APPENDIX C8(a): Minutes of Meetings

Minutes of Meetings

Revised Basic Assessment Report review & comment period

Savannah Environmental (Pty) Ltd | Directors: KM Jodas, J Thomas, M Matsabu
Company Reg No.: 2006/000127/07
VAT Reg No.: 4780226736

BASIC ASSESSMENT AND PUBLIC PARTICIPATION PROCESSES FOR THE PROPOSED WIND GARDEN WIND FARM AND FRONTEER WIND FARM NEAR MAKHANDA, EASTERN CAPE PROVINCE

(DFFE Ref. No.: 14/12/16/3/3/1/2314 and 14/12/16/3/3/1/2315 respectively)

MEETING NOTES OF PUBLIC PARTICIPATION PROCESS MEETING HELD ON WEDNESDAY, 07 JULY 2021 AT 09H00 VENUE: MICROSOFT TEAMS, VIRTUAL MEETING

Meeting notes prepared by:

Nicolene Venter
Savannah Environmental (Pty) Ltd
E-mail: publicprocess@savannahsa.com

Please note that these notes are not verbatim, but a summary of the comments submitted at the meeting. Please address any comments to Savannah Environmental at the above address

WIND GARDEN WIND FARM AND FRONTEER WIND FARM PROPOSED DEVELOPMENTS NEAR MAKHANDA, EASTERN CAPE PROVINCE

MEETING ATTENDEES

Captured alphabetically according to surname

Name	Position	Organisation
James Brown	Landowner	BRACKKLOOF
Laetitia Erasmus		Resident and Cllr of Sundays River Valley
Carla Strydom		Earth & Wire, co-developer
Savannah Environmental		
Jo-Anne Thomas (JT)	Environmental Assessment Practitioner	
Nicolene Venter (NV)	Public Participation and Social Consultant	
Environmental Specialist		
Matthew Keeley	Urban-Econ Development Economists. SEIA Specialist Studies	
Cherene de Bruyn	PGS Heritage. HIA	

Nicolene Venter welcomed the attendees at the public participation process meeting (PPPM) for the Wind Garden and Fronteer Wind Farms located near Makhanda within the Makado Local Municipality, Sarah Baartman District Municipality, Eastern Cape Province.

Jo-Anne Thomas presented the following:

- project description for the Wind Garden Wind Farm and the Fronteer Wind Farm;
- the Basic Assessment (BA) and public participation processes followed to date;
- the environmental studies undertaken;
- key summary of the results of the various environmental studies undertaken for inclusion in the Revised BA Reports;
- summary of the cumulative impacts; and
- the way forward after the meeting.

Nicolene Venter informed the participants that the review and comment period for the BA Reports would end on Wednesday, 21 July 2021.

A copy of the virtual participants' attendance is attached as **Appendix A** and the presentation is attached as **Appendix B** to the meeting notes.

DISCUSSION SESSION (including those submitted on the MS Teams conversation platform)

Comments captured per participants and in alphabetical order

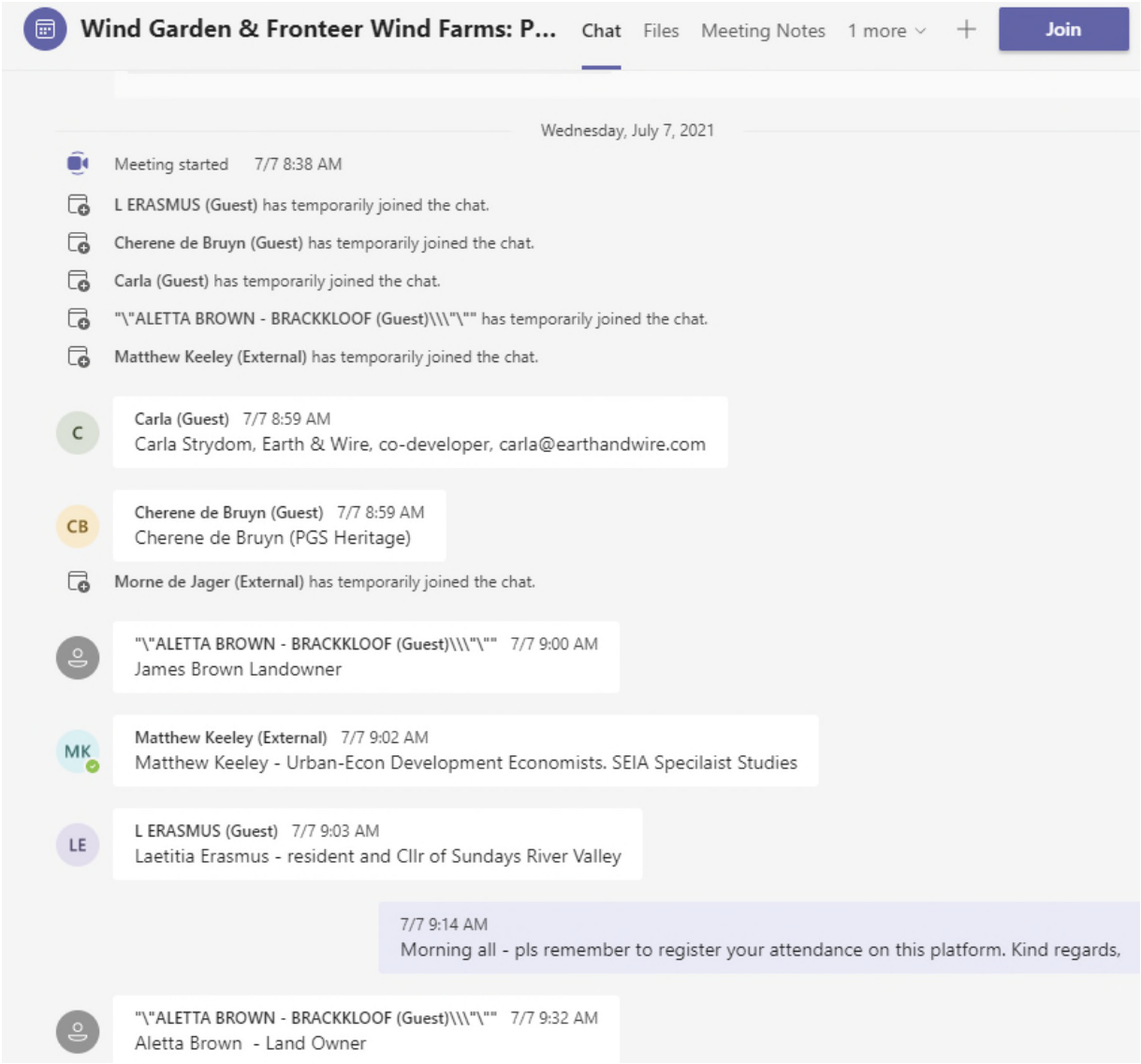
Question / Comment	Response
Letitia Erasmus	
What is the impact for the water resources in the area?	Jo-Anne Thomas: Groundwater will be used for the project development (construction only). A water resources feasibility study is included as part of the BA Report. The feasibility study concluded there is sufficient water within the catchment for the project. The water in the catchment area is under-utilised currently. In terms of impacts on surface water and watercourses, the sensitive features have been avoided by the placement of infrastructure. There are some watercourse crossings by roads, but the watercourses in the site area are of low sensitivity, as they are non-perennial features.
No objection to the proposed projects. Any development is good for the area.	The comments were noted.

CLOSURE

Nicolene Venter thanked the participants for making time available to attend the public participation process meeting and for their valuable inputs into the process. The meeting was closed at 09h35.

APPENDIX A: Proof of Attendance

MS Teams screen shot



Wind Garden Wind Farm and Fronteer Wind Farm, Eastern Cape Province

Public Participation Process Meetings
July 2021

Revised Basic Assessment Report

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AGENDA

- Welcome and introduction
- Meeting conduct
- Purpose of the Meeting
- Project description
- BA process
- Results as documented in the Revised BAR
- Way forward

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MEETING CONDUCT

- Recording of the meeting
- Please mute while presentation is presented
- Please type your name in the message box as proof of attendance
- Questions and comments can be submitted on the chat function during the presentation – team will respond after presentation
- Please hold all verbal questions until after presentation
- Please raise your hand (virtual function) to ask a question

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PURPOSE OF THE MEETING

- Provide stakeholders and I&APs with an overview of the proposed project
- Summary of the BA and PP process
- Present a summary of key environmental findings as documented in the Revised BARs
- Opportunity for you to seek clarification and obtain further information
- Obtain and record comments for inclusion in the final BA reports to be submitted to DFFE

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PROJECT OVERVIEW

(Jo-Anne Thomas)

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PROJECT DESCRIPTION

Wind Garden Wind Farm		Fronteer Wind Farm	
Applicant	Wind Garden (Pty) Ltd	Applicant	Fronteer (Pty) Ltd
Location	17km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ	Location	12km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ
Contracted Capacity	264MW	Contracted Capacity	213MW
Infrastructure details	47 wind turbines - Hub height of up to 120m - Tip height up to 200m	Infrastructure details	38 wind turbines - Hub height of up to 120m - Tip height up to 200m
	Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line		Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line
	Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,		Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,

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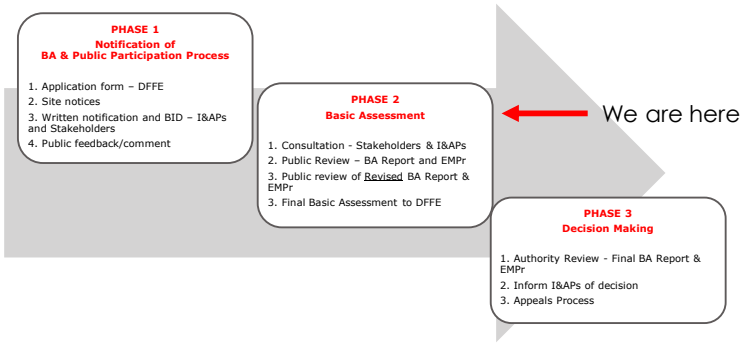
BA PROCESS & PUBLIC INVOLVEMENT



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SPECIALIST STUDIES

Specialist	Field of study
Simon Todd of 3foxes Biodiversity Solutions	Terrestrial Ecology (including fauna and flora)
Adri Barkhuysen of East Cape Diverse Consultants and Dr Steve Percival of Ecology Consulting and Peer Review by Owen Davies of Arcus Consultancy Services South Africa	Avifauna (including monitoring)
Michael Brits and Mark Hodgson of Arcus Consultancy Services South Africa	Bats (including monitoring)
Dr Brian Colloty of EnviroSci	Aquatic
Dr Brian Colloty of EnviroSci	Soil, Land Use, Land Capability and Agricultural Potential
Cherene de Bruyn and Wouter Fourie of PGS Heritage, Elize Butler of Banzai Environmental and Emmylou Bailey of Hearth Heritage	Heritage (including archaeology, palaeontology and cultural landscape)
Morné de Jager of Enviro Acoustic Research (EAR)	Noise
Lourens du Plessis of LOGIS	Visual
Matthew Keeley of Urban Econ	Socio-economic
Lourens du Plessis of LOGIS	Traffic

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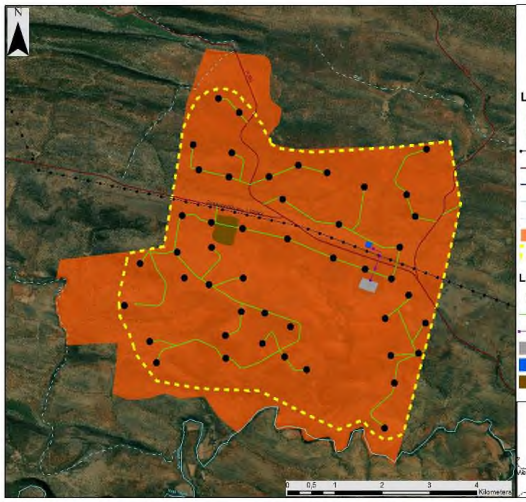

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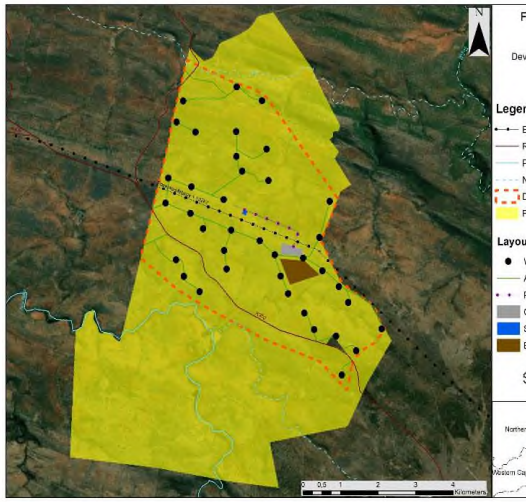

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA1 and CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
	  • Martial Eagle nests – 2.5km no go and 5km cautionary buffer
	  • Other large eagle nests – 1km no go buffer

Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of high, moderate/medium and low and very low sensitivity have been identified

Heritage resources	• The ruins of one (1) house (EWF1-07) identified to be a low heritage significance.
	• A farmstead (EWF1-04) identified to be of a medium heritage significance.
	• Three (3) burial grounds (EWF1-10 – EWF1-12) identified to be of a high heritage significance.
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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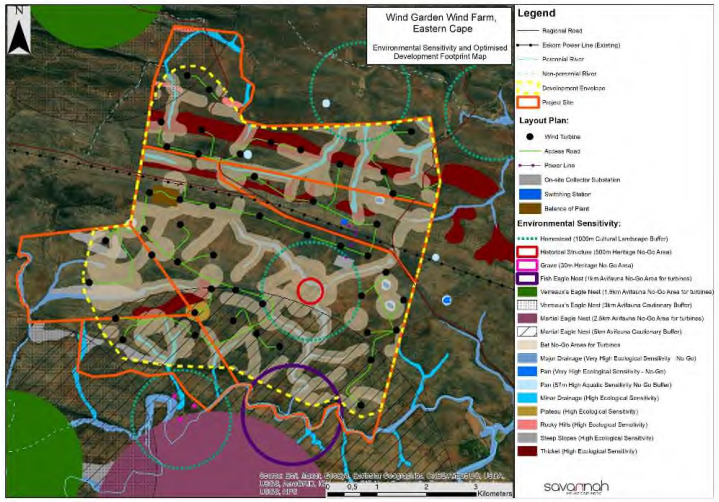

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
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Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of moderate/medium and low and very low sensitivity have been identified

Heritage resources	• Five (5) heritage sites identified
	• One (1) site contains graves
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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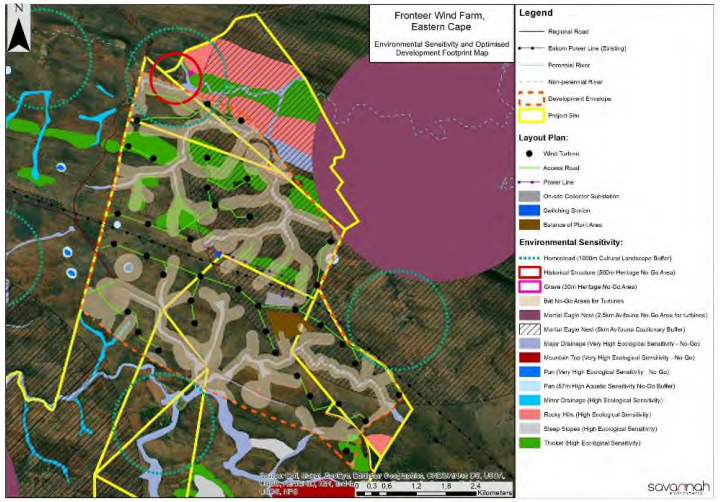

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RESULTS – DIRECT & INDIRECT IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Construction Phase	Operation Phase
Ecology	Medium and Low	Low
Aquatic Ecology	Low	Low
Avifauna	Medium and Low	Low
Bats	Low	Low
Land Use, Soil & Agriculture	Medium and Low	Medium and Low
Heritage (archaeology & palaeontology) Heritage (Cultural landscape)	Low Medium	Low Medium
Noise	Low	Low
Visual	Medium	High, Medium and Low
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Low	Minimal

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RESULTS – CUMULATIVE IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Project on its own	Project together with other similar developments
Ecology	Low	Medium
Aquatic Ecology	Low	Medium
Avifauna	Low	Medium
Bats	Medium	Medium
Land Use, Soil & Agriculture	Low	Low
Heritage (archaeology & palaeontology)	Low	Low
Heritage (cultural landscape)	High	High
Noise	Low	Low
Visual	High	High
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Medium	Low

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CONCLUSION AND RECOMMENDATIONS

- Projects are well aligned with the national, provincial and local policy framework
- From a biodiversity perspective, location of infrastructure considered acceptable
- Optimised layout proposed ensures that all aquatic, avifauna and bat sensitivities identified are avoided and recommended buffer areas are honoured
- Where impacts could not be avoided, appropriate mitigation has been proposed to minimise impacts

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CONCLUSION AND RECOMMENDATIONS

- Socio-economic impacts of the proposed wind farms on the surrounding game farms expected to be negative
- Benefits of the two projects are expected to occur at a national, regional and local level
- Costs to the environment at a site-specific level have been largely limited through the layout optimization
- The benefits of the project are expected to partially offset the localised environmental costs of the wind farm
- Based on the conclusions of the specialist studies, it is concluded that the development of the projects will not result in unacceptable environmental impacts (subject to the implementation of the recommended mitigation measures).

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WAY FORWARD

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WAY FORWARD

- Revised Basic Assessment Reports review and comment period: **21 June 2021** until **21 July 2021** (can be downloaded from the Savannah Environmental website)
- Our Public Participation team is available to answer any questions
- Meeting notes to be distributed
- Final BA Reports to be submitted to DFFE for decision-making at end-July 2021 (in terms of regulated timeframe)

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WHO TO CONTACT FOR FURTHER INFORMATION

Savannah Environmental (Pty) Ltd
Nicolene Venter
Email: publicprocess@savannahsa.com
PO Box 148, Sunninghill, 2157
Tel: 011 656 3237
Mobile: 060 978 8396
Fax: 086 684 0547
www.savannahSA.com

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MEETING NOTES OF THE PUBLIC PARTICIPATION PROCESS MEETING HELD ON TUESDAY, 07 JULY 2021 AT 14H00 VENUE: MICROSOFT TEAMS, VIRTUAL MEETING

Meeting notes prepared by:

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Savannah Environmental (Pty) Ltd
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WIND GARDEN WIND FARM AND FRONTEER WIND FARM PROPOSED DEVELOPMENTS NEAR MAKHANDA, EASTERN CAPE PROVINCE

MEETING ATTENDEES

Captured alphabetically according to surname

Name	Position	Organisation
Clarice Arendse	Senior Associate	Richard Summers Inc. Attorneys
William Fowlds	Director	African Rhino Conservation Collaboration
Chris Pike	Director	Lukhanyo Game Reserve
Carla Strydom	Co-developer	Earth & Wire
Richard Summers		Richard Summers Inc
Jeni Williams	I&AP	
Sarah Winter	Heritage Consultant	
Savannah Environmental		
Jo-Anne Thomas	Environmental Assessment Practitioner	
Nicolene Venter	Public Participation and Social Consultant	
Environmental Specialist		
Cherene de Bruyn	PGS Heritage. Heritage Impact Assessment	
Morne de Jager	EARES. Noise Impact Assessment	
Matthew Keeley	Urban-Econ Development Economists. SEIA Specialist Studies	

Nicolene Venter welcomed the attendees at the public participation process meeting (PPPM) for the Wind Garden and Fronteer Wind Farms located near Makhanda within the Makado Local Municipality, Sarah Baartman District Municipality, Eastern Cape Province.

Jo-Anne Thomas presented the following:

- project description for the Wind Garden Wind Farm and the Fronteer Wind Farm;
- the Basic Assessment (BA) and public participation processes followed to date;
- the environmental studies undertaken;
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DISCUSSION SESSION (including those submitted on the MS Teams conversation platform)

Comments captured per participants and in alphabetical order

Question / Comment	Response
William Fowlds	
How do we stakeholders process 260 pages a day for 30 days, and still give some meaningful feedback? With no time extension, does that mean we cannot provide meaningful feedback.	Jo-Anne Thomas responded that stakeholders can still provide comments after the report has been submitted to the department if unable to provide comments within the timeframe. Savannah will submit comments to the department, and they will be requested to consider them. If you submit a comment now and say you cannot provide comments within the review period, we can discuss it with the DFFE. The DFFE decision-making period is 57 days from submission of the final document.
Would recommend that the timeframe get doubled at least.	The comment was noted.
Understanding is that Jeni was referring to below ground sound. In the studies referred to, were elephants heard or was only ambient noise heard.	Morne de Jager replied that the latest study he has consulted does not discuss low frequency noise but the communication of elephants and rhinos, and specifically mentions that wind speed does influence the communication of these animals. This is because as wind speed increases, these animals stop communicating between themselves. Animals do not communicate in high wind scenarios as the wind noise is so high that animals do not communicate.
There is a gap in the data. We do not know what frequencies elephant communicate at. we need to find a way to determine at what frequencies animals communicate.	Morne de Jager responded that the microphone they use measures above 1hz. Specialist microphones can measure at lower frequencies. The frequency at which elephants hear has been defined in previous literature. Most species we know at what frequencies they hear at. Audiograms are however not yet available. We still require more information.
Studies use information available to deduce there is no impact on animals but there is not enough information to make the deduction.	The comment was noted.
Page 13 of the executive summary of the BA in terms of the figures referred to. Is there a place in the report where these calculations are broken down such that stakeholders can understand these better?	Matthew Keeley responded that operational and construction impacts are discussed fully in section 5.2 in the socio-economic report.
How much of this, besides employment, benefits the local economy and how much is not localised.	The employment numbers have been split to short and long term – i.e. construction vs operational impact.

