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Savannah Environmental (Pty) Ltd
Care of Jo-Anne Thomas

Per email: Joanne@savannahsa.com

Dear Jo-Anne

PART 1 AMENDMENT: VISUAL ASSESSMENT

Proposed Sannaspos PV Solar Energy Facility, Free State Province

1. PROJECT TITLE

Proposed Sannaspos PV Solar Energy Facility (SEF) on the Remainder of the Farm Besemkop No. 1808 and the Remainder of the Farm Lejwe No. 2962, Sannaspos, Free State Province

2. BACKGROUND AND PURPOSE OF THE AMENDMENT

Engie Solar is proposing to amend the Environmental Authorisation (EA) for the Sannaspos PV project (DFFE Ref: 14/12/16/3/3/2/360/1 and 14/12/16/3/3/2/360/2) and the EA for its associated grid connection infrastructure by extending the EA validity by an additional two (2) years. Extension of the validity of the EA will ensure that the EA remains valid for the undertaking of the authorised activities. The project is a preferred bidder project under Round 5 of the REIPPPP and construction is planned to commence in the near future following Financial and Commercial Close.

3. ASSESSMENT OF THE PROPOSED AMENDMENT

The reviewer has assessed the proposed amendment to the extension of the validity of the EA and has drawn the following conclusions:

3.1. The Affected Environment

The description of the affected environment, as described in the original VIA report remains unchanged. There have been no change in land use for the proposed development site, no new developments have been constructed on or near the development site, and the land use zonation (agriculture) remains the same.

The above conclusion was verified through consultation with the project proponent and the current land owner(s), as well as the observation of satellite imagery of the study area taken during 2012 and 2023.



Figure 1: Google Earth satellite image October 2012 (proposed PV Facility indicated in yellow).



Figure 2: Google Earth satellite image June 2023 (proposed PV Facility indicated in yellow).

3.2. Terms of reference for the VIA

The terms of reference for the original VIA report (based on the *Guideline for Involving Visual and Aesthetic Specialists in EIA Processes (2005)*), included:

- Description of the site context, location and environmental characteristics.
- Description and categorisation of the proposed project in terms of the set guidelines.
- Identification of main view corridors and preparation of a photographic study and

digital elevation model as basis for the viewshed analysis.

- Undertaking viewshed analysis as a mechanism to identify and select observation points for visual impact assessment of the proposed development.
- Assessment of potential visual impact of proposed development from selected observation points in terms of standard procedure and guidelines.
- Description of measures to mitigate potential detrimental impacts and enhance the potential positive impact of the proposed development.

The following methodology (supplementary/additional to the original VIA report) was undertaken during this Visual Assessment:

- Determine the potential visual exposure of the proposed project infrastructure
- Determine the visual distance/observer proximity to the project infrastructure
- Identify potential sensitive visual receptors and areas of higher viewer incidence
- Determine the visual absorption capacity of the landscape
- Calculate a visual impact index to identify the magnitude of the visual impact on potentially affected areas/receptors
- Determine the significance of the potential visual impact
- Provide mitigation measures to alleviate the potential visual impacts

The above activities and analyses are still relevant in light of the proposed amendment to the extension of the validity of the EA.

3.3. Impact rating assessment and impact mitigation measures

Three dominant *view corridors* were identified (in the VIA report) within the region, namely:

- **N8.** The main movement corridor between Bloemfontein and Maseru and also the alignment of various tourism and heritage routes.
- **S417.** A secondary road between the N8 in the north and the Rustfontein Dam in the south.
- **S418.** A secondary road between Sannaspos in the north and the R702 in the south.

Additional (or selected) *Key Observation Points* (KOPs) included as **Annexure 2** to the VIA report included:

- KOP 1. Located along the N8 highway approximately 3.2km east of the project site.
- KOP 6. Located at the intersection of the S417 and the N8 north of the project site.
- KOP 7. Located at the entrance to the Sannaspos railway station of the N8.
- KOP 10. Located adjacent to the project site along the S417.

Observation points 2 to 5, 8 and 9 are also indicated on the maps in the VIA report, but are not discussed in Annexure 2.

