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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:

- 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.
- 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
- 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.
- Where applicable **tick** the boxes that are applicable in the report.
- An incomplete report may be returned to the applicant for revision.
- 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.
- This report must be handed in at offices of the relevant competent authority as determined by each authority.
- No faxed or e-mailed reports will be accepted.
- The signature of the EAP on the report must be an original signature.
- The report must be compiled by an independent environmental assessment practitioner.
- 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.
- A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 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?

YES

NO

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

THE PROPOSED INDUSTRIAL DEVELOPMENT ON ERF 755, OLYVENHOUTSDRIFT, UPINGTON, NORTHERN CAPE

• ACTIVITY DESCRIPTION

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

It is proposed that a portion (approximately 3.2ha) of Erf 755, Olyvenhoutsdrift Settlement be rezoned for the development of a light industrial park. The rest of the property (6.7ha) will remain zoned for agricultural use.

The site is located on a portion of Erf 755 Olyvenhoutsdrift Settlement, within the Dawid Kruiper Municipality. The site is approximately 4km south of Upington, along the N10.

Erf 755 Olyvenhoutsdrift Settlement is currently zoned Agricultural (C.a.2), however, the site is vacant and not used.

Coordinates: S 28°28'26.95", E 21°16'19.98".

The proposed industrial park development will include 10 736m² of floor space and 178 parking bays. There will approximately 31 industrial units, ranging in size from 150m² to 1985m².

Services:

The services to the proposed development are described in the Bulk Engineering Services Report (**Appendix D2**).

Roads and access:

The N10 runs along the eastern boundary of the site. An existing gravel access road running along the northern boundary of the site intersects with the N10 and is the current access road to neighbouring industrial sites. Entrance to the newly proposed development will be from the north, also via the existing gravel access road. SANRAL has indicated that the use of the existing access from the N10 will be allowed.

Internal roads shall vary in width but will generally not be less than 6m in width. Roads will be black top (typically Cape or double seal), brick paving or gravel with the required base, sub base and selected layer works. The specific road wearing course will be dependent on the specific industrial activity on-site, dust control and eventual design vehicle usage of a specific area within the development.

Water:

A 110 mm diameter uPVC (**dark blue**) bulk water connections to the property from the existing 200mm diameter municipal supply pipeline (running along the N10 towards Louisvaleweg) is proposed.

The development is expected to demand an average flow of 0.35 l/s with an instantaneous peak flow of 2.1 l/s. The estimated average daily demand would be 30,000 l/day.

Concerns have been raised regarding the limited capacity of the existing municipal supply mains.

To mitigate possible water shortages and low water pressures, it is suggested that an on-site water storage system be implemented. Therefore on-site water storage for 48 hours would require a capacity of 60,000 litres.

Sectional steel tanks would be used as an on-site water reservoir. Water storage can be elevated or kept under pressure via a pump system to ensure sufficient pressure to the development at all times.

Although the typical industrial water use will be 'off-peak' and is generally not expected to place additional strain on the water supply lines during peak residential usage, an on-site water storage strategy would allow the on-site reservoir to be supplied during off-peak periods for use under peak conditions, should it then be required.

Internal water pipes shall be Ø 63mm to Ø 110mm uPVC Class 6 minimum.

Sewerage:

The development is expected to discharge an estimated average sewage flow of 0.3 l/s with an expected peak flow of 1.21 l/s. The average daily sewage run-off is therefore expected to be 25 500 l/d.

As indicated by Dawid Kruiper Municipality, the Louisvaleweg Sewage Treatment Works is currently unable to accommodate additional sewage flow as it is already operating at capacity.

It is consequently required that the developer be responsible for the sewage generated by the development, at least until the sewage works in question is upgraded.

It is therefore recommended that the sewage be treated by a Bio- Filter Rotating Biological Contactor Sewage Purification Plant or similar approved packaged sewage treatment system to comply with the relevant water quality standards.

Municipal services will be required for the disposal of the sludge as required once the plant is operational.

The internal sewer system will consist of Ø 160mm uPVC Class 34 sewer pipes for general distribution with Ø 110mm uPVC Class 34 building connections. Minimum slopes will be 1:60 for building connections.

Purified waste water will be used on site to augment potable water for irrigation.

Solid waste:

Solid waste will be collected and handled by the municipality as this development falls within the urban edge and the general area of service by the municipality.

Stormwater:

The area is relative small and flat and no problems are foreseen in this regard.

Drainage through the site generally occurs in two directions over the property. The proposed industrial development mainly drains towards the north western corner of the property and will contribute to an existing watercourse running north along the western edge of the proposed development. The agricultural zoning will generally drain towards the north of the property, as is currently the case naturally and is therefore expected to be unaffected by the development in question. The catchment areas contributing to the storm water run-offs are however relatively small and result in easily manageable flows across the site.

Storm water run-off will be handled overland and accommodated within the proposed roads while complimenting the existing natural drainage scenario within and around the property. Storm water will therefore generally still follow current drainage paths to existing natural features. Areas at risk of erosion due to storm water run-off within the site will be suitably stabilised to prevent any erosion damage that might occur, although the gentle gradient across the site should not present major challenges in terms of storm water management. Storm water run-off will be handled

overland and accommodated within roads where required, within the boundaries of the development.

Electricity:

The bulk electrical connection can be made available on the Municipal network after extensive upgrading and extension of the Dawid Kruiper Municipality's network is completed. The following upgrading of the network in order to connect the proposed load:

- Provision of a dedicated cable feeder of similar size to the existing feeder to create a ring feeder between Alpha Substation and Louisvale Road Load Centre,
- Install suitable MV circuit breakers at both ends of the cable feeder, and
- Consider the loading and if necessary the upgrading of the secondary 11kV network connecting the proposed development to the Louisvale Road Load Centre.