Question / Comment	Response
	Construction period is for ~2 years. A Total of ~570 equivalent full-time positions will be created. Based on information provided by the preferred technology supplier, during construction 241 of the direct employment positions are expected to be reserved for skilled black South African based personnel and 330 will be filled by un-skilled and semi-skilled skilled black workers. 239 positions will be reserved for people from local communities. The above is for Wind Garden. When including Fronteer, the numbers will be doubled. For the operational phase: Direct employment of 27 SA based employees (8 full time positions for unskilled and semi-skilled workers). In updating the report, an indication has also been provided of the potential contribution in the local community as a result of the developer's SED spend in the area. The developer has committed to spent 2.5% of annual revenue to socio economic development in the area. 2% of this will be directly spent within local communities. The socio-economic study has considered the 2% and estimated that this would be approximately R15.46 million per annum (for Wind Garden). This will increase by CPI over the approximate 20-year period. The report indicates, based on engagement with the developer, that in terms of the R15.4 million, the spend in terms of local communities for short- and long-term job creation is expected to equate to approximately R6.9 million (~45% of the total SED). Difficult to put a number to the total number of jobs that would be created with this value. Therefore, this is not done in the report. The SEIA indicates that this value would be the indicative amount that would be targeted towards additional contributions to employment over and above the direct jobs created by the wind farm maintenance,
Is this a unique undertaking to this developer or is it a standard amount	Matthew Keeley responded that according to the REIPPP, the 2.5% is a standard measure for wind farms. Even though this project falls outside the REIPPP program,

Question / Comment	Response
	the developer has still committed to this amount for contribution to the local economy. spending.
If other wind farms in the area are generating 2.5% of annual revenue towards socio-economic development, local towns such as Cookhouse and Somerset East should be thriving, and they are not. There is the same amount of degradation in these areas as in other towns. Protests have increased because of the wind farms. Concerned that theoretical promises and commitments have been made in the past, but they are not uplifting the communities. Whereas the opposite can be said of nature-based land use and the socio-economic benefits to locals.	Matthew Keeley responded that he cannot respond on the other projects as he has not been involved in these. He indicated that he had seen reports of unrest related to the projects in the media but that he is not aware as to why the funds have not been released as per the commitment from the developers. The SEIA report has been developed and analysed considering the specific commitment from the developer. There is a separate document detailing how money is intended to be spent and it is purely on this basis that the information is included in the SEIA report.
The R14.6 billion and the R2.6 billion mentioned (in Fronteer relating to construction) – is this also broken down in Section 5.2 of the report? Can we find out how much of this ends up locally and how much goes elsewhere?	Matthew Keeley indicated that this relates to impact on production and GDP. In this regard, the report breaks the figures into direct, indirect and induced impacts, with direct being R5.7, indirect being R6.4 and induced R2.5 billion. In the previous public participation session, it was indicated that from an economic modelling perspective it is quite difficult to confine the direct expenditure to the local economy as the expenditure is spread throughout the national economy. Therefore, the SEIA has made a qualitative assessment. It is mentioned in the report that if a service be required and should a service provider have the necessary expertise and available resources within the local economy, a local supplier should ideally be procured for the service. At this stage, unlike the employment, there is no real data to indicate how much would be spent in the local economy. From an operational perspective, the developer has indicated that where possible SMMEs from the local economy would be appointed for on site maintenance. It would therefore be anticipated that the majority of the contribution to production and GDP will be spent in the local economy. That is ultimately provided that there is the expertise and resources available locally to procure.
The local socio-economic impact is important. The revised report has included additional information. The numbers look impressive, but it does not clearly define how much ends up	Matthew Keeley responded that, in terms of the socio-economic modelling impacts, the employment figures and the GDP and production figures were included in the original report. The only update made in terms of positive expenditure and employment which was not quantified

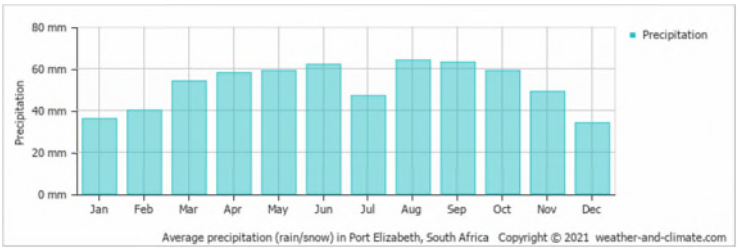
Question / Comment	Response
being spent locally. Understanding is that from a socio-economic perspective, research has not been done in circumstances being referred to in this instance – i.e. a proposed wind farm development bordering on game reserves and farms. Using figures to flip what is seen as a negative socio-economic impact and turn it around stating a positive socio-economic impact. The question is who is it positive for? Is it the locals or the rest of the country at the expense of the locals?	was to elaborate on the SED spend by the developer. This was included in response to comments received. In terms of other comments relating to negative impacts, the SEIA team abilities to engage with a number of other stakeholders particularly within the local eco-tourism industry allowed the team to provide quite a lot of quantitative and qualitative additions to the SEIA report, which would be important for the Department to recognise that there is notable objections to the development from a socio-economic perspective. Section 6.3 of the revised report includes quite a lot of narrative provided with regards to the opposition and the reasons provided in this regard. In addition, based on suggestions from some of the game farms on the draft report, the SEIA team tried to engage with tour operators. From the 15 who were contacted, the team received one or two responses, and these are also included in the report. In terms of positive and negative impacts, for the construction and operational phases there are in excess of 23 impacts indicated. Of this there are 13 positive impacts and 10 negative impacts described.
There is a big difference between 2 years of construction and 18-23 years of implementation. Therefore, bundling the 2 together is a convenient way to count 13 vs 7. The fact remains that the existing economy (which is a biodiversity economy) when compared to the 18 years where only 27 employment positions per farm are applicable, this is different to the high employment numbers and economic spend. The socio-economic report needs to acknowledge that research has not been done on the impact of wind energy facility on a game reserve. The proposed site is not on a game reserve but is next door to a protected environment. This is not a voluntary association but is recognised by the government. Socio-economic impact	Matthew Keeley acknowledged that the construction impacts are confined to a defined period of time. The provision of the 2.5% or 2% revenue spend provides some indications of how one may be able to weigh up any negative consequences which might arise from the negative tourism impacts in contrast to the contribution that the developer intends to spend within the local economy.

Question / Comment	Response
on immediate region is the issue and it is important for the entire duration for the lifetime of the project. Most of the impact is happening over 90% of the time and not just during construction.	
Please direct me to the place in the report regarding the strategic location of these proposed developments within the corridors between the Addo Elephant Park and the Great Fish River Reserve	Jo-Anne Thomas replied that the ecologist did look at this and some information is included in his report (Appendix D).
Chris Pike	
Question submitted on Teams Conversation Function: Savannah to please answer when we get to the answers and questions section. Jo-Anne mentioned that there are 2 different applicants hence the 2 projects are being considered separate. Then why are you doing all correspondence/meetings on both projects at the same time?	Nicolene Venter responded that Savannah Environmental has permission to conduct a combined PP process for these two projects as per the approved public participation plan. She added that the best way to avoid stakeholder fatigue is to streamline PP processes for multiple projects in the same area. Carla Strydom added that cumulative impacts are important to consider which is why the 2 projects have been presented at the same time. The reason there are 2 separate applications is that the 2 projects have different grid connections, and they are therefore on different timelines. One will be developed on different timeframes. From an SPV perspective, it is better to have the permits totally separate for the 2 SPVs.
Do not understand why the reports for the 2 projects are released concurrently? For all intents and purposes this is seen as one big project. The reports are the same and the findings are the same. Inherent bias favouring the applicant as the stakeholders are required to comment on the 2 reports at the same time.	Nicolene Venter replied that her response relating to stakeholder fatigue relates to combined public participation for the meetings and avoid fatigue in the consultation to split the projects and hold the same meetings.
You are giving us a single 30-day period for both projects. There is no way for stakeholders to review each report at the same time. We need 30 days per project to review.	Jo-Anne Thomas responded that a request for extension of the timeframe from the DFFE to allow stakeholders to provide comments, and the department has declined the request. The timeframe cannot be extended at this time and the legislated time frame will expire.
Question submitted on Teams Conversation Function: Question on the Black Blade concept (worked in Iceland?) Firstly -Your	Jo-Anne Thomas responded that if the black blade is not technically feasible mitigation, then those turbines located in the cautionary buffer area must be removed from the layout. From a visual perspective the specialist used the height from the turbine in the visual simulations

Question / Comment	Response
Avifaunal specialist lists this as one of their main collision mitigators, however this black blade concept is NOT Supported by your Visual impact specialist in his revised report. So are you or aren't you going to use this black blade concept?	not the colours. The revised study does indicate that painting the one blade black will increase the visual impact and that this is not supported. Carla Strydom added that currently the use of the black blade is not yet confirmed. Feasibility studies are still underway. Efficiency and safety issues also need to be considered.
Question submitted on Teams Conversation Function: Black blade - secondly - if you do plan to use this black blade concept - are you going to redo your visual study to include the increased visual "footprint" this black blade will leave. As your initial visual report is based on 3 white blades. *Question submitted on Teams Conversation Function:* In balance would also then increase noise?	
1. If black blade is not used, turbines will be removed. This must be put in the report. 2. A lot of the mitigations allowing this proposal is based on this black blade implementation to move forward with construction. Yet, if it cannot be implemented your study does not show mitigation measures without the black blade. All of your scorings are based on this one mitigation, if the blades are not black then your scoring of the impacts is not accurate. You have not finalized whether or not the black blade will be used. if it is not available you need to reassess. And redo a report with both black blade Included and not included. As the turbines are not fixed, how is that applicable to your current scorings as all ecological studies has been based on the current layout?	Carla Strydom replied that the research in terms of using back blades looks promising, but this is still being investigated. There are various studies being undertaken to determine how this option would be feasible (e.g. to bring the colour int the blade during manufacturing). She confirmed that if the black blade mitigation is not feasible then the turbine in the cautionary buffer would need to be removed or relocated during the final design.

Question / Comment	Response
If the black blade is not to be used and turbines are to be removed, then this should be stated in the report.	**Post meeting note:** This will be made clear in the final report to be submitted to DFFE.
Question submitted on Teams Conversation Function: So to confirm - if the black blade is not going to be used as a collision mitigation then you need to redo the calculations of before and after mitigation!	
If the turbine positions are not fixed then how does this affect the study	Carla Strydom responded that turbine positions would be finalised on the basis of micro-siting following geotechnical work and other ground-truthing. If a mitigation recommended is not feasible then the particular turbine would need to be removed.
Question submitted on Teams Conversation Function: Furthermore from Richard's comment above (*30-day review period of the Revised BA Reports*) - We as IAPs have real jobs, farms to run! workers and families to support - all of this made even more difficult by the current COVID situation - your 30 days is not enough! we have a right as IAP's to comment! our rights are being compromised!	Jo-Anne Thomas confirmed that the DFFE would be approached for an extension on the regulated timeframe for the process in order to accommodate the request for extension of the review period.
Question submitted on Teams Conversation Function: Matthew - have you seen this document of "promise" to local upliftment from the development, and based your impacts report on this how did you make your calculations? Or just the concept thereof. Thanks	Matthew Keeley responded that the document that has been compiled by the developer is a conservation framework for the Wind Garden and Fronteer facilities, dated January 2021. This is included as part of the BA Report. This document together with the anticipated revenue figures provided by the developer were used to make the calculations included in section 5.4 of socio-economic studies. As understood by the specialist, the conservation framework is committed to by the developer as part of the submission.
In the summary of the BAR (visual) study in section 10.10.2 – the calculations are based on sections of 0-5km, 10-20km etc. and in 10.11.2 the visual impact sections relating to socio-economic specific to game farming are now divided in larger	*Matthew Keeley responded to this question at 2pm on 08 July 2021.* The following response was provided: Matthew Keeley responded that the VIA had indicated that the visual impact on the immediate properties would be that of a high significance. From a socio-economic perspective, this must be interpreted based on the visual

Question / Comment	Response
increments, 0-20km radius is being used which will dilute the impacts, these impacts specifically of visual on tourism and game farming is listed as medium. From the amount of negative inputs from landowners from all meetings attended and submitted comments, the reduction of the impact from high to moderate is not understood. It sems to be a biased mathematical calculation when 90% of comments were negative?	impact as a contributor to potential tourism impacts in the broader area and on immediately adjacent farms. In the revised SEIA report, an additional impact rating for immediate and adjacent farms to the project site and there is another table rating the impact on the broader area. The scoring for both rate the impact at medium negative impact. The rating of significance is based on the calculation of the significance. In calculating this impact, the specialist considers the extent of the impact (where the impact will be felt), duration (short-, medium- or ling-term), magnitude (how will it change the existing processes in the area) and the probability (how can evidence be provided to support the notion that the impact will occur will not occur). The calculation of the significance rating is to add extent, duration and magnitude multiplied by probability. In contrast to the visual impact where the probability and magnitude scorings are very high – i.e. there can be no doubt that the visual impacts will be realised, the SEIA specialist cannot definitively say based on the evidence throughout the rest of the report say that the magnitude and probability for the changes in tourism activity will be at the top end of the scale. In order to say that any of the impacts will be high, the probability rating must also be high. In the case of the SEIA, the probability is rated as medium. Therefore, although it is stated that there are likely going to arise negative impacts associated with tourism numbers potentially reducing, they are deemed to be medium significance and not high.
Request whether the commitment made by Savannah on page 69 of the minutes, to make the SIAs accessible and understandable to all community members have been attended to.	Nicolene Venter responded that this is in process through the councillor and with the affected and adjacent landowners.
The approach taken to date has been to give access to those with internet. What about those that don't have? With the short timeframes of 3 weeks to the deadline, the community has not been involved at any stage to date is a problem. The timeframe is too short and affects the entire community. It is very last minute that Savannah is getting the individual parties involved.	Nicolene Venter responded that the community members have been involved and added that comments had been received from some of the occupiers on some of the properties. They have been made aware of the project through formal channels but we are aware that perhaps they did not have an opportunity to give the PP team a call or have one-on-one interaction and this is what is being worked on at the moment. Landowners will be contacted to determine the best means to communicate with occupiers. This was

Question / Comment	Response
	requested previously but no feedback has been received from any of the landowners.
The rainfall measurements on the east farms in the feasibility study states 548mm annual. From a landowner's perspective and someone who lives in the area, this is not true we barely get 400mm a year, not even close to 500mm. Where did the specialists get their data from?	Jo-Anne Thomas replied that she will confirm with the specialists. **<u>Post meeting note</u>:** The data source as indicated by the specialist was a 1990 WRC report, as referenced in the feasibility study. Recent information shows a weather shift in the past 20 years with the Grahamstown area seemingly becoming wetter – the latest data puts Grahamstown at 625mm/ year for 2021, as shown below. 
Richard Summers	
The critical aspect is the pressure the stakeholders are put under to comment on 2 discreet applications. Nett effect is doubling up on the volume of information that stakeholders have to review. The benefit to the applicant is a shortened timeframe for comment but stakeholders. Is the EAP persisting with the 30-day commenting period in connection with both applications? There is an inability for stakeholders to engage meaningfully in this context. It cannot be expected that I&APs can comment on the additional information in a short timeframe. Is the 30-day period cast in stone? It is understood that there are regulatory timeframes to be considered.	Jo-Anne Thomas responded that a request for extension of the timeframe from the DFFE to allow stakeholders to provide comments, and the department has declined the request. The timeframe cannot be extended at this time and the legislated time frame will expire.
Question submitted on Teams Conversation Function:	

Question / Comment	Response
Please provide I&APs with copies of the request for an extension made to DFFE and with a copy of the DFFE response	Nicolene Venter (via online chat function): The requested letter is included as appendix B of the revised report
Question submitted on Teams Conversation Function: Nicolene, I don't see any refusal by DFFE in Appendix B. Moreover, the EAP letter to DFFE in May 2021 indicated that the revised report will be subject to another round of PPP of 'at least 30 days'. The original question remains, why is the EAP persisting with the bare minimum requirement of 30 days. Stakeholders are complaining that they cannot cope with volume in this truncated timeframe.	Jo-Anne Thomas responded that the previous request included the indication that the report would be put back out to comment in terms of Regulation 19, as required. A further request will be put to the DFFE for a further extension as per the request at this meeting.
Requests clarity on the timeframe for approaching DFFE. There is a bulk of new information that I&APs have not have sight of previously. It is problematic for the study to go for final decision-making without the EAP having sight of the preliminary comments on what is fundamentally new information. It is within the power of the Department to extend timeframes. I&APs will resort to the courts for relief if the timeframes are not extended.	Jo-Anne Thomas confirmed that the Department would be contacted, and feedback will be provided as soon as possible.
Sarah Winter	
What is the difference between the proposed 500m and 1000m buffers around the historic homesteads?	Cherene de Bruyn responded that the 500m buffer is recommended by the heritage specialists and the 1000m buffer is recommend by the cultural landscape assessment. Both were included to accommodate the CLA mitigation measures.
It must be one or the other. Can't have both buffers.	Cherene de Bruyn responded that a 500m buffer is recommended to conserve the historic homesteads and in order to accommodate the cultural heritage landscape assessment recommendations and thus the buffer has been extended to 1000m.
The cultural landscape study assesses the impacts as very high before mitigation to moderate after mitigation. This this to be very clearly	Jo-Anne Thomas replied that there are other mitigations recommended in the report relating to cultural landscape.

Question / Comment	Response
demonstrated given the nature and scale of the proposed development. This is a statement. This is quite a shift going from assessing something as a very high impact to moderate given the scale of a turbine. This is going from unacceptable to acceptable. Has the heritage specialist considered this?	
Jeni Williams	
Question submitted on Teams Conversation Function: 1) What mammals are on the nearby game farms/ What the distance these game farms are from the wind farms?	1) Jo-Anne Thomas responded that antelopes, rhinos, elephants in the area. There are game farms immediately adjacent to the game farm and some more than 20 km away.
2) Has subsonic noise been taken into account?	2) Morne de Jager replied that with low frequency noise is considered for all wind farms. Low frequency noise used to be an issue with the first wind turbines decades ago. Wind Turbine developers have done significant research to prevent this issue. When noise studies are undertaken a certificate is provided that indicates the amount of acoustic energy in the frequency (usually above 32Hz). This is an issue which has been significantly investigated over the last few decades. There is a study in Southern Australia (2013) where low frequency noise was measured over a large area close to existing wind turbines and far away from existing turbines. Measurements were done while the turbines were operational ad also while the turbines were in shut down. The outcome of the study shows that there is very little difference between low frequency noise naturally occurring and that close to the wind turbines. The only difference detected was where these measurements were within 100m of the turbines.
3) As far as birds are concerned, is there any plan to paint one blade black?	3) Jo-Anne Thomas responded that the black blade is a mitigation recommended by the avifauna specialist and the developer needs to adhere to the mitigation. Carla Strydom added that there is still work going into this proposal. There is a lot of research which needs to go into this mitigation and there is more work

Question / Comment	Response
	required from the Civil Aviation (CAA) perspective which needs to be done.
Dr Angela Stoegar Howath and Anthon Baotic of the University of Vienna who are doing research on mammal communication are highly opposed to the development of wind farms close to game reserves. Their findings (2018) conclude that the wind farms can affect the animals up to 20 km away. We have seen in Addo recently that the park management has requested that all vehicles turn off engines must be turned off at waterholes or where there are a lot of elephants due to that noise masking the calves and low frequency communication between calves and their mothers.	Morne de Jager replied that low frequency noise is around us at all times. As wind speed increases so does low frequency noise. Studies that tried to define low frequency noise over large distances from wind farms shows that, for all practical purposes, once you are further than a few hundred meters from a turbine you cannot distinguish between natural vs wind turbine noise.
Question submitted on Teams Conversation Function: Subsonic Elephant rumbles are picked up by vibrations. Dr Stoegar and Dr Baotic have published many research papers worldwide in this regard. I am not referring to low frequency I am referring to sub sonic frequencies that influences elephants, rhinos and even dung beetles.	
Not referring to low frequency above-ground noise. Referring to subsonic noise which can have an impact in elephants and dung beetles in terms of vibrations.	Morne de Jager responded that subsonic noise represents everything below 20hz and is included in low frequency noise.
Can we discuss Buffer zones for large animals tomorrow please? Wants to include Dr. Angela Stoeger. from Austria.	Nicolene Venter responded that the question has been noted and will be posed to the specialist who will be attending the public participation process meeting on Thursday, 08 July 2021 at 14h00. **Post-meeting note:** Jeni Williams did not attend the public participation process meeting on Thursday, 08 July 2021 at 14h00 and the attendance of Dr Angela Stoeger could not be secured.

