other Plans (e.g. Guide Plan)YES NOPlease explain			YES X	NO	Please explair
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(ii) hppercention of the existing environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)       YES X       NO       Please explain the existing Please explain the existing Please explain the existing Please explain the existing Please explain the exist of the exist exist environmental management priorities for the area and if the exist explain the exist exist exist explain the exist explain the exist explain the exist exis exist exist exist exist exist exist exist e	(c)	Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible	YES X	NO	Please explair
Structure plan must be submitted to the municipality for approval         (e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)       YES X       NO       Please explain         (f) Any other Plans (e.g. Guide Plan)       YES       NO       Please explain	(d)	Approved Structure Plan of the Municipality	YES X	NO	Please explair
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)YES XNOPlease explain(f) Any other Plans (e.g. Guide Plan)YESNOPlease explain	• •		_		p -
		An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability	YES X	NO	Please explair
	( <b>f</b> )	Any other Plans (e.g. Guide Plan)	VEQ	NO	
	(I) N/A		IEO	NU	riease explait

3.	Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES X	NO	Please explain
Pa	t of the municipality's IDP project			
4.	Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES X	NO	Please explain
5.	Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES	NO X	Please explain
Pro	ponent must apply for water/ Sanitation and electricity			
6.	Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES	NO X	Please explain
Co	st will be for the developer's account			
7.	Is this project part of a national programme to address an issue of national concern or importance?	YES	NO	Please explain
No	sure		•	
8.	Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES X	NO	Please explain
	y open space available/ suitable for this project. Proposed project loo as and the services are expected to be consumed by the local and di			
9.	Is the development the best practicable environmental option for this land/site?	YES X	NO	Please explain
Мо	st practicable site available			

10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES X	NO	Please explai
Yes the benefits will outweigh the impacts. No major impact on the recei	ving envi	ronme	ent is foreseen.
Minor impacts will be addressed through the implementation of the EMP	r		
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO X	Please explai
Only activity in this area			
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO X	Please explai
Although the development is about 20m from the nearest resident, EMP	r has bee	en put	in place to
ensure that the construction team do not infringe into the rights of adjace	ent prope	rty ow	ners
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES X	NO	Please explai
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO	Please explai
Not sure			
15. What will the benefits be to society in general and to communities?	o the lo	ocal	Please explair
Employment, recreation, increase in economic activities, increase in her	itage valu	le	
16. Any other need and desirability considerations related to th activity?	e propo	sed	Please explair
The proposed project will enhance the management and conservation or constant monitoring and proper waste management strategies	f the adja	cent s	tream through
17. How does the project fit into the National Development Plan for	2030?		Please explair
The national development plan aims at alleviating poverty and reduce preamble of the NDP encourages the provision of equal quality ser proposed development is expected to create employment which we employed. It will also reduce inequality by bringing recreational amenity	vice to a vill reduc	ill con ce po	nmunities. The verty to those
18. Please describe how the general objectives of Integrated Env set out in section 23 of NEMA have been taken into account.	ironmen	tal Ma	anagement as
The department of Water Affairs has been consulted to comment on the is in close proximity to a stream; a waste management plan has been management of the site both during and after construction. All interest have patient and effected an expectation of the stream and effected an expectation.	develope	d to e	nsure effective

been notified about the project and offered an opportunity to comment on the proposed development

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

Various studies have been conducted and relevant state departments have been consulted to ensure a general management and protection of the environment. Studies conducted include geotechnical study and wetland study. The following state departments have been consulted: Department of Water Affairs, Department of Roads and Transports and Department of Economic Development and Land use planning Hantam Municipality.

#### 11. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

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

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
N/A			

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

#### a) Solid waste management

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

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

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

The activity is expected to produce very minimal solid waste from mostly cement bags, material packages which will be disposed through the municipality's waste collection facility

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

Will the activity produce solid waste during its operational phase? If YES, what estimated quantity will be produced per month? How will the solid waste be disposed of (describe)?

The activity is expected to produce very minimal solid waste from mostly consumption items like biscuit, cans, sweets etc since it is a park were people will visit for relaxation. The municipality will install permanent waste collection facilities within the park and waste will be collected regularly by the municipality during domestic waste collection

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

Collection will be done by the municipality and the waste will be disposed of in the nearest landfill Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)? Not Applicable

YES X	NO
	m <sup>3</sup>

YES X	NO
	m³

#### BASIC ASSESSMENT REPORT

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

Can any part of the solid waste be classified as hazardous in terms of the NEM: YES NO X WA?

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM: WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility? YES NO X If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM: WA must also be submitted with this application.

