

Savannah Environmental (Pty) Ltd  
PO Box 148  
Sunninghill  
2157

**Name:** Gerhard Botha  
**Cell:** 084 207 3454  
**E-mail:** gerhard@nkurenkuru.co.za  
**Date:** 14 April 2022  
**Ref:** Lichtenburg 3 PV Part 2 Amendment

**Attention: Ms. Jo-Anne Thomas**

Dear Madam,

**ECOLOGICAL AND AQUATIC/WETLAND COMMENTS: PROPOSED AMENDMENT TO THE AUTHORISED ABO WIND LICHTENBURG 3 PV PROJECT (DEA REF 14/12/16/3/3/2/1093).**

The ABO Wind Lichtenburg 2 PV solar energy facility is authorised for a maximum electricity export capacity of 100MW and includes the following infrastructure (refer to Figure 1).

- » Photovoltaic modules with a net generation (contracted) capacity of 100MW;
- » On-site 88/132kV substation;
- » Mounting structures (fixed tilt/static, single-axis or double-axis tracking systems) for the PV arrays and related foundations;
- » DC/AC Inverters, LV/MV power transformers and internal electrical reticulation (underground cabling);
- » A new 88/132kV overhead power line from the on-site substation to the Mmabatho / Watershed DS 1 88kV Power Line;
- » Access and internal road network;
- » Temporary laydown area;
- » Auxiliary buildings (gate-house and security, control centre, office, two warehouses, canteen & visitors centre, rainwater tanks, etc);
- » Perimeter fencing; and
- » Battery Energy Storage System (BESS), with a capacity of up to 500MW/500MWh, an extent of no more than 5ha, and a maximum height of 3.5m<sup>1</sup>.

ABO Wind Lichtenburg 3 PV (Pty) Ltd is now considering the following amendments (**Error! Reference source not found.**):

- » consideration of Grid Connection Corridor Alternative 2 as the preferred grid connection corridor. Furthermore, it is requested that the DFFE considers an extension to this corridor such that the proposed collector substation on Lichtenburg 3 PV is located within the corridor;
- » a change in the location of the step-up/on-site substation;

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<sup>1</sup> This infrastructure was authorised by the DFFE (Ref:14/12/16/3/3/2/1093/AM2) through a Part 2 amendment process undertaken in March 2020 for the addition of a Battery Energy Storage System (BESS) to the EA for the proposed project.

- » change in the capacity of the step-up/on-site substation from 88/132kV to 33/132kV; and
- » a substitution of the wording, 'a new 132kV overhead power line from the on-site substation to the Mmabatho/Watershed DS 1 88kV power line', with 'a 132kV power line from the collector substation complex to the Eskom Watershed Substation'.

Considering the above, the amendments are proposed within the authorised footprint of Lichtenburg 3 PV. In addition, the proposed location of the collector (step-up/on-site) substation and extension request to the grid connection corridor for Lichtenburg 3 PV is proposed within an area that was assessed by Specialists during the EIA process. The reason for the extension to this corridor is on the basis that the location of the step-up/on-site substation for Lichtenburg 3 PV is being moved from its authorised location to a new location within the authorised footprint of the project as part of the proposed collector substation complex for all 3 projects. The change in the location is to collect the electricity from each of the three projects at one location, the collector substation complex from which electricity will be transmitted to the Eskom Watershed Substation via a 132kV power line.

The authorised ABO Wind Lichtenburg 3 PV solar energy facility ('the project') is located 10km north of Lichtenburg and 7km south-east of Bakerville in the North West Province. The project is located within Ward 16 of the Ditsobotla Local Municipality and the Ngaka Modiri Molema District Municipality in the North West Province. The development footprint of the solar energy facility is located on the Remaining Extent of Portion 2 of Farm Zamenkomst No. 04. It is within this property that the project will be constructed and operated.

The original Ecological Assessment/Report was conducted by Nkurenkuru Ecology and Biodiversity (Pty) Ltd. (Mr. Gerhard Botha – PrSciNat: Ecology and Botany) in November 2018. The entire project site (including all alternative sites) was surveyed from the 29<sup>th</sup> to the 31<sup>st</sup> of October 2018 and survey conditions were regarded as acceptable to near-optimal. As mentioned, the entire project site was surveyed and included all the alternative areas, and as such the areas now proposed for the new preferred grid route and collector (on-site/step-up) substation complex were also thoroughly surveyed and described and assessed.

Ecological comments were requested from Nkurenkuru Ecology and Biodiversity by Savannah Environmental regarding the proposed amendments.

Subsequently, the aim and terms of reference are to:

- » Determine whether the ecological findings/results, as well as the impacts assessed within the original Ecological Impact Assessment (2018) still, ring true for the amended preferred grid route option.
  - In the case where such impacts will change in any way due to the proposed amendments (in terms of duration, magnitude, significance etc.), a comparison should be provided of such impacts before the changes and after the proposed changes;

- » Whether there will be any additional impacts;
  - In the case where there will be additional impacts, such impacts should be assessed in-line with the methodology specified by Savannah Environmental.
- » Determine any potential advantages and/or disadvantages associated with the changes;
- » Provide measures to ensure avoidance, management and mitigation of impacts associated with such proposed changes, and any changes to the existing EMPr.