CLOSURE

Nicolene Venter thanked the participants for making time available to attend the public meeting and for their valuable inputs into the process. The meeting was closed at 16h07.

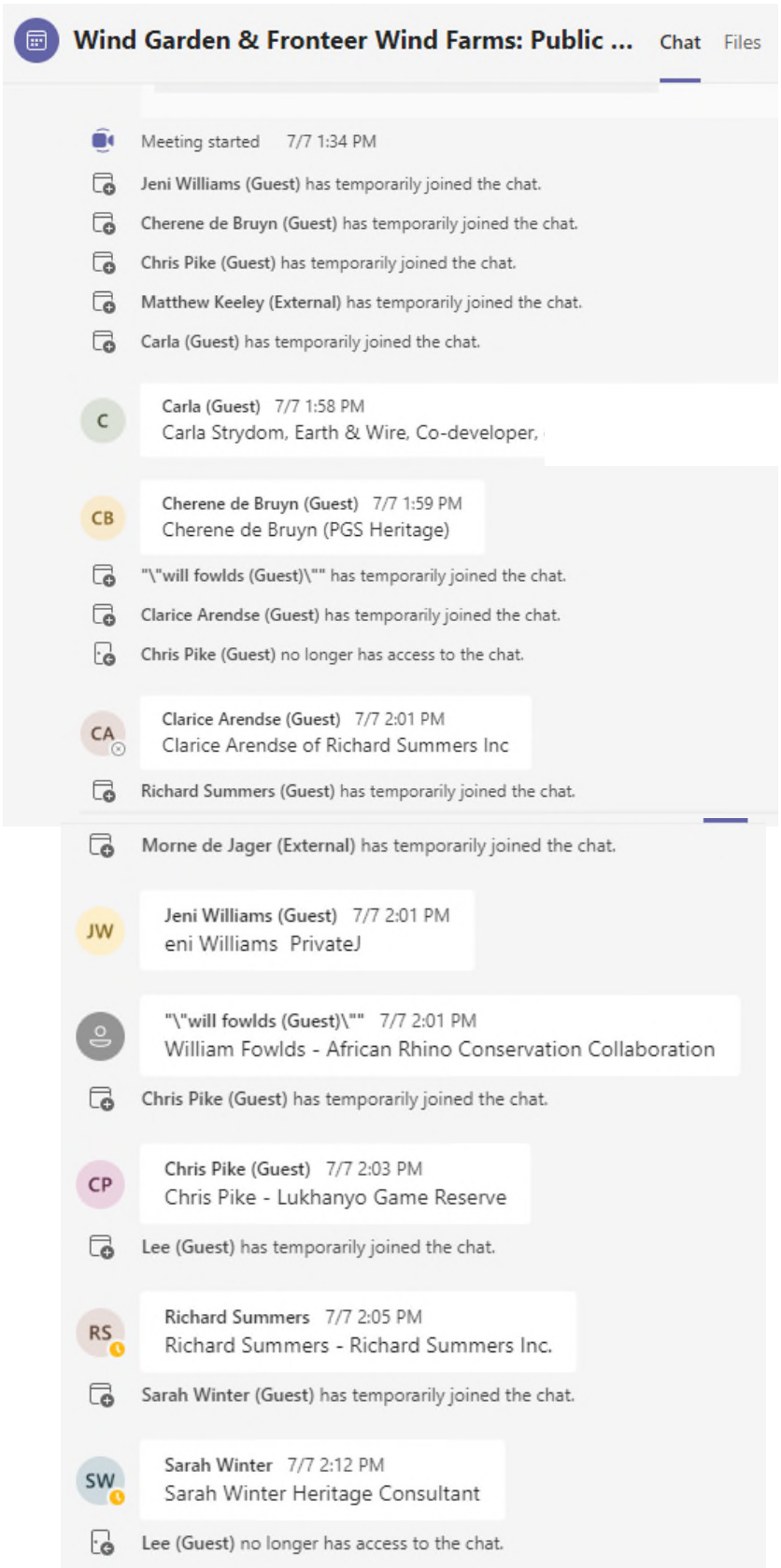
LIST OF ABBREVIATIONS / ACRONYMS

BA	Basic Assessment	I&AP	Interested and Affected Party
CAA	Civil Aviation Authority	PPPM	Public Participation Process Meeting
CLA	Cultural Landscape Assessment	REIPPP	Renewable Independent Power Producer Programme
CPI	Consumer Price Index	SED	Socio-Economic Development
DFFE	Department of Forestry, Fisheries and the Environment	SEIA	Socio-Economic Impact Assessment
GDP	Gross Domestic Product	SPV	Special Purpose Vehicle
Hz	Hertz		

APPENDIX A: Attendance Register (According to time stamp)		
Full Name	**User Action**	**Timestamp**
Nicolene Venter	Joined	7/7/2021, 1:41:08 PM
Shandré van der Merwe	Joined before	7/7/2021, 1:41:08 PM
Jo-Anne Thomas	Joined	7/7/2021, 1:51:33 PM
Jeni Williams (Guest)	Joined	7/7/2021, 1:53:20 PM
Cherene de Bruyn (Guest)	Joined	7/7/2021, 1:55:26 PM
Chris Pike (Guest)	Joined	7/7/2021, 1:55:32 PM
Chris Pike (Guest)	Left	7/7/2021, 2:00:23 PM
Matthew Keeley	Joined	7/7/2021, 1:56:50 PM
Carla (Guest)	Joined	7/7/2021, 1:57:46 PM
\will fowlds (Guest)\""	Joined	7/7/2021, 1:59:47 PM
Clarice Arendse	Joined	7/7/2021, 1:59:57 PM
Richard Summers	Joined	7/7/2021, 2:01:08 PM
Morne de Jager	Joined	7/7/2021, 2:01:12 PM
Chris Pike (Guest)	Joined	7/7/2021, 2:02:20 PM
Lee (Guest)	Joined	7/7/2021, 2:04:13 PM

APPENDIX A: Proof of Attendance

MS Teams screen shots



Wind Garden Wind Farm and Fronteer Wind Farm, Eastern Cape Province

Public Participation Process Meetings
July 2021

Revised Basic Assessment Report

1

AGENDA

- Welcome and introduction
- Meeting conduct
- Purpose of the Meeting
- Project description
- BA process
- Results as documented in the Revised BAR
- Way forward

2

MEETING CONDUCT

- Recording of the meeting
- Please mute while presentation is presented
- Please type your name in the message box as proof of attendance
- Questions and comments can be submitted on the chat function during the presentation – team will respond after presentation
- Please hold all verbal questions until after presentation
- Please raise your hand (virtual function) to ask a question

3

PURPOSE OF THE MEETING

- Provide stakeholders and I&APs with an overview of the proposed project
- Summary of the BA and PP process
- Present a summary of key environmental findings as documented in the Revised BARs
- Opportunity for you to seek clarification and obtain further information
- Obtain and record comments for inclusion in the final BA reports to be submitted to DFFE

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PROJECT OVERVIEW

(Jo-Anne Thomas)

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PROJECT DESCRIPTION

Wind Garden Wind Farm		Fronteer Wind Farm	
Applicant	Wind Garden (Pty) Ltd	Applicant	Fronteer (Pty) Ltd
Location	17km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ	Location	12km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ
Contracted Capacity	264MW	Contracted Capacity	213MW
Infrastructure details	47 wind turbines - Hub height of up to 120m - Tip height up to 200m	Infrastructure details	38 wind turbines - Hub height of up to 120m - Tip height up to 200m
	Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line		Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line
	Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,		Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,

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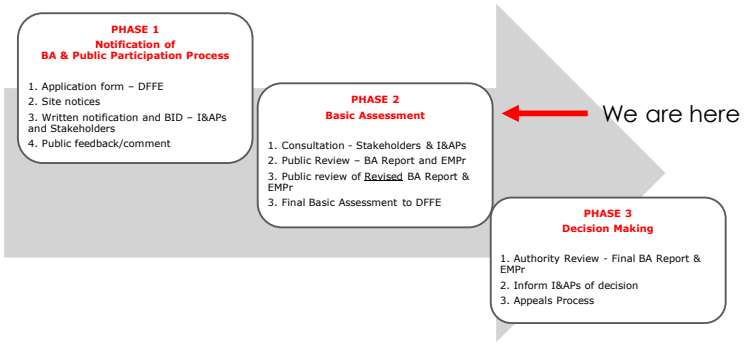
BA PROCESS & PUBLIC INVOLVEMENT



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SPECIALIST STUDIES

Specialist	Field of study
Simon Todd of 3foxes Biodiversity Solutions	Terrestrial Ecology (including fauna and flora)
Adri Barkhuysen of East Cape Diverse Consultants and Dr Steve Percival of Ecology Consulting and Peer Review by Owen Davies of Arcus Consultancy Services South Africa	Avifauna (including monitoring)
Michael Brits and Mark Hodgson of Arcus Consultancy Services South Africa	Bats (including monitoring)
Dr Brian Colloty of EnviroSci	Aquatic
Dr Brian Colloty of EnviroSci	Soil, Land Use, Land Capability and Agricultural Potential
Cherene de Bruyn and Wouter Fourie of PGS Heritage, Elize Butler of Banzai Environmental and Emmylou Bailey of Hearth Heritage	Heritage (including archaeology, palaeontology and cultural landscape)
Morné de Jager of Enviro Acoustic Research (EAR)	Noise
Lourens du Plessis of LOGIS	Visual
Matthew Keeley of Urban Econ	Socio-economic
Lourens du Plessis of LOGIS	Traffic

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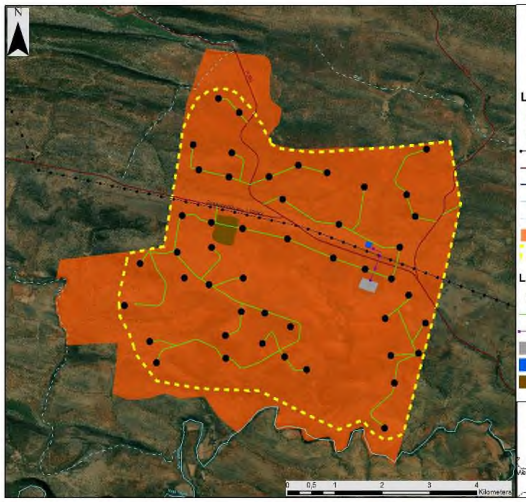

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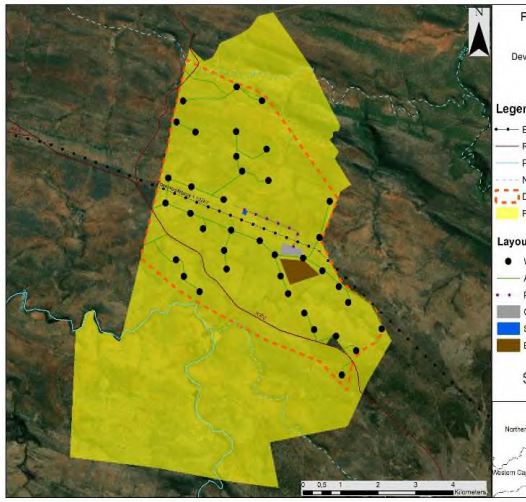

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA1 and CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
	  • Martial Eagle nests – 2.5km no go and 5km cautionary buffer
	  • Other large eagle nests – 1km no go buffer

Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of high, moderate/medium and low and very low sensitivity have been identified

Heritage resources	• The ruins of one (1) house (EWF1-07) identified to be a low heritage significance.
	• A farmstead (EWF1-04) identified to be of a medium heritage significance.
	• Three (3) burial grounds (EWF1-10 – EWF1-12) identified to be of a high heritage significance.
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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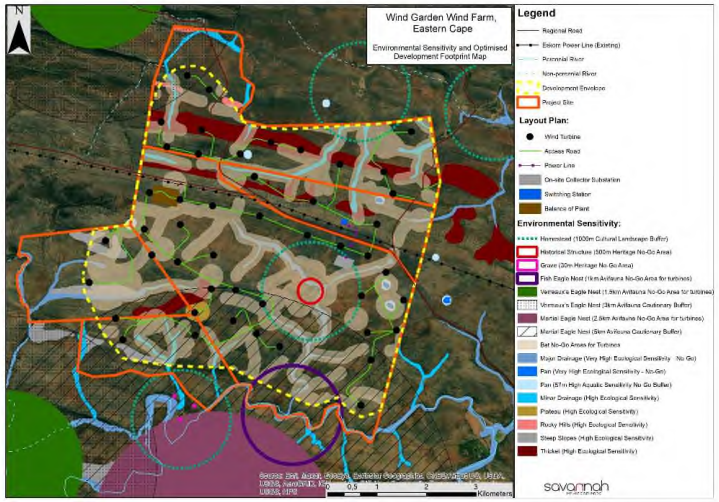

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
	  • Martial Eagle nests – 2.5km no go and 5km cautionary buffer
	  • Other large eagle nests – 1km no go buffer

Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of moderate/medium and low and very low sensitivity have been identified

Heritage resources	• Five (5) heritage sites identified
	• One (1) site contains graves
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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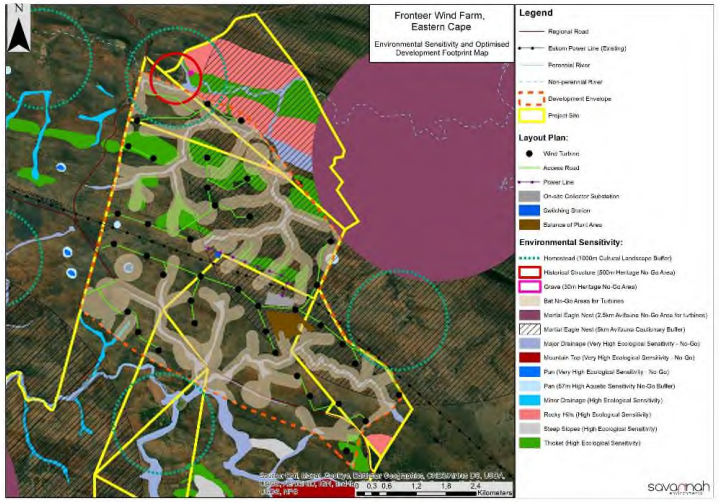

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RESULTS – DIRECT & INDIRECT IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Construction Phase	Operation Phase
Ecology	Medium and Low	Low
Aquatic Ecology	Low	Low
Avifauna	Medium and Low	Low
Bats	Low	Low
Land Use, Soil & Agriculture	Medium and Low	Medium and Low
Heritage (archaeology & palaeontology) Heritage (Cultural landscape)	Low Medium	Low Medium
Noise	Low	Low
Visual	Medium	High, Medium and Low
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Low	Minimal

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RESULTS – CUMULATIVE IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Project on its own	Project together with other similar developments
Ecology	Low	Medium
Aquatic Ecology	Low	Medium
Avifauna	Low	Medium
Bats	Medium	Medium
Land Use, Soil & Agriculture	Low	Low
Heritage (archaeology & palaeontology)	Low	Low
Heritage (cultural landscape)	High	High
Noise	Low	Low
Visual	High	High
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Medium	Low

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CONCLUSION AND RECOMMENDATIONS

- Projects are well aligned with the national, provincial and local policy framework
- From a biodiversity perspective, location of infrastructure considered acceptable
- Optimised layout proposed ensures that all aquatic, avifauna and bat sensitivities identified are avoided and recommended buffer areas are honoured
- Where impacts could not be avoided, appropriate mitigation has been proposed to minimise impacts

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CONCLUSION AND RECOMMENDATIONS

- Socio-economic impacts of the proposed wind farms on the surrounding game farms expected to be negative
- Benefits of the two projects are expected to occur at a national, regional and local level
- Costs to the environment at a site-specific level have been largely limited through the layout optimization
- The benefits of the project are expected to partially offset the localised environmental costs of the wind farm
- Based on the conclusions of the specialist studies, it is concluded that the development of the projects will not result in unacceptable environmental impacts (subject to the implementation of the recommended mitigation measures).

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WAY FORWARD

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WAY FORWARD

- Revised Basic Assessment Reports review and comment period: **21 June 2021** until **21 July 2021** (can be downloaded from the Savannah Environmental website)
- Our Public Participation team is available to answer any questions
- Meeting notes to be distributed
- Final BA Reports to be submitted to DFFE for decision-making at end-July 2021 (in terms of regulated timeframe)

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WHO TO CONTACT FOR FURTHER INFORMATION

Savannah Environmental (Pty) Ltd
Nicolene Venter
Email: publicprocess@savannahsa.com
PO Box 148, Sunninghill, 2157
Tel: 011 656 3237
Mobile: 060 978 8396
Fax: 086 684 0547
www.savannahSA.com

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Savannah Environmental (Pty) Ltd | Directors: KM Jodas, J Thomas, M Matsabu
Company Reg No.: 2006/000127/07
VAT Reg No.: 4780226736

BASIC ASSESSMENT AND PUBLIC PARTICIPATION PROCESSES FOR THE PROPOSED WIND GARDEN WIND FARM AND FRONTEER WIND FARM NEAR MAKHANDA, EASTERN CAPE PROVINCE

(DFFE Ref. No.: 14/12/16/3/3/1/2314 and 14/12/16/3/3/1/2315 respectively)

MEETING NOTES OF PUBLIC PARTICIPATION PROCESS MEETING HELD ON TUESDAY, 08 JULY 2021 AT 09H00 VENUE: MICROSOFT TEAMS, VIRTUAL MEETING

Meeting notes prepared by:

Nicolene Venter
Savannah Environmental (Pty) Ltd
E-mail: publicprocess@savannahsa.com

Please note that these notes are not verbatim, but a summary of the comments submitted at the meeting. Please address any comments to Savannah Environmental at the above address

WIND GARDEN WIND FARM AND FRONTEER WIND FARM PROPOSED DEVELOPMENTS NEAR MAKHANDA, EASTERN CAPE PROVINCE

MEETING ATTENDEES

Captured alphabetically according to surname

Name	Position	Organisation
James Brown	Landowner	Brackkloof Farm
Chris Pike	Director	Lukhanyo Game Reserve
Nick Orphanides	Landowner	Clifton Farm
Carla Strydom		Earth and Wire, Development team
Savannah Environmental		
Jo-Anne Thomas	Environmental Assessment Practitioner	
Nicolene Venter	Public Participation and Social Consultant	
Environmental Specialist		
Cherene de Bruyn	PGS Heritage. HIA	

Nicolene Venter welcomed the attendees at the public participation process meeting (PPPM) for the Wind Garden and Fronteer Wind Farms located near Makhanda within the Makado Local Municipality, Sarah Baartman District Municipality, Eastern Cape Province.

Jo-Anne Thomas presented the following:

- project description for the Wind Garden Wind Farm and the Fronteer Wind Farm;
- the Basic Assessment (BA) and public participation processes followed to date;
- the environmental studies undertaken;
- key summary of the results of the various environmental studies undertaken for inclusion in the Revised BA Reports;
- summary of the cumulative impacts; and
- the way forward after the meeting.

Nicolene Venter informed the participants that the review and comment period for the BA Reports would end on Wednesday, 21 July 2021.

A copy of the virtual participants' attendance is attached as **Appendix A** and the presentation is attached as **Appendix B** to the meeting notes.

DISCUSSION SESSION (including those submitted on the MS Teams conversation platform)

Comments captured per participants and in alphabetical order

Question / Comment	Response
Chris Pike	
Question submitted on Teams Conversation Function: The Water feasibility study refers to several batching plants - concrete mixing areas i presume? Where	Jo-Anne Thomas responded that the concrete mixing areas (batching plant) are located in the balance of

Question / Comment	Response
are these on the mapping and have these areas been included in the assessment of impacts?	plant area and is indicated on the layout. This has been included on the consideration of impacts and the management of these is included in the environmental management plan for the project.
Water feasibility study uses 3 different areas of study to pull water from as they state that the batching plant has not been finalized. Has it been finalised or are things still being moved around?	Jo-Anne Thomas responded that the layout could still change, but the change would only be slight. The location of infrastructure has been placed according to sensitivities on site. If there is a change, assessment would be relooked at an amendment process would be undertaken.