The visual impact analysis of the **original VIA** and *assessment from the relevant observation points in the foreground and middle ground* is summarised as follows:

- Visibility: Medium to low

- Visual exposure: Medium
- Visual absorption capacity: Medium to high
- Visual sensitivity of receptors: Medium
- Visual intrusion: Low
- Significance of impact: Low

Additional potential sensitive visual receptors (and potential magnitude of the impact) identified during **this Visual Assessment** (per the methodology mentioned in the previous section) include:

Potentially **very high** magnitude (receptors located within 1km of the proposed development):

- 1 – S417 Secondary Road (as per the original VIA report)
- 2 – Mamend Homestead

Potentially **high** magnitude (receptors located within 1 - 3km of the proposed development):

- 3 - N8 National Road (as per the original VIA report)

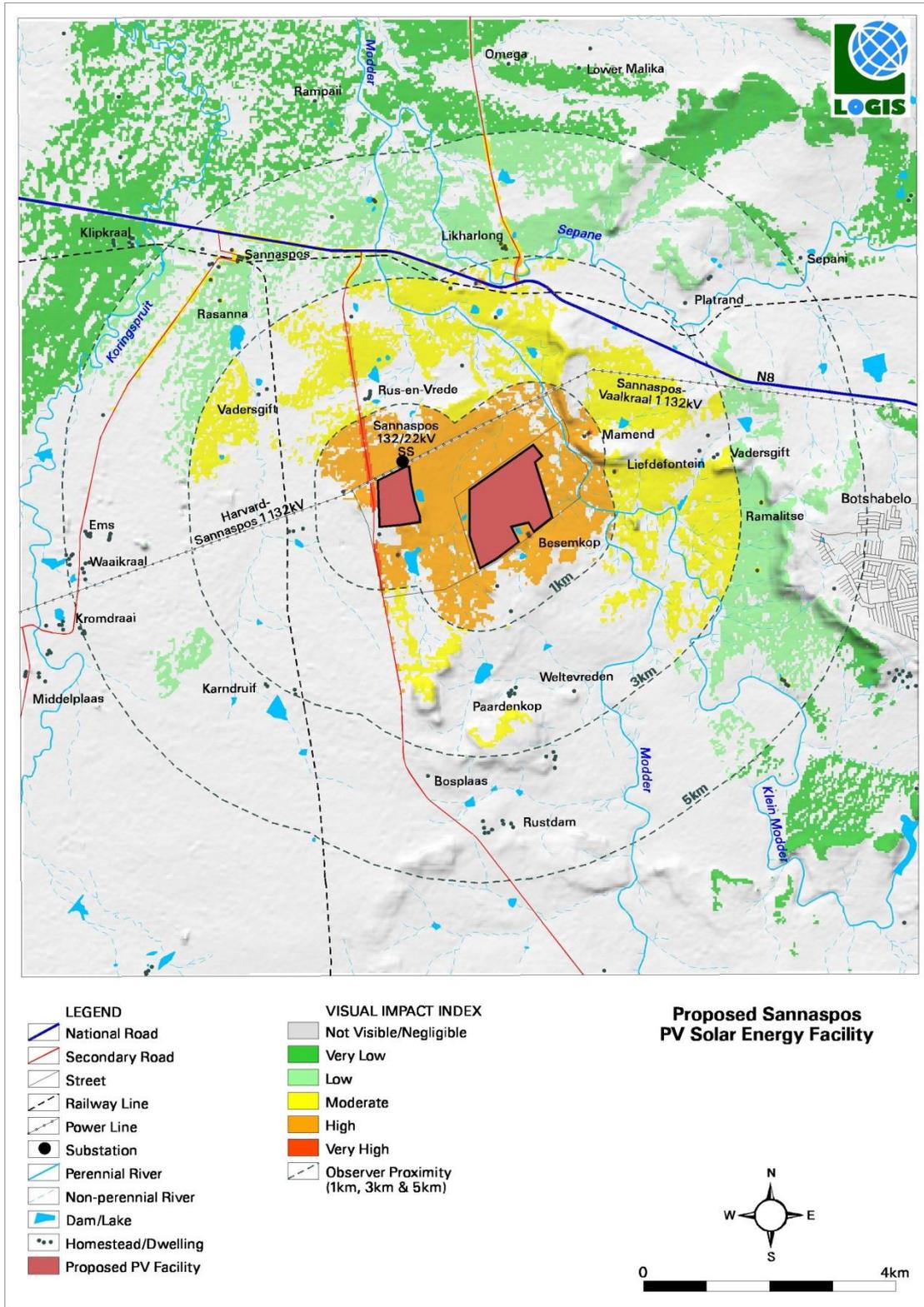
Potentially **moderate** magnitude (receptors located within 3 - 5km of the proposed development):