Based on a comparison between recent satellite images (Google Earth Satellite Image from December 2021) and satellite images used during the Ecological Assessment (Google Earth Image from May 2018), land-use practices remained the same (predominantly cattle grazing with small scale ploughing and cultivation (rain-fed crops/pastures) towards the northern portion of the proposed extended area and new on-site substation area), with no clear change in vegetation structure and the present ecological status of the assessed area (**Error! Reference source not found.**). As such the need for a site visit as part of the Part 2 Amendment was deemed unnecessary with the findings of the terrestrial and wetland/ecological study and assessment still regarded as applicable.

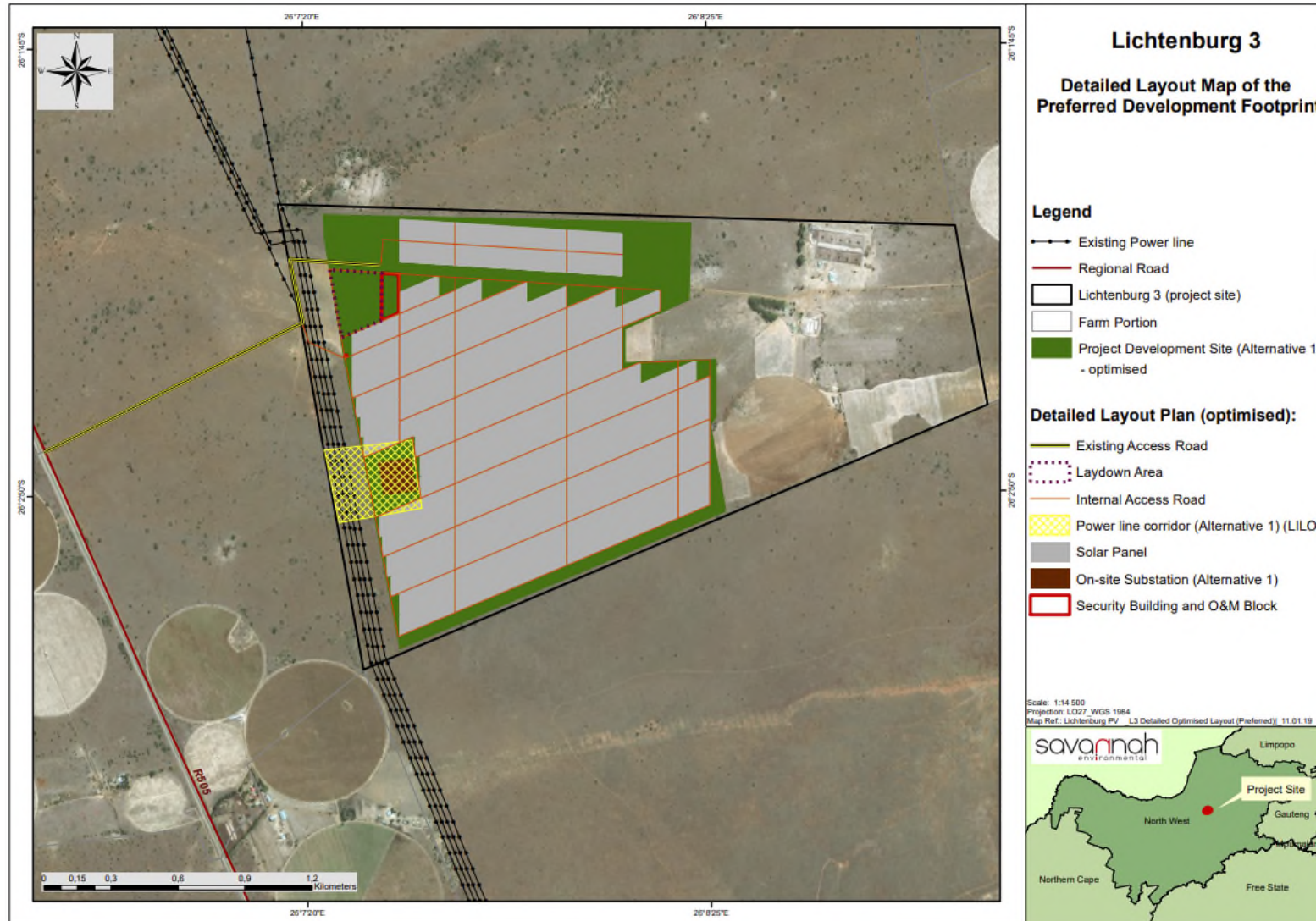


Figure 1: The authorised layout of the proposed ABO Wind Lichtenburg 3 PV solar energy facility (map provided by Savanna Environmental Pty (Ltd)).