CLOSURE

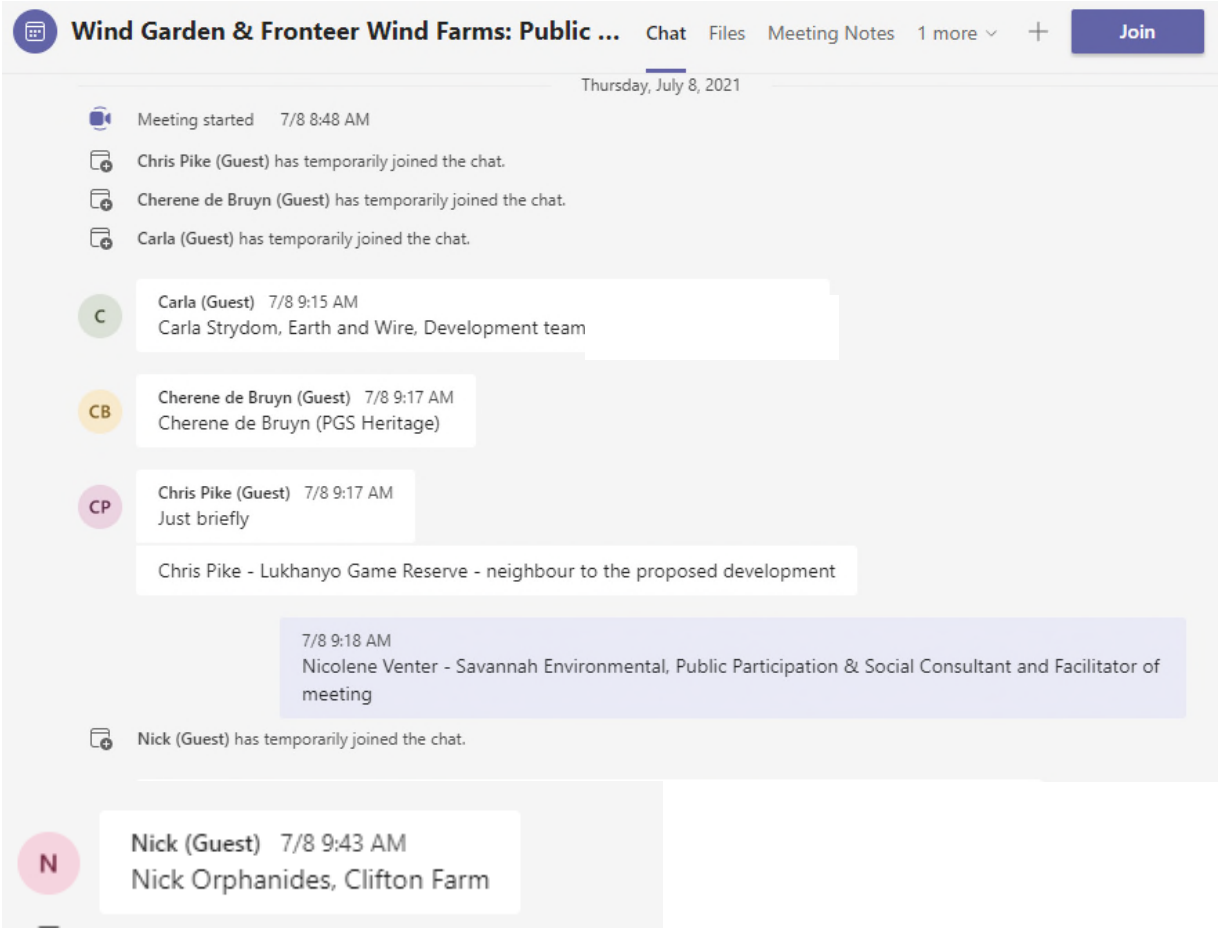
Nicolene Venter thanked the participants for making time available to attend the public meeting and for their valuable inputs into the process. The meeting was closed at 09h45.

APPENDIX A: Attendance Register

APPENDIX A: Attendance Register (According to time stamp)		
Full Name	**User Action**	**Timestamp**
Nicolene Venter	Joined	7/8/2021, 8:48:45 AM
Shandré van der Merwe	Joined	7/8/2021, 8:51:29 AM
Jo-Anne Thomas	Joined	7/8/2021, 8:54:25 AM
Chris Pike (Guest)	Joined	7/8/2021, 8:55:38 AM
Cherene de Bruyn (Guest)	Joined	7/8/2021, 8:59:19 AM
Carla (Guest)	Joined	7/8/2021, 9:00:09 AM
Nick Orphanides (Guest)	Joined	7/8/2021, 9:19:01 AM

APPENDIX A: Proof of Attendance

MS Teams screen shots



Wind Garden Wind Farm and Fronteer Wind Farm, Eastern Cape Province

Public Participation Process Meetings
July 2021

Revised Basic Assessment Report

1

AGENDA

- Welcome and introduction
- Meeting conduct
- Purpose of the Meeting
- Project description
- BA process
- Results as documented in the Revised BAR
- Way forward

2

MEETING CONDUCT

- Recording of the meeting
- Please mute while presentation is presented
- Please type your name in the message box as proof of attendance
- Questions and comments can be submitted on the chat function during the presentation – team will respond after presentation
- Please hold all verbal questions until after presentation
- Please raise your hand (virtual function) to ask a question

3

PURPOSE OF THE MEETING

- Provide stakeholders and I&APs with an overview of the proposed project
- Summary of the BA and PP process
- Present a summary of key environmental findings as documented in the Revised BARs
- Opportunity for you to seek clarification and obtain further information
- Obtain and record comments for inclusion in the final BA reports to be submitted to DFFE

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PROJECT OVERVIEW

(Jo-Anne Thomas)

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PROJECT DESCRIPTION

Wind Garden Wind Farm		Fronteer Wind Farm	
Applicant	Wind Garden (Pty) Ltd	Applicant	Fronteer (Pty) Ltd
Location	17km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ	Location	12km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ
Contracted Capacity	264MW	Contracted Capacity	213MW
Infrastructure details	47 wind turbines - Hub height of up to 120m - Tip height up to 200m	Infrastructure details	38 wind turbines - Hub height of up to 120m - Tip height up to 200m
	Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line		Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line
	Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,		Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,

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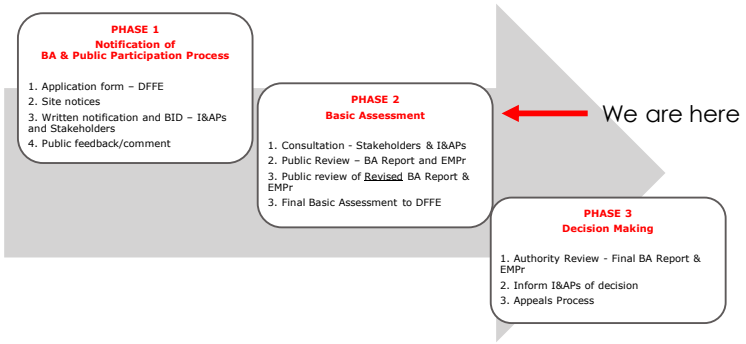
BA PROCESS & PUBLIC INVOLVEMENT



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SPECIALIST STUDIES

Specialist	Field of study
Simon Todd of 3foxes Biodiversity Solutions	Terrestrial Ecology (including fauna and flora)
Adri Barkhuysen of East Cape Diverse Consultants and Dr Steve Percival of Ecology Consulting and Peer Review by Owen Davies of Arcus Consultancy Services South Africa	Avifauna (including monitoring)
Michael Brits and Mark Hodgson of Arcus Consultancy Services South Africa	Bats (including monitoring)
Dr Brian Colloty of EnviroSci	Aquatic
Dr Brian Colloty of EnviroSci	Soil, Land Use, Land Capability and Agricultural Potential
Cherene de Bruyn and Wouter Fourie of PGS Heritage, Elize Butler of Banzai Environmental and Emmylou Bailey of Hearth Heritage	Heritage (including archaeology, palaeontology and cultural landscape)
Morné de Jager of Enviro Acoustic Research (EAR)	Noise
Lourens du Plessis of LOGIS	Visual
Matthew Keeley of Urban Econ	Socio-economic
Lourens du Plessis of LOGIS	Traffic

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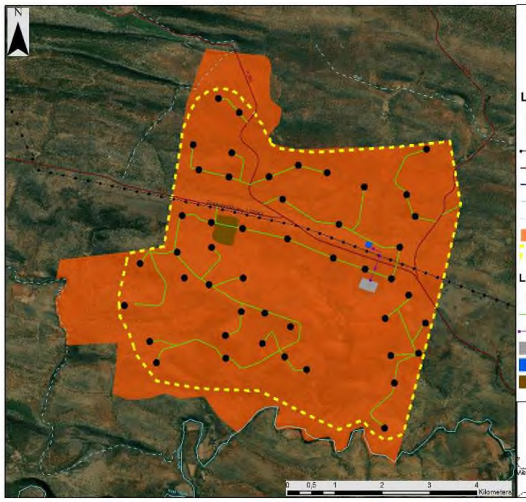

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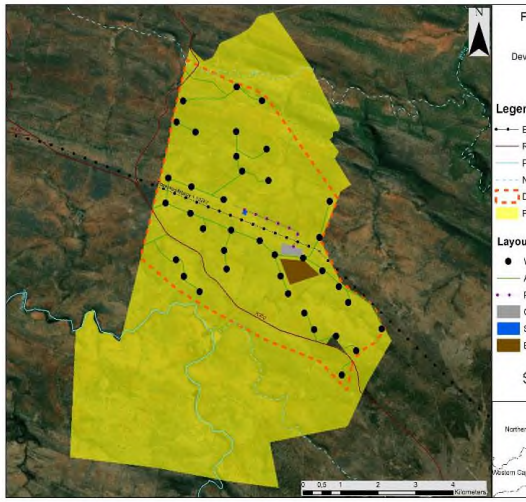

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA1 and CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
	  • Martial Eagle nests – 2.5km no go and 5km cautionary buffer
	  • Other large eagle nests – 1km no go buffer

Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of high, moderate/medium and low and very low sensitivity have been identified

Heritage resources	• The ruins of one (1) house (EWF1-07) identified to be a low heritage significance.
	• A farmstead (EWF1-04) identified to be of a medium heritage significance.
	• Three (3) burial grounds (EWF1-10 – EWF1-12) identified to be of a high heritage significance.
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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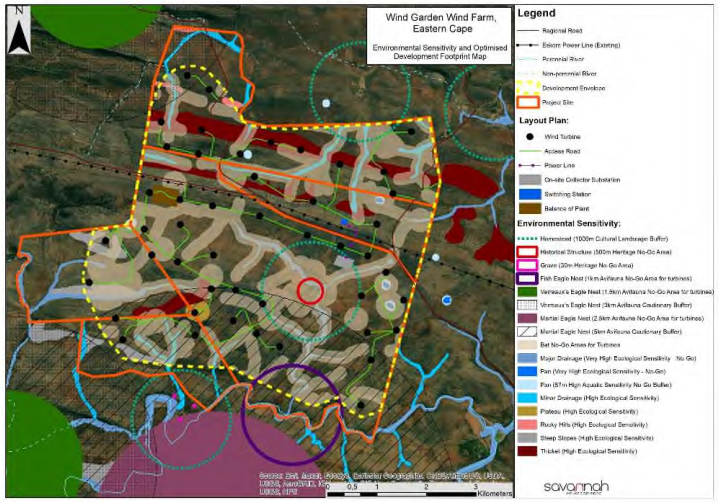

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
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Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of moderate/medium and low and very low sensitivity have been identified

Heritage resources	• Five (5) heritage sites identified
	• One (1) site contains graves
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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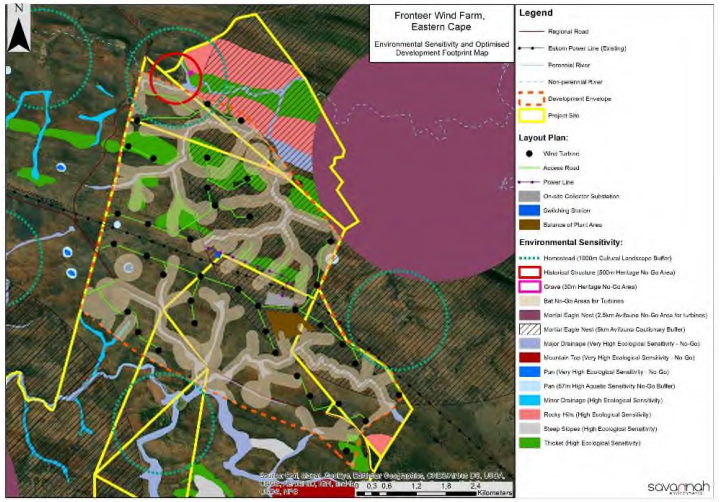

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RESULTS – DIRECT & INDIRECT IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Construction Phase	Operation Phase
Ecology	Medium and Low	Low
Aquatic Ecology	Low	Low
Avifauna	Medium and Low	Low
Bats	Low	Low
Land Use, Soil & Agriculture	Medium and Low	Medium and Low
Heritage (archaeology & palaeontology) Heritage (Cultural landscape)	Low Medium	Low Medium
Noise	Low	Low
Visual	Medium	High, Medium and Low
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Low	Minimal

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RESULTS – CUMULATIVE IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Project on its own	Project together with other similar developments
Ecology	Low	Medium
Aquatic Ecology	Low	Medium
Avifauna	Low	Medium
Bats	Medium	Medium
Land Use, Soil & Agriculture	Low	Low
Heritage (archaeology & palaeontology)	Low	Low
Heritage (cultural landscape)	High	High
Noise	Low	Low
Visual	High	High
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Medium	Low

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CONCLUSION AND RECOMMENDATIONS

- Projects are well aligned with the national, provincial and local policy framework
- From a biodiversity perspective, location of infrastructure considered acceptable
- Optimised layout proposed ensures that all aquatic, avifauna and bat sensitivities identified are avoided and recommended buffer areas are honoured
- Where impacts could not be avoided, appropriate mitigation has been proposed to minimise impacts

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CONCLUSION AND RECOMMENDATIONS

- Socio-economic impacts of the proposed wind farms on the surrounding game farms expected to be negative
- Benefits of the two projects are expected to occur at a national, regional and local level
- Costs to the environment at a site-specific level have been largely limited through the layout optimization
- The benefits of the project are expected to partially offset the localised environmental costs of the wind farm
- Based on the conclusions of the specialist studies, it is concluded that the development of the projects will not result in unacceptable environmental impacts (subject to the implementation of the recommended mitigation measures).

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WAY FORWARD

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WAY FORWARD

- Revised Basic Assessment Reports review and comment period: **21 June 2021** until **21 July 2021** (can be downloaded from the Savannah Environmental website)
- Our Public Participation team is available to answer any questions
- Meeting notes to be distributed
- Final BA Reports to be submitted to DFFE for decision-making at end-July 2021 (in terms of regulated timeframe)

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WHO TO CONTACT FOR FURTHER INFORMATION

Savannah Environmental (Pty) Ltd
Nicolene Venter
Email: publicprocess@savannahsa.com
PO Box 148, Sunninghill, 2157
Tel: 011 656 3237
Mobile: 060 978 8396
Fax: 086 684 0547
www.savannahSA.com

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Savannah Environmental (Pty) Ltd | Directors: KM Jodas, J Thomas, M Matsabu
Company Reg No.: 2006/000127/07
VAT Reg No.: 4780226736

BASIC ASSESSMENT AND PUBLIC PARTICIPATION PROCESSES FOR THE PROPOSED WIND GARDEN WIND FARM AND FRONTEER WIND FARM NEAR MAKHANDA, EASTERN CAPE PROVINCE

(DFFE Ref. No.: 14/12/16/3/3/1/2314 and 14/12/16/3/3/1/2315 respectively)

MEETING NOTES OF PUBLIC PARTICIPATION PROCESS MEETING HELD ON TUESDAY, 08 JULY 2021 AT 14H00 VENUE: MICROSOFT TEAMS, VIRTUAL MEETING

Meeting notes prepared by:

Nicolene Venter
Savannah Environmental (Pty) Ltd
E-mail: publicprocess@savannahsa.com

Please note that these notes are not verbatim, but a summary of the comments submitted at the meeting.
Please address any comments to Savannah Environmental at the above address

WIND GARDEN WIND FARM AND FRONTEER WIND FARM PROPOSED DEVELOPMENTS NEAR MAKHANDA, EASTERN CAPE PROVINCE

MEETING ATTENDEES

Captured alphabetically according to surname

Name	Position	Organisation
James Brown	Landowner	BrackklooF
Joe Cloete	General Manager	Shamwari
Graeme Mann	Executive Manager	Kwandwe Private Game Reserve
Nick Orphanides	Landowner	Clifton Farm
Chris Pike	Director	Lukhanyo Game Reserve
Angus Sholto-Douglas	Managing Director	Kwandwe Game Reserve
Carla Strydom	Co-developer	Earth & Wire
Savannah Environmental		
Jo-Anne Thomas	Environmental Assessment Practitioner	
Nicolene Venter	Public Participation and Social Consultant	
Nondumsio Bulunga	Public Participation Consultant	
Environmental Specialist		
Matthew Keeley	Urban-Econ Development Economists. SEIA Specialist Studies	
Simon Todd	3Foxes. Ecologist	
Cherene de Bruyn	PGS Heritage. HIA	
Morne de Jager	EARES. Noise Impact Assessment	
Lourens du Plessis	LOGIS. VIA Specialist	

Nicolene Venter welcomed the attendees at the public participation process meeting (PPPM) for the Wind Garden and Fronteer Wind Farms located near Makhanda within the Makado Local Municipality, Sarah Baartman District Municipality, Eastern Cape Province.

Jo-Anne Thomas presented the following:

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DISCUSSION SESSION (including those submitted on the MS Teams conversation platform)

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Question / Comment	Response
Joe Cloete	
Agree with the statement from Angus that referring to a tourism product in Germany is way out of line when compares to an African product. We in the game farm industry have spent millions and many years to do all necessary measures to improve aesthetics of the area (e.g. putting power lines underground). If a guest was given a choice between going to Botswana where there are no wind turbines and going to the Eastern Cape where there are 70 or 80 turbines on the boundary, the answer will be simple. The research is considered flawed especially when looking at the properties in the research used as examples and comparing that to our properties. The socioeconomic impact of these wind farm developments will be greater than what the research is showing. There is short-term job creation associated with wind farm construction. What about long-term job creation for the families that work on the farms. There is no other source of job creation in the Eastern Cape other than agriculture, hunting farms, tourism properties. Urge the specialists to relook at the research. I think the SEIA is underestimating the impact this is going to have on the people of the area that have no alternative source of employment. We are going to throw everything we have at this to protect these private areas in the Eastern Cape. The effect of COVID on this industry is unbelievable. The property I work at as an example paid 485 staff in February 2020. We are now paying 180 and we are overstaffed. We do not know when it will recover.	Matthew Keeley acknowledged the comment.
Cannot stress enough that the full impact of the socio-economic impact on the communities, on the procurement process	The comment was noted.

Question / Comment	Response
is going to affect a lot of businesses in and around Grahamstown. The chain of procurement goes a long way down. Has this been taken into account? I question the extent and the socio-economic impact survey. I do not think it has been done thoroughly and do not think it has been thought through.	
Are the directors of this developing company here today?	Carla Strydom introduced herself as being from Earth and Wire, a co-developer in the project. However, she informed the attendees that she is not a Director.
Who is the other developer?	Carla Strydom responded that Wind Relic is the main developer. Earth and Wire does have a shareholding in the project.
Graeme Mann	
In the previous public participation meeting, there were land occupants who are not landowners who wanted to know whether their homes would be plotted on the maps in terms of relevant factors in regard to the placement of turbines. Has this been done?	Jo-Anne Thomas responded that from a noise perspective all the structures on the site were identified (all the dwellings) and they were mapped and indicated as noise sensitive developments. Morne de Jager confirmed that he used the aerial images to identify structures and also went on site to confirm. He also spoke to some of the landowners to determine which structures are being used. Some of the dwellings are only used occasionally (such as during the hunting season).
It is my understanding that the visual impact is listed as being high and when the probability multipliers are used then the risk becomes become moderate or. From my perspective, the probability of this having a massive irretrievable economic impact on Kwandwe and its communities is a certainty. We have surveyed our own repeat guests. Without fail they have said it would be a tragedy and they would not come back if there were wind turbines on our property. From our perspective, it is not a probability it is a certainty. The business would not longer be able to operate or employ anyone. Urge that the review of this project takes that into account.	Matthew Keeley confirmed that he had discussed the surveys undertaken. The notes from the discussion and the mention of the survey and Kwandwe's opinions have been added to the revised report.
Nick Orphanides	
Have travelled Africa extensively and has been to many lodges south of Kenya. He can confirm that the lodges in the area are of the highest quality and a point of pride in this part of the world. So to compare the area to other areas such as the Western Cape is not considered appropriate. This part of the world, without light pollution specifically and windmills, etc is still an absolute gem. People come to see pristine wildlife and the whole experience. There are a lot of fantastic reserves in the area.	This comment was noted.

