

Division: Civil Engineering
 Your Reference:
 Our Reference: 20060/NH/E01-1
 Date: 17 March 2025

SRK Consulting (South Africa) (Pty) Ltd
 254 Walmer Boulevard
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ATTENTION: Ms. NICOLA RUMP

Dear Ms Rump

BEAUFORT WEST SOLAR PV ENERGY FACILITY: SPECIALIST LETTER OF OPINION FOR EA PART TWO AMENDMENT – TRAFFIC STUDY

The above development refers.

1. INTRODUCTION

Beaufort West Solar PV Energy (PTY) LTD is undertaking a Part Two Amendment to an Environmental Authorisation (EA) for the proposed Beaufort West Solar PV Energy Facility, situated approximately 7 km south of the town of Beaufort West in the Western Cape province. The proposed facility is to have a combined maximum generating capacity of 415 MW. The Part Two Amendment to the EA is required due to proposed changes to the layout after it was finalised and authorised by Department of Forestry, Fisheries and the Environment (DFFE) in 2023.

The letter serves as the specialist letter of opinion on how the proposed amendments to the approved layout affect the traffic study which informed the EA and whether the finding, recommendations and mitigation measures of the original traffic study remain valid and applicable in light of the proposed amendments. The specialist letter of opinion is written by the author of the original traffic study which bears reference herein and is titled **Beaufort West Solar PV Energy Facility Transportation Study - Rev 0** and dated 08 November 2022.

2. REASONS FOR AMENDMENT

It is understood that the reasons for the Part Two Amendment are proposed changes to the approved layout. The approved layout is depicted in Appendix A Figure A while the proposed amended layouts (preferred and alternative) are depicted in Appendix A Figure B and Figure C. The proposed changes are discussed below.

2.1. Solar PV Areas

- The configuration of the solar PV areas has been amended to avoid additional sensitivities while retaining the maximum generation capacity of 415 MW. The re-configuration does not alter the scope of work that in any way that would affect the findings of the original traffic study.

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2.2. On-Site Substation

- The footprint of the on-site substation changes slightly but remain within the approved area of 2 ha. This change is thus deemed to have a negligible impact on the traffic study.

2.3. Laydown Areas

- Additional laydown areas have been introduced. Original laydown areas were approximately 9 ha whereas the latest layout proposed laydown areas of approximately 16.2 ha. The additional laydown areas will increase the volumes of construction traffic.

2.4. Construction Site

- A construction site is included in the updated layout. However, the construction site falls within the footprint of the laydown areas discussed above and therefore does not have an additional impact.

2.5. Road Widths

- The access road width is increased from 6 m to 8 m while internal road widths are increased from 5 m to 6 m. The increased road widths will require additional layerworks and hence will result in increased construction traffic.

2.6. Diesel Storage Area

- On-site diesel storage of less than 30 m³ is proposed. Such storage will require a concrete-surfaced bunded area capable of containing 110% of the stored volume. The requisite bunded area is estimated to be approximately 33 m² (assuming a containment height of 1 m). The materials necessary for the construction of the bunded area will result in a slight increase in construction traffic.

2.7. Additional Guardhouses

- Numerous guard houses are proposed on the facility whose construction will result in a slight increase in construction traffic.

3. SPECIALIST COMMENT

3.1. Previous Key Findings

The material findings of the original Traffic Study are summarised below:

- The proposed development was anticipated to have the greatest traffic impact during the construction phase wherein ± 20 peak-hour trips would be generated over the morning and afternoon peaks. These trips account for the transportation of labour, construction plant, construction materials and wind energy facility components. The nationally accepted trigger for detailed Traffic Impact Assessments is 50 generated peak-hour trips. The traffic generated by the proposed development was estimated to be well below this trigger and was thus considered to be of low impact.
- Access to the site was to be obtained through an existing access point which was assessed and accounted for in the final layout.
- The primary long-distance haulage routes were assessed to emanate from Ngqura, Cape Town and Saldanha Bay and follow a series of national and provincial routes which were observed to be well maintained and in good condition.
- The overall traffic impacts of the proposed development were assessed to be low and the authorisation of the development was recommended.

3.2. Implications of Amendments

3.2.1. Revise Traffic Volumes

As discussed above, the proposed amendments result in an increase in construction traffic and thus necessitate a re-determination of the expected traffic volumes. The revised traffic volumes are tabulated below.