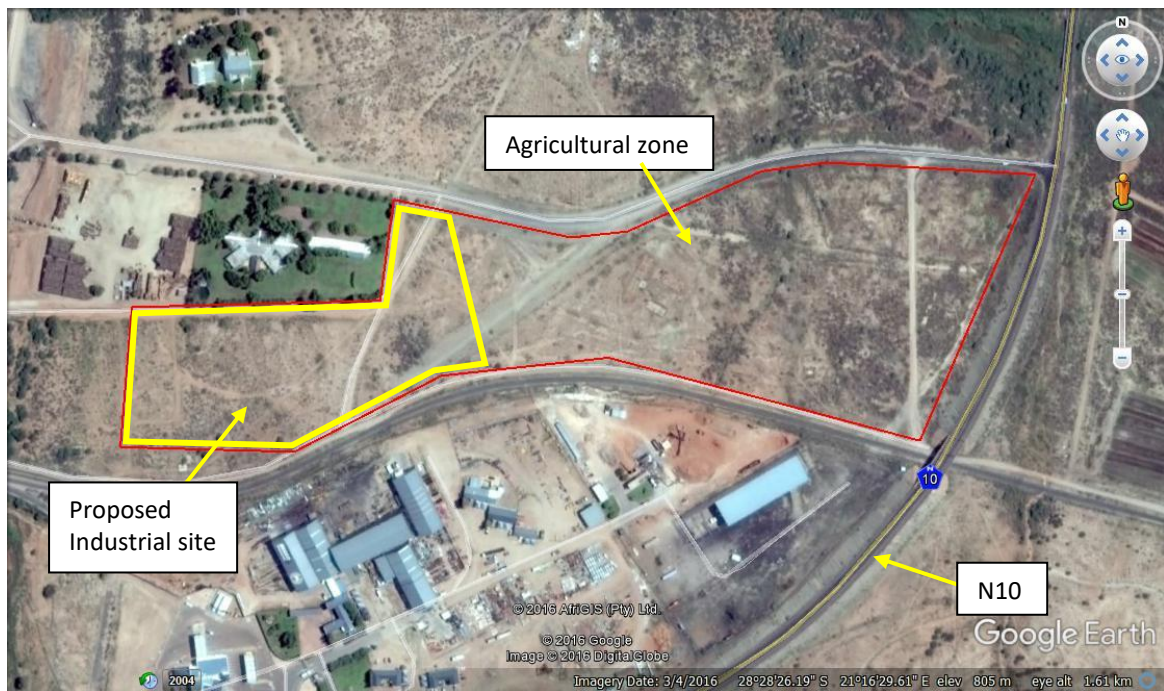
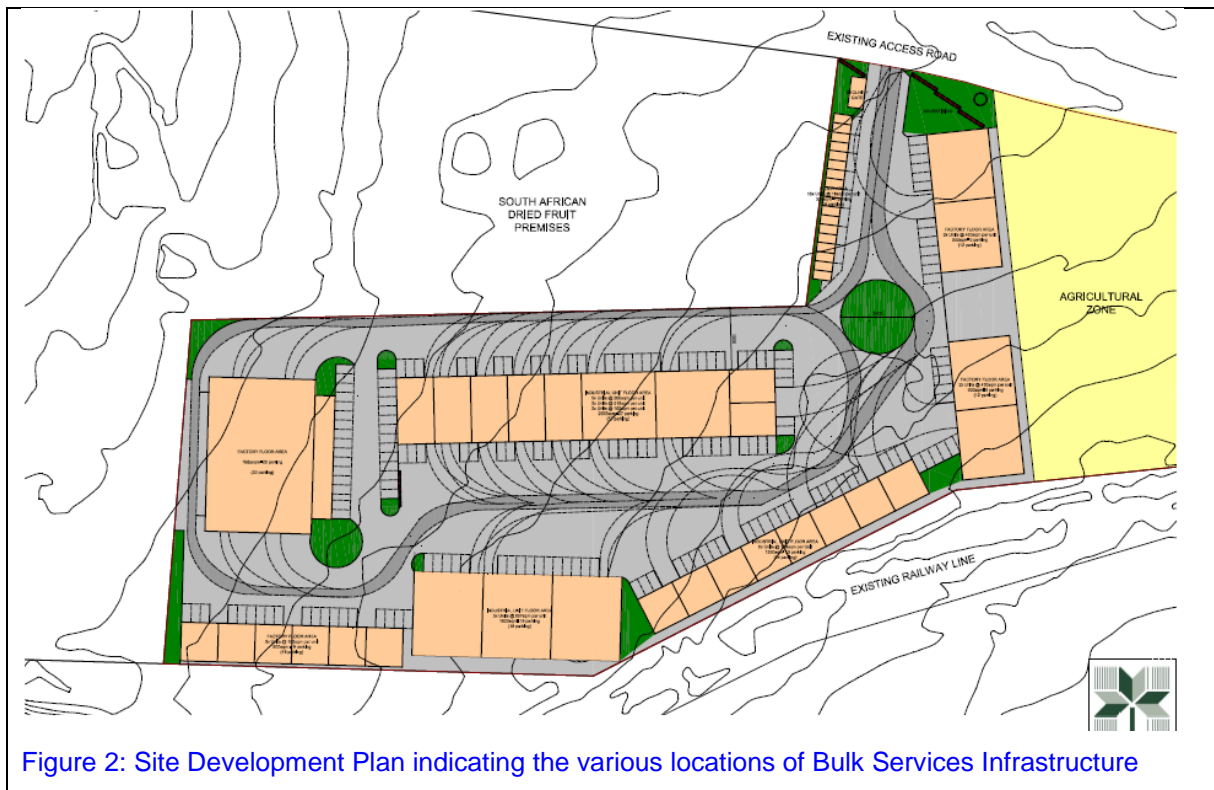


Figure 1: Aerial view of the site. The Portion of Erf 755 that will be subdivided is depicted by the red polygon. The portion that will be rezoned to Industrial, and will be developed, is indicated by the yellow polygon.