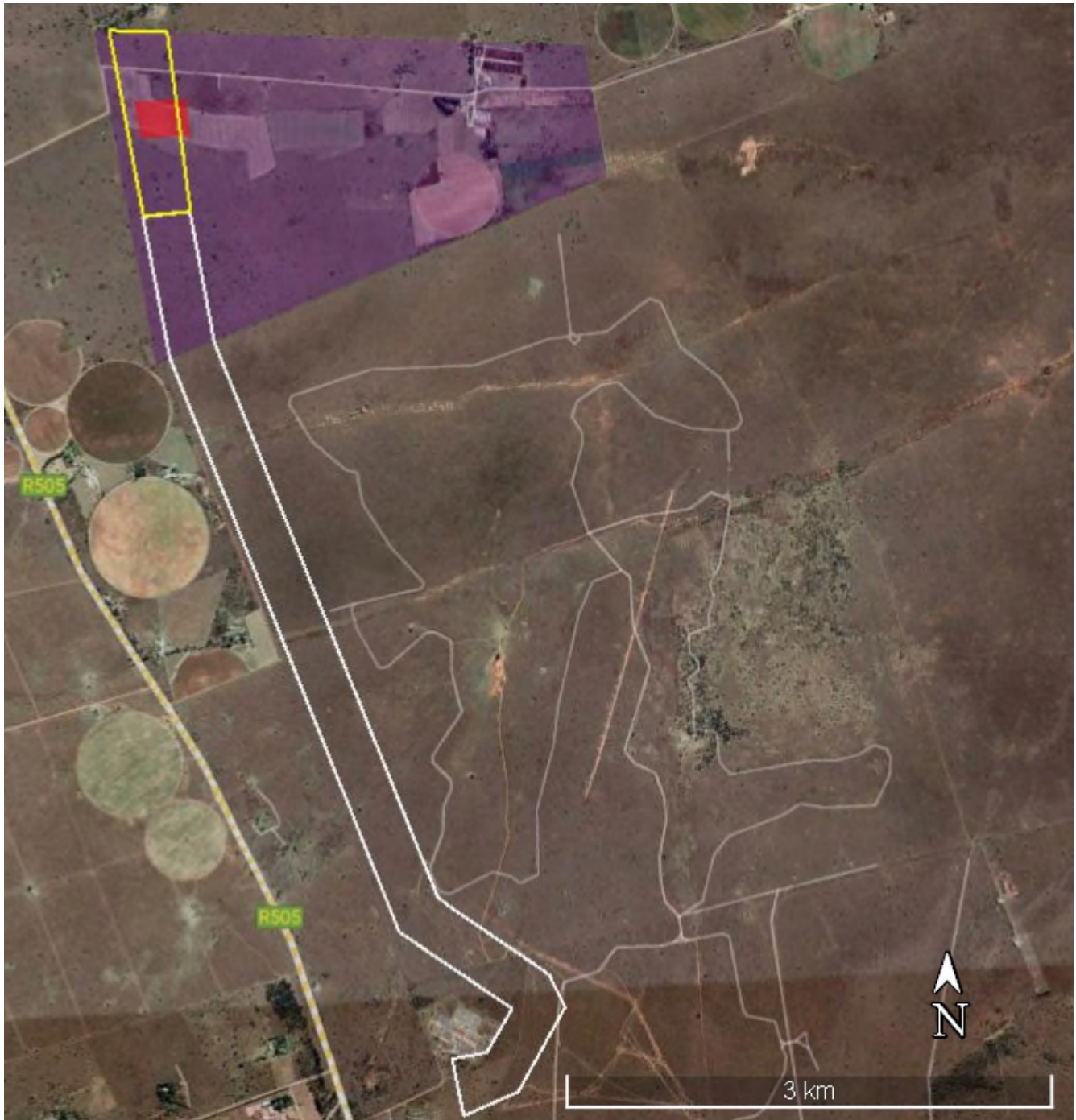


Figure 2: Google ImageTM illustrating the “now” preferred grid route (Grid Connection Alternative 2 with an extension to the north) and new collector (on-site/step-up) substation complex location (now with a combined footprint of up to 6.92ha).

Purple shaded area: Portion 2 of the Farm Zamenkomst No 4; Red shaded area: Proposed collector (on-site/step-up) substation footprint; White outlined area: Grid Connection Alternative 2 corridor surveyed during the initial assessment; Yellow outlined area: Proposed extension of the Grid Connection Alternative 2 corridor.

