DRAFT BASIC ASSESSMENT REPORT

for

THE PROPOSED LETABA RANCH EXPANSION AND INFRASTRUCTURE **UPGRADE PROJECT**

For submission to:

DEPARTMENT OF ENVIRONMENTAL AFFAIRS



environmental affairs

Department: Environmental Affairs **REPUBLIC OF SOUTH AFRICA**

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The preferred eco-tourism destination

Date: September 2014

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SEF Ref No. 505674

DEA Ref No: 14/12/16/3/3/1/1277

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ATEGIC ENVIRO NMENTAL FOCUS

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environmental affairs

Department: Environmental Affairs **REPUBLIC OF SOUTH AFRICA**

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File Reference Number: Application Number: Date Received:

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

Kindly note that:

- 1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
- 2. This report format is current as of **1 September 2012**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
- 3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
- 4. Where applicable **tick** the boxes that are applicable in the report.
- 5. An incomplete report may be returned to the applicant for revision.
- 6. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
- 7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 8. No faxed or e-mailed reports will be accepted.
- 9. The signature of the EAP on the report must be an original signature.
- 10. The report must be compiled by an independent environmental assessment practitioner.
- 11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
- 12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
- 14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
- 15. Shape files (.shp) for maps must be included on the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

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

1. PROJECT DESCRIPTION

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

The proposed project is for the refurbishment and expansion of the tourism infrastructure at the existing Letaba Ranch Game Reserve by the Limpopo Tourism Agency (LTA). The project involves the refurbishment and expansion of the main resort and the construction of the new greenfield staff village. The proposed development will take place on Portion 0 of the Farm Belasting 7 LU as well as on Portion 1 of the Farm Letaba Ranch 17 LU both in the Limpopo Province. This large game reserve comprises of 42 000 hectares and it is located on the western boundary of the Kruger National Park.

applied for	
Listed activity as described in GN R.544, 545 and 546	Description of project activity
GN R.544 Item 23(i) and (ii): The transformation of undeveloped, vacant or derelict land to –	Eighteen (18) hectares of natural vegetation will be cleared for the construction of the proposed Letaba Ranch Staff Village including residential
(i)residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares, or	units, roads, parking and recreational areas.
(ii)residential, retail, commercial, recreational, industrial or institutional use, outside an urban area and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares.	
GN R.544 Item 24: The transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, at the time of the coming into effect of this Schedule or thereafter such land was zoned open space, conservation or had an equivalent zoning.	Eighteen (18) hectares of natural vegetation will be cleared for the construction of the proposed Letaba Ranch Staff Village. The property on which the development will be located (Belasting 7 LU) is currently zoned as a Provincial Park.
GN R.546 Item 4(a),(i),(ii) and (gg): The construction of a road wider than 4 metres with a reserve less than 13,5 metres	A number of 4m wide, unsurfaced roads will be constructed to give access to all the facilities in the proposed Letaba Ranch staff village.
 (a)In Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga and Northern Cape provinces: i. In an estuary; ii. Outside urban areas, in: 	

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

(gg)Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from	
any other protected area identified in terms of NEMPAA or from the core areas of a biosphere	
reserve; GN R.546 Item 14(a) and (i): The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation, except where such removal of vegetation:	The vegetation type to be cleared is Tsende Mopaneveld which consists of more than 75% indigenous species. This vegetation type however falls in the "Least Threatened" category under the National Environmental Management Biodiversity
(a)In Eastern Cape, Free State, KwaZulu-Natal, Gauteng, Limpopo, Mpumalanga, Northern Cape, Northwest and Western Cape: i. All areas outside urban areas.	Act, 2004 (Act No 10 of 2004).

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 Regulation 22(2)(h) of GN R.543. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

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

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

a) Site alternatives

Alternative 1 (preferred alternative)		
Description: Separate Resort and Staff Village	Lat (DDMMSS)	Long (DDMMSS)
The proposed development will take place on Portion 0 of the Farm Belasting 7 LU as well as on Portions 1 and 2 of the Farm Letaba Ranch 17 LU. These properties are located	4 Corners of Res	ort:
approximately 40km north of Phalaborwa in the Limpopo	31°01'48.79"E	23°39'59.46"S
Province and can be accessed via the R71. See Figure 1: Locality Map.	31°01'52.97"E	23°40'21.15"S
	31°02'24.99"E	23°40'17.66''S
The project involves the refurbishment and expansion of the main resort (Portion 1 and 2 of Letaba Ranch 17 LU) and the	31°02'32.19"E	23°40'05.06''S
construction of the new Greenfield staff village (Portion 0 of Belasting 7). Refer to Figure 2 for the Layout of Alternative 1.		
	4 Corners of Staf	
	30°59'36.64"E	23°40'58.38''S
which the compost will be utilised in landscaped gardens around the buildings within the Resort, as well as at the Staff village.	30°59'37.66''E	23°41'16.80"S
	30°59'49.61''E	23°41'13.94"S
and stored at the Waste Transfer Facility (refer to Appendix A for the location of the WTF) for a maximum period of 90 days before	30°59'51.00"E	23°40'53.84''S
they are removed by a recycling contractor (details to be provided upon appointment). Waste that cannot be recycled will be taken to the Phalaborwa municipal landfill site.		
The Letaba Ranch Staff Village will have its own abattoir. The capacity of this facility will be well below the threshold as listed in the EIA Regulations (GN R 544 of July of June 2010) (i.e. less than 6 units per day). The abattoir will be utilised for the processing of game as part of the existing Letaba Ranch Hunting Program. The tusks, horns and hides will be claimed by		
hunters whereas the meat will be donated to the neighbouring local community. Animal carcasses will be removed from Letaba Ranch by a licensed hazardous waste contractor (details to be provided upon appointment).		