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

Listed activity as described in GN 324, 325 and 327	Description of project activity
<p><u>GN 327 (Item 27):</u> The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for;</p> <p>(i) the undertaking of a linear activity; or</p> <p>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</p>	<p>The site exceeds 1ha (3.2ha), and indigenous vegetation will need to be cleared.</p>

• **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

No other site alternatives were considered. The site is within the urban edge and is close to existing industrial developments, as well as to the N10.

There are no significant or sensitive environmental or historical aspects on the site. Due to the degraded nature of the site, it is also seen as a feasible area to develop.

The site is considered the only reasonable and feasible site.

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

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)
Therefore, there are no feasible alternative layouts considered that would mitigate any potential environmental impact, as the entire site will be developed		
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

c) Technology alternatives

No technology alternatives were considered. This is an industrial development, and therefore, there are no technology alternatives.

Alternative 1 (preferred alternative)
Alternative 2
Alternative 3

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

N/A

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

e) No-go alternative

This would mean that no-development would take place and the proposed site will remain as is. No industrial opportunities will be provided.
 Although this option would result in no potential negative environmental impacts, the socio-economic

benefits from implementing the activity would not be achieved.

The no-go option would only have been recommended if it were found that the construction of the proposed development on this site or in this area might potentially cause substantial detrimental harm to the environment.

According to the Biodiversity Assessment (**Appendix D3**), the “No-Go” alternative will ensure that none of the negative environmental impacts will occur. However, the property is not pristine and it should be preferable to development on a site like this (not pristine and with poor connectivity) before compromising pristine veld with good connectivity. The proposed development is also sure to have short and long term benefits with regards to job creation, which are likely to have a positive impact on the local economy.

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

• **PHYSICAL SIZE OF THE ACTIVITY**

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

Alternative:		Size of the activity:
Alternative A1 (preferred activity alternative)		Erf 755 – 3.2ha
Alternative A2 (if any)		m ²
Alternative A3 (if any)		m ²

or, for linear activities:

Alternative:		Length of the activity:
Alternative A1 (preferred activity alternative)		m
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 ²
Alternative A2 (if any)		m ²
Alternative A3 (if any)		m ²

• **SITE ACCESS**

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

Describe the type of access road planned:

The N10 runs along the eastern boundary of the site. An existing gravel access road running along the northern boundary of the site intersects with the N10 and is the current access road to neighbouring industrial sites. Entrance to the newly proposed development will be from the north, also via the existing gravel access road. SANRAL has indicated that the use of the existing access from the N10 will be allowed.

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.

- **LOCALITY MAP**

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

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

- **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.

- **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.

- **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.

- **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.

- **ACTIVITY MOTIVATION**

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

<ul style="list-style-type: none"> • Is the activity permitted in terms of the property's existing land use rights? 	YES	NO	Please explain
<p>Portion of the site (3.2ha) will need to be rezoned from C.a.2 Agriculture to E.c.2.Industry.</p>			
<ul style="list-style-type: none"> • Will the activity be in line with the following? 			
<ul style="list-style-type: none"> (a) Provincial Spatial Development Framework (PSDF) 	YES	NO	Please explain
<p>The Dawid Kruiper Municipality was recently established by the amalgamation of the //Khara Hais Municipality and the Mier Municipality after the municipal elections held on the 3rd of August 2016.</p> <p>In the Northern Cape Province there are currently 12 renewable energy projects, that we are aware of, to which bidding slots have been awarded. Only two of these project sites are currently located within the Dawid Kruiper Local Municipal area,</p> <p>However, there are 12 REDZ (Renewable Energy Development Zones) that have been gazetted, which includes the Upington Zone, which is indicated to have 600 MW in wind energy potential,</p>			

34000 MW in solar energy potential (total potential of 34600 MW). Promotion and encouragement of these development opportunity brought about by the mentioned zone, will increase economic and employment opportunities in the Dawid Kruiper Municipality.

In support to the growing renewable energy sector, the development of an increased amount of industrial premises will provide a platform for the stimulation of even more industrial developments (indirectly necessitated by renewable energy developments) as well as other sectors of the economy of Upington and the area surrounding thereto, due to the fact that Upington will be ready to accommodate such economic activities.

In the light of the above mentioned, the land owner of the involved property has set out to purchase a 10ha portion of Plot 755, Olyvenhoutsdrif Settlement, from the //Khara Hais Municipality. It is the intention of the developing entity, Kobus Duvenhage Bouers (Pty.) Ltd. to develop a 3.2ha portion, of the 10ha area, as an industrial park.

The //Khara Hais SDF marks the 3.2ha, area that is the only portion of the 10ha study area that will be subject to rezoning, for future development in terms of the primary land use rights of an E.c.2 Industry zoning. This is the zoning that is proposed.

The proposed development aligns with the stipulations of the //Khara Hais Municipal SDF, for development outside of the urban edge to an extent and may therefore be positively considered by the Dawid Kruiper Municipal Planning Tribunal.