	Construction Phase	O&M Phase	Decommissioning Phase
Original Assessment	± 20	± 8	± 11
Part Two Amendment	± 26	± 8	± 16
Comment	Marginal increase but still below the threshold for a detailed TIA	Unchanged	Marginal increase but still below the threshold for a detailed TIA

3.2.2. Traffic Impacts

- The traffic impacts of the proposed the Beaufort West Solar PV Facility remain low. In terms of TMH 16¹, developments that generate less than 50 peak-hour trips are not required to undertake a detailed Traffic Impact Assessment (TIA). The generated peak-hour traffic for the Beaufort West Solar PV Facility is well below this threshold even after considering the proposed layout changes.
- The cumulative traffic impacts of the proposed amended Beaufort West Solar PV Facility and the surrounding developments also remain low. The findings and recommendations of the original traffic impact assessment in this respect remain valid and applicable.
- The traffic impacts for both the preferred layout and alternative layout are identical and are as assessed above. There is no preference between the two layout alternatives in respect of traffic impacts.

4. CONCLUSION

The traffic impacts of the proposed Beaufort West Solar PV Facility, considering the proposed amendments to the original approved development, remain nominal. The findings, impact rating, mitigation measures, and recommendations of the original traffic assessment remain valid and applicable.

We trust the foregoing is sufficient for your requirements. Should you have further queries or requirements, please do not hesitate to contact the undersigned.

Yours sincerely



Ntuthuko Hlanguza Pr. Eng
Civil Engineer
SIVEST

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¹ TMH 16: South African Traffic Impact and Site Traffic Assessment Manual

Appendix A

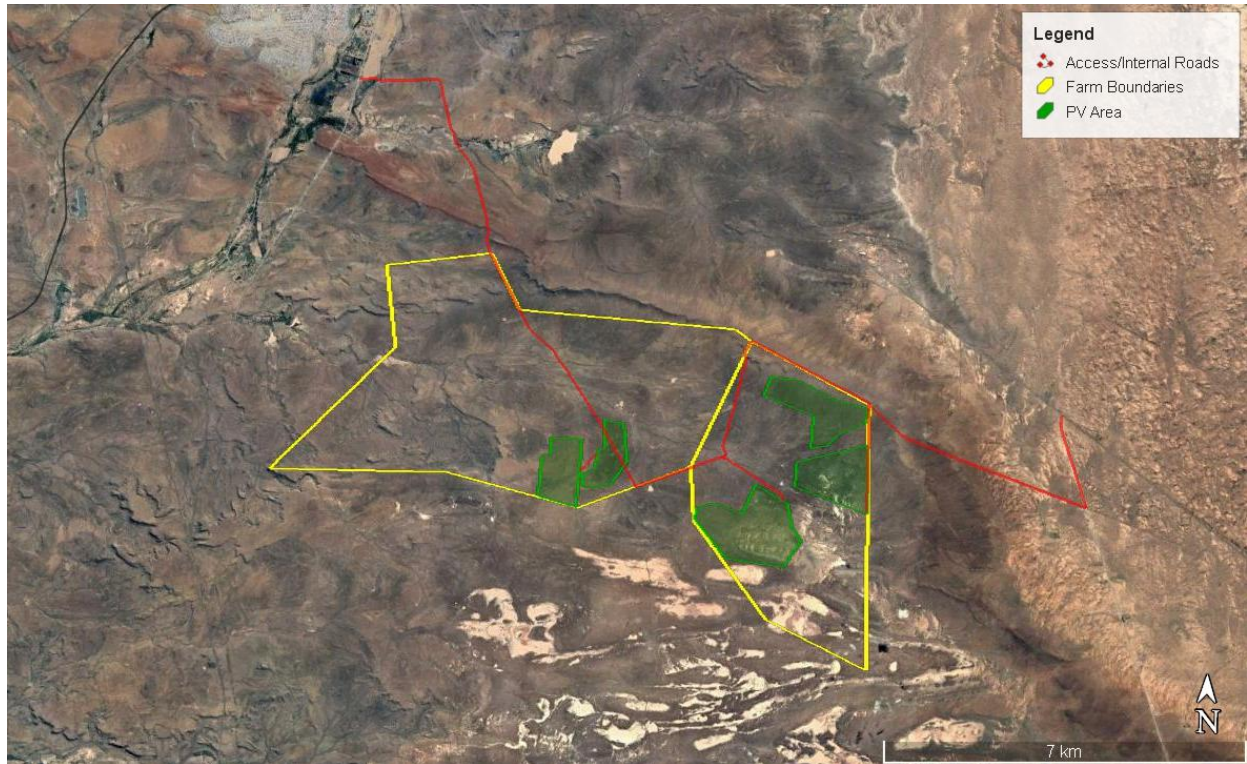


Figure A: Approved Layout