#### b) Liquid effluent

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

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

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

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	e activity	produce	effluent	that w	/ill be	treated	and/or	disposed	of at	another	VEC
facility?	)							·			IE2

If YES, provide the particulars of the facility:

in Teo, provido dio particularo or dio rac	Sincy.	
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:

#### c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other that exhaust emissions | YES and dust associated with construction phase activities?

YES	NO

NO X

If YES, the applicant must consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

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

If YES, is it controlled by any legislation of any sphere of government?

The activity is anticipated to produce dust during the construction phase and the quantity will not be above accepted limit since it will be controlled through dust suppression techniques

NO X

NO X

m<sup>3</sup>

NO X

YES

#### d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM: WA?

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

#### e) Generation of noise

Will the activity generate noise?

If YES, is it controlled by any legislation of any sphere of government?

Describe the noise in terms of type and level:

The noise will be generated as a result of trucks delivering construction materials on the site

#### 13. WATER USE

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

Municipal X 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: Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?

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

#### 14. ENERGY EFFICIENCY

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

The development will obtain electricity supply from the Municipality

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

YES	NO
Х	
YES	NO X

litres

NO X

YES

YES

NO X

### SECTION B: SITE/AREA/PROPERTY DESCRIPTION

#### Important notes:

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

Section B Copy No. (e.g. A):

- 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 X NO

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

Property	Province	Northern Cape	]		
description/physi	District	Namakwa District Municipality			
cal address:	Municipality				
	Local Municipality	Hantam Municipality			
	Ward Number(s)	02			
	Farm name and	Calvinia			
	number				
	Portion number	Erf no. 2560			
	SG Code	C01500020000256000000	0	1	5
	Where a large number	r of properties are involved (e.g. linear activities), please			
	attach a full list to this	application including the same information as indicated			
	above.				
			_		
Current land-use	Residential				
zoning as per					
local municipality					
IDP/records:					
		lere is more than one current land-use zoning, please land use zonings that also indicate which portions each application.			

Is a change of land-use or a consent use application required?

YES NO X

#### 1. GRADIENT OF THE SITE

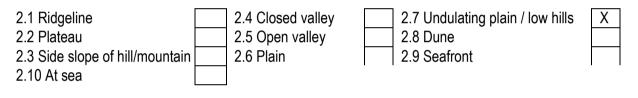
Indicate the general gradient of the site.

#### Alternative S1:

Allemative 01	•					
Flat X	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper
		Х				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:



#### 3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

	Alternative S1:		Alterna	tive S2	Alterna	tive S3
			(if any)		(if any):	
Shallow water table (less than 1.5m deep)	YES	NO X	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO X	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES X	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO X	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO X	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO X	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO X	YES	NO	YES	NO
An area sensitive to erosion	YES X	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 <sup>E</sup>	Natural veld with scattered aliens <sup>E</sup>	Natural veld with heavy alien infestation <sup>E</sup>	Veld dominated by alien species <sup>E</sup>	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure X	Bare soil

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

#### 5. SURFACE WATER

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

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

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

A riparian habitat and drainage line were found on the proposed site. The riparian habitat is associated with the Oorlogskloof River which flows through the southwest corner of the site. The drainage line identified is non-perennial to emphemeral and likely to only support flows during and after a heavy rainfall event or during the wet season. The riparian habitat has been affected by human activity within its catchment and along its course.

#### 6. LAND USE CHARACTER OF SURROUNDING AREA

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

Natural area	Dam or reservoir	Polo fields
Low density residential X	Hospital/medical centre	Filling station <sup>H</sup>
Medium density residential	School	Landfill or waste treatment site

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

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

N/A

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

N/A

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

N/A

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

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

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

#### 7. CULTURAL/HISTORICAL FEATURES

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

YES NO X Uncertain

N/A

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

Will any building or structure older than 60 years be affected in any way? Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

YES	NO X
YES	NO X

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

#### 8. SOCIO-ECONOMIC CHARACTER

#### a) Local Municipality

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

Level of unemployment:

11.8% unemployed; Youth unemployment rate – 15.30% (2014 Electoral statistics)

Economic profile of local municipality:

Population is 21579 (2011 census). Farming and mining are the main economic activities in Hantam Municipality. Farming activities include sheep, wool and lucerne and rooibos tea cultivation. Hantam is known for its incredible nature reserves filled with array of plants and bulbs

Level of education:

25% completed Metric or higher and 1% postgraduate (2011 census); No schooling – 14.40%; Higher education - 8.10%, metric - 18.80% (2014 Electoral statistics)

#### b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R 31,250,0	00.00
What is the expected yearly income that will be generated by or as a result of the	R 5,870,00	00.00
activity?		
Will the activity contribute to service infrastructure?	YES X	NO
Is the activity a public amenity?	YES X	NO
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	15	
What is the expected value of the employment opportunities during the development and construction phase?	R 18,800,0	00.00
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?	28	
	-	