(b) Urban edge / Edge of Built environment for the area	YES	NO	Please explain
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The site is located inside the Upington urban edge. Please refer to Appendix J2

(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES	NO	Please explain
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The Dawid Kruiper Municipality was recently established by the amalgamation of the //Khara Hais Municipality and the Mier Municipality after the municipal elections held on the 3rd of August 2016.

In the Northern Cape Province there are currently 12 renewable energy projects, that we are aware of, to which bidding slots have been awarded. Only two of these project sites are currently located within the Dawid Kruiper Local Municipal area,

However, there are 12 REDZ (Renewable Energy Development Zones) that have been gazetted, which includes the Upington Zone, which is indicated to have 600 MW in wind energy potential, 34000 MW in solar energy potential (total potential of 34600 MW). Promotion and encouragement of these development opportunity brought about by the mentioned zone, will increase economic and employment opportunities in the Dawid Kruiper Municipality.

In support to the growing renewable energy sector, the development of an increased amount of industrial premises will provide a platform for the stimulation of even more industrial developments (indirectly necessitated by renewable energy developments) as well as other sectors of the economy of Upington and the area surrounding thereto, due to the fact that Upington will be ready to accommodate such economic activities.

In the light of the above mentioned, the land owner of the involved property has set out to purchase a 10ha portion of Plot 755, Olyvenhoutsdrif Settlement, from the //Khara Hais Municipality. It is the intention of the developing entity, Kobus Duvenhage Bouers (Pty.) Ltd. to develop a 3.2ha portion, of the 10ha area, as an industrial park.

The //Khara Hais SDF marks the 3.2ha, area that is the only portion of the 10ha study area that will be subject to rezoning, for future development in terms of the primary land use rights of an E.c.2 Industry zoning. This is the zoning that is proposed.

The proposed development aligns with the stipulations of the //Khara Hais Municipal SDF, for development outside of the urban edge to an extent and may therefore be positively considered by the Dawid Kruiper Municipal Planning Tribunal.

(d) Approved Structure Plan of the Municipality	YES	NO	Please explain
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Unknown

(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
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No EMF was identified

(f) Any other Plans (e.g. Guide Plan)	YES	NO	Please explain
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• Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES	NO	Please explain
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• Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES	NO	Please explain
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This development has the potential to positively contribute to, amongst others, the renewable energy sector of the surrounding area, by means of providing space for industrial activities, supplementary to this sector, to be more readily accommodated when needed.

This development has the potential to provide an economic injection in the local community, by means of creating employment opportunities.

The proposed development will increase the income generated by the study area, which is currently non-existent.

<ul style="list-style-type: none"> • Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.) 	YES	NO	Please explain
<p>Accordinging the Engineering Services Report (Appendix D2), the following conclusion, related to the provision of bulk services, can be reached:</p> <ul style="list-style-type: none"> - Municipal services directly to the site of the development are limited, but connection to bulk municipal infrastructure is possible in terms of water supply. - Sewerage would require on-site treatment due to insufficient capacity at the Louisvaleweg sewage treatment works. - Electricity supply from David Kruiper Municipal network connection will only be possible after extensive extensions to the electrical network are undertaken. - Through management of the on-site services, the effect of municipal services, where connection is plausible, should be kept to a minimum. 			
<ul style="list-style-type: none"> • Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.) 	YES	NO	Please explain
<p>The //Khara Hais SDF marks the 3.2ha, area that is the only portion of the 10ha study area that will be subject to rezoning, for future development in terms of the primary land use rights of an E.c.2 Industry zoning. This is the zoning that is proposed.</p>			
<ul style="list-style-type: none"> • Is this project part of a national programme to address an issue of national concern or importance? 	YES	NO	Please explain
<ul style="list-style-type: none"> • Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.) 	YES	NO	Please explain
<p>The //Khara Hais SDF marks the 3.2ha, area that is the only portion of the 10ha study area that will be subject to rezoning, for future development in terms of the primary land use rights of an E.c.2 Industry zoning. This is the zoning that is proposed.</p> <p>The involved portion of land (Plot 755, Olyvenhoutsdrif) is located within the Uppington urban edge and is surrounded by agricultural, residential, authority and industrial land uses. The Orange River is located about 2.7km to the north-west of the study area.</p> <p>The proposed industrial development, that will be implemented on the 3.2ha study area, after approval of this application, should not negatively influence the surrounding land uses, due to the fact that this area, as mentioned above, is already accustomed to industrial practices.</p> <p>The proposed development may be positively considered when measured in terms of its suitability in relation to existing land uses in this area.</p>			

There are no significant negative environmental impacts that have been identified.			
• Is the development the best practicable environmental option for this land/site?	YES	NO	Please explain
<p>The proposed development will result in the loss of very little indigenous vegetation over the site, and the site is not in an archaeological, historical, ecologically or botanically sensitive area. The erf has been disturbed in the past.</p> <p>However, the development of the site will create an industrial zone, which may contribute to the growing renewable energy sector in the area. Leaving the site undeveloped (no-go option), will not create this industrial development or contribute to economic growth, and will not create jobs during the construction and operational phases.</p>			
• Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES	NO	Please explain
No significant negative environmental impacts are expected by the proposed development			
• Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO	Please explain
Not necessarily, but further industrial areas may be developed in future			
• Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO	Please explain
No person's rights are expected to be negatively affected by the proposed development. The activity is expected to have a general positive impact on the surrounding area.			
• Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO	Please explain
The development is located within the Uppington urban edge.			
• Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO	Please explain
• What will the benefits be to society in general and to the local communities?	Please explain		
<p>The project will provide job opportunities during the construction and the operational phase.</p> <p>This development has the potential to positively contribute to, amongst others, the renewable energy sector of the surrounding area, by means of providing space for industrial activities, supplementary to this sector, to be more readily accommodated when needed.</p> <p>This development has the potential to provide an economic injection in the local community, by means of creating employment opportunities.</p> <p>The proposed development will increase the income generated by the study area, which is currently non-existent.</p>			