- 4 – Rasanna Homestead
- 5 - Sannaspos Station and Dwellings (as per the original VIA report)
- 6 - Likhalong Homestead
- 7 - Unknown Homestead 1
- 8 - Unknown Homestead 2

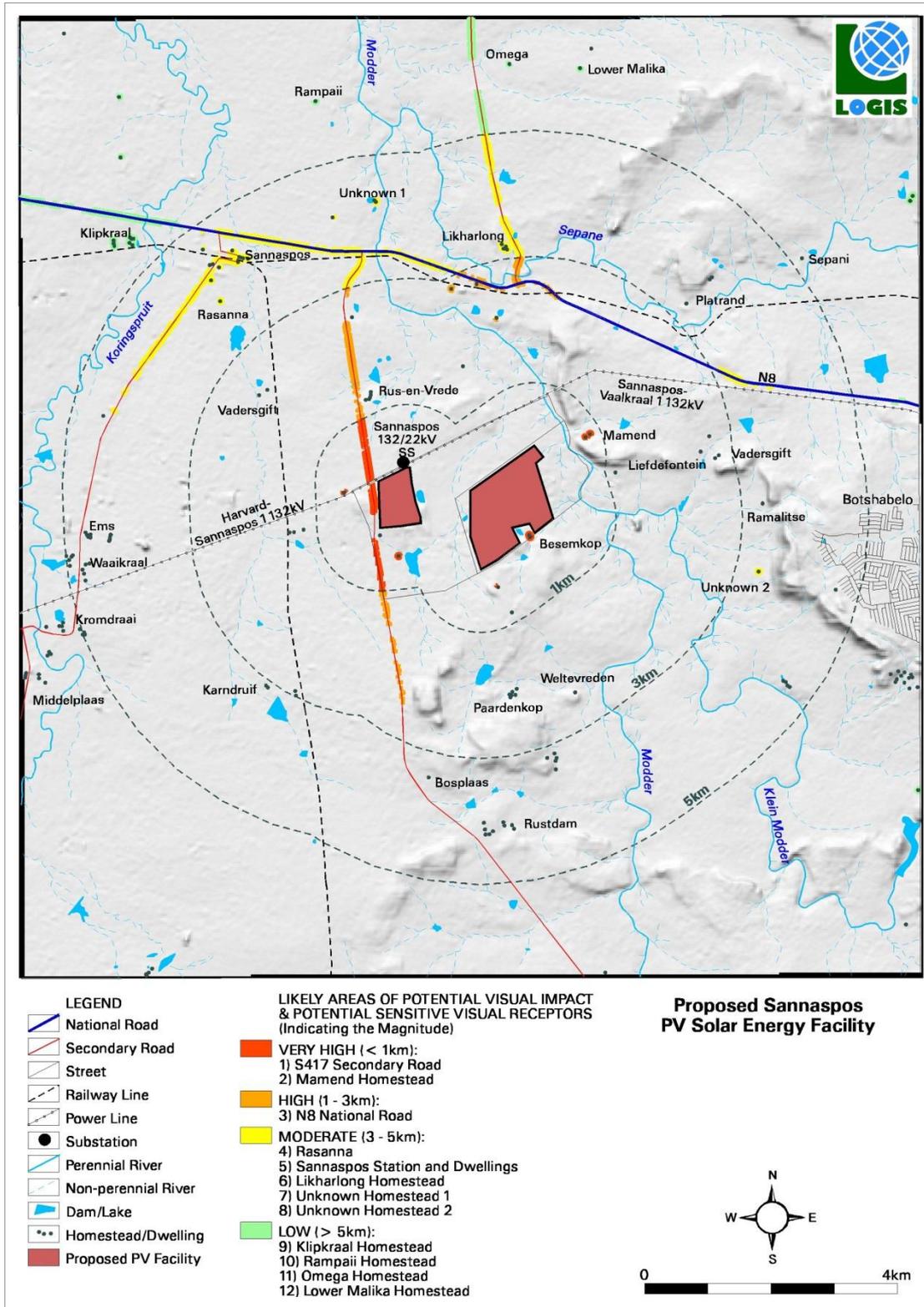
Potentially **low** magnitude (receptors located beyond 5km of the proposed development):

- 9 - Klipkraal Homestead
- 10 - Rampaii Homestead
- 11 - Omega Homestead
- 12 - Lower Malika Homestead

The visual impact index and the receptors mentioned above are indicated on **Maps 1 and 2** below.