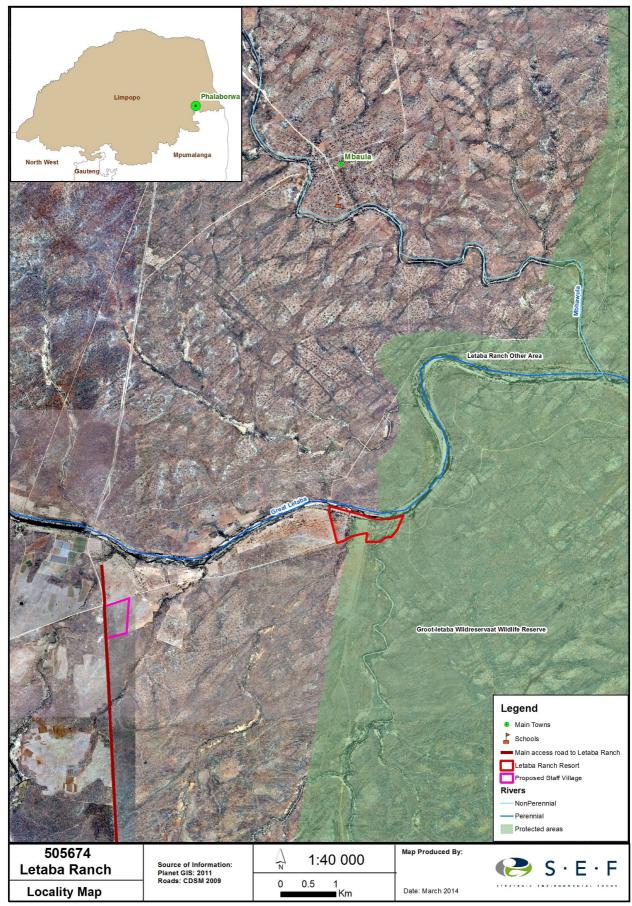


Figure 1: Locality Map



Figure 2: Alternative 1 - Separate Resort and Staff Village

Alternative 2		
Description: Combined Resort and Staff Village	Lat (DDMMSS)	Long (DDMMSS)
Site Alternative 2 was initially explored where the proposed staff village was also to be located on Portion 1 and Portion 2 of the Farm Letaba Ranch 17 LU immediately adjacent to the Resort. Refer to Figure 3 for the Layout of Alternative 2. This Alternative was determined to be less favourable for the following reasons:	4 Corners of con Staff Village 31°01'48.79''E 31°01'52.97''E 31°02'53.00''E	nbined Resort and 23°39'59.46''S 23°40'21.15''S 23°40'06.60''S 23°02'43.03''S
disturbances hindering tourism potential.		

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.



Figure 3: Alternative 2 - Combined Resort and Staff Villag

b) Lay-out alternatives

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

c) Technology alternatives

Alternative 1 (preferred alternative)	
Alternative 2	

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

Alternative 1 (preferred alternative)	
Alternative 2	

e) No-go alternative

This option assumes that a conservative approach would ensure that the environment is not impacted upon any more than is currently the case. It is important to state that this assessment is informed by the current condition of the area. Should the DEA decline the application, the 'No-development' option will be followed and the status quo of the site will remain.

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: Alternative A1¹ (preferred activity alternative) Size of the activity: Staff Village = 8 hectares Resort = 10 hectares Total =18 hectares 15 hectares

Alternative A2 (if any)

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

or, for linear activities:

Alternative:

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

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)	42 000 000m ²
Alternative A2 (if any)	42 000 000m ²

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

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 - ATTACHED

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

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

6. LAYOUT/ROUTE PLAN - ATTACHED

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 - ATTACHED

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 DWA);
- 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 - ATTACHED

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 - ATTACHED

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

10. ACTIVITY MOTIVATION

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

1. Is the activity permitted in terms of the property's existing land use rights?	YES X	Please explain	
The proposed area is currently zoned as "Provincial Park". The proposed activity involves the upgrading of the existing facilities and the establishment of the greenfield staff village on the existing Letaba ranch game reserve, thus no change in land use is required.			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES X	Please explain	
The Limpopo SDF acknowledges that although the Province has excellent agricultural potential, mineral reserves, and tourism resources, not enough has or is currently being done in order to secure employment. The Province is hoping to address this through the Limpopo Employment Growth and Development Plan (LEGDP). The proposed project will secure temporary as well as permanent jobs in the local area and will also boost tourism, thus providing long term employment opportunities.			
(b) Urban edge / Edge of Built environment for the area	YES X	Please explain	
The Development will take place in a rural area and will not be within the	e urban e	edge.	
(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	Please explain	
According to the <i>Ba-Phalaborwa IDP 2013/14 – 2015/16</i> the Municipality has taken a decision to focus on growing the Tourism industry in an attempt to mitigate for any losses from the mining sector. The strategic intent of the Municipality is, therefore, around economic development through tourism. The proposed Letaba Ranch project is therefore completely in line with the current Municipal Strategy.			
(d) Approved Structure Plan of the Municipality	YES X	Please explain	
The Municipality will be notified of the proposed project and will be given the opportunity to raise issues / comment.			

(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	Please explain
No environmental management priorities will be compromised. According to the <i>Ba-Phalaborwa IDP</i> 2013/14 – 2015/16 the Ba-Phalaborwa Municipality has a fully developed mining industry and a high potential of growing the tourism industry into a competitive sector. The IDP further specifically states that the Selwane area, adjacent to the Groot Letaba River, has the potential of becoming a formidable agricultural cluster with a potential significant tourism element in both the Eiland and Letaba Ranch resorts.		
(f) Any other Plans (e.g. Guide Plan)	YES X	Please explain
As Letaba Ranch is bordering the Kruger National Park it is already beir conservation area. The future management of Letaba Ranch will therefor the Kruger National Park Management Plan.		
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	Please explain
The <i>Ba-Phalaborwa IDP 2013/14 – 2015/16</i> identified the development Ranch as a "potential project" in order to develop the Tourism sector of		•
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	Please explain
The Ba-Phalaborwa Local Municipality is currently being threatened by the downscaling of the mining sector (the main contributor to the local GDP). The mining sector is expected to shed jobs in the near future as a result of Phalaborwa Mining Company (PMC) halting copper mining and the resultant closure of related operations in the area. The main challenge is to stimulate the local economy and attract sustainable investment, such as tourism, into the area. The re-opening of the Letaba Ranch Game Reserve would stimulate the local economy and create potential job opportunities for the surrounding community.		
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 X	Please explain
Water Supply: The reserve has a large number of boreholes (approx. 60) serving w picket posts. The only borehole currently used for potable water is loca consists of an electric submersible pump with a 50mm diameter. HDP	ated at t	he existing resort and

storage tanks at:

- Resort 5 kl
- Staff Quarters 5 kl
- Office Complex 15 kl

The water demand of the proposed development upgrade has been estimated and the following infrastructure is proposed:

- 100 kl Reservoir Utilise existing
- WTW 100 kl/day To demineralise borehole water and disinfection
- Elevated storage 60 KI (various locations)
- Bulk Pipelines 2.3 km
- Reticulation Pipelines 2.2 km
- Boreholes (new) 2 no.

Borehole development will be done professionally, starting with the siting of the boreholes, casing of the holes and testing of the yield and subsequent compliance with drinking water standards.

Road Infrastructure:

The reserve has far in excess of 200km of gravelled roads – generally requiring a LDV to navigate. To open up the reserve for tourism it will be required to upgrade a significant portion of these roads to an acceptable standard. The 4km access road from the tar junction to the gate of Letaba Ranch is a gravel road owned and maintained by local government. The upgrade of this road should be dealt with through local structures. All the roads in the reserve are gravel and the condition of the roads are adequate for LDV / 4x4 travel, but not presently in a condition fit for paying visitors to the proposed Reserve. It is envisaged that Game drive vehicles will be provided as part of the proposed development, meaning that visitors will only be required to travel to the Lodge with their personal vehicles.

Sewage:

The present infrastructure consists of waterborne sewerage with localised septic tanks at the current Resort and Staff Quarters. Due to old infrastructure and possible lack of maintenance, the sewer infrastructure at the Staff Quarters is under capacitated.

It is generally preferably to serve developments such as these with either a centralised Waste Water Treatment Package Plant (WWTPP) or a septic tank system. It is proposed that Letaba Ranch make use of a combination of the above two systems. For remote camps it is proposed to use septic tanks to trap the solids and do partial treatment, and then pipe the solids free sewer overflow to a low point, from where a small submersible pump is used to pump the liquid to a WWTW that serves to perform secondary treatment on the sewerage, until it complies with regulatory standards. Having a formal WWTPP makes it possible to use well trained operators or alternatively to outsource to contractors.

The proposed sewer infrastructure is as follows:

- Gravity pipelines 1200m
- Septic Tanks 13 no. (Serving clusters of 10 beds each)
- Pumped sewer lines 2050m
- Submersible PS's 4 no. of 1.5kW each

• WWTW P/Plant - 70 kl/day (70m³/day)

Electricity:

An existing Eskom overhead distribution line at 11/22kV level will be the feeder supplying electricity to the various areas. Two existing transformer supply points exist but both will have to be upgraded to provide the proposed new development with sufficient capacity. A third new supply point will be required at the proposed new entrance gate.

Some of the areas requiring electrical supply e.g. boreholes, outpost units and the electric fence will be too far removed from the Eskom supply for any economical design and will be provided with self-sustained renewable solar electrical supplies.

It is proposed to install a 2kW Solar PV system with 16 kWh battery back-up in each of the staff or manager houses to utilise the first 2kW of power from the sun's energy during the day and night.

The battery back-up will maintain the supply at night for about 8 hours. The systems will be grid-tied and the users will not notice the change over from solar to Eskom when the supply exceeds the first 2kW. In the case of the picket units and the boreholes, the 2kW solar electricity will be the only supply available to these units.

All internal electrical design will conform to Eskom's energy efficiency requirements and includes, amongst other requirements, the following:

- Energy efficient lighting e.g. LED's;
- Heat pumps or Solar geysers for hot water;
- Gas stoves; and
- Gas refrigeration (where possible).

It is intended to add a component of solar PV to each accommodation unit which is grid tied to enable seamless use/change-over of electricity between the sun and the Eskom Supply.

An estimated 10km section of the existing electrical fencing will be upgraded / refurbished whilst new electric fencing will be installed around the new facilities amounting to approximately 13km's. Electrical supply for the Energisers will be obtained from Solar PV sources.

All hot water systems, except the outpost units, will consist of heat pump technology to provide an aesthetically pleasing solution. A condenser will be mounted in the same position as the normal unit. It is proposed to use solar hot water geysers for the outpost units.

For air conditioning, split units will be installed further utilising inverter drive heat pump technology.

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 X	Please explain
Comment from the Ba-Phalaborwa Municipality to be submitted with the Report.	e Final Ba	sic Assessment
7. Is this project part of a national programme to address an issue of national concern or importance?	YES X	Please explain
Game Reserves serve as areas for the protection and conservation species are endangered and threatened due to poaching and rapid ind further resulting in the destruction of habitats. One of the national conce indigenous species. Preservation of biodiversity and natural resources i the free movement, enhance the natural breeding and growth of indige the natural environment.	ustrialisa rns is the s key, thi	tion with urbanisation dwindling number of s project will promote
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	Please explain
The Letaba Ranch is a communal conservation area of the Kruger Nation activity and land use are therefore in line with the broader context.	onal Park	and the proposed
9. Is the development the best practicable environmental option for this land/site?	YES X	Please explain
The site was previously used as a game reserve when the severe flooding that took place in the year 2000 caused the Letaba river to b Ranch to be evacuated and subsequently closing its doors. The facility state to this day. The Limpopo Tourism Agency now has funds in expansion of this previous tourist attraction site.	urst its b is still in	anks causing Letaba a severely damaged
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES X	Please explain
The project will stimulate the local economy by growing the Tourism sec opportunities. The project will also promote wildlife conservation and act to the Kruger National Park.		
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES X	Please explain
The proposed project will attract tourists to the area which will may lead life related activities such as game-farming, lodges, etc.	to other	conservation / wild-

12. Will any person's rights be negatively affected by the proposed activity/ies?NOX	Please explain
The proposed activities will take place in an existing Provincial Park on an exist footprint (Resort Area). Although the staff village will be located in a Greenfield area visible from outside the Park. Neighbouring communities will not experience any ne originating from the proposed Staff Village or Resort.	– it will not be
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?NOX	Please explain
The proposed activities are proposed outside the Urban Edge and land is zoned as "Pr	rovincial Park"
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?NO X	Please explain
This project is not listed as a SIP	
15. What will the benefits be to society in general and to the local communities?	Please explain
Growth in the Tourism Sector	
 Secondary Economic Opportunities (selling of commodities, crafts etc.) 	
Employment Opportunities	
Wildlife Conservation	
16. Any other need and desirability considerations related to the proposed activity?	Please explain
The floods of 2000 damaged the following structures within the Letaba Ranch Resort a	at the time.
• 11 rondavels;	
Restaurant;	
Viewing Deck;	
 Thatched Lapa – this was utilised as a Dining Area for the old lodge; 	
Office building;	
Reservoir and Pump House;	
Swimming pool; and	
Tennis court.	
These structures and facilities are currently in a state of complete disrepair and the considerable investment in order to be refurbished and expanded. The Limpopo T managed to secure the necessary funds and this investment will transform the resort find a viable asset.	ourism Agency

17. How does the project fit into the National Development Plan for 2030?	Please explain	
The proposed Development will fit in very well with the National Development	Plan's vision to	
eliminate poverty by 2030. By growing the Tourism sector in the area, the local economy will be		
stimulated and jobs will be created. National, as well as International, tourists will be	attracted to the	
proposed Letaba Ranch Reserve, either as a stop-over destination to the Kruger Nat	ional Park or as	
an alternative holiday destination. Tourism is a sustainable economy which will pro	vide continuous	
opportunities. Staff will be recruited locally and will receive necessary skills and tra	aining which will	
equally empower them. Other local economies - such as the supply of services a	nd commodities	
(food, fuel, arts and crafts) will also be stimulated.		

18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

An Integrated Environmental Management (IEM) philosophy was adopted in order to ensure that environmental considerations are fully integrated into all stages of the development process. This philosophy aims to achieve a desirable balance between conservation and development (DEAT, 1992). The IEM guidelines is also being considered in this BAR process in order to ensure a proactive approach to sourcing, collating and presenting information in a manner that can be interpreted at all level.

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

The proposed Letaba Ranch development will be **socially sustainable** as it will be venture of permanent nature which will be offering job and skills-development opportunities to local residents. In an area which is currently quite isolated and which does not have a focus or drive, the re-opening of Letaba Ranch could uplift an entire community. The development will also put a lot of emphasis on conservation and will raise awareness among staff as well as visitors.

A great deal of financial resources will be invested in the proposed Letaba Ranch development in order to make it as **environmentally sustainable** as possible. All internal electrical design will conform to Eskom's energy efficiency requirements which will include energy efficient lighting, heat pumps or Solar geysers for hot water, gas stoves and gas refrigeration. All hot water systems, except the outpost units, will consist of heat pump technology to provide an aesthetically pleasing solution. A condenser will be mounted in the same position as the normal unit. It is proposed to use solar hot water geysers for the outpost units. For air conditioning, split units will be installed further utilising inverter drive heat pump technology. The EMPr (Appendix G) was compiled in accordance with the Integrated Environmental Management (IEM) philosophy which aims to achieve a desirable balance between conservation and development (DEAT, 1992). This document will be implemented during the construction as well as the operational phase of the proposed development.

The proposed Letaba Ranch will also be <u>economically sustainable</u> as it will stimulate the tourism sector. The National Kruger Park is well visited throughout the year and generates a lot of revenue. Letaba Ranch will be striving towards being an alternative or combined tourist destination alongside KNP. Letaba Ranch will also act as a gateway for other similar ventures in the area which will stimulate the tourism sector as well as provide for secondary economic opportunities such as the selling of commodities, crafts, etc.

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:	Promulgation Date:
Constitution of the Republic of South Africa Act, 1996 (Act No 108 of 1996)	The proposed development must comply with Section 24 in the Bill of Rights of the Constitution	Provincial	4 February 1997

National Environmental Management Act No. 107 of 1998 as amended	Application for Environmental Authorisation by means of a Basic Assessment Reporting Process	Department of Environmental Affairs (DEA)	27 November 1998
National Water Act, 1998 (Act No. 36 of 1998) (NWA)	Application for a Water Use License	Department of Water Affairs (DWA)	1 October 1998
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA)	The development is larger than 0.5 hectares and classified as a Section 38 development in terms of the NHRA. The proposed development will therefore need formal authorisation from the SAHRA before it can proceed.	National Heritage Resources Agency (SAHRA)	1 April 2000
National Environmental Management: Protected Areas Act 2003 (Act No. 57 of 2003)	The current status of the Letaba Ranch Reserve, according to the NEM:PA is "Provincial Park"	National and Provincial Government	11 February 2004
National Environmental Management: Biodiversity, 2004 (Act No. 10 of 2004) (NEM: BA)	This Act is applicable to this application for environmental authorisation, in the sense that it requires the project applicant to consider the protection and management of biodiversity	South African National Biodiversity Institute	1 September 2004
Promotion of Access to Information Act, 2000 (Act No. 2 of 2000)	The Public Participation Process must ensure transparency and accountability in which people have access to information that enables them to exercise and protect their rights	National and Provincial Government	9 March 2001
DEA Guidelines on Public Participation	Guides the Public Participation Process of this Application	Department of Environmental Affairs (DEA)	10 October 2012
DEA Guidelines on Alternatives	Guides the Alternative site selection process of this Application	Department of Environmental Affairs (DEA)	2004
DEA Guidelines on Need & Desirability	Guides the Need & Desirability description of this Application	Department of Environmental Affairs (DEA)	2004

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?

10m³ to 15m³

YES X

11.3 m³

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

The appointed contractor will be instructed to remove all building rubble from site and to dispose of material at a licensed disposal facility (Phalaborwa).

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

Phalaborwa disposal facility

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 non-recyclable Solid Waste will be stored temporarily at the Letaba Ranch Waste Transfer site for a maximum duration of 90 days before it is disposed at the Phalaborwa Municipal Landfill.
- Recyclables (Plastic, Glass, Metal, Paper, etc.) will be sorted and stored at the Letaba Ranch Waste Transfer site for a maximum of 90 days before being removed by a reputable recycling contractor. (Details of contractor to be forwarded to the Department on appointment).
- Hazardous waste (animal carcasses from butchery) will be removed by a licenced hazardous waste contractor and be disposed of at a licenced hazardous waste disposal facility (Details of contractor to be forwarded to the Department on appointment).

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

N/A

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

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?

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. *Animal carcasses from abattoir – to be removed by Hazardous Waste Contractor*

Is the activity that is being applied for a solid waste handling or treatment facility?

NO
Х

YES X

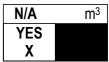
If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of 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.

The WWTW P/Plant will have maximum daily throughput capacity of 70m³ (i.e below the EIA threshold)

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

					· ····	
IT YES	nrovide	the	particulars	ot the	tacility	• N/A
	provido	uio	partiouraro		raomy	

, i		1		
Facility name:				
Contact				
person:				
Postal				
address:				
Postal code:				
Telephone:			Cell:	
E-mail:			Fax:	

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

All food waste will be composted and compost will be reused in the landscaped gardens of the Resort as well as the Staff village.

All recyclables (Plastic, Glass, Metal, Paper, etc.) will be sorted from the waste at the Letaba Ranch Waste Transfer Facility and will subsequently be removed by a Recycling contractor.

c) Emissions into the atmosphere

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

	NU Y
YES	NO

If YES, is it controlled by any legislation of any sphere of government? N/A 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:

N/A

d) Waste permit

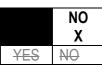
Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?



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?

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. N/A

If NO, describe the noise in terms of type and level:

N/A

13. WATER USE

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

Municipal Water board Groundw X	ter 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

10 000 litres

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

Proof will be submitted with the Final Basic Assessment

use license) from the Department of Water Affairs?

14. ENERGY EFFICIENCY

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

All internal electrical design will conform to Eskom's energy efficiency requirements and includes, amongst other requirements, the following:

- Energy efficient lighting e.g. LED's;
- Heat pumps or Solar geysers for hot water;
- Gas stoves; and
- Gas refrigeration (where possible).

All hot water systems, except the outpost units, will consist of heat pump technology to provide an aesthetically pleasing solution. A condenser will be mounted in the same position as the normal unit. It is proposed to use solar hot water geysers for the outpost units.

For air conditioning, split units will be installed further utilising inverter drive heat pump technology.

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

See above

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

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? **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	Limpopo		
description/physi	District	Mopani District Municipality		
cal address:	Municipality			
	Local Municipality	Ba-Phalaborwa		
	Ward Number(s)	93304015		
	Farm name and number	Farm Belasting 7 LU and Farm Letaba Ranch 17 LU		
	Portion number	Farm Belasting 7 LU Portion 0		
		Farm Letaba Ranch 17 LU Portion 1 and 2		
	SG Code	T0LU0000000000700000		
		T0LU0000000001700001		
		T0LU0000000001700002		
	9	er of properties are involved (e.g. linear activities), please is application including the same information as indicated		
Current land-use zoning as per local municipality IDP/records:	Provincial Park			
		re there is more than one current land-use zoning, please rrent land use zonings that also indicate which portions each this application.		
ls a change of land u	so or a consont uso ann	NO		

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

NO
Х

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

• Staff Village:

Flat	<u>1:50 – 1:20</u>	<u>1:20 – 1:15</u>	<u>1:15 – 1:10</u>	<u>1:10 – 1:7,5</u>	1:7,5 – 1:5	Steeper than 1:5
Resort:						с.т пып
Flat	1:50 – 1:20 X	1:20 – 1:15	1:15 – 1:10	<u>1:10 – 1:7,5</u>	1:7,5 – 1:5	Steeper than 1:5

Alternative S2 (if any):

• Staff Village:

Flat	<u>1:50 – 1:20</u>	<u>1:20 – 1:15</u>	<u>1:15 – 1:10</u>	1:10 – 1:7,5	1:7,5 – 1:5	Steeper
X						than 1:5
Resort:		•				
Flat	1:50 – 1:20	<u>1:20 – 1:15</u>	<u>1:15 – 1:10</u>	1:10 – 1:7,5	1:7,5 – 1:5	Steeper
	X					than 1:5

2. LOCATION IN LANDSCAPE

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

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

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

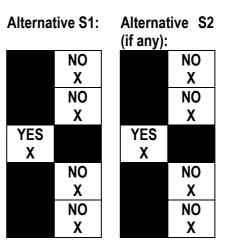
Shallow water table (less than 1.5m deep)

Dolomite, sinkhole or doline areas

Seasonally wet soils (often close to water bodies)

Unstable rocky slopes or steep slopes with loose soil

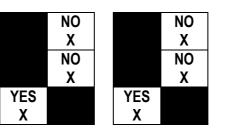
Dispersive soils (soils that dissolve in water)



Soils with high clay content (clay fraction more than 40%)

Any other unstable soil or geological feature

An area sensitive to erosion



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

4. GROUNDCOVER

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

Natural veld - good condition ^E X	Natural veld with scattered aliens [≞]	Natural veld with heavy alien infestation ^E	Veld dominated by alien species[⊑]	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. *Refer to Appendix D.1: Ecological Impact Assessment*

5. SURFACE WATER

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

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

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse. *Refer to Appendix D.2: Wetland Impact Assessment*

Perennial River:

The Letaba River (Afrikaans: Letabarivier), also known as Leţaba or Lehlaba, is a river located in Eastern Limpopo Province, South Africa. It is one of the most important tributaries of the Olifants River. It starts at the confluence of the Groot Letaba River and Klein Letaba River, where they continue their journey eastwards through the Lowveld as the Letaba River. It joins the Olifants River in the foothills of the Lebombo Mountains, near South Africa's border with Mozambique.

Non-Perennial River:

Four non-perennial tributaries of the Letaba River were identified in the Study Area. Please refer to Appendix D.2: Wetland Impact Assessment for a map of the location of these tributaries.

Seasonal Wetland:

One wetland type, a valley bottom wetland with a channel, was delineated and classified into three different hydro-geomorphic (HGM) units within the study area. Refer to Appendix D.2: Wetland Impact Assessment for a map of the location of these HGM units.

Present Ecological State: HGM 1 were found to be in a relatively natural state with only some moderate impacts associated. HGM 2 was classified largely natural with only a few modifications as a result of the intact natural habitats associated with wetlands catchment. HGM 3 was also classified largely natural with only a few modifications. Small changes to the hydrological and geomorphologic processes of the wetland itself include a few dirt roads as well as an small historic cultivated field (commercial).

6. LAND USE CHARACTER OF SURROUNDING AREA

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

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ⁺⁺
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) [№]	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police	Harbour	Crovovord
base/station/compound	Haibbul	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

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

N/A

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

N/A

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

N/A

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

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

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

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:

NO X

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:

Refer to Appendix D.3: Heritage Impact Assessment

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

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:

The labour force in Phalaborwa was 51,510 persons in 2001 according to the strict definition. This indicates a participation rate of more than 39% (on a total population of 131,091), which is very high by South African standards. The average labour force participation rate in Limpopo was 24.6% in 2001. This is an indication that Ba-Phalaborwa is a destination for labour migration. There was a modest increase in the number of employed persons between 1996 and 2001, but a considerable increase in the number of unemployed persons. The strict unemployment rate therefore increased from 29.2% in 1996 to 40.4% in 2001. The labour force participation rate in Phalaborwa was 34.6% in 1996, but increased to 39% as indicated above. More than half of the increase in the number of unemployed persons therefore originates as labour seekers from outside the municipal area.

According to the 2007 CS results, unemployment in the Ba-Phalaborwa Municipal Area is at 11% per household head.

Economic profile of local municipality:

The Mopani District LED Strategy identifies the following key economic Sectors for Ba-Phalaborwa Municipality:

- **Agriculture:** A wide variety of agricultural products are currently grown in the area. Fruit and vegetables are mostly destined for fresh consumption by the local and export markets. Farmers and private companies are responsible for some value addition. Value addition includes: manufacture of fruit juices, drying of fruit and vegetables, manufacture of atchaar.
- **Mining:** The Municipality's mining sector contributes 92.5% to the District's mining sector GDP. This contribution translates to 59.6% of the total district GDP. Mining gives Ba-Phalaborwa a competitive edge over other municipalities in the District. Unfortunately, copper mining (which constitutes the backbone of the mining sector in the municipal area) is destined to stop before 2020.
- Manufacturing: Manufacturing focuses on beneficiation of and value addition to products from the primary sector of he economy, namely mining and agriculture. It is, therefore, classified as the secondary sector of the economy. The manufacturing activities in the Municipality are mainly focused on the mining sector. There is, however, a potential for the processing and packaging of agricultural related products such as Cattle, poultry, vegetables, eggs, etc.
- **Tourism:** The decline of the mining industry forces the Municipality to venture into other economic sectors. The geographic position of Ba-Phalaborwa and the abundance of wildlife in the Kruger National Park present an opportunity for diversification into tourism. Tourism is the economic sector with the most potential for development in the Municipality as a result of the

Municipality's ideal location and climate. Comparative contribution of local municipalities to the district economy			
MUNICIPALITY	% GDP CONTRIBUTION TO THE DISTRICT		
Ba-Phalaborwa	47.4%		
Tzaneen	20.3%		
Giyani	16.7%		
Letaba	8.9%		
Maruleng	6.7%		

Level of education:

Number and type	Number and type of schools per circuit office in the municipal area				
Circuit Office Public Primary	Public Schools	Secondary Schools	Combined Private Schools	Combined Public Schools	Total
Lulekani	19	7	5	1	32
Namakgale	18	7	0	0	25
Total	37	14	5	1	57

b) Socio-economic value of the activity

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

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development and construction phase of the activity/ies?

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

What percentage of this will accrue to previously disadvantaged individuals? How many permanent new employment opportunities will be created during the operational phase of the activity?

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

What percentage of this will accrue to previously disadvantaged individuals?

R <mark>xxx</mark>	
R <mark>xxx</mark>	-
YES	NO
YES	NO
R <mark>xxx</mark>	
% <mark>xxx</mark>	
R <mark>xxx</mark>	
% <mark>xxx</mark>	

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.

Refer to Appendix D1: Ecological Impact Assessment

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)

Systemati	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)	According to the Limpopo Conservation Plan version 2, the area associated with the Resort is classified as a Protected Area, CBA 1 as well as an ESA2 while the proposed Staff Village falls within a Protected Area
				Protected Area Areas that are already proclaimed under national or provincial legislation, including gazetted biodiversity stewardship sites. The land management objective of Pas is to maintain these areas in a natural state with limited or no biodiversity loss. Degraded areas should be rehabilitated to natural or near natural conditions and further degradations should be avoided. Compatible land-use within these areas are restricted to conservation activities (eco-tourism) and associated infrastructure; <u>Critical Biodiversity Area (CBA)</u> Areas that are required to meet biodiversity
				targets for species, ecosystems or ecological processes. These need to be kept in a natural or near-natural state, with no further loss of habitat or species. This category is split into: CBA 1: – Irreplaceable sites. These areas are required to meet biodiversity pattern and/or ecological processes targets. No alternative sites are available to meet targets. The land management objective for CBA1 areas are to

	maintain these areas in a natural state with limited or no biodiversity loss, as well as rehabilitation of the degraded areas. Compatible land-use within CBA1 areas include conservation and associated activities such as extensive game farming and eco- tourism; CBA 2: – Areas selected to meet biodiversity pattern and/or biodiversity process targets. Alternative sites might be available to meet biodiversity targets. The land management objectives within CBA2 areas are to maintain in a natural state with limited or no loss of biodiversity as well as to maintain current agricultural activities whilst minimizing the impact on threatened species. Compatible land-use within CBA 2 areas arable agriculture, extensive and intensive animal production as well as eco-tourism and game farming operations.
	Ecological Support Area (ESA) Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of Pas or CBAs and for delivering ecosystem services. ESA 1: – Natural, near natural and degraded areas supporting CBAs by maintaining ecological processes. The land management objective within these areas is to maintain ecosystem functionality and connectivity allowing for minimal loss of biodiversity patterns. Compatible land-use within these areas include conservation and associated activities such as extensive game farming, ecotourism, extensive livestock production, urban open space systems and low density rural residential small holdings or resorts. ESA 2: – Areas with no natural habitat remaining but which are important to maintain ecological processes. Land management objectives within ESA 2 areas is to avoid additional or new impacts on ecological processes. Compatible land-use within these areas include existing activities should be maintained but where possible a transition to less intensive land-use or ecological restoration should be favoured.

b) Indicate and describe the habitat condition on site

For the purpose of this exercise the "site" means the areas to be refurbished / developed (i.e. existing Resort and Greenfield Staff Village) and not the entire Letaba Ranch Reserve.

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	50%	An area of 47ha around the Resort area was surveyed and was classified as <i>Colophospermum mopane</i> veld. The veld around the proposed Resort, which hasn't been impacted on by the old Resort (outlined below), is in good condition.
Near Natural (includes areas with low to moderate level of alien invasive plants)	40%	An area of 21ha around the proposed Staff Village was surveyed and was classified as <i>Colophospermum mopane</i> veld and natural grasslands (secondary grassland: old agricultural fields).
Degraded (includes areas heavily invaded by alien plants)	0%	n.a
Transform (includes cultivation, dams, urban, plantation, roads, etc)	10%	The footprint of the old resort is completely transformed with various derelict structures, a swimming pool, reservoir, tennis courts and landscaped gardens. Access to the resort is via an existing 4km long, 8m wide gravel road.

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

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 study area is situated within the Savanna Biome (Rutherford and Westfall, 1994). The Savanna Biome is the largest Biome in southern Africa, occupying over one-third of the surface area of South Africa (Mucina and Rutherford, 2006). It is characterised by a grassy ground layer and a distinct upper layer of woody plants. Where this upper layer is near the ground the vegetation may be referred to as Shrubveld, where it is dense, as Woodland, and the intermediate stages are locally known as Bushveld (Mucina and Rutherford, 2006). The Savanna Biome is divided into smaller units known as vegetation types.

According to Mucina and Rutherford (2006), the study area is located in the Tsende Mopaneveld vegetation type. The Tsende Mopaneveld vegetation type consists of slightly undulating plains with medium high tree or shrub cover. Dominant tall tree species includes *Acacia nigrescens*, *Sclerocarya birrea*, *Colophospermum mopane*, *Combretum apiculatum*, *Acacia gerrardii*, *A,tortillis*, *Albizia harveyi*, *Bridelia mollis and Combretum imberbe*. Tall shrubs include species such as *Combretum hereroense*, *Dichrostachys cinerea*, *Euclea divinorum*, *Grewia bicolor*, *Grewia monticola*, *Tephrosia polystachya and Clerodendrum ternatum*. The graminoid layer include species such as *Bothriochloa radicans*, *Digitaria eriantha*, *Heteropogon contortus*, *Themeda triandra*, *Eragrostis rigidior*, *E.superba*, *Panicum coloratum* and *Schmidtia pappophoroides*. Tsende Mopaneveld is classified as Least Threatened (Mucina & Rutherford, 2006) with more than 60% statutorily conserved, mostly in the Kruger National Park. An additional 5% is conserved in private reserves mainly the Greater Letaba Game Reserve.

Refer to *Appendix D1: Ecological Impact Assessment* for threatened species and special habitats identified on site (including photos).

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Mopani Herald	
Date published	15/05/2014	
Site notice position	Latitude	Longitude
	30° 59' 37.62" E	23° 40' 58.06" S
	30° 40' 59.62" E	23° 40' 59.62" S
Date placed	13/05/2014	

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

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 54(2)(e) and 54(7) of GN R.543.

Key stakeholders (other than organs of state) identified in terms of Regulation 54(2)(b) of GN R.543:

Refer to Appendix E2 for a list of all identified stakeholders

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; Attached
- registered mail receipts; Attached
- courier waybills; Attached
- signed acknowledgements of receipt; and/or Attached
- 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
No comments were received to date. To be	
updated in the Final Basic Assessment Report.	

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.

No comments has been received to date – the Comment and Response Report will be submitted with the Final Basic Assessment (Appendix E3)

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders: Refer to Appendix E4 for list of Authorities and Organs of State

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address

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

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

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. - Attached

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

- A public meeting will only be held if deemed necessary based on comments received from I&AP's

SECTION D: IMPACT ASSESSMENT

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

1. 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 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.

2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts.

The potential impacts of the proposed development were identified through a desktop study, a site visit, specialist studies and comments received during the public participation process.

In the Basic Assessment Report, the potential impacts are broadly identified and outlined. An assessment of the potential impacts is provided, identifying the impacts that are potentially significant and recommending management and mitigation measures to reduce the negative impacts and enhance the positive impacts.

In general, it is recognised that every development has the potential to pose various risks to the environment as well as to the residents and/or businesses in the surrounding area. Therefore, it is important that these possible risks are taken into account during the planning phase of the development. Risks and key issues were identified and addressed through an internal process based on similar developments, and an environmental evaluation.

Previous experience has shown that it is often not feasible or practical to only identify and address possible impacts. The rating and ranking of impacts is often a controversial aspect because of the subjectivity involved in attaching values to impacts.

Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required.

The classes are rated as follows:

1) No significance The impact is not substantial and does not require any mitigatory action.

2) Low

The impact is of little importance, but may require limited mitigation.

3) Medium

The impact is of importance and therefore considered to have a negative impact. Mitigation is required to reduce the negative impacts to acceptable levels.

4) High

The impact is of great importance. Failure to mitigate, with the objective of reducing the impact to acceptable levels, could render the entire development option or entire project proposal unacceptable. Mitigation is therefore essential.

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

*SBM = Significance Before Mitigation

***SAM =** Significance After Mitigation

Activity *SBM = Significance Before Mitigation *SAM = Significance After Mitigation	Impact summary	SBM	Proposed mitigation	SAM
Alternative 1: Separate Resort and Staff Village (pref	ferred alternative)		
Potential impacts on ground and surface water resources due to hydrocarbon spillages during the construction phase of the development	Direct impact:	M	Refer to Appendix F	L
Potential impacts on ground and surface water quality due to hydrocarbon spillages during the operational phase of the development	Direct impact:	М	Refer to Appendix F	L
Soil erosion as a result of increased volume of surface water run-off associated with the establishment of hard surfaces and vegetation clearance during the construction and operational phases.	Direct impact:	М	Refer to Appendix F	L
Impacts on flora within the proposed area, stemming from activities such as vegetation clearing and topsoil stripping during the construction phase	Direct impact:	Н	Refer to Appendix F	М
Impacts on Fauna due to increased level of activity and associated noise during the construction and operational phase	Direct impact:	Н		М
Noise, dust and disturbance during the construction phase	Direct impact:	М	Refer to Appendix F	L
Potential disturbance of heritage resources during the construction phase	Direct impact:	М	Refer to Appendix F	L
The visual impact of transforming the natural Mopane Veld landscape character of the Lowveld.	Cumulative Impact:	H	Refer to Appendix F	М

Activity *SBM = Significance Before Mitigation *SAM = Significance After Mitigation	Impact summary	SBM	Proposed mitigation	SAM
Job creation during both the construction and operational phases of the proposed project	Positive Impact	N/A	N/A	+ H
Alternative 2: Combined Resort and Staff Village	I			
Potential impacts on ground and surface water resources due to hydrocarbon spillages during the construction phase of the development	Direct impact:	Н	Refer to Appendix F	М
Potential impacts on ground and surface water quality due to hydrocarbon spillages during the operational phase of the development	Direct impact:	Н	Refer to Appendix F	М
Soil erosion as a result of increased volume of surface water run-off associated with the establishment of hard surfaces and vegetation clearance during the construction and operational phases.	Direct impact:	Н	Refer to Appendix F	M
Impacts on flora within the proposed area, stemming from activities such as vegetation clearing and topsoil stripping during the construction phase	Direct impact:	Н	Refer to Appendix F	М
Faunal displacement due to increased level of activity and associated noise during the construction phase	Direct impact:	Н	Refer to Appendix F	М
Faunal displacement due to increased level of activity and associated noise during the operational phase	Direct impact:	М	Refer to Appendix F	L
Noise, dust and disturbance during the construction an operational phases	Direct impact:	М	Refer to Appendix F	L
Potential disturbance of heritage resources during the construction phase	Direct impact:	М	Refer to Appendix F	L
The visual impact of transforming the natural Mopane Veld landscape character in the Lowveld.	Cumulative Impact:	н	Refer to Appendix F	м
Job creation during the construction and operational phases of the proposed project	Positive Impact	N/A	N/A	+ H

No-Go Alternative

This option assumes that a conservative approach would ensure that the environment is not impacted upon any more than is currently the case. It is important to state that this assessment is informed by the current condition of the area. Should the DEA decline the application, the 'No-Go' option will be followed and the status quo of the site will remain.

A complete impact assessment in terms of Regulation 22(2)(i) of GN R.543 must be included as Appendix F - Attached

3. ENVIRONMENTAL IMPACT STATEMENT

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

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

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment).

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application.

In accordance with GN No. 543, this BAR is aimed at describing the proposed activity as well as the receiving environment that may be affected by the proposed project. In accordance with the EIA Regulations, an identification of relevant legislation and guidelines is also given as well as a description of the public participation process that is being followed.

Comments and/ or concerns identified by Interested and Affected Parties (I&APs) during the review period of the Draft BAR will incorporated into the Final BAR. The Final BAR will be submitted to the DEA for consideration.

The ability to mitigate any of the potential impacts identified in this Draft BAR has also been investigated and summarised into a working/ dynamic Environmental Management Programme (EMPr) for consideration by I&APs and ultimately by the DEA.

Please refer to Appendix F for the Detailed Impact Assessment – including mitigation measures and to Appendix G for the EMPr.

Is an EMPr attached? The EMPr must be attached as Appendix G. - Attached

YES

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. - *Attached*

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

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

Craig Allen

NAME OF EAP

SIGNATURE OF EAP

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps - Attached

Appendix B: Photographs - Attached

Appendix C: Facility illustration(s) - Attached

Appendix D: Specialist reports (including terms of reference) - Attached

D1: Ecological Impact Assessment - Attached

D2: Wetland Impact Assessment - Attached

D3: Heritage Impact Assessment - Attached

D4: Aquatic Impact Assessment - Attached

Appendix E: Public Participation

E1: Proof of Advert and Site Notice - Attached

E2: Proof of Stakeholder Notification (other than Organs of State) - To be provided in the Final BAR

E3: Comment and Response Report - To be provided in the Final BAR

E4: Proof of Stakeholder Notification (Organs of State) - To be provided in the Final BAR

E5: Registered I&AP's - Attached

E6: Proof of Public and/or Stakeholder Meetings - only if required by I&AP's

Appendix F: Impact Assessment – Attached

Appendix G: Environmental Management Programme (EMPr) - Attached

Appendix H: Details of EAP and expertise - Attached

Appendix I: Specialist's declaration of interest - Attached

Appendix J: Additional Information - N/A