<ul style="list-style-type: none"> • Any other need and desirability considerations related to the proposed activity? 	Please explain
N/A	
<ul style="list-style-type: none"> • How does the project fit into the National Development Plan for 2030? 	Please explain
N/A	
<ul style="list-style-type: none"> • Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account. 	
<p>The general objectives of Integrated Environmental Management have been taken into account through the following:</p> <ul style="list-style-type: none"> - The actual and potential impacts of the activity on the environment, socio-economic conditions and cultural heritage have been identified, predicted and evaluated, as well as the risks and consequences and alternatives and options for mitigation of activities, with a view to minimizing negative impact, maximizing benefits and promoting compliance with the principles of environmental management – <i>please refer to Section D below.</i> - The effects of the activity on the environment have been considered before actions taken in connection with them – <i>alternatives have been considered and investigated (please refer to Section A below).</i> - Adequate and appropriate opportunity for public participation was ensured through the public participation process – <i>please refer to Section C for the public participation information, including the list of identified Interested and Affected parties, as well as the methods for identifying and informing I&APs of the application and proposed activity.</i> - The environmental attributes have been considered in the management and decision-making of the activity – <i>an EMP has been included (Appendix G) with the proposed activity and must adhere to the requirements of all applicable state Authorities.</i> 	
<ul style="list-style-type: none"> • Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account. 	
<p>The principles of environmental management as set out in section 2 of NEMA have been taken into account. The principles pertinent to this activity include:</p> <ul style="list-style-type: none"> - People and their needs have been placed at the forefront while serving their physical, psychological, developmental, cultural and social interests – <i>the proposed activity will have a beneficial impact on people, as it will provide much needed additional housing opportunities.</i> - Development must be socially, environmentally and economically sustainable. Where disturbance of ecosystems, loss of biodiversity, pollution and degradation, and landscapes and sites that constitute the nation's cultural heritage cannot be avoided, are minimised and remedied. - Where waste cannot be avoided, it is minimised and remedied through the implementation and adherence of EMP. - The use of non-renewable natural resources is responsible and equitable – <i>no exploitation of non-renewable natural resources occurs with the proposed activity.</i> - The negative impacts on the environment and on people's environmental rights have been anticipated and prevented, and where they cannot be prevented, are minimised and remedied - <i>refer to Section F below.</i> - The interests, needs and values of all interested and affected parties have been taken into account in any decisions through the Public Participation Process – <i>please refer to Section C for the public participation information.</i> - The social, economic and environmental impacts of the activity have been considered, assessed and evaluated, including the disadvantages and benefits – <i>refer to Section B below.</i> - The effects of decisions on all aspects of the environment and all people in the environment have been taken into account, by pursuing what is considered the best practicable environmental option – <i>the proposed activity is expected to have minimal/negligible environmental impacts, especially after mitigation measures as described under Section D and E and in the EMP are implemented.</i> 	

• **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
Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA)	- rezoning and subdivision	Local Municipality	Not yet

• **WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT**

a) **Solid waste management**

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

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

The general solid waste generated during construction will be consolidated on site during construction, and disposed of at the nearest approved municipal landfill site.

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

The general solid waste generated during construction will be consolidated on site during construction, and disposed of at the nearest approved municipal landfill site.

Will the activity produce solid waste during its operational phase?	YES	NO
If YES, what estimated quantity will be produced per month?	m ³	
How will the solid waste be disposed of (describe)?		

Solid waste will be collected and handled by the municipality as this development falls within the urban edge and the general area of service by the municipality.

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

Solid waste will be collected and handled by the municipality as this development falls within the urban edge and the general area of service by the municipality.

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

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

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	YES	NO
If YES, what estimated quantity will be produced per month?	Approximately 765m ³ (@25 500 l/d)	
Will the activity produce any effluent that will be treated and/or disposed of on site?	YES	NO
<i>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.</i>		

Will the activity produce effluent that will be treated and/or disposed of at another facility?	YES	NO
If YES, provide the particulars of the facility:		
Facility name:		
Contact person:		
Postal address:		
Postal code:		
Telephone:	Cell:	
E-mail:	Fax:	

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

None

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other than exhaust emissions and dust associated with construction phase activities?	YES	NO
It is not known at this stage exactly what sort of industrial activities will take place by individual unit owners/tenants. However, these owners/tenants will need to apply for their own emissions licences if required		
If YES, is it controlled by any legislation of any sphere of government?	YES	NO
If YES, the applicant must consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.		
If NO, describe the emissions in terms of type and concentration:		

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA? It is not known at this stage exactly what sort of industrial activities will take place by individual unit owners/tenants. However, these owners/tenants will need to apply for their owner waste permits if required.	YES	NO
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----	----

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

e) Generation of noise

Will the activity generate noise?	YES	NO
If YES, is it controlled by any legislation of any sphere of government?	YES	NO
Describe the noise in terms of type and level: General industrial noise associated with an industrial development of this size		

• WATER USE

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

Municipal	Water board	Groundwater	River, stream, dam or lake	Other	The activity will not use water
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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.	litres	
	YES	NO

• ENERGY EFFICIENCY

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

N/A

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

N/A

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

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

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

<ul style="list-style-type: none"> Has a specialist been consulted to assist with the completion of this section? 	YES	NO
If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.		