18

What is the expected current value of the employment opportunities during the	R 9,200,000.00
first 10 years?	
What percentage of this will accrue to previously disadvantaged individuals?	80%

#### 9. BIODIVERSITY

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

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

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

#### b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (Including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	
Degraded (includes areas heavily invaded by alien plants)	%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	100%	

#### c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems						
Ecosystem threat	Critical		•	ling rivers,				
status as per the National	Endangered		ssions, channelled and		<b>F</b> etuers		Coastline	
Environmental	Vulnerable	unchanneled wetlands, flats, seeps pans, and artificial wetlands)			noroblo			
Management:	Least							
Biodiversity Act (Act No. 10 of 2004)	Threatened X	YES X	NO	UNSURE	YES	NO X	YES	NO X

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

Pragmites australis was found in abundance along sections of the marginal zone as well as several species of sedge. Within the non-marginal zone , low profile shrubs and forbs dominated with acacia trees present in patches

## SECTION C: PUBLIC PARTICIPATION

#### 1. ADVERTISEMENT AND NOTICE

Publication name	Noord Wester News Paper- Calvinia				
Date published	22 May 2015				
Site notice position	Latitude	Longitude			
	31° 27' 50.3"	19° 46'06.1"			
Date placed	1 <sup>st</sup> June 2015				

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

#### 2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 733.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 733

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Mr R N. Swartz	Ward 2 Councillor – Hantam LM	0826512687
Mr N Viljoen	Project Manager-Hantam LM	0273418500

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

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

#### 3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
Issue about use of part of the project funds for community upliftment	Mrs Nombexeza explained that part of the funds allocated for the project is to settle community based labour. She further said that the Hantam Municipality can engaged with the National Department of Environment to negotiate the community based needs to be funded
A participant was not convinced that a wetland study was needed and sought to know what triggered the study. Because in his opinion the stream on the site is artificial and non-perennial	Mrs Azong explained that the availability of a stream, the nature of the soil and vegetation are indications that the site is within a wetland and therefore a wetland study is recommended to

ascertain	the	impact	of	the	proposed
developme	nt on t	he wetlan	d		

#### 4. COMMENTS AND RESPONSE REPORT

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

#### 5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
NC Provincial Department of Roads and Public Works	Thando Mbetha	053 839 2109		tmbetha@ncpg.gov.za	
NC Department of Water and Sanitation	Mahunonyane M	053 830 8800		mahuninyanem@dws.gov.za	

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

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

#### 6. CONSULTATION WITH OTHER STAKEHOLDERS

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

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

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

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

### SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

#### 1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

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

Activity Alternative 1 (p			Proposed mitigation					
Alternative 1 (preferred alternative)								
	<b>Direct impacts:</b> Loss of soil storativity and increase storm water runoff	Medium	All construction activities should be undertaken during the dry season					
	waste generation	Low	A waste management plan should be developed before construction					
	<i>Indirect impacts:</i> Erosion on the river bank	High	Construction activities should be phased to minimize extent of exposed areas					
	Water quality deterioration	High	Carefully control all on-site operations that involves the use of cement or concrete					
	Alien specie encroachment	Medium	Any alien species found on the site during construction activities must be removed No alien plant must be used for landscaping or rehabilitation of the site					
	Cumulative impacts:							
	Direct impacts:							
	Indirect impacts:							
	Cumulative impacts:							
Alternative 2								
	Direct impacts:							

Activity	Impact summary	Significance	Proposed mitigation
	Indirect impacts:		
	Cumulative impacts:		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
Alternative 3			
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
No-go option	1		1
	<b>Direct impacts:</b> Wetland destruction	/ High	A buffer Zone of about 30m is required from the boundaries of the wetland
	Indirect impacts:		
	Cumulative impacts:		

A complete impact assessment in terms of Regulation 19(3) of GN 733 must be included as Appendix F.

#### 2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment <u>after</u> 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)

After the management and mitigation of impacts we do not foresee any negative impacts. All the potential negative impacts that are likely to emerge from the construction activities have been

addressed in the EMPr. Although we foresee the likely disposal of waste in the adjacent water channel during operational phase of the project, measures have been defined in the EMPr to mitigate this impact.

## Alternative B

#### Alternative C

No-go alternative (compulsory)

### 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)?

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).

YES X

NO

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.

 Buffering of the riparian habitat to prevent destruction

 Is an EMPr attached?

 YES X

 NO

 The EMPr must be attached as Appendix G.

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

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

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

C A MAWELELA

NAME OF EAP

SIGNATURE OF EAP

DATE

#### **SECTION F: APPENDIXES**

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information