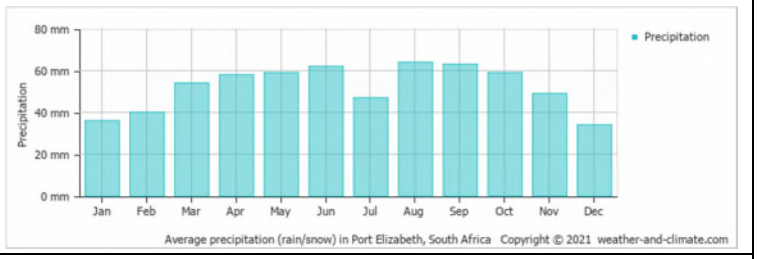
Question / Comment	Response
When Lourens visited Clifton, he had said that the impact would be high due to the project. When considering the picture displayed (photomontage from the VIA report), it does give a basic representation. However, where he sites at his house, he will be surrounded by turbines. Investments for his property are on hold. The fact that these projects are even being considered is slowing investment in the area. Anyone spoken to states that the presence of turbines would be a deal breaker for visitors. He stated that Cookhouse turbines (55km away) are clearly visible from his property. Some of the proposed turbines are so invasive and completely annihilates what is being planned. For the sake of completeness more photos would have been helpful. Everyone in the area will be in a position where the turbines will influence them and their livelihoods. The true effects of this wind farm are not considered to be accurately quantified. It is going to be a sterilisation of an industrial scale on a non-industrial landscape.	Photo montages are done to try and be as representative as possible within the time and budget constraints. The report states that the visual impact is expected to be very high on Clifton and other farms immediately adjacent to the project sites. The cumulative impact of the area is expected to be high and this is stated in the report.
Do not see how turbines on the perimeter would not have permanent lights from a safety aviation perspective. The effect would be astonishing within a kilometre. The closest turbines are just over the farm boundary. The lights at Cookhouse and Waainek are very bright. They are very intrusive. They come on at different stages and are like strobe lights coming on and off.	Lourens du Plessis responded that this is why the needs-based lighting is mentioned in the VIA, also stating that in the event that this cannot be implemented then the visual impact will be high.
With the way the significance ratings formula is compiled you miss out on the actual leverage of the multiplier effect which should genuinely be employed. If an impact is very high, it should have a stronger effect on the outcome. Some of these things are terminal issues in our view as affected parties. Nothing seems to get to this point. There seems to be a provisor that says impacts can be mitigated.	Jo-Anne Thomas responded that the significance rating is not the only aspect looked at by the Department. In term of visual impact, it is stated in the report that it is not possible to mitigate the impacts.
The point is that it is not mitigatable so at what point does mitigation fall away and will it influence the project to stop. How high must the impact be for it to be realized that it is unmitigable.	Jo-Anne Thomas responded that all the information is presented to the Department, and they will take everything into consideration the assessment, all the comments in making a decision.

Question / Comment	Response
	Lourens du Plessis added that the showstopper would be a fatal flaw. It is difficult in South African context to tell private landowners what they can and cannot do. As a specialist, can put together all possible information to present to the department to consider in the decision-making process.
With regards to bats, there is a buffer of a 100m from blade to tip, and then there is another buffer of 260m to the base. Do bats fly into bases? Surely there must be a 160m buffer around the base and from there a 260m buffer to the turbine blades?	Jo-Anne Thomas responded that there are two types of buffers recommended. One is related to habitat loss which is the 260m buffer from the base to address want encroachment into the habitat, and a second buffer to blade to tip associated with drainage lines is associated with collision risk.
Nicolene Venter was reminded that the information of the mining and industrial off-takers in Gauteng and Mpumalanga from the electricity generated will be provided.	Nicolene Venter obtained information from the Applicant that the information requested is confidential information as negotiations are still in process and are subject to confidentiality agreements. It is also important to note that the requested information is not applicable or relevant to the EA Applications.
Nick stated: Regarding underground water on site, for one of the farms there is a water catchment (133 km^2) that will be used and could have terminal effects on other farms that rely on ground water. Statement: Regarding the bird buffer zones, to agree with Angus the bird buffer zones are shocking. There was some rebuttal of the vultures setup for when we want to expand their range, there was capping on how to do it.	The comment submitted is noted by the project team.
Chris Pike	
In the summary of the BAR (visual) study in section 10.10.2 – the calculations are based on sections of 0-5km, 10-20km etc. and in 10.11.2 the visual impact sections relating to socio-economic specific to game farming are now divided in larger increments, 0-20km radius is being used which will dilute the impacts, these impacts specifically of visual on tourism and game farming is listed as medium. From the amount of negative inputs from landowners from all meetings attended and submitted comments, the reduction of the impact from high to moderate is not understood. It sems to be a biased mathematical calculation when 90% of comments were negative?	Matthew Keeley responded that the VIA had indicated that the visual impact on the immediate properties would be that of a high significance. From a socio-economic perspective, this must be interpreted based on the visual impact as a contributor to potential tourism impacts in the broader area and on immediately adjacent farms. In the revised SEIA report, an additional impact rating for immediate and adjacent farms to the project site and there is another table rating the impact on the broader area. The scoring for both rate the impact at medium negative impact. The rating of significance is based on the calculation of the significance. In calculating this impact, the specialist considers the extent of the impact (where the impact will be felt), duration (short-, medium- or ling-term), magnitude (how will it change the existing processes in the area) and the probability (how can evidence be provided to support the notion that the impact will occur will not occur). The calculation of the significance rating is to add extent, duration and magnitude multiplied by probability. In contrast to the visual impact where the probability and magnitude scorings are very high – i.e. there can be no doubt that the visual impacts will be realised, the SEIA specialist cannot definitively say based on the evidence throughout the rest of the report say that the magnitude and probability for the changes in tourism activity will be at the top end of the scale. In order to say that any of the impacts will be high, the probability rating must also be high.

Question / Comment	Response
	In the case of the SEIA, the probability is rated as medium. Therefore, although it is stated that there are likely going to arise negative impacts associated with tourism numbers potentially reducing, they are deemed to be medium significance and not high.
It is understood that the significance is calculated based on maths. Was the purpose of the revised report not to take into account all the input from the PP meetings? Has the input been used?	Matthew Keeley responded that in order for the study to get to a score that is hjgh means that there must be no doubt in any literature or any basis of research for the specialist to fundamentally say that the impact probability is high. Based on the research, the specialist cannot do so. In the revised report, there are a lot of sections included around the fears and the perceptions locally about how the tourism industry will change locally if the wind farms are implemented. The perceived impact of local parties is that this impact is high. When this is contract to other assessments in terms of all the theoretically literature, of which a lot speaks to the negative consequences as a result of wind farms, none of the literature supports the idea that the probability is absolute and high. Even in the documentation provided to the team in objection, for example in Mr Summers' submission which included reference to German studies which showed the correlation between the tourism study and wind farms, the study concludes that even by undertaking a full national analysis on the German economy it shows that wind turbines generally impose a weak but negative effect on tourism. Therefore, even for studies that conclude that there is a negative impact, it is not one of high significance.
Question submitted on Teams Conversation Function: William Fowlds spoke several times in the previous meetings with regards to 3 different published papers. And I apologies if I get the names slightly wrong: 1. A review of literature on impacts of WEFs on nature based tourism. 2. The study of the Albany biodiversity corridor 3. Terblanche 2020. Matthew - you say you took new information into account between the draft and final draft - did you take these into account?	Matthew Keeley responded that at least two of the three papers have been included in the updated report. In terms of the Albany study, the correlation between the visual impact and the tourism impact is shown from a spatial coverage point of view. It did not refer to any substantive literature or primary research in terms of the impact on tourism, but rather showed what the perceived impact could be as a result of changes in visual impacts. This was a similar methodology used in the German study. This German study was one provided to the SEIA team in objection.
If these studies have been considered and included, surprised that this did not sway the findings a bit further but will leave it at that.	The comment was noted.
Sensitive receptors are inducted as a way of looking at how good or bad the visual impact will be. It seems that the really sensitive receptors were not involved in all. I have 2 proposed turbine sites in front of the lodge and can see another 7. Nick	Lourens du Plessis responded that he tried to be as thorough as possible and identify as many sensitive visual receptors as possible. The study included a list of 74, including the list of objecting landowners, of which Chris Pike is included as one. Angus Sholto-Douglas provided a landowner map, where Chris

Question / Comment	Response
Orphanides is in the same position. Why were we not approached?	Pike is included as an adjacent landowner, with his name specifically included in the report.
In terms of photomontages, sites chosen were not from the sensitive receptors. Pictures are from roads nearby etc. and not actually from our points of view. Is the accuracy of the report not biased not including photomontages from the sensitive receptors?	Lourens du Plessis responded that, as there were 74 receptors, it would be very difficult, as well as time consuming and costly to make visual montages form every sensitive receptor. The idea of the photos montages is just to give a snapshot of what the wind farm would look like from varying distances once it had been constructed. It is not intended to show the wind farm from every angle.
This is considered to be a major oversight from Savannah, as the overseeing company for the project that there should have been a follow-up between the draft and revised report. Do not think that there is enough data. I have two big turbines from base up to top, right in front of my lodge, at the main view. This kills the business. We can't market that or mitigate it in any way. Mitigation should speak to moving those 2 turbines out of the way. Do not think that the montages tool has been used very well.	Lourens du Plessis responded that the photo montages are only one tool used on the VIA. There are other considerations as well, such as the visual impact index. He indicated that he went to visit Nick Orphanides and he has a similar view. Reference was made to 7.3.0 for similarities (viewpoint 1 of the construction), this is a similar point of view as what Chris Pike would experience (referring to proximity to the property). The similarity would be in the proximity. Figure 7.3 of the VIA report provides an indication of turbines in field of view (as referred to by Chris Pike). In the background you can see the Waainek existing turbines (7 turbines in total). These photo simulations are representative samples of what the general impact will be.
Referring to Figures 7.7 and 7.8, 7.10 and 7.11, and 7.13 and 7.14 in the visual study: Why is the viewpoint after construction more exposed? This hides the turbines.	Lourens du Plessis responded that it is very difficult to compactly put these photos in the report as the quality deteriorates once placed in a pdf. The purpose of the enlarged images is to show what is more typical of what would be seen. He confirmed that the photos are not manipulated at all apart from inserting the turbines. He reiterated that the purpose of the enlarged images is to show what will be seen.
Question submitted on Teams Conversation Function: I appreciate your day montages but that is only half the visual impact? where are the nighttime visual montages?	Lourens du Plessis responded that as a mitigation measure in the report, it was mentioned that the project proponent must fit needs-based lighting on the turbines. The project proponent has indicated that this is a non-negotiable requirement. The turbines therefore would not be lit up except when there is an aeroplane in the airspace. Therefore, to simulate the night-time would be incorrect as the turbines would be in relative darkness for most of the time.
Lights referred to are referred to as developing technology. Similar to the black blade that's not applicable, or unsure. Are the lights available? From the report this does not seem that the lights are available. The lights are listed in the report. Grant mentioned that the CAA is saying that all turbines must have lights. Is the needs-based lighting going to be used or not?	Jo-Anne Thomas replied that project team had a meeting with the civil aviation authorities and Air Traffic Navigation System as part of the public participation process for these projects, and they confirmed that not all turbines need lights, and it will be determined on the layout of the facility and only on the perimeter. The needs-based lighting was also discussed. They are aware of it, and it is technology that is available and there are various discussions with various developers on this technology and how it can be implemented in South Africa. CAA and ATNS stated that this is a technology that would need to be considered seriously as it is a requirement of various projects.

Question / Comment	Response
	The developer has indicated that this is a non-negotiable and will be implemented. It is stated as a mitigation and is also included in the EMPr and therefore needs to be implemented. Lourens du Plessis added that this would be included as a condition that is included in the Environmental Authorisation (EA). Jo-Anne Thomas indicated that the EA would state that all mitigation measures are required to be implemented, and it becomes legally binding.
Impact is described as high. Is there anything above high? It seems that high does not properly define the 0-5km impact of visual impact, if the term high is also used to describe the other more severe impacts.	Lourens du Plessis responded that based on the methodology applied in by the EAP which attempts to standardize ratings, there is low, moderate and high in terms of significance where less than 30 is low 30 -60 is medium/moderate and anything greater than 60 is high. Impacts indicated as high relate to those where the impact must have an effect on the decision to develop in the area. The visual assessment is based on this methodology. If the impact is high then it should be considered in the recommendations as to whether the development should go ahead.
It must be noted that we feel this standardization is not indicative of actual impacts. We feel this is watered down to a standardized high and not representative of the actual impact.	Jo-Anne Thomas responded that it is not just the significance that is indicated. The make-up of the rating is shown to the Department. The Department is therefore made aware of the extent, duration, magnitude and probability which is all considered in determining significance. It is not just the significance that is important in the impact assessment. The other aspects also need to be considered in the impact assessment rating as per the Regulations.
The Birdlife comments included in the Revised report state that that the buffers zones in the avifaunal report are outdated. Has this been rectified?	Jo-Anne Thomas responded that the specialist has provided a response in the Comments and Responses Report indicating the buffers as they were calculated are based on site observation. Buffers are based on collision risk modelling undertaken by the specialist and it has been subsequently looked at again and confirmed by the specialist.
Why the specialist is using their personal buffer zone calculations and not the best practice measurements as used in South Africa? Why is this allowed?	Jo-Anne Thomas responded that this is not their preference. It is based on scientific data and it was discussed with birdlife and the information shared with them. For example, one and half buffer for the Verraux's Eagle is an accepted buffer with the 3km being cautionary buffer. Understanding that the guidelines are guidelines and is not legislated and must be adapted to the pre-construction monitoring or on-site specifics. **Post-meeting note**: The species-specific guidelines for the Verreux's Eagle states the following in terms of buffers: "*A buffer of 3 km is recommended around all nests (including alternate nests). This is intended to reduce the risk of collisions and disturbance. This is a precautionary buffer and may be reduced (or increased) based on the results of rigorous avifaunal surveys, but nest buffers should never be less than 1.5km.*" The buffers recommended are in line with these.
On site conservation which is why we keep questioning the accuracy of these reports and the reason is for example a report of	**Post-meeting note**: The bird specialists have not recorded oxpeckers in the monthly Walking Transects. It is presumed that these birds avoid the

Question / Comment	Response
between 5 – 10 oxpeckers in the area on one of the properties. The difference between 5 and 10 is either 50% or 100% which refers to accuracy of population size. The avifauna it is difficult to look at the report to conclude that observation.	domestic stock (cattle, etc.) because they walk around with dips/chemicals on their backs, therefore rather forage on wild antelope. The numbers quoted are Incidental observations provided in response to comments received.
Regarding the water feasibility study and the desktop study to confirm the annual rainfall as they said 548mm per year.	Jo-Anne Thomas replied that she will confirm with the specialists. **Post-meeting note:** The data source as indicated by the specialist was a 1990 WRC report, as referenced in the feasibility study. Recent information shows a weather shift in the past 20 years with the Grahamstown area seemingly becoming wetter – the latest data puts Grahamstown at 625mm/ year for 2021, as shown below. 
What will be submitted to the department, just the summary of the minutes or the recording and stated. On the Friday 26th meeting at 17:00 – when you look at the minutes of just 14 pages it is summarized and a lot of information is missing, and it was sent out to late. The meeting of that day needs to be looked at again. Some information was missing from a landowner,	Nicolene Venter replied that only the summary of the minutes will be sent to the department as a recording cannot be uploaded. The meeting minutes of the 26th July 2021 will be verified. **Post-meeting note:** It can be confirmed that the draft meeting notes are a correct summary of the comments raised by the attendees and responses provided by the project team.
Angus Sholto-Douglas	
Question submitted on Teams Conversation Function: How does Matthew Keeley know it will not be high? Using the word "probability"?	Matthew Keeley referred to the response provided to Chris Pike regarding the methodology used.
Matthew says there is a weakness of literature but the specialist's own data comes from a very weak platform where he has interviewed guests from locations which are nowhere near wildlife based - based tourism operations. The understanding is that this proposal will have a significant impact on wildlife-based tourism operations (i.e. the collective neighbours). There seems to be an intent to dilute and mitigate on some grounds that are not that strong. Stakeholders have had a fundamental issue with the SEIA from the start of the process and they require more evidence to explain why this is something that can be brought down to a	Matthew Keeley responded that he has met with Angus and that his concerns have been fully noted and these are included in the study. In the meeting there was a discussion regarding the gap in literature to find studies that provide evidence of wind farms being established directly adjacent to game farms such as those in the area. The specialist has attempted to strengthen the findings of the SEIA in the revised report and appreciate if they can add to the body of literature. As mentioned previously, the SEIA team undertook a review of literature from other countries where many of the tourist activities that are in place are not African wildlife orientated. In all of these studies, it cannot be ruled out that there cannot be any commonalities or similarities between different types of tourism attractions even though they are not wildlife specific. Those studies have therefore remained with the revised report.

Question / Comment	Response
medium impact when we all see it as a very high impact.	The specialist however endeavoured to undertake additional primary research. This has been done on 2 fronts – i.e. 1. Attempt to engage with tourist booking operators. Contacted 13-15 parties and received 1 response. This response provided an indication as to the reasons why international travellers choose to come to farms in and around the Makhanda area. The response indicated that the operator themselves are concerned that if turbines are erected on farms in close proximity to operations such as Kwandwe, there are definite fears that tourists may choose to go elsewhere. The interviews also informed as to the different decision-making processes that a tourist makes when choosing a location to visit. This includes sense of place and the visuals and overall experience of being in the wildlife environment. Other factors affecting decisions on which farm to visit include where it is located, proximity to closest airport, quality of facilities on the site, variety and abundance of fauna and flora in the area, the quality of the trophy in the case of hunters, as well as any relationship/prior visit to those farms. Other things noted include relative affordability, value for money of the facility and its offering, whether the area is in a malaria area or not. 2. In response to criticisms on the draft report, where it was stated that there were only efforts to contact tourism facilities which were not close to wildlife-based tourism facilities and that there was no attempt to contact wildlife attractions or lodges, an extensive process was undertaken where up to 20 nature reserves/lodge were identified throughout the country which were within a 10km radius of where wind farms have been developed. These were in areas such as Nelson Mandela Bay (2 reserves close to Grassridge), one in the Western Cape (close to Darling Wind Farm), one in Hopefield (Western Cape) and a bush lodge close to the Metro Wind Facility in Nelson Mandela Bay. It is acknowledged that these are not directly comparable to farms such as Kwandwe but extensive feedback was received. All of them noted no changes because of the wind farm. The SEIA is therefore not conclusive one way or the other. The primary research shows a mixed response, and this has been included in the revised report.
Urge the SEIA team to compare apples with apples. The area cannot be compared to an area in the Western Cape. Surely if there is not enough evidence then the precautionary approach should be applied?	Matthew Keeley replied that the study is not directly trying to compare like for like and this limitation is clearly stated in the study.
The provincial Department of Environmental Affairs brought up the topic of cumulative impacts. There seems to be	Lourens du Plessis responded that he had no control of the weather on the day his photos were taken.

Question / Comment	Response
a strategy to put these two wind farms right against each other and put them into separate companies. Need to look at cumulative impacts of the two together. It is noted that a project in the Western Cape has been refused because of the cumulative impact on another. The photographs were taken on a cloudy day. This is good strategy by the VIA specialist. The turbines do not stand out well against the grey clouds. On Kwandwe there is a point of reference with Waainek Wind Farm which is ~20km away to the west of Makhanda and we can see them very clearly from the northern parts of Kwandwe which is about 30km away. We can therefore gauge the visual impact of the Waainek Wind Farm on Kwandwe. Saying that the visual impact at 20km is low is wrong.	Referring to figure 7.3 of the VIA report, indicates what has been said regarding the cumulative impact and also regarding turbines in field of view (as referred to by Chris Pike). In the background you can see the Waainek existing turbines (7 turbines in total). These photo simulations are representative samples of what the general impact will be.
Regarding water extraction on site, how will it impact water tables, it is a water scare area and some of us extract ground water and how will our water tables will be influenced.	**Post-meeting note**: A water feasibility study was included in the Revised BA Report and indicates that there is sufficient water from the groundwater resource. The impact on water tables will however be investigated in detail as part of the Water Use License application process.
As I am fond of raptors, the buffers proposed by birdlife are being mitigated. It talks to the responsibility of the EAP and I hope it doesn't talk to the responsibility of the developer.	**Post-meeting note**: The species-specific guidelines for the Verreux's Eagle states the following in terms of buffers: "*A buffer of 3 km is recommended around all nests (including alternate nests). This is intended to reduce the risk of collisions and disturbance. This is a precautionary buffer and may be reduced (or increased) based on the results of rigorous avifaunal surveys, but nest buffers should never be less than 1.5km.*" The buffers recommended are in line with these.