Property description/physical address:	Province	Northern Cape
	District Municipality	ZF Mgcawu District Municipality
	Local Municipality	Dawid Kruiper Municipality (formerly //Khara Hais Municipality)
	Ward Number(s)	
	Farm name and number	Erf 755, Olyvenhoutsdrift
	Portion number	
	SG Code	
Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.		
Current land-use zoning as per local municipality IDP/records:	C.a.2 - Agricultural	
In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.		
Is a change of land-use or a consent use application required?		YES NO

- GRADIENT OF THE SITE**

Indicate the general gradient of the site.

Alternative S1:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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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
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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
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- LOCATION IN LANDSCAPE**

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

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

- GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE**

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

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

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

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

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

- **SURFACE WATER**

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

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

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

There are no watercourses (streams or wetlands) on the property, or within 32m of the property. The closest watercourse is a small ephemeral stream located approximately 80m to the west of the property. The proposed development is therefore expected to have no direct impacts on this watercourse.



Figure 2: Google Earth image of the site, showing the nearest watercourse (blue dashed line) located approximately 80m west of the property boundary (red polygon).

• LAND USE CHARACTER OF SURROUNDING AREA

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

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ^H
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant ^A	Nature conservation area
Medium industrial ^{AN}	Train station or shunting yard ^N	Mountain, koppie or ridge
Heavy industrial ^{AN}	Railway line ^N	Museum
Power station	Major road (4 lanes or more) ^N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police	Harbour	Graveyard

base/station/compound		
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

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

No impacts are expected.

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

No impacts are expected. The proposed development (industrial) will be in line with surrounding land-uses.

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

N/A

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

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

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

• **CULTURAL/HISTORICAL FEATURES**

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:	YES	NO
	Uncertain	
<p>According to the Archaeological Assessment (Appendix D5), the proposed development site comprises a severely transformed and degraded industrial landscape</p> <p>More than 70 Later Stone Age implements, mostly flakes, chunks and cores were recorded on the proposed development site, but these are spread very thinly and unevenly over the area. Two scrapers were found, but no pottery or ostrich eggshell was encountered. More than 95% of the implements are in banded ironstone. Several indurated shale Middle Stone Age flakes were also recorded. No Early Stone Age tools were found.</p> <p>No graves, or typical grave markers were encountered during the field assessment</p>		

The severely disturbed and degraded context in which they were found means that the archaeological resources have been rated as having *low* (Grade 3C) significance.

The results of the study indicate that the proposed development of an industrial park on Erf 755 Olyvenhoutsdrift will not have an impact of great significance on archaeological heritage.

The Archaeological Assessment (**Appendix D5**) concluded that the proposed development site is not a sensitive archaeological landscape. No settlement sites or evidence of human occupation were found. Most of the tools are assigned to the Later Stone Age, while a few Middle Stone Age lithics were also recorded. The majority of the tools recorded (flakes, chunks & a few cores) most likely represent discarded flakes or flake debris.

The impact significance of the proposed development on important archaeological heritage is assessed as LOW.

Therefore, there are no objections to the authorization of the proposed development.

The following recommendations were given:

- No archaeological mitigation is required.
- Should any unmarked human burials/remains or ostrich eggshell water flask caches be uncovered, or exposed during preparation of the lands for cultivation, , these must immediately be reported to the archaeologist (Jonathan Kaplan 0823210172), or the South African Heritage Resources Agency (Ms Natasha Higgitt 021 4624502). Burials, etc. must not be removed or disturbed until inspected by the archaeologist.

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?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO
If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority. Please note that the site is larger than 5 000m ² and the character of the site will change. The site is also larger than 10 000m ² and will be rezoned. The project is therefore subject to Section 38(1) of the NHRA. The project will be registered with SAHRA through SAHRIS.		

• **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:

According to the //Khara Hais Municipality IDP 2012-2017, the unemployment rate decreased significantly from 34% in 2001 to 22.1% in 2011. There was a huge decline in the youth unemployment rate too from 42.3% in 2001 to 29% in 2011 but the youth unemployment rate is still very high in comparison with the overall unemployment rate of the municipality. Although about 44.7% of the //Khara Hais population are between 14 and 35 years old, youths remains relatively

marginalised.

An increase of 5.1% (20.9% in 2001 to 26% in 2011) of people living in //Khara Hais over the age of twenty years have completed the 12th grade while there was a significant decline of 6.5% (13.6 in 2001 to 7.1% in 2011) in people that had no schooling at all. Higher education increases from 20.9% in 2001 to 26% in 2011.

Economic profile of local municipality:

According to StatsSA, the wine industry is the highest contributor to the municipality's economy; and it is also more dominant in Upington. Most of Upington's wines are produced by Orange River Wine Cellars (OWC). The company has six depots in the area (all of them on the banks of the Orange River) at Upington, Kanoneiland, Grootdrink, Kakamas, Keimoes and Groblershoop. The wines from OWC are exported, mainly to Europe and the USA. A number of privately owned cellars also exist in the area. The //Khara Hais region accounts for more or less 40% of South Africa's grape exports.

Tourism is contributing to the economy of the municipality through places like Die Eiland holiday resort.

The economy of Upington relies heavily on agriculture, tourism and the services industry. Many large companies in the wine industry, table grapes, dried fruit and livestock farming have their head offices in Upington. All major South African banks are represented in Upington and numerous shops and retail outlets cater for most needs.