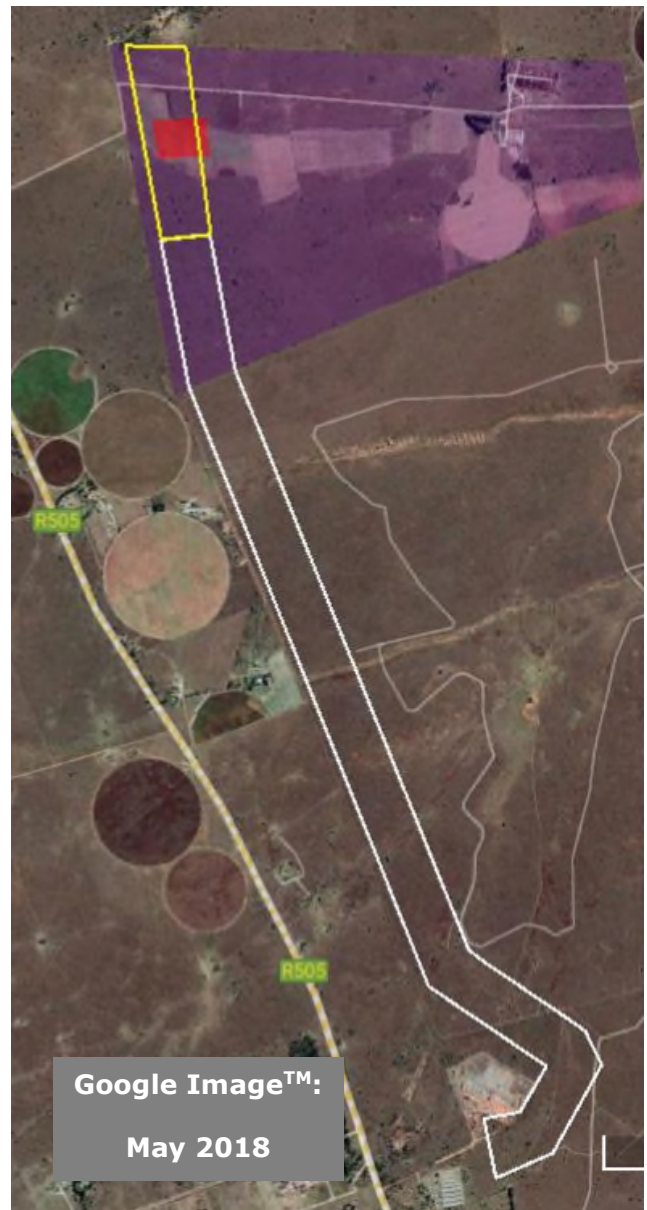


Figure 3: Google Images™ comparing how land use practices and the ecological status may have changed over time (between 2018 and 2021). From the satellite images, it is clear that no significant changes have occurred over time.

## 1. GENERAL FINDINGS / NOTES ON THE AFFECTED ENVIRONMENT AND ASSESSED IMPACTS.

During the original ecological survey, two vegetation associations were identified within the proposed grid corridors (**Error! Reference source not found.**):

- » Association 1: *Elionurus muticus* – *Helichrysum callicomum* Savanna Grassland; and
- » Association 2: *Hyparrhenia hirta* – *Elionurus muticus* Grassland

Plant association 2 covers slightly deeper sandy-loam soils which are regarded as high to moderately high arable lands and as such large portions of this association have been extensively ploughed. The central portion of the proposed grid corridor extension area as well as most of the collector (on-site/step-up) substation complex will be located within such transformed/ploughed areas that were historically covered by plant association 2. The bulk of the originally surveyed/assessed Grid Alternative 2 corridor will however, mostly traverse plant association 1 which tend to cover shallow, rocky soil forms, whilst small sections of plant association 2 will be crossed (as described within the Ecological Assessment/Report). As mentioned, the proposed affected area (project site) is used as grazing for cattle and game with limited disturbances present (disturbances include existing power lines, service roads, twin tracks and a small area currently ploughed and cultivated to the north.

According to the sensitivity assessment, both of these vegetation associations have been classified as **medium sensitivity** (**Error! Reference source not found.**). All disturbed and transformed areas have been furthermore, classified as **low sensitivity**. During the Ecological Study and Assessment, it was found that both of these vegetation associates were regarded as **acceptable for the proposed grid infrastructure development**.

Furthermore, during the Ecological Study and Assessment, **no** faunal and floral species of conservation concern (Red Data and highly range-restricted species) have been identified within the new collector (on-site/step-up) substation complex footprint as well as the proposed grid corridor (original surveyed/assessed Grid Alternative 2 corridor as well as the proposed extension). Additionally, the proposed grid corridor, as well as the collector (on-site/step-up) substation complex, are located **outside** of any significant terrestrial biodiversity features (provincially and nationally identified areas).

In terms of freshwater resource features, **no** aquatic/wetland features have been identified within 500m of the proposed grid corridors and subsequently the proposed development of the grid infrastructure will **not** have an impact on any freshwater resource features.