CLOSURE

Nicolene Venter thanked the participants for making time available to attend the public meeting and for their valuable inputs into the process. The meeting was closed at 16h50.

LIST OF ABBREVIATIONS / ACRONYMS

ATNS	Air Traffic Navigation Services	EA	Environmental Authorisation
BA	Basic Assessment	EAP	Environmental Assessment Practitioner
CAA	Civil Aviation Authority	EMPr	Environmental Management Programme
DFFE	Department of Forestry, Fisheries and the Environment	VIA	Visual Impact Assessment

APPENDIX A: Attendance Register (According to time stamp)		
Full Name	**User Action**	**Timestamp**
Nicolene Venter	Joined	7/8/2021, 1:53:16 PM
Shandré van der Merwe	Joined	7/8/2021, 1:53:29 PM
Jo-Anne Thomas	Joined	7/8/2021, 1:54:49 PM
Nondumiso Bulunga	Joined	7/8/2021, 2:07:43 PM
Chris Pike (Guest)	Joined	7/8/2021, 1:57:13 PM
Morne de Jager	Joined	7/8/2021, 1:58:20 PM
Joe Cloete	Joined	7/8/2021, 1:59:39 PM
JAMES BROWN - BRACKKLOOF (Guest)	Joined	7/8/2021, 2:00:11 PM
Simon Todd (Guest)	Joined	7/8/2021, 2:00:40 PM
Lourens du Plessis (Guest)	Joined	7/8/2021, 2:00:40 PM
Angus Sholto-Douglas(Guest)	Joined	7/8/2021, 2:01:03 PM
Graeme Mann (Guest)	Joined	7/8/2021, 2:01:08 PM
Nick Orphanides (Guest)	Joined	7/8/2021, 2:01:47 PM
Matthew Keeley	Joined	7/8/2021, 2:02:39 PM

Wind Garden Wind Farm and Fronteer Wind Farm, Eastern Cape Province

Public Participation Process Meetings
July 2021

Revised Basic Assessment Report

1

AGENDA

- Welcome and introduction
- Meeting conduct
- Purpose of the Meeting
- Project description
- BA process
- Results as documented in the Revised BAR
- Way forward

2

MEETING CONDUCT

- Recording of the meeting
- Please mute while presentation is presented
- Please type your name in the message box as proof of attendance
- Questions and comments can be submitted on the chat function during the presentation – team will respond after presentation
- Please hold all verbal questions until after presentation
- Please raise your hand (virtual function) to ask a question

3

PURPOSE OF THE MEETING

- Provide stakeholders and I&APs with an overview of the proposed project
- Summary of the BA and PP process
- Present a summary of key environmental findings as documented in the Revised BARs
- Opportunity for you to seek clarification and obtain further information
- Obtain and record comments for inclusion in the final BA reports to be submitted to DFFE

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PROJECT OVERVIEW

(Jo-Anne Thomas)

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PROJECT DESCRIPTION

Wind Garden Wind Farm		Fronteer Wind Farm	
Applicant	Wind Garden (Pty) Ltd	Applicant	Fronteer (Pty) Ltd
Location	17km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ	Location	12km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ
Contracted Capacity	264MW	Contracted Capacity	213MW
Infrastructure details	47 wind turbines - Hub height of up to 120m - Tip height up to 200m	Infrastructure details	38 wind turbines - Hub height of up to 120m - Tip height up to 200m
	Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line		Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line
	Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,		Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,

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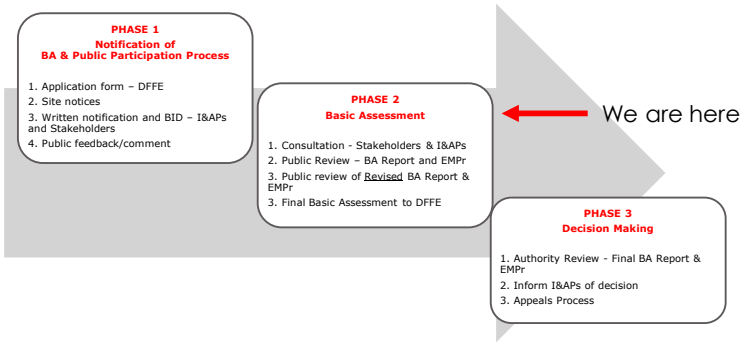
BA PROCESS & PUBLIC INVOLVEMENT



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SPECIALIST STUDIES

Specialist	Field of study
Simon Todd of 3foxes Biodiversity Solutions	Terrestrial Ecology (including fauna and flora)
Adri Barkhuysen of East Cape Diverse Consultants and Dr Steve Percival of Ecology Consulting and Peer Review by Owen Davies of Arcus Consultancy Services South Africa	Avifauna (including monitoring)
Michael Brits and Mark Hodgson of Arcus Consultancy Services South Africa	Bats (including monitoring)
Dr Brian Colloty of EnviroSci	Aquatic
Dr Brian Colloty of EnviroSci	Soil, Land Use, Land Capability and Agricultural Potential
Cherene de Bruyn and Wouter Fourie of PGS Heritage, Elize Butler of Banzai Environmental and Emmylou Bailey of Hearth Heritage	Heritage (including archaeology, palaeontology and cultural landscape)
Morné de Jager of Enviro Acoustic Research (EAR)	Noise
Lourens du Plessis of LOGIS	Visual
Matthew Keeley of Urban Econ	Socio-economic
Lourens du Plessis of LOGIS	Traffic

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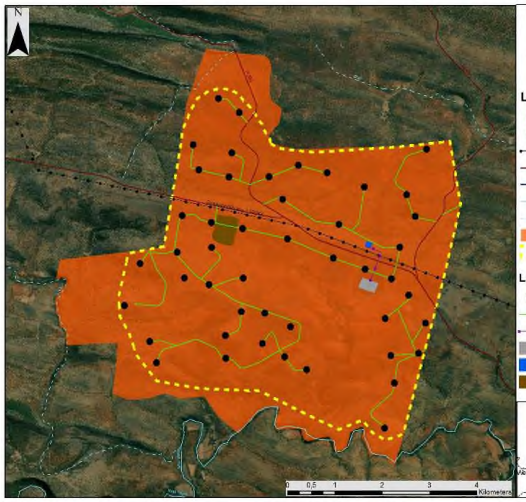

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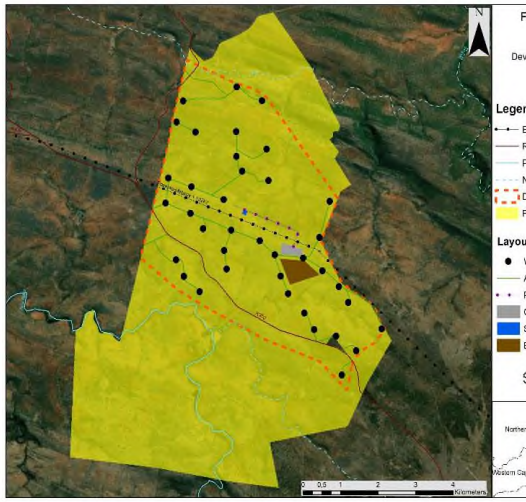

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA1 and CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
	  • Martial Eagle nests – 2.5km no go and 5km cautionary buffer
	  • Other large eagle nests – 1km no go buffer

Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of high, moderate/medium and low and very low sensitivity have been identified

Heritage resources	• The ruins of one (1) house (EWF1-07) identified to be a low heritage significance.
	• A farmstead (EWF1-04) identified to be of a medium heritage significance.
	• Three (3) burial grounds (EWF1-10 – EWF1-12) identified to be of a high heritage significance.
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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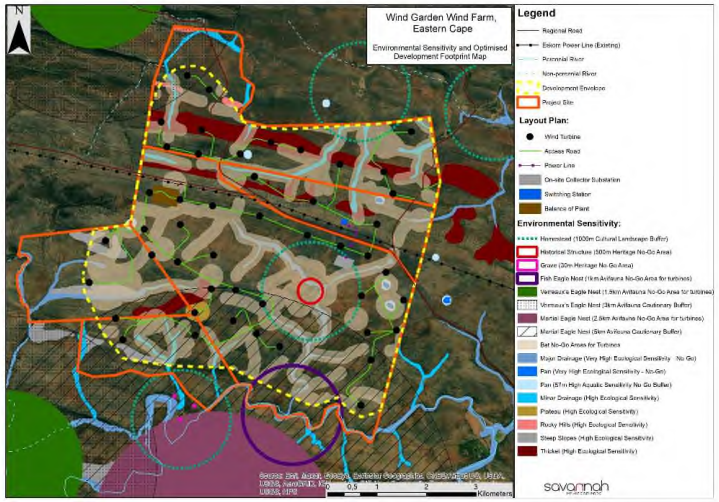

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
	  • Martial Eagle nests – 2.5km no go and 5km cautionary buffer
	  • Other large eagle nests – 1km no go buffer

Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of moderate/medium and low and very low sensitivity have been identified

Heritage resources	• Five (5) heritage sites identified
	• One (1) site contains graves
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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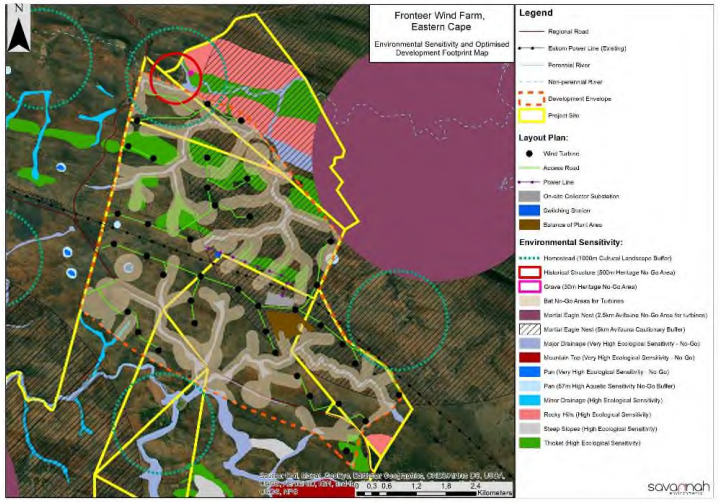

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RESULTS – DIRECT & INDIRECT IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Construction Phase	Operation Phase
Ecology	Medium and Low	Low
Aquatic Ecology	Low	Low
Avifauna	Medium and Low	Low
Bats	Low	Low
Land Use, Soil & Agriculture	Medium and Low	Medium and Low
Heritage (archaeology & palaeontology) Heritage (Cultural landscape)	Low Medium	Low Medium
Noise	Low	Low
Visual	Medium	High, Medium and Low
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Low	Minimal

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RESULTS – CUMULATIVE IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Project on its own	Project together with other similar developments
Ecology	Low	Medium
Aquatic Ecology	Low	Medium
Avifauna	Low	Medium
Bats	Medium	Medium
Land Use, Soil & Agriculture	Low	Low
Heritage (archaeology & palaeontology)	Low	Low
Heritage (cultural landscape)	High	High
Noise	Low	Low
Visual	High	High
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Medium	Low

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CONCLUSION AND RECOMMENDATIONS

- Projects are well aligned with the national, provincial and local policy framework
- From a biodiversity perspective, location of infrastructure considered acceptable
- Optimised layout proposed ensures that all aquatic, avifauna and bat sensitivities identified are avoided and recommended buffer areas are honoured
- Where impacts could not be avoided, appropriate mitigation has been proposed to minimise impacts

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CONCLUSION AND RECOMMENDATIONS

- Socio-economic impacts of the proposed wind farms on the surrounding game farms expected to be negative
- Benefits of the two projects are expected to occur at a national, regional and local level
- Costs to the environment at a site-specific level have been largely limited through the layout optimization
- The benefits of the project are expected to partially offset the localised environmental costs of the wind farm
- Based on the conclusions of the specialist studies, it is concluded that the development of the projects will not result in unacceptable environmental impacts (subject to the implementation of the recommended mitigation measures).

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WAY FORWARD

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WAY FORWARD

- Revised Basic Assessment Reports review and comment period: **21 June 2021** until **21 July 2021** (can be downloaded from the Savannah Environmental website)
- Our Public Participation team is available to answer any questions
- Meeting notes to be distributed
- Final BA Reports to be submitted to DFFE for decision-making at end-July 2021 (in terms of regulated timeframe)

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WHO TO CONTACT FOR FURTHER INFORMATION

Savannah Environmental (Pty) Ltd
Nicolene Venter
Email: publicprocess@savannahsa.com
PO Box 148, Sunninghill, 2157
Tel: 011 656 3237
Mobile: 060 978 8396
Fax: 086 684 0547
www.savannahSA.com

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Savannah Environmental (Pty) Ltd | Directors: KM Jodas, J Thomas, M Matsabu
Company Reg No.: 2006/000127/07
VAT Reg No.: 4780226736

BASIC ASSESSMENT AND PUBLIC PARTICIPATION PROCESSES FOR THE PROPOSED WIND GARDEN WIND FARM AND FRONTEER WIND FARM NEAR MAKHANDA, EASTERN CAPE PROVINCE

(DFFE Ref. No.: 14/12/16/3/3/1/2314 and 14/12/16/3/3/1/2315 respectively)

MEETING NOTES OF FOCUS GROUP MEETING WITH EASTERN CAPE DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT AFFAIRS AND TOURISM HELD ON TUESDAY, 14 JULY 2021 AT 14H00 VENUE: MICROSOFT TEAMS, VIRTUAL MEETING

Meeting notes prepared by:

Nicolene Venter
Savannah Environmental (Pty) Ltd
E-mail: publicprocess@savannahsa.com

Please note that these notes are not verbatim, but a summary of the comments submitted at the meeting. Please address any comments to Savannah Environmental at the above address

WIND GARDEN WIND FARM AND FRONTEER WIND FARM PROPOSED DEVELOPMENTS NEAR MAKHANDA, EASTERN CAPE PROVINCE

MEETING ATTENDEES

Captured alphabetically according to surname

Name	Position	Organisation
Div de Villiers	Manager: Environmental Compliance	DEDEAT
Dayalan Govender	Regional Manager	DEDEAT
Alistair McMaster	Manager	DEDEAT
Hylton Newcombe	Director	Wind Relic
Carla Strydom		Earth and Wire
Savannah Environmental		
Jo-Anne Thomas	Environmental Assessment Practitioner	
Nicolene Venter	Public Participation and Social Consultant	

Nicolene Venter welcomed the attendees at the Focus Group Meeting (FGM) for the Wind Garden and Fronteer Wind Farms located near Makhanda within the Makado Local Municipality, Sarah Baartman District Municipality, Eastern Cape Province.

Jo-Anne Thomas presented the following:

- project description for the Wind Garden Wind Farm and the Fronteer Wind Farm;
- the Basic Assessment (BA) and public participation processes followed to date;
- the environmental studies undertaken;
- key summary of the results of the various environmental studies undertaken for inclusion in the Revised BA Reports;
- summary of the cumulative impacts; and
- the way forward after the meeting.

Nicolene Venter informed the participants that the review and comment period for the BA Reports would end on Wednesday, 21 July 2021.

A copy of the virtual participants' attendance is attached as **Appendix A** and the presentation is attached as **Appendix B** to the meeting notes.

DISCUSSION SESSION (including those submitted on the MS Teams conversation platform)

Comments captured per participants and in alphabetical order

Question / Comment	Response
Div de Villiers	
Raised concerns that Andries Struwig, Siya Gqalangile and Rory Haschick were not part of the meeting.	The comment was noted and it can be confirmed that the Officials mentioned have been invited to the meeting.
Sensitivity relating to game farms and tourism areas is obviously going to be one of the key factors which is going to result in comments. What is the distance of turbines to game farms in the area? There have been a number of meetings with game farmers and the ecotourism fraternity in the past with the Department and with wind farm developers where these concerns were raised at an early stage. Have these been taken into account?	Jo-Anne Thomas responded that Kwandwe Private Game Reserve is an adjacent landowner and have been involved in the process from the beginning of the process. They have raised a number of comments which have been taken into consideration in the socio-economic study. The developer has been engaging with the affected parties in terms of the impacts in order to understand the impacts.
What is the distance from Kwandwe?	Jo-Anne Thomas responded that in terms of where their activities are located, these are beyond 10km. Hylton Newcombe confirmed that the houses and lodges are about 15km from the boundary of Kwandwe. The closest vantage point taken for the VIA was 12km looking back at the ridge line separating the wind farm and Kwandwe. Jo-Anne Thomas added that the visual report includes the effect of distance on impacts. The VIA would provide an indication of location of the sensitive areas.
There are also a number of other game reserves and game farms in the area, and the Great Fish River Nature Reserve. The visual impact is going to be one of the big things in this area. This seems to clash with the REDZ in some areas. Hope that there is sufficient mitigation and sufficient effort to ensure that the game reserves and eco-tourism sectors were taken into account and minimise impacts on their future business and the economy based on that form of business for the Eastern Cape.	It was detailed in the presentation that the socio-economic impact assessment considered the impact of the project on the game farming and eco-tourism industry, and that the study concluded that the impact is expected to be negative.
Please provide more information regarding the mitigation especially around the eco-tourism and game farm facilities and the impacts on the economy in this regard. In terms of the impact on night skies, this is one of the biggest things that the DEDEAT have heard from other similar projects. In addition, any environmental benefits that the projects are looking at giving in terms of mitigation.	Jo-Anne Thomas responded that in terms of the impacts of night lighting, the developer is committed to minimising the impacts and one of the measures recommended is the needs-based lighting which is activated by pilots. This is a technology being considered in South Africa. This would significantly reduce the impacts of the night lighting. In terms of the benefits to the environment. The developer is looking at specifically providing inputs into biodiversity conservation in the area. There is a

Question / Comment	Response
	framework included in the BA Report in this regard. In addition, the developer is committed to pro-active mitigation in terms of avifauna, such as shut-down on demand. The developer is discussing with the affected game farmers and tourism facilities to identify where inputs can be provided to benefit the surrounding area and the conservation efforts being undertaken.
Pro-active mitigation and on-demand lighting is considered very positive, but must be implemented.	Hylton Newcombe responded that the pilot-activated night lights is a non-negotiable mitigation. This is stated as such in the report. The CAA has indicated that they are taking it into consideration in terms of implementation. In terms of biodiversity, a conservation framework has been put forward to Kwandwe and the other game farms in the area which the developer is hoping to get constructive feedback on. In addition, the developer is partnering with EWT to help manage with the biodiversity and linking up with biodiversity corridors as positive spinoffs from the wind farm for management going forward.
The fact that it is non-negotiable for night lights to only come on demand is encouraging as is the undertaking to contribute to biodiversity conservation in the area in collaboration with EWT and surrounding game reserves.	The comment was noted.
Dayalan Govender	
Was placement of the wind turbines determined utilising the screening tool compiled by DFFE?	Jo-Anne Thomas responded that the specialist studies considered the screening tool and also considered specific sensitivities on the site.
Was the screening tool used to allocate the placement of structures in a manner that would reduce the areas of sensitivity?	Jo-Anne Thomas responded that the requirements for the specialist studies were informed by the screening tool.
Did the screening tool look at the entire site?	Jo-Anne Thomas confirmed that this was the case.
Did you not look at what the impact would be for each component? When DEDEAT was taken through training on the screening tool by the national office, they used a wind turbine project and demonstrated that a determination of placement could be made of the turbines using the screening tool.	Jo-Anne Thomas responded that in terms of the approach to the project, the specialists looked at a bigger site as a starting point in order to identify sensitivities and inform the placement of the infrastructure. The information within the screening tool is based mainly on desktop information. Although this was used as a starting point and the specialists did consider the information, the sensitivities identified on the site are based on detailed fieldwork and monitoring where required.
Why is there a turbine placed in the CBA1 area? A CBA is an area which should not be lost.	Jo-Anne Thomas responded that the placement of the turbines also considers the technical considerations of the site. The ecologist determined a limit of acceptable loss in the CBA1 and CBA2 areas and determined that the placement of the turbines in these areas was considered to be acceptable.