The Northern Cape, and especially the Upington area, has a growing renewable energy sector

Level of education:

According to the //Khara Hais Municipality IDP 2012-2017, an increase of 5.1% (20.9% in 2001 to 26% in 2011) of people living in //Khara Hais over the age of twenty years have completed the 12th grade while there was a significant decline of 6.5% (13.6 in 2001 to 7.1% in 2011) in people that had no schooling at all. Higher education increases from 20.9% in 2001 to 26% in 2011.

b) Socio-economic value of the activity

To be Confirmed

What is the expected capital value of the activity on completion?	R
What is the expected yearly income that will be generated by or as a result of the activity?	R
Will the activity contribute to service infrastructure?	YES NO
Is the activity a public amenity?	YES NO
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	
What is the expected value of the employment opportunities during the development and construction phase?	R
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?	R

What percentage of this will accrue to previously disadvantaged individuals?	%
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• **BIODIVERSITY**

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

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

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	N/A. No CBAs were identified on SANBI BGIS

- 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)	80 %	The site is almost highly disturbed and degraded, with very little indigenous vegetation left on the site. According to the Biodiversity Assessment (Appendix D3), the vegetation encountered on the development site is dominated by the low shrub <i>Justicia australis</i> (previously <i>Monechma genistifolium</i>), but with <i>Tetraena decumbens</i> also abundant and <i>Senegalia mellifera</i> occasionally found (white grasses of the <i>Stipagrostis</i> genus still prominent in places). Other species encountered includes: <i>Aptosimum</i>

		<i>spinescens</i> , <i>Hypertelis salsoloides</i> (in dense patches), <i>Salsola aphylla</i> , <i>Tetraena decumbens</i> , <i>Tetraena simplex</i> , <i>Tetragonia fruticosa</i> , <i>Trianthema parvifolia</i> and <i>Tribulus terrestris</i> . This area showed significant disturbance as a result of urban associated impacts (e.g. footpaths, quarry sites, old buildings etc.). The alien invasive tree <i>Prosopis</i> was again occasionally encountered.
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	20%	Parts of the site has been completely transformed, through old building foundations, old excavations and quarries, vehicles tracks/roads, footpaths and other disturbances.

c) Complete the table to indicate:

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

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

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

The site would historically have been covered in Bushmanland Arid Grassland (Least Threatened). According to the Biodiversity Assessment (**Appendix D3**), Bushmanland Arid Grassland is normally described as a sparsely vegetated, grassland dominated vegetation type, sometimes structurally transformed into a low shrubs vegetation layer, which was the case on this property, although historical and present day disturbances was evident throughout the property. Two different plant communities were observed. To the east (not within the development footprint) on a slightly more sandy substrate an open grassy community dominated by *Mesembryanthemum coriarium* and white grasses (*Stipagrostis* species). To the west (part of the development footprint) on shallow limestone a lower shrub community was encountered, absolutely dominated by *Justicia australis* and *Tetraena decumbens* (to a lesser degree) with *Senegalia mellifera* also occasionally present

The site has been relatively heavily impacted on by previous activities on the site, and parts of the site has been completely transformed, through old building foundations, old excavations and quarries, vehicles tracks/roads, footpaths and other disturbances.

No aquatic ecosystems were identified on the site.

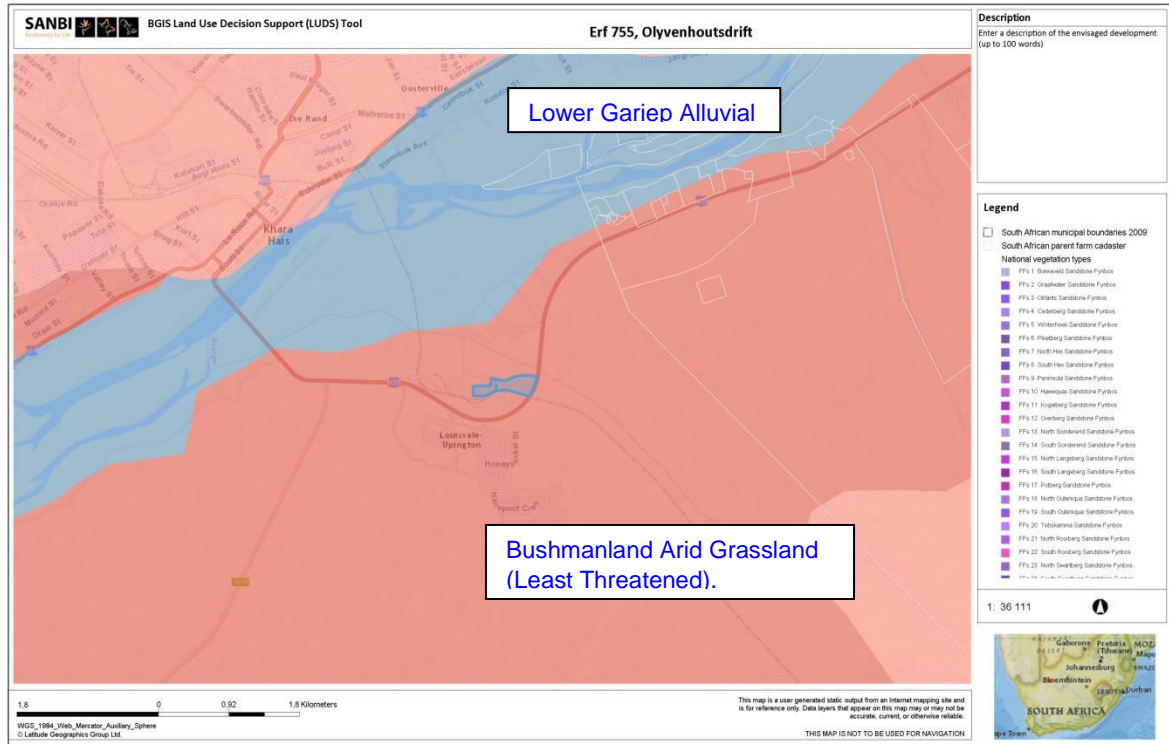


Figure 5: SANBI BGIS map showing the vegetation cover of the area. The site is indicated by the blue polygon.