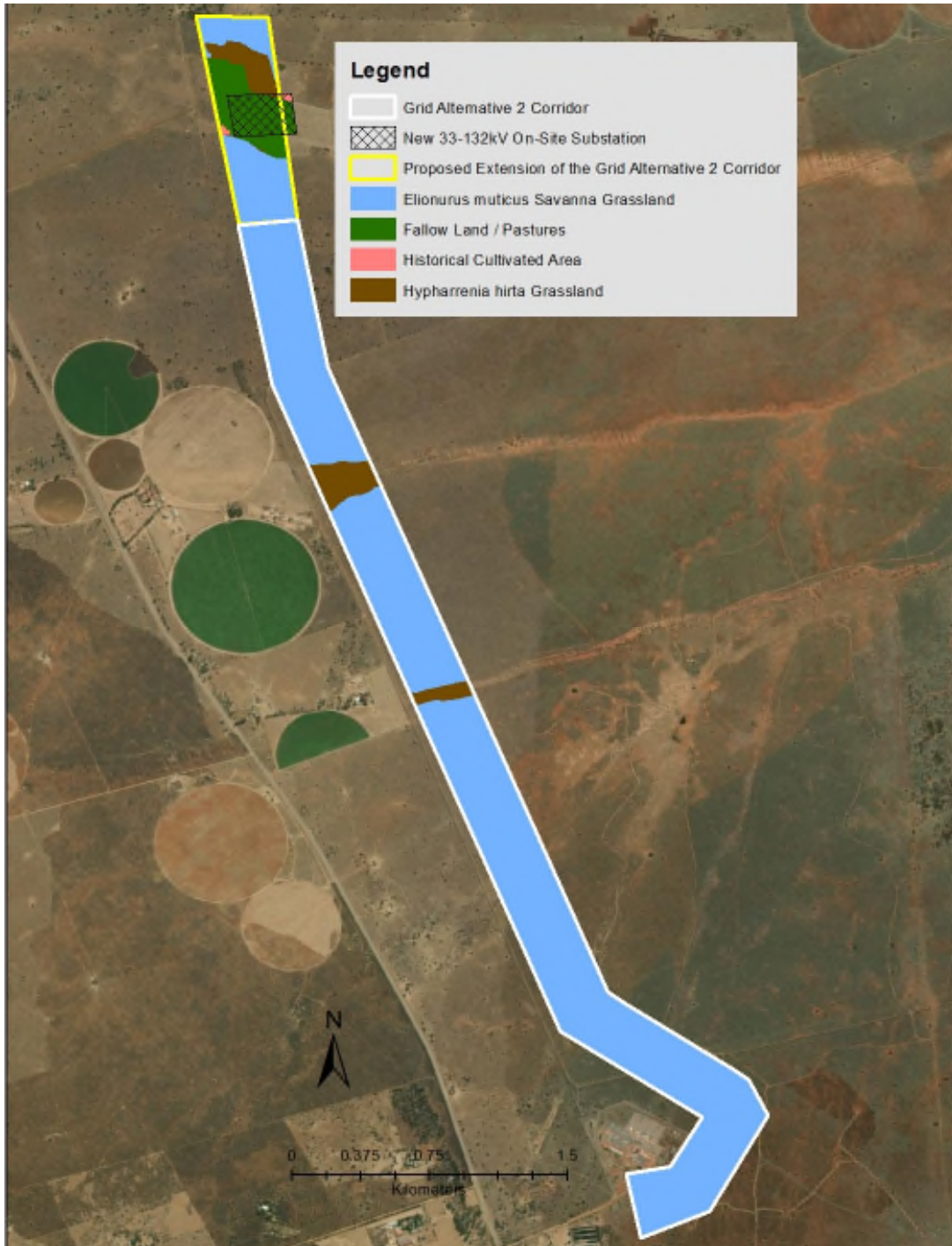


Figure 4: Map indicating the land coverages and land uses characterizing the newly proposed grid corridor and on-site substation.





Figure 5: Map indicating the ecological sensitivity characterizing the newly proposed grid corridor and on-site substation.

## **2. GRID LINE CORRIDOR AMENDMENT: COMPARISON AND ASSESSMENT OF POTENTIAL IMPACTS LISTED WITHIN THE ORIGINAL ECOLOGICAL REPORT.**

Grid Alternative 1 (authorised grid alternative), is a much shorter alternative and will subsequently have a significantly smaller impact footprint than the other two grid line alternatives assessed during EIA assessment. During the assessment of the impacts associated with the different grid alternatives the following statements/conclusions were drawn:

*"In terms of the Overhead Power Line Alternatives, Alternative 1 is, from an ecological and surface hydrological perspective, the most preferred option as this option will extend over a very short distance before connecting to existing infrastructure. Subsequently, direct, indirect and cumulative impacts on natural and semi-natural habitats will be very limited.*

*Alternatives 2 and 3 will extend through very similar habitat types (including identified vegetation communities), and subsequently, it is expected that the direct-indirect and cumulative impacts associated with these two alternatives will be very similar, as well as the mitigation measures recommended. Even though Overhead Power Line Alternative 3 is a slightly longer route, the additional distance is too small to cause a significant and notable increase or variations in impacts compared to Alternative 2. As both these alternatives are located within a relatively uniform habitat type with no identified sensitive features, ecological and surface hydrological Impacts will largely be low.*

*Even though Alternative 1 is, as mentioned, the preferred option, Alternatives 2 and 3 are still regarded as low enough in terms of potential impacts and subsequently still acceptable, and as such the selection of the preferred alternative remains the choice of the developer, which would probably be based on the technically preferred substation alternative."*

A summary of all applicable impacts listed within the original Ecology Report will be provided below, followed by a summary of the significance of each impact, for the grid line that was authorised (Grid Alternative 1) as well as Grid Alternative 2, as determined/calculated within the original Ecological Study and Assessment (Botha, 2018).

Within the original Ecology Report, the following potential impacts were listed as applicable to the grid infrastructure development and were subsequently assessed.

- » Potential ecological impacts resulting from the proposed development would stem from a variety of different activities and risk factors associated with the construction and operation phases of the project, including the following:

- Human presence and uncontrolled access to the site may result in negative impacts on fauna and flora through poaching of fauna and uncontrolled collection of plants for traditional medicine or other purposes.
  - The prosed significance of this impact for all assessed grid corridors options were rated as **low**.
- » Construction Phase
- Site clearing and exploration activities for site establishment.
  - Vegetation clearing will potentially impact listed plant and faunal species.
    - There are only a few provincially protected plant animal species (and no species of conservation concern) potentially present within the power line corridor alternatives and it is likely that some of these protected species may be impacted.
    - Vegetation clearing during construction will lead to the loss of currently intact habitat (plant and animal) within the power line corridor alternatives and is an inevitable consequence of the development. As this impact is certain to occur it is assessed for the construction phase as this is when clearing will take place.
    - The prosed significance of this impact for all assessed grid corridors options were rated as **low**.
  - Soil compaction and increased erosion risk would occur due to the loss of plant cover and soil disturbance created during the construction phase.
    - These potential impacts may result in a reduction in the buffering capacities of the landscape during extreme weather events.
    - The prosed significance of this impact for all assessed grid corridors options were rated as **low**.
  - Invasion by alien plants may be attributed to excessive disturbance to vegetation,
    - This may create a window of opportunity for the establishment of these alien invasive species.
    - In addition, regenerative material of alien invasive species may be introduced to the site by machinery traversing through areas with such plants or materials that may contain regenerative materials of such species.
    - The prosed significance of this impact for all assessed grid corridors options were rated as **low**.
  - Presence and operation of construction machinery on site.
    - This will create a physical impact as well as generate noise, potential pollution and other forms of disturbance at the site.
    - The prosed significance of this impact for all assessed grid corridors options were rated as **low**.
  - Increased human presence can lead to poaching, illegal plant harvesting and other forms of disturbance such as fire.

- The proposed significance of this impact for all assessed grid corridors options were rated as **low**.
- » Operation Phase
- The facility will require management and if this is not done effectively, it could impact adjacent intact areas through impacts such as erosion and the invasion of alien plant species.
  - The proposed significance of this impact for all assessed grid corridors options were rated as **low**.

Table 7: Comparison of the Impact Significance Ratings (pre- and post-mitigation) that were determined/calculated for Grid Corridor Alternative 1 and 2 during the Ecological Study and Assessment.

Phase	Impact	Significance Ratings			
		Grid Corridor Alternative 1		Grid Corridor Alternative 2	
		Pre-Mitigation	Post-Mitigation	Pre-Mitigation	Post-Mitigation
Construction	<i>Potential Impacts on vegetation and listed protected plant species.</i>	Low (15)	Low (9)	Low (24)	Low (18)
	<i>Faunal Impacts due to construction activities</i>	Low (18)	Low (12)	Low (24)	Low (15)
	<i>Potential increased erosion risk during construction</i>	Low (18)	Low (9)	Low (24)	Low (15)
Operation	<i>The disturbed and bare ground that is likely to be present within the power line corridor after construction will leave the corridor vulnerable to alien plant invasion for some time, and pose a potential threat to surrounding grasslands.</i>	Low (15)	Low (9)	Low (21)	Low (15)
	<i>Increased alien plant invasion during operation.</i>	Low (18)	Low (9)	Low (21)	Low (15)
	<i>Increased erosion risk during operation.</i>	Low (18)	Low (9)	Low (21)	Low (15)

**2.1. Grid Line Corridor Amendment: Amendments to existing listed impacts and/or the addition of new potential impacts based on the proposal of an extension of the assessed Grid Corridor Alternative 2.**

Following a review of the Ecological Study and Impact Assessment conducted in 2018 as well as a through survey of the most recent available Google Earth Imagery, the following comments can be made regarding the above-mentioned impacts.

- » Even though, the newly proposed, preferred grid route will be slightly longer, the extent of the additional area as well as the present ecological condition/status of this additional area is of such a nature (small additional area, traversing mainly transformed areas), that a change in the significance of all assessed impacts is not warranted
- » Furthermore, the proposed amendments to the preferred grid corridor footprint will not result in any additional impacts (impacts not mentioned or assessed within the “original” ecological impact assessment).
- » Subsequently the assessment of the impacts within the original report will remain unchanged and are still applicable.

As such no additional impact assessment or alteration to existing impact assessment was deemed necessary.

## **2.2. Grid Line Corridor Amendment: Additional mitigation measures deemed necessary to be included**

No additional or amended mitigation measures, relating to fauna, flora and terrestrial biodiversity, in addition to those specified in the original Ecological specialist study (dated November 2018) are recommended.

## **3. ON-SITE SUBSTATION AMENDMENT: COMPARISON AND ASSESSMENT OF POTENTIAL IMPACTS LISTED WITHIN THE ORIGINAL ECOLOGICAL REPORT.**

The change in capacity of the step-up/on-site substation from 88/132kV to 33/132kV is of such a nature, that this change in capacity will not have any bearing on the impacts assessed during the EIA phase.

The relocation of the authorised on-site substation will however, have a slight impact (reduction) on the significance ratings of some of the impacts assessed during the EIA phase. This is due to the fact that the substation will be relocated from a near-natural to natural grassland area to an area that has been largely disturbed and transformed (ploughing). The relocation of the on-site sub-station will furthermore, not result in any new impacts and also will not result in some of the impacts assessed becoming irrelevant

During the assessment of the impacts associated with the approved on-site substation location, the following statements/conclusions were drawn:

Within the original Ecology Report the following potential impacts were listed as applicable to the authorised on-site sub-station development and were subsequently assessed during the EIA phase.

- » Potential ecological impacts resulting from the proposed development would stem from a variety of different activities and risk factors associated with the construction and operation phases of the project, including the following:
  - Human presence and uncontrolled access to the site may result in negative impacts on fauna and flora through poaching of fauna and uncontrolled collection of plants for traditional medicine or other purpose.
  - The proposed significance of this impact was rated as **low**.
  