Question / Comment	Response
What is the economical threshold for the project to be sustainable?	Hylton Newcombe responded that the project is proposed to provide electricity to the grid and also to produce methanol and green hydrogen together with Enertrag. In the short-term, the intention is to only install around 100MW capacity. Using a 4MW turbine, this equates to about 24 turbines. The turbine within the CBA area is therefore not mandatory for the feasibility of the project.
From an assessment perspective, if the turbine within the CBA can be lost and not affect the sustainability of the project, that would be ideal. Once a CBA is disturbed then there is the opportunity for the area to be completely eroded.	The comment was noted and will be discussed with the ecologist.
In terms of avifauna, were only the nests considered? Were the areas of foraging considered?	Jo-Anne Thomas responded that the monitoring considered the flight paths of the birds as well as the nests. The buffers are around the nests, but the placement of the turbines was informed by any flight paths identified. In terms of the sensitive species identified, being the Verreaux's Eagle and the Martial Eagle, these buffers are the areas where these birds are active in relation to their nests, as observed during the onsite monitoring. The buffers are proposed in order to minimise the collision risk.
Has the avifauna specialist considered the potential once a structure is introduced outside the buffers as to whether these would influence the prey species.	Hylton Newcombe responded that there was 18 months of monitoring with vantage point monitoring covering 80% of the site. There has been collaboration with EWT (Dr Gareth Tate). The Verreaux's Eagles activity was not close to any of the infrastructure within the area and the infrastructure is not located in any habitat for the prey items for these birds. For the Martial Eagles, the activity fitted the existing EWT model with their 17 GPS tracked Martial Eagles (non-nomadic and nomadic birds). The recommendation includes a 2.5km no-go buffer as seen on the models from EWT, and also a precautionary buffer included.
Considering how animals would behave once the system is modified. The species will respond to a pristine situation and a species will respond to a modified situation. There was a study done where it was found that dassies started congregating around the bases of turbines. This also resulted in a change in the behaviour of the predators.	Jo-Anne Thomas responded that there has been a lot of data collected in the country from operating wind farms. Data may be available to inform a response. The avifauna specialist will be requested to consider the query and their response will be forwarded.
What socio-economic development spinoffs are seen for the project? Have seen a number of projects set up in the region. The construction phase is a very busy phase with many job opportunities. What are the long-term benefits for the district from a job creation perspective?	Hylton Newcombe responded that a joint collaboration meeting has been arranged with the Makana Municipality and the Sarah Baartman District Municipality to discuss a collaboration framework with beneficiaries, etc and how to set up correct measures and processes for the SED. He added that Wind Relic has also had a meeting with the LED Portfolio Committee meeting with the various councillors. In addition, a working conservation

Question / Comment	Response
	framework has been given to Kwandwe, etc, asking for constructive input on how the developer can have a working mutualist relationship with them as part of the SED/ED spinoff. Nothing is being proposed by the developer, but are rather asking for constructive inputs from those who would be the beneficiaries in terms of what the development can offer.
Have the dust implications of the batching plant been looked at?	Jo-Anne Thomas responded that there was not a specialist study considering dust taking the location of the site into consideration. The EMPr does include mitigation for the management of dust and there is a specific objective for the management of the batching plant to ensure minimisation of dust associated therewith.
What is the water source?	Jo-Anne Thomas responded that the proposal is to use groundwater. She added that there was a feasibility undertaken in terms of the use of ground water and it was indicated that there would be sufficient water. The developer has also commenced with a Water Use License Application process, which would include more detailed studies as required by Water Affairs.
Is there potential to have to treat the water before use?	Hylton Newcombe confirmed that water treatment would need to be considered.
Will there be any triggers associated with the water treatment?	Jo-Anne Thomas responded that there should not be any triggers as the volumes would not exceed 2Ml/day as per the Regulations.
In terms of traffic impact it is assumed that it is the intention to move the components from the Port of Ngqura to the site. Will new roads be constructed or will roads be expanded? If roads are being expanded what is the implication in terms of runoff and erosion.	Jo-Anne Thomas replied that existing roads would be used as far as possible. Where new roads are required or, where widening of roads are required, there are specific mitigations included in the report and EMPr in terms of erosion management (including implementation of erosion management structures and ongoing monitoring)
Will roads be mainly onsite? Is there any envisaged change to provincial roads in the area? The provincial roads department is worried about the impact of heavy vehicles on the infrastructure.	Hylton Newcombe noted the comment regarding the concerns from the provincial roads department. He indicated that within the development area, the developer will be responsible for road maintenance and upkeep. There will not be a laydown area within the site. The components will be transported directly to the platform area in order to minimise the development area. The platform would be 60m x 70m. There will not be a separate logistics area on site for the different turbine components.
What percentage of local content will be in the project?	Hylton Newcombe responded that the local content will be in line with the REIPPP Programme, even though the developer in not taking part in the REIPPP Programme.

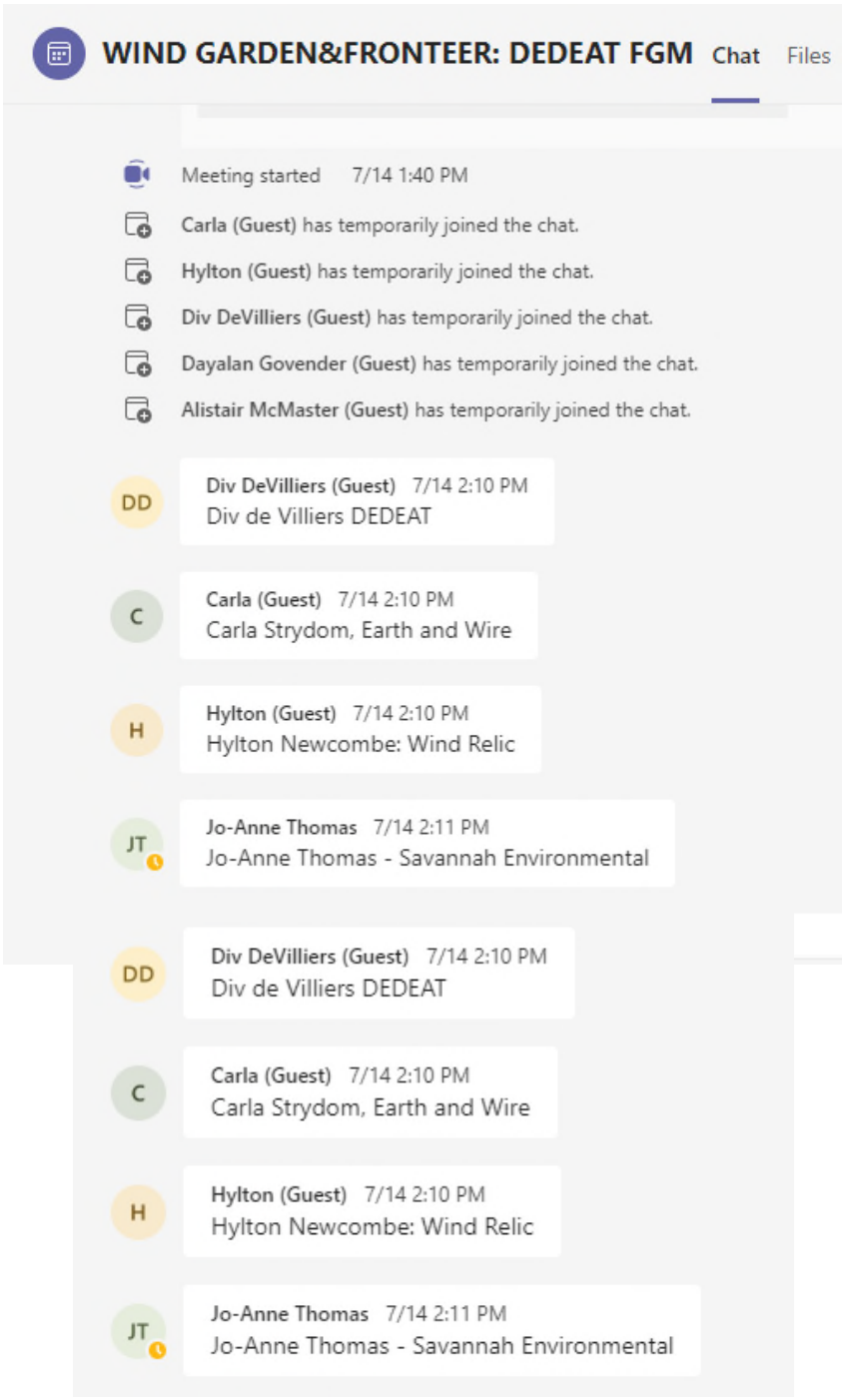
Question / Comment	Response
	Nicolene Venter added that the SED information is included in the socio-economic impact assessment. Carla Strydom added that the local content threshold for wind in REIPPP is 40%.
How reliant is the developer on the Makana Municipality for anything for this project? Is there any planning approvals required? The Makana Municipality is practically non-functional and there have been moved to have the council dissolved. This should be factored into any project management requirements.	Jo-Anne Thomas responded that in terms of the EIA, only comments from the municipality are required. Further permits and approvals will come as part of the Town Planning process which usually follows after the impact assessment.
Alistair McMaster	
Please explain how the screening tool works. If I understand it correctly, the screening tool triggers the kinds of specialist studies that need to take place and that is where the screening tool stops and the specialist studies start.	Jo-Anne Thomas responded that the understanding is correct. She indicated that the screening tool works together with the specialist protocols. The screening report is drawn on the basis of the properties proposed for the project. The screening report indicates the specialist studies required and the aspects of the environment and the sensitivities. Sensitivities range from very high to low or none. The specialist protocols then detail what level of specialist study is required.

CLOSURE

Nicolene Venter thanked the participants for making time available to attend the public meeting and for their valuable inputs into the process. The meeting was closed at 15h30.

APPENDIX A: Proof of Attendance

MS Teams screen shots



APPENDIX B: Presentation

Wind Garden Wind Farm and Fronteer Wind Farm, Eastern Cape Province

Focus Group Meeting
Eastern Cape Department of Economic Development, Environmental Affairs and Tourism

Wednesday, 14 July 2021

Revised Basic Assessment Report

1

AGENDA

- Welcome and introduction
- Meeting conduct
- Purpose of the Meeting
- Project description
- BA process
- Results as documented in the Revised BAR
- Way forward

2

MEETING CONDUCT

- Recording of the meeting
- Please mute while presentation is presented
- Please type your name in the message box as proof of attendance
- Questions and comments can be submitted on the chat function during the presentation – team will respond after presentation
- Please hold all verbal questions until after presentation
- Please raise your hand (virtual function) to ask a question

3

PURPOSE OF THE MEETING

- Provide stakeholders and I&APs with an overview of the proposed project
- Summary of the BA and PP process
- Present a summary of key environmental findings as documented in the Revised BARs
- Opportunity for you to seek clarification and obtain further information
- Obtain and record comments for inclusion in the final BA reports to be submitted to DFFE

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PROJECT OVERVIEW

(Jo-Anne Thomas)

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PROJECT DESCRIPTION

Wind Garden Wind Farm		Fronteer Wind Farm	
Applicant	Wind Garden (Pty) Ltd	Applicant	Fronteer (Pty) Ltd
Location	17km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ	Location	12km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ
Contracted Capacity	264MW	Contracted Capacity	213MW
Infrastructure details	47 wind turbines - Hub height of up to 120m - Tip height up to 200m	Infrastructure details	38 wind turbines - Hub height of up to 120m - Tip height up to 200m
	Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line		Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line
	Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,		Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,

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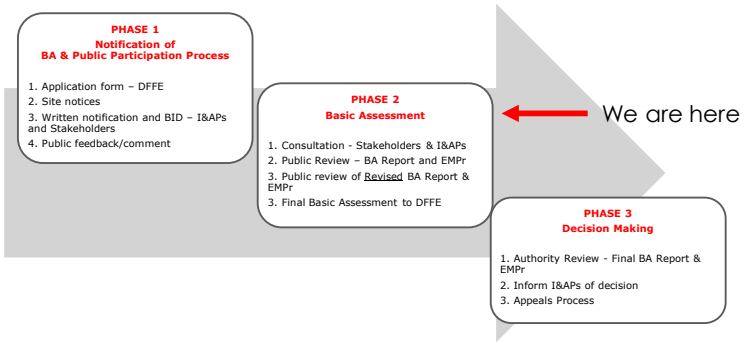
BA PROCESS & PUBLIC INVOLVEMENT



7

SPECIALIST STUDIES

Specialist	Field of study
Simon Todd of 3foxes Biodiversity Solutions	Terrestrial Ecology (including fauna and flora)
Adri Barkhuysen of East Cape Diverse Consultants and Dr Steve Percival of Ecology Consulting and Peer Review by Owen Davies of Arcus Consultancy Services South Africa	Avifauna (including monitoring)
Michael Brits and Mark Hodgson of Arcus Consultancy Services South Africa	Bats (including monitoring)
Dr Brian Colloty of EnviroSci	Aquatic
Dr Brian Colloty of EnviroSci	Soil, Land Use, Land Capability and Agricultural Potential
Cherene de Bruyn and Wouter Fourie of PGS Heritage, Elize Butler of Banzai Environmental and Emmylou Bailey of Hearth Heritage	Heritage (including archaeology, palaeontology and cultural landscape)
Morné de Jager of Enviro Acoustic Research (EAR)	Noise
Lourens du Plessis of LOGIS	Visual
Matthew Keeley of Urban Econ	Socio-economic
Lourens du Plessis of LOGIS	Traffic

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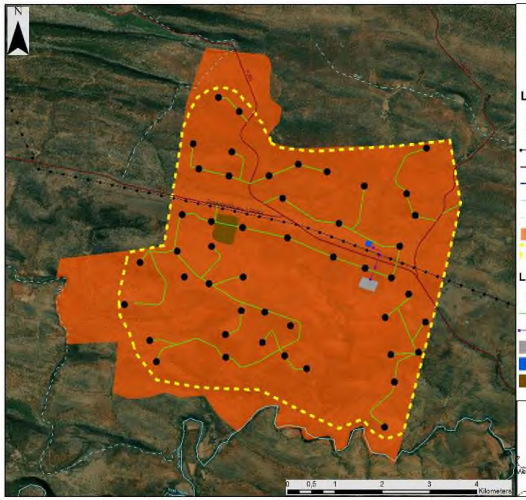

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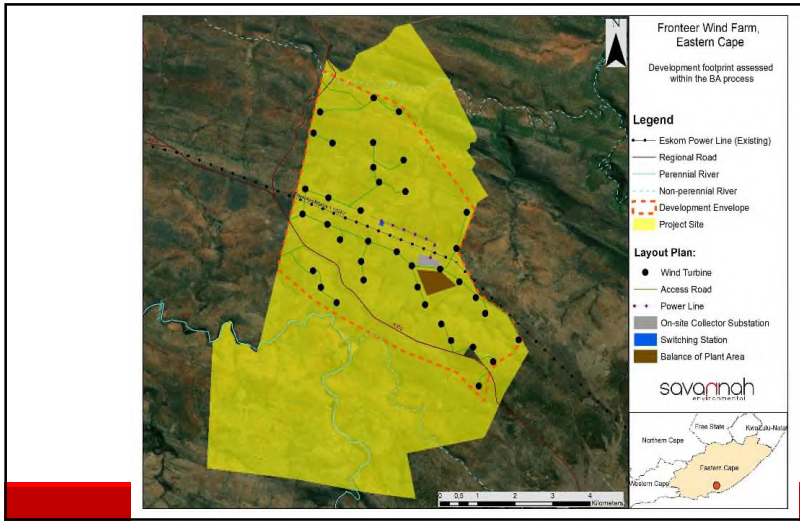

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA1 and CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
	  • Martial Eagle nests – 2.5km no go and 5km cautionary buffer
	  • Other large eagle nests – 1km no go buffer

Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of high, moderate/medium and low and very low sensitivity have been identified

Heritage resources	• The ruins of one (1) house (EWF1-07) identified to be a low heritage significance.
	• A farmstead (EWF1-04) identified to be of a medium heritage significance.
	• Three (3) burial grounds (EWF1-10 – EWF1-12) identified to be of a high heritage significance.
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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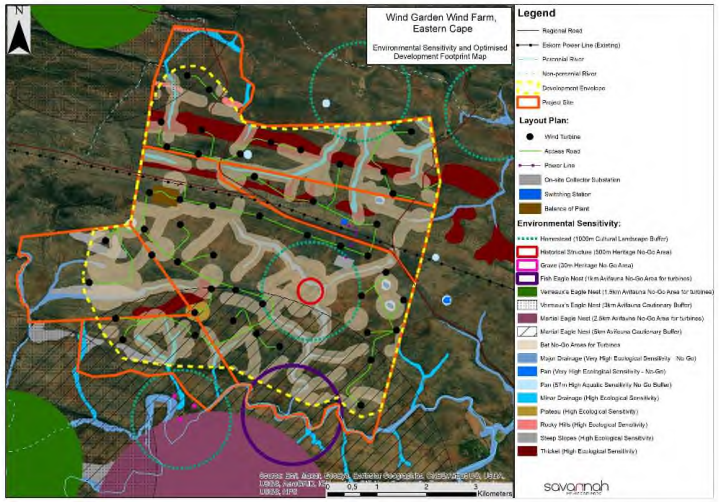

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
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	  • Other large eagle nests – 1km no go buffer

Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of moderate/medium and low and very low sensitivity have been identified

Heritage resources	• Five (5) heritage sites identified
	• One (1) site contains graves
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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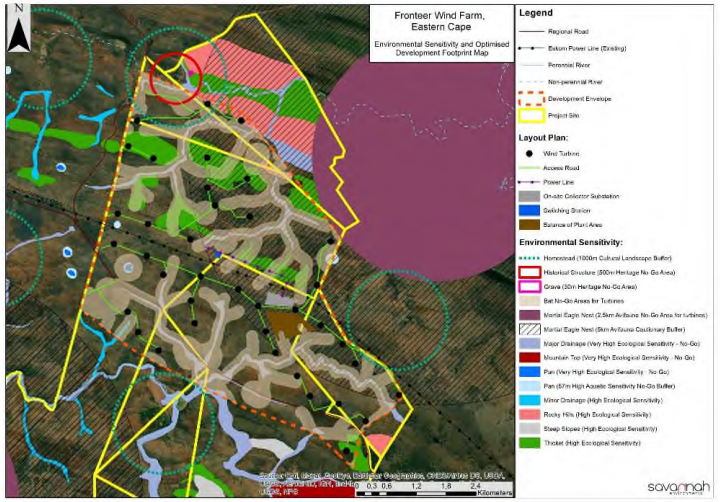

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RESULTS – DIRECT & INDIRECT IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Construction Phase	Operation Phase
Ecology	Medium and Low	Low
Aquatic Ecology	Low	Low
Avifauna	Medium and Low	Low
Bats	Low	Low
Land Use, Soil & Agriculture	Medium and Low	Medium and Low
Heritage (archaeology & palaeontology) Heritage (Cultural landscape)	Low Medium	Low Medium
Noise	Low	Low
Visual	Medium	High, Medium and Low
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Low	Minimal

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RESULTS – CUMULATIVE IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Project on its own	Project together with other similar developments
Ecology	Low	Medium
Aquatic Ecology	Low	Medium
Avifauna	Low	Medium
Bats	Medium	Medium
Land Use, Soil & Agriculture	Low	Low
Heritage (archaeology & palaeontology)	Low	Low
Heritage (cultural landscape)	High	High
Noise	Low	Low
Visual	High	High
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Medium	Low

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CONCLUSION AND RECOMMENDATIONS

- Projects are well aligned with the national, provincial and local policy framework
- From a biodiversity perspective, location of infrastructure considered acceptable
- Optimised layout proposed ensures that all aquatic, avifauna and bat sensitivities identified are avoided and recommended buffer areas are honoured
- Where impacts could not be avoided, appropriate mitigation has been proposed to minimise impacts

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CONCLUSION AND RECOMMENDATIONS

- Socio-economic impacts of the proposed wind farms on the surrounding game farms expected to be negative
- Benefits of the two projects are expected to occur at a national, regional and local level
- Costs to the environment at a site-specific level have been largely limited through the layout optimization
- The benefits of the project are expected to partially offset the localised environmental costs of the wind farm
- Based on the conclusions of the specialist studies, it is concluded that the development of the projects will not result in unacceptable environmental impacts (subject to the implementation of the recommended mitigation measures).

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WAY FORWARD

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WAY FORWARD

- Revised Basic Assessment Reports review and comment period: **21 June 2021** until **21 July 2021** (can be downloaded from the Savannah Environmental website)
- Our Public Participation team is available to answer any questions
- Meeting notes to be distributed
- Final BA Reports to be submitted to DFFE for decision-making at end-July 2021 (in terms of regulated timeframe)

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WHO TO CONTACT FOR FURTHER INFORMATION

Savannah Environmental (Pty) Ltd
Nicolene Venter
Email: publicprocess@savannahsa.com
PO Box 148, Sunninghill, 2157
Tel: 011 656 3237
Mobile: 060 978 8396
Fax: 086 684 0547
www.savannahSA.com

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Savannah Environmental (Pty) Ltd | Directors: KM Jodas, J Thomas, M Matsabu
Company Reg No.: 2006/000127/07
VAT Reg No.: 4780226736

BASIC ASSESSMENT AND PUBLIC PARTICIPATION PROCESSES FOR THE PROPOSED WIND GARDEN WIND FARM AND FRONTEER WIND FARM NEAR MAKHANDA, EASTERN CAPE PROVINCE

(DFFE Ref. No.: 14/12/16/3/3/1/2314 and 14/12/16/3/3/1/2315 respectively)

MEETING NOTES OF FOCUS GROUP MEETING WITH MAKANA LOCAL MUNICIPALITY
HELD ON TUESDAY, 20 JULY 2021 AT 09H00
VENUE: MICROSOFT TEAMS, VIRTUAL MEETING

Meeting notes prepared by:

Nicolene Venter
Savannah Environmental (Pty) Ltd
E-mail: publicprocess@savannahsa.com

Please note that these notes are not verbatim, but a summary of the comments submitted at the meeting. Please address any comments to Savannah Environmental at the above address

WIND GARDEN WIND FARM AND FRONTEER WIND FARM PROPOSED DEVELOPMENTS NEAR MAKHANDA, EASTERN CAPE PROVINCE

MEETING ATTENDEES

Captured alphabetically according to surname

Name	Position	Organisation
Gubevu Maduna	Manager Water Services	Makana Local Municipality
Radu Mzomhle	Deputy Director: Electricity Engineer	Makana Local Municipality
Moppo Menne	Municipal Manager	Makana Local Municipality
Savannah Environmental		
Jo-Anne Thomas (Virtual)	Environmental Assessment Practitioner	
Nicolene Venter	Public Participation and Social Consultant	

Nicolene Venter welcomed the attendees at the Focus Group Meeting (FGM) for the Wind Garden and Fronteer Wind Farms located near Makhanda within the Makado Local Municipality, Sarah Baartman District Municipality, Eastern Cape Province.

Jo-Anne Thomas presented the following:

- project description for the Wind Garden Wind Farm and the Fronteer Wind Farm;
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- the environmental studies undertaken;
- key summary of the results of the various environmental studies undertaken for inclusion in the Revised BA Reports;
- summary of the cumulative impacts; and
- the way forward after the meeting.

Nicolene Venter informed the participants that the review and comment period for the BA Reports would end on Wednesday, 21 July 2021.

A copy of the virtual participants' attendance is attached as **Appendix A** and the presentation is attached as **Appendix B** to the meeting notes.

DISCUSSION SESSION (including those submitted on the MS Teams conversation platform)

Comments captured per participants and in alphabetical order

Question / Comment	Response
Gubevu Maduna	
My understanding in terms of where you are in terms of the programme, the PP is done and looking at the environment effects of the project, there are no disadvantages. From my perspective, this seems to be more of an update than anything else. We are from the technical perspective. In the absence of any specific designs, we will not be able to question anything. As far as I understand where the project	Jo-Anne Thomas replied that the project is currently in the feasibility stage. The detail will still come, and the developer will engage with the municipality as required.

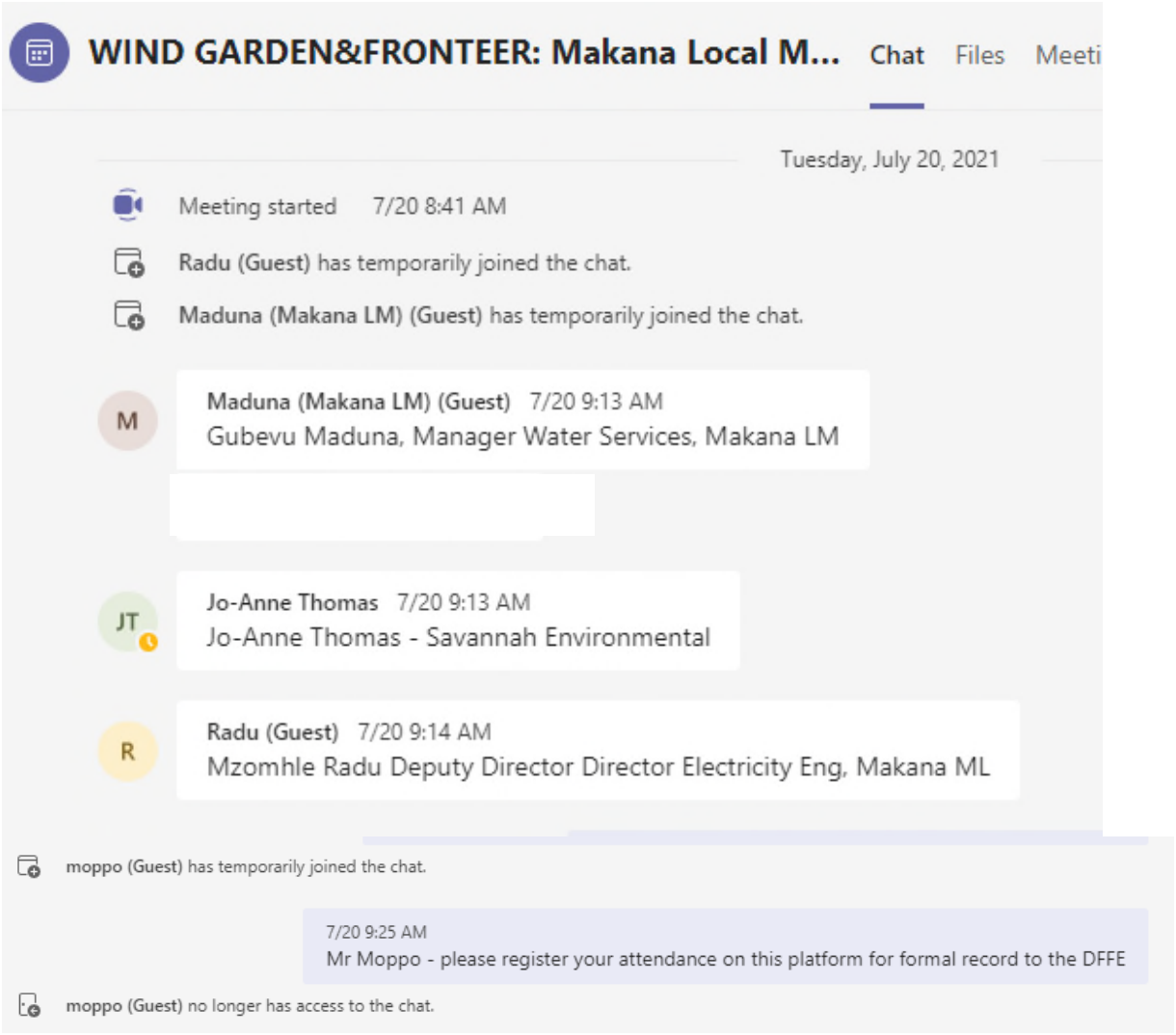
Question / Comment	Response
is now, it is at a stage where you are considering environmental aspects. We are now aware of the project.	
Radu Mzomhle	
In terms of the public participation, it is believed that comments would be submitted by the Department of Agriculture.	Nicolene Venter noted the comment and confirm that the Department is registered on the project database.
What is the lifespan of the wind farm?	Jo-Anne Thomas responded that the lifespan of the project is expected to be 20 years but depending on the need it could be extended. That would be determined at the relevant time.
After the lifespan of the plant will there be a decommissioning stage?	Jo-Anne Thomas responded that there would be decommissioning at the end of life. At the time there may be additional studies and management measures required. This will be determined at the time.
What is the vibration rates for each turbine?	Jo-Anne Thomas responded that that specific information in this regard is not available, but it is expected that there would be limited vibrations considering the extensive foundations for the turbine itself to avoid it from moving too much. Additional information will be requested from the technical team. **Post-meeting note**: The turbine bases are designed to cater for all forces and vibrations which the turbine generates bearing in mind that the load is a dynamic load and significant safety factors are taken into account in the design. The foundations are also designed in such a manner that any movement and settlement is countered.

CLOSURE

Nicolene Venter thanked the participants for making time available to attend the public meeting and for their valuable inputs into the process. The meeting was closed at 09h45.

APPENDIX A: Proof of Attendance

MS Teams screen shots



Wind Garden Wind Farm and Fronteer Wind Farm, Eastern Cape Province

Focus Group Meeting
Makana Local Municipality

Tuesday, 20 July 2021

Revised Basic Assessment Report

1

AGENDA

- Welcome and introduction
- Meeting conduct
- Purpose of the Meeting
- Project description
- BA process
- Results as documented in the Revised BAR
- Way forward

2

MEETING CONDUCT

- Recording of the meeting
- Please mute while presentation is presented
- Please type your name in the message box as proof of attendance
- Questions and comments can be submitted on the chat function during the presentation – team will respond after presentation
- Please hold all verbal questions until after presentation
- Please raise your hand (virtual function) to ask a question

3

PURPOSE OF THE MEETING

- Provide stakeholders and I&APs with an overview of the proposed project
- Summary of the BA and PP process
- Present a summary of key environmental findings as documented in the Revised BARs
- Opportunity for you to seek clarification and obtain further information
- Obtain and record comments for inclusion in the final BA reports to be submitted to DFFE

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PROJECT OVERVIEW

(Jo-Anne Thomas)

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PROJECT DESCRIPTION

Wind Garden Wind Farm		Fronteer Wind Farm	
Applicant	Wind Garden (Pty) Ltd	Applicant	Fronteer (Pty) Ltd
Location	17km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ	Location	12km north-west of Makhanda Makana Local & Sarah Baartman District Municipalities Cookhouse REDZ
Contracted Capacity	264MW	Contracted Capacity	213MW
Infrastructure details	47 wind turbines - Hub height of up to 120m - Tip height up to 200m	Infrastructure details	38 wind turbines - Hub height of up to 120m - Tip height up to 200m
	Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line		Grid: - 132kV switching station & 132/33kV on-site collector substation - 132kV overhead power line (twin turn dual circuit) - Poseidon – Albany 132kV power line
	Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,		Foundations, hardstands, temporary laydown areas, cabling, access roads, temporary concrete batching plant, temporary staff accommodation and O&M buildings,

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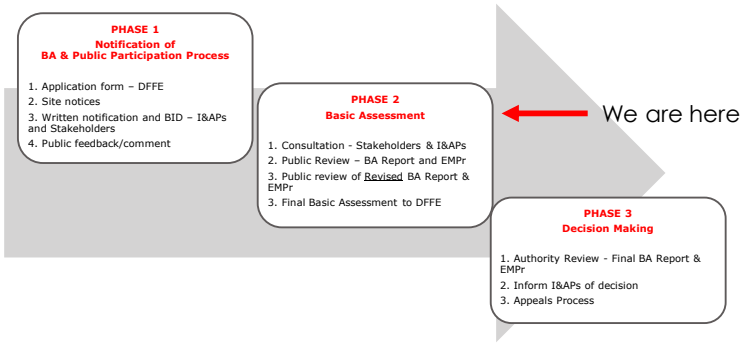
BA PROCESS & PUBLIC INVOLVEMENT



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SPECIALIST STUDIES

Specialist	Field of study
Simon Todd of 3foxes Biodiversity Solutions	Terrestrial Ecology (including fauna and flora)
Adri Barkhuysen of East Cape Diverse Consultants and Dr Steve Percival of Ecology Consulting and Peer Review by Owen Davies of Arcus Consultancy Services South Africa	Avifauna (including monitoring)
Michael Brits and Mark Hodgson of Arcus Consultancy Services South Africa	Bats (including monitoring)
Dr Brian Colloty of EnviroSci	Aquatic
Dr Brian Colloty of EnviroSci	Soil, Land Use, Land Capability and Agricultural Potential
Cherene de Bruyn and Wouter Fourie of PGS Heritage, Elize Butler of Banzai Environmental and Emmylou Bailey of Hearth Heritage	Heritage (including archaeology, palaeontology and cultural landscape)
Morné de Jager of Enviro Acoustic Research (EAR)	Noise
Lourens du Plessis of LOGIS	Visual
Matthew Keeley of Urban Econ	Socio-economic
Lourens du Plessis of LOGIS	Traffic

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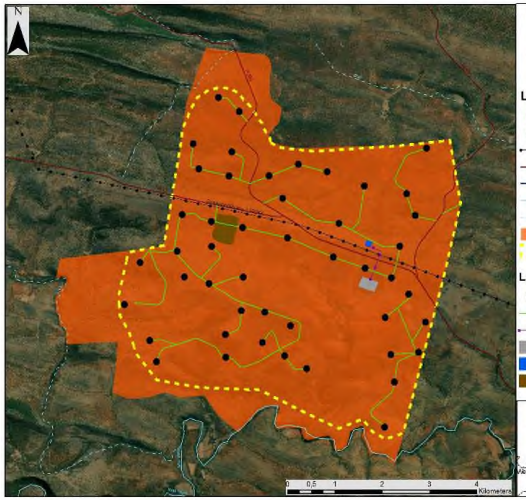

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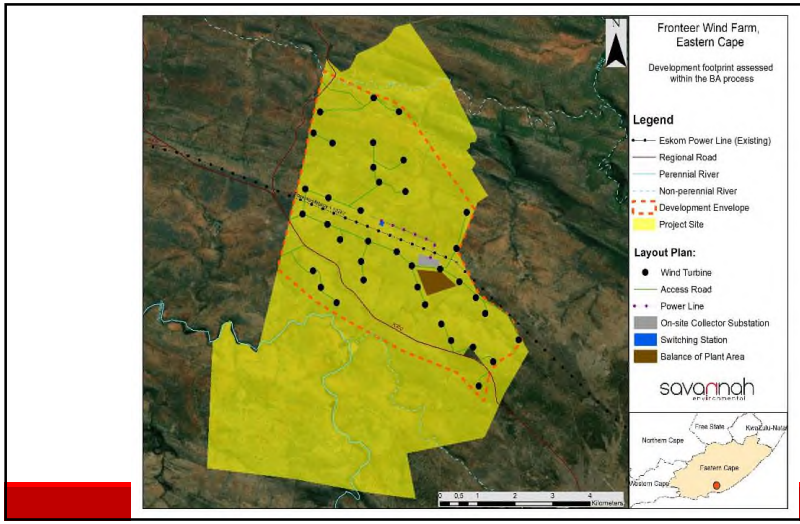

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA1 and CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
	  • Martial Eagle nests – 2.5km no go and 5km cautionary buffer
	  • Other large eagle nests – 1km no go buffer

Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – WIND GARDEN

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of high, moderate/medium and low and very low sensitivity have been identified

Heritage resources	• The ruins of one (1) house (EWF1-07) identified to be a low heritage significance.
	• A farmstead (EWF1-04) identified to be of a medium heritage significance.
	• Three (3) burial grounds (EWF1-10 – EWF1-12) identified to be of a high heritage significance.
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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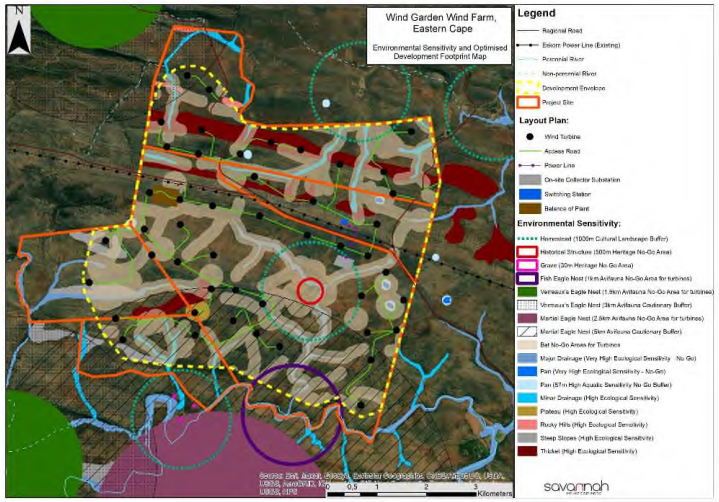

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Terrestrial ecology	• Site comprises mainly ESA with some CBA2 • Drainage features & pans of very high sensitivity • Water features, specific landscape characteristics and habitat of high sensitivity • Hillside area, Thicket habitat, Valley landscapes and lowlands of medium sensitivity
Aquatic ecology	• Wetlands and pans of high sensitivity – 57m buffer • Watercourses of low sensitivity

Avifauna	• Sensitive avifauna species and features identified on the site through 12-months monitoring
	• Buffers recommended to reduce collision
	  • Verreaux's Eagle nests – 1.5km no go and 3km cautionary buffer
	  • Martial Eagle nests – 2.5km no go and 5km cautionary buffer
	  • Other large eagle nests – 1km no go buffer

Bats	• Habitat features present specific uses and opportunities for bats including roosts, foraging resources and commuting resources
	• No go buffers:
	  • drainage areas - 100m to blade tip
	  • Tunnel roost entrance - 2.5km
	  • All other features - 260m to turbine base

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OVERVIEW OF SENSITIVITIES – FRONTEER

Environmental Aspect	Sensitivities and associated buffers
Agriculture	• Areas of moderate/medium and low and very low sensitivity have been identified

Heritage resources	• Five (5) heritage sites identified
	• One (1) site contains graves
	• Buffers:
	  • 500m no-go-buffer-zone - general conservation of the historical farmsteads,
	  • 1000m no-go-buffer-zone from historical farmsteads considering cultural landscape.
	  • 30-meter no-go-buffer-zone - Graves and Burial grounds

Noise	• Noise Sensitive Developments within the site and surrounding area
Visual	• Road users • Residents • Game farms and tourism facilities
Socio-economic	• Game farms • Tourism facilities • Surrounding landowners and occupiers

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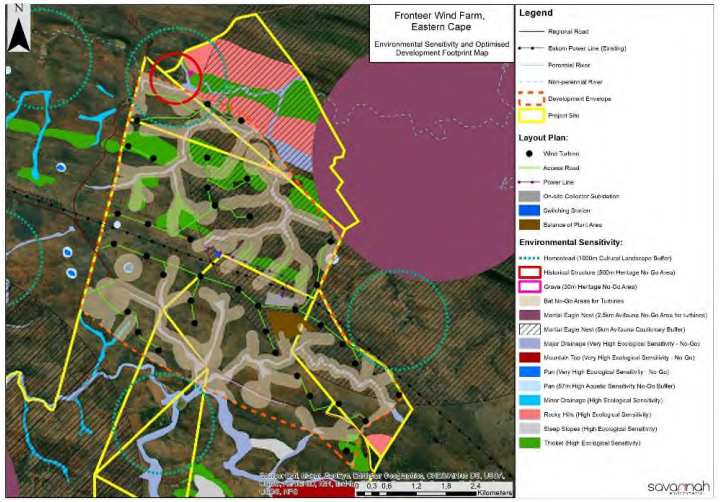

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RESULTS – DIRECT & INDIRECT IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Construction Phase	Operation Phase
Ecology	Medium and Low	Low
Aquatic Ecology	Low	Low
Avifauna	Medium and Low	Low
Bats	Low	Low
Land Use, Soil & Agriculture	Medium and Low	Medium and Low
Heritage (archaeology & palaeontology) Heritage (Cultural landscape)	Low Medium	Low Medium
Noise	Low	Low
Visual	Medium	High, Medium and Low
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Low	Minimal

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RESULTS – CUMULATIVE IMPACTS

Specialist Field	Impact Significance (incl. mitigation)	
	Project on its own	Project together with other similar developments
Ecology	Low	Medium
Aquatic Ecology	Low	Medium
Avifauna	Low	Medium
Bats	Medium	Medium
Land Use, Soil & Agriculture	Low	Low
Heritage (archaeology & palaeontology)	Low	Low
Heritage (cultural landscape)	High	High
Noise	Low	Low
Visual	High	High
Socio-Economic	Positive Impacts: High and Medium	Positive Impacts: High and Medium
	Negative Impacts: Medium and Low	Negative Impacts: Medium and Low
Traffic	Medium	Low

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CONCLUSION AND RECOMMENDATIONS

- Projects are well aligned with the national, provincial and local policy framework
- From a biodiversity perspective, location of infrastructure considered acceptable
- Optimised layout proposed ensures that all aquatic, avifauna and bat sensitivities identified are avoided and recommended buffer areas are honoured
- Where impacts could not be avoided, appropriate mitigation has been proposed to minimise impacts

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CONCLUSION AND RECOMMENDATIONS

- Socio-economic impacts of the proposed wind farms on the surrounding game farms expected to be negative
- Benefits of the two projects are expected to occur at a national, regional and local level
- Costs to the environment at a site-specific level have been largely limited through the layout optimization
- The benefits of the project are expected to partially offset the localised environmental costs of the wind farm
- Based on the conclusions of the specialist studies, it is concluded that the development of the projects will not result in unacceptable environmental impacts (subject to the implementation of the recommended mitigation measures).

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WAY FORWARD

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WAY FORWARD

- Revised Basic Assessment Reports review and comment period: **21 June 2021** until **21 July 2021** (can be downloaded from the Savannah Environmental website)
- Our Public Participation team is available to answer any questions
- Meeting notes to be distributed
- Final BA Reports to be submitted to DFFE for decision-making at end-July 2021 (in terms of regulated timeframe)

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WHO TO CONTACT FOR FURTHER INFORMATION

Savannah Environmental (Pty) Ltd
Nicolene Venter
Email: publicprocess@savannahsa.com
PO Box 148, Sunninghill, 2157
Tel: 011 656 3237
Mobile: 060 978 8396
Fax: 086 684 0547
www.savannahSA.com

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