SECTION C: PUBLIC PARTICIPATION

• ADVERTISEMENT AND NOTICE

Publication name	Die Gemsbok	
Date published	20 May 2016	
Site notice position	Latitude	Longitude
Date placed	See Appendix E1	

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

• 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)

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.

• ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
No comments were received during the initial PPP period	
Only comment from SAHRA was received, however, it appears that they have confused the proposed project with another application in the area, with a similar erf number.	

- **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.

- **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 Department of Agriculture & Land Reform	W. Mothibi (HOD)	(053)838 9102			Private Bag X5018, Kimberley, 8300
Department of Cooperative Governance, Human Settlements and Traditional Affairs (NC)	Gladys Botha	053 830 9513			Private bag X5005, Kimberley, 8300
Department of Roads and Public Works	K. Nogwili (HOD)	(053)839 2241			P O Box 3132, Kimberley, 8300
Directorate Forestry Management	J. Mans	054 338 5909			PO Box 2782, Upington, 8800
Department of Water and Sanitation	A. Abrahams	053 830 8803	053 831 4534		28 Central Road, Beaconsfield, Kimberley, 8301
Department of Water Affairs-Northern Cape	R. Mazwi	053 7731239			Private Bag X6101, Kimberley, 8300
SAHRA	Natasha Higgitt	021 462 4502			P.O.Box 4637, Cape Town, 8000

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.

- **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.

- ### 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	Impact summary	Significance	Proposed mitigation
Alternative 1 (preferred alternative)			
	Direct impacts: Potential impact on freshwater ecosystems	None	No watercourses on or in close proximity to the site
	The loss of cultural or historic aspects during construction	Low	<ul style="list-style-type: none"> No archaeological mitigation is required. Should any unmarked human burials/remains or ostrich eggshell water flask caches be uncovered, or exposed during preparation of the lands for cultivation, , these must immediately be reported to the archaeologist (Jonathan Kaplan 0823210172), or the South African Heritage Resources Agency (Ms Natasha Higgitt 021 4624502). Burials, etc. must not be removed or disturbed until inspected by the archaeologist.
	Indirect impacts: Temporary jobs will be created in the construction industry during the construction phase.	Low - positive	No mitigation measures are required. Temporary jobs will be created during the construction phase
	Cumulative impacts:		
	Direct impacts: Loss of vegetation <ul style="list-style-type: none"> Direct loss of vegetation type and associated habitat due to construction and 	Very low to Negligible	<ul style="list-style-type: none"> All invasive alien plant species encountered on the property should be removed responsibly and follow-up work must be done during the construction period.

	operational activities.		
	Indirect impacts:		
	Cumulative impacts:		
Alternative 2			
	Direct impacts:		
	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			
	Direct impacts: No industrial development will take place on the site, and the associated socio-economic benefits such as job opportunities, will not be provided	Low - negative	N/A
	Indirect impacts:		
	Cumulative impacts:		

A complete impact assessment in terms of Regulation 19(3) of GN 326 must be included as Appendix F.

• **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.

<p>Alternative A (preferred alternative)</p> <p>The following is a summary of the potential impacts, and their ratings after mitigation, and probability of occurrence:</p> <p><u>Construction phase.</u></p> <p>Freshwater ecosystems – None, unlikely.</p> <p>Loss of vegetation– Very Low to Negligible, Probable.</p> <p>Potential impacts on heritage resources – Low, Possible.</p> <p>Job creation – Low (Positive), definite.</p> <p>Noise impact - Low (negative),, definite, during construction phase.</p> <p>Visual impact – Low (negative), definite, during construction</p> <p><u>Operational Phase</u></p> <p>Geographical and/or physical aspects - No impact expected</p> <p>Freshwater ecosystems – No impact expected</p> <p>Potential impacts on archaeological heritage – No impact expected</p> <p>Socio-economic (additional job opportunities) – Medium (Positive), Probable</p> <p>Noise impact - Low, Possible</p> <p>Visual impact – Low, Probable</p> <p><u>Decommissioning</u></p> <p>The project as proposed does not require ‘decommissioning’ or ‘closure’, as such the potential impacts thereof is considered irrelevant.</p>
<p>Alternative B</p>
<p>Alternative C</p>
<p>No-go alternative (compulsory)</p> <p>No industrial development will take place on the site, and the associated socio-economic benefits such as job opportunities, will not be provided - Low – negative, Probable</p> <p>The “No-Go” alternative will ensure that none of the negative environmental impacts will occur. However, the property is not pristine and it should be preferable to development on a site like this (not pristine and with poor connectivity) before compromising pristine veld with good connectivity. The proposed development is also sure to have short and long term benefits with regards to job creation, which are likely to have a positive impact on the local economy.</p>

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?	YES	NO
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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.

Compliance with the EMP and appointment of an ECO during the construction phase.

Is an EMPr attached?	YES	NO
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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.

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