Map 1: Visual impact index.



Map 2: Likely areas of potential visual impact and potential sensitive visual receptors.

In spite of the fact that some of the additional receptors sites may experience visual impacts of **very high** to **high** magnitude, these impacts may still only be of **moderate** (medium) significance. This is due to the fact that none of the recipient sites (e.g. adjacent land owners)¹ have objected to the proposed development. The likelihood of the impact

¹ To the author's knowledge and according to the Comments and Responses Report.

occurring is therefore low.

The proposed extension of the validity of the EA by an additional ten years is therefore not expected to alter the influence of the project infrastructure on *areas of higher viewer incidence* (observers traveling along the roads within the region) or *potential sensitive visual receptors* (residents of homesteads in closer proximity to the infrastructure).

The proposed amendment to the validity of the EA is consequently not expected to influence the anticipated visual impact, as stated in the original VIA report (i.e. the visual impact is expected to occur regardless of the amendment). This statement relates specifically to the assessment of the visual impact within a 1km (and potentially up to 3km) radius of the SEF structures (potentially low significance), but also generally apply to potentially *low* to *very low* visual impacts at distances of up to 5km from the structures.

From a visual perspective, the proposed amendment will therefore require no (zero) changes to the significance rating within the original visual impact assessment report that was used to inform the approved EIA. In addition to this, no new mitigation measures are required.

There are no new assessment guidelines which are now relevant to the authorised development which were not undertaken as part of the initial visual impact assessment. Additional to this, and as stated above, there have been no changes to the environment of the region surrounding the proposed development site, or on the farm earmarked for the PV Facility.

3.4. Cumulative visual impact

There are three authorised/approved (not yet constructed) solar energy facility developments within a 30km radius of the proposed Sannaspos PV SEF. These include:

- The Proposed Serurubele Photovoltaic Solar Energy Facility near Bloemfontein within Mangaung Metropolitan in Free State Province
- The Proposed Establishment of a Photovoltaic Solar Plant in Batshabelo, Mangaung Local Municipality, Free State
- The Proposed Establishment of a Renewable Energy Facility (Pulida Solar Farm) on the Remainder of the Farm Klipdrift 20, Letsemeng Local Municipality, Xhariep District Municipality, Free State Province

Notes:

The names above are provided verbatim from the REEA_OR_2022_Q3 database.

The last facility mentioned above appears to be an error in the REEA_OR_2022_Q3 database, as it is not located in the correct local municipality.

The first two facilities are located respectively 22km south-west and 8.2km east of the proposed Sannaspos PV SEF. None of these facilities (i.e. the Sannaspos, Serurubele or Batshabelo SEFs) would be visible from each other. Further to this, the relatively constrained area of potential visual exposure of the Sannaspos development (and the constrained dimensions of the PV arrays) is unlikely to be of high significance in terms of cumulative visual impacts within the larger region.

4. CONCLUSION AND RECOMMENDATIONS

The proposed amendment will require no changes to the impact significance ratings as stated within the original VIA report which was used to inform the approved EIA. In addition to this, no new mitigation measures are required.

It is suggested that the amendment to the validity of the EA be supported, subject to the conditions and recommendations as stipulated in the original EA, and according to the Environmental Management Programme (EMPr) and suggested mitigation measures, as provided in the original VIA report.

5. REFERENCES

Chief Directorate National Geo-Spatial Information, varying dates. *1:50 000 topographical Maps and Data*.

DFFE, 2022. *South African Renewable Energy EIA Application Database (REEA_OR_2022_Q3)*.

Google Earth, 2012 & 2023. *Satellite imagery*.

Oberholzer, B. (2005). *Guideline for involving visual and aesthetic specialists in EIA processes: Edition 1*.

Zone Land Solutions, 2012. *Visual Impact Assessment: Proposed Sannaspos Solar Park, Free State Province*.

Feel free to contact me at any time, should you have any queries.

Kind regards.

A handwritten signature in black ink, appearing to read 'L. du P.' with a flourish at the end.

Lourens du Plessis (PrGISc)