- » Construction Phase
  - Site clearing and exploration activities for site establishment.
  - Vegetation clearing will potentially impact listed plant and faunal species.
    - There are only a few provincially protected plant animal species (and no species of conservation concern) potentially present within the power line corridor alternatives and it is likely that some of these protected species may be impacted.
    - Vegetation clearing during construction will lead to the loss of currently intact habitat (plant and animal) within the power line corridor alternatives and is an inevitable consequence of the development. As this impact is certain to occur it is assessed for the construction phase as this is when clearing will take place.
    - The proposed significance of this was rated as **low**.
  - Soil compaction and increased erosion risk would occur due to the loss of plant cover and soil disturbance created during the construction phase.
    - These potential impacts may result in a reduction in the buffering capacities of the landscape during extreme weather events.
    - The proposed significance of this impact was rated as **low**.
  - Presence and operation of construction machinery on site.
    - This will create a physical impact as well as generate noise, potential pollution and other forms of disturbance at the site.
    - The proposed significance of this impact was rated as **low**.
  - Increased human presence can lead to poaching, illegal plant harvesting and other forms of disturbance such as fire.
    - The proposed significance of this impact was rated as **low**.
  
- » Operation Phase
  - The facility will require management and if this is not done effectively, it could impact adjacent intact areas through impacts such as erosion and the invasion of alien plant species.
  - Invasion by alien plants may be attributed to excessive disturbance to vegetation,
    - This may create a window of opportunity for the establishment of these alien invasive species.

- In addition, regenerative material of alien invasive species may be introduced to the site by machinery traversing through areas with such plants or materials that may contain regenerative materials of such species.
- The prosed significance of this impact was rated as **low**, post mitigation (medium pre-mitigation).
- Soil compaction and increased erosion risk would occur due to the loss of plant cover and soil disturbance created during the construction phase.
  - These potential impacts may result in a reduction in the buffering capacities of the landscape during extreme weather events.
  - The prosed significance of this impact was rated as **low**

As mentioned, the new location is characterised by a largely transformed and disturbed are due to active ploughing and rainfed cultivation practices (crops and pastures). As such impacts on natural vegetation and habitats will be lower as well as the impact on the natural faunal communities of the area (due to a reduction of impacts on natural faunal habitats). Subsequently the following Impacts will be re-assessed below:

- Construction Phase
  - Impact on natural vegetation communities;
  - Impacts on Faunal activity and natural habitats;

All remainder of the impacts assessed during the EIA phase still remain applicable and unchanged (in terms of significance).

### 3.1. On-site sub-station Amendment: Amendments to existing listed impacts based on the relocation of the approved sub-station location.

#### **Construction Impact 1: Impacts on local vegetation.**

<b>Impact Nature:</b> Impacts on vegetation would occur due to vegetation clearance associated with the construction of the substation.				
The most likely consequences include:				
» local loss of habitat;				
» very small and local disturbance to processes maintaining local biodiversity and ecosystem goods and services.				
	Authorised On-site Substation Location		New On-site Substation Location	
	Without Mitigation	With Mitigation	Without Mitigation	With Mitigation
<b>Extent</b>	Local (1)	Local (1)	Local (1)	Local (1)
<b>Duration</b>	Long-term (4)	Long-term (4)	Long-term (4)	Long-term (4)

<b>Magnitude</b>	Minor (2)	Small (0)	Minor (2)	Small (0)
<b>Probability</b>	Probable (3)	Probable (3)	Improbable (2)	Improbable (2)
<b>Significance</b>	<b>Low (21)</b>	<b>Low (15)</b>	<b>Low (14)</b>	<b>Low (10)</b>
<b>Status</b>	Slightly Negative	Slightly Negative	Slightly Negative	Slightly Negative
<b>Reversibility</b>	Moderate	High	High	High
<b>Irreplaceable loss of resources</b>	Very slight loss of resources	Very slight loss of resources	No irreplaceable loss of natural resources.	No irreplaceable loss of natural resources.
<b>Can impacts be mitigated?</b>	To some extent. Areas of vegetation will be replaced with infrastructure and hard surfaces. The only recommended mitigation is to ensure that all activities occur within the development footprint with no disturbance of vegetation outside of the substation location.			
<b>Residual Impacts</b>	Some loss of vegetation is inevitable and cannot be avoided.		Very limited residual impact is restricted to the small natural areas where the loss of natural vegetation will be inevitable.	

### **Construction Impact 2: Impacts on faunal activity and natural habitats**

**Impact Nature:** Construction activities such as the operation of heavy machinery and the presence of construction personnel at the substation location could result in direct (e.g. road mortalities) and indirect impacts as a result of noise and dust pollution on terrestrial fauna at the site during construction.

The most likely consequence includes a reduction in the area of occupancy of some of the affected species.

	<b>Authorised On-site Substation Location</b>		<b>New On-site Substation Location</b>	
	<b>Without Mitigation</b>	<b>With Mitigation</b>	<b>Without Mitigation</b>	<b>With Mitigation</b>
<b>Extent</b>	Local (1)	Local (1)	Local (1)	Local (1)
<b>Duration</b>	Medium-term (3)	Short-term (2)	Long-term (4)	Long-term (4)
<b>Magnitude</b>	Minor (2)	Small (1)	Minor (2)	Small (0)
<b>Probability</b>	Probable (3)	Probable (3)	Improbable (2)	Improbable (2)
<b>Significance</b>	<b>Low (18)</b>	<b>Low (12)</b>	<b>Low (14)</b>	<b>Low (10)</b>
<b>Status</b>	Slightly Negative	Slightly Negative	Slightly Negative	Slightly Negative
<b>Reversibility</b>	Medium	High	High	High
<b>Irreplaceable loss of resources</b>	Slight loss of resources	None	No irreplaceable loss of natural resources.	No irreplaceable loss of natural resources.



<b>Can impacts be mitigated?</b>	To some extent. Areas of vegetation will be replaced with infrastructure and hard surfaces. The only recommended mitigation is to ensure that all activities occur within the development footprint with no disturbance of vegetation outside of the substation location.	
<b>Residual Impacts</b>	Some loss of vegetation is inevitable and cannot be avoided.	Very limited residual impact restricted to the small natural areas where the loss of natural vegetation will be inevitable.

### 3.2. On-site sub-station Amendment: Additional mitigation measures deemed necessary to be included

No additional or amended mitigation measures, relating to fauna, flora and terrestrial biodiversity, in addition to those specified in the original Ecological specialist study (dated November 2018) are recommended.

## 4. CONCLUSION AND RECOMMENDATIONS

The following amendments to the project have been proposed by ABO Wind Lichtenburg 3 PV (Pty) Ltd;

- » Consideration of Grid Connection Corridor Alternative 2 as the preferred grid connection corridor. Furthermore, it is requested that the DFFE considers an extension to this corridor such that the proposed collector substation on Lichtenburg 3 PV is located within the corridor;
- » a change in the location of the step-up/on-site substation;
- » change in the capacity of the step-up/on-site substation from 88/132kV to 33/132kV; and
- » a substitution of the wording, 'a new 132kV overhead power line from the on-site substation to the Mmabatho/Watershed DS 1 88kV power line', with '*a 132kV power line from the collector substation complex to the Eskom Watershed Substation*'.

Considering the above, the amendments are proposed within the authorised footprint of Lichtenburg 3 PV. In addition, the proposed location of the collector (step-up/on-site) substation complex and the extension request to the grid connection corridor for Lichtenburg 3 PV are proposed within an area that was assessed by Specialists during the EIA process. The reason for the extension to this corridor is on the basis that the location of the step-up/on-site substation for Lichtenburg 3 PV is being moved from its authorised location to a new location within the authorised footprint of the project. The change in the location of the substation is to collect the electricity from each of the three projects at one location (with a combined footprint of up to 6.92ha), the collector substation complex from which electricity will be transmitted to the Eskom Watershed Substation via a 132kV power line.

Based on a comparison between recent satellite images (Google Earth Satellite Image from December 2021) and satellite images used during the Ecological Assessment (Google Earth Image

from May 2018), land use practices remained the same (predominantly cattle grazing with small scale ploughing and cultivation (rain fed crops/pastures) towards the northern portion of the proposed extended area and new collector (on-site/step-up) substation complex area), with no clear change in vegetation structure and the present ecological status of the assessed area (Figure 3). As such the need for a site visit as part of the Part 2 Amendment was deemed unnecessary with the findings of the terrestrial and wetland/ecological study and assessment still regarded as applicable.

Following a review of the Ecological Study and Impact Assessment conducted in 2018 as well as a through a survey of the most recent available Google Earth Imagery, the following comments can be made regarding the above-mentioned impacts.

- » Even though, the newly proposed and preferred grid route (Grid Corridor Alternative 2 with a slight amendment/extension) will be slightly longer than the originally assessed Grid Alternative 2 route. The extent of the additional area as well as the present ecological condition/status of this additional area is of such a nature (small additional area, traversing mainly transformed areas), that a change in the significance of all assessed impacts is not warranted.
- » Furthermore, the proposed grid line amendments will not result in any additional impacts (impacts not mentioned or assessed within the “original” ecological impact assessment).
- » In terms of the amendment to the on-site substation, the proposed relocation of the authorised on-site substation will, however, have a slight impact (reduction) on the significance ratings of some of the impacts assessed during the EIA phase. This is because the substation will be relocated from a near-natural to natural grassland area, to an area that has been largely disturbed and transformed (ploughing).
  - As the new location is largely characterised by largely transformed and disturbed areas, impacts on natural vegetation and habitats will be lower as well as the impact on the natural faunal communities of the area (due to a reduction of impacts on natural faunal habitats). Subsequently, these impacts have been re-assessed within this Part II Amendment Letter and it was found that for both aspects (impacts on natural vegetation and fauna) there was a slight reduction in the significance.
- » Furthermore, the proposed on-site substation amendment will not result in any additional impacts (impacts not mentioned or assessed within the “original” ecological impact assessment).
- » No additional or amended mitigation measures, relating to fauna, flora and terrestrial biodiversity, in addition to those specified in the original Ecological specialist study (dated November 2018), are recommended.

**In conclusion, the proposed amendments will result in similar ecological impacts. Subsequently, from an ecological perspective, no objective or motives (identification of**

**impacts of high ecological significance etc.) were identified which would hinder the proposed amendment.**

**Therefore, it is the opinion that the proposed amendment is acceptable and may be authorised, subject to the implementation of the recommended mitigation measures provided within the original Ecological Impact Assessment (Botha, 2018).**



Gerhard Botha (SACNASP Reg. No 400502/14)  
2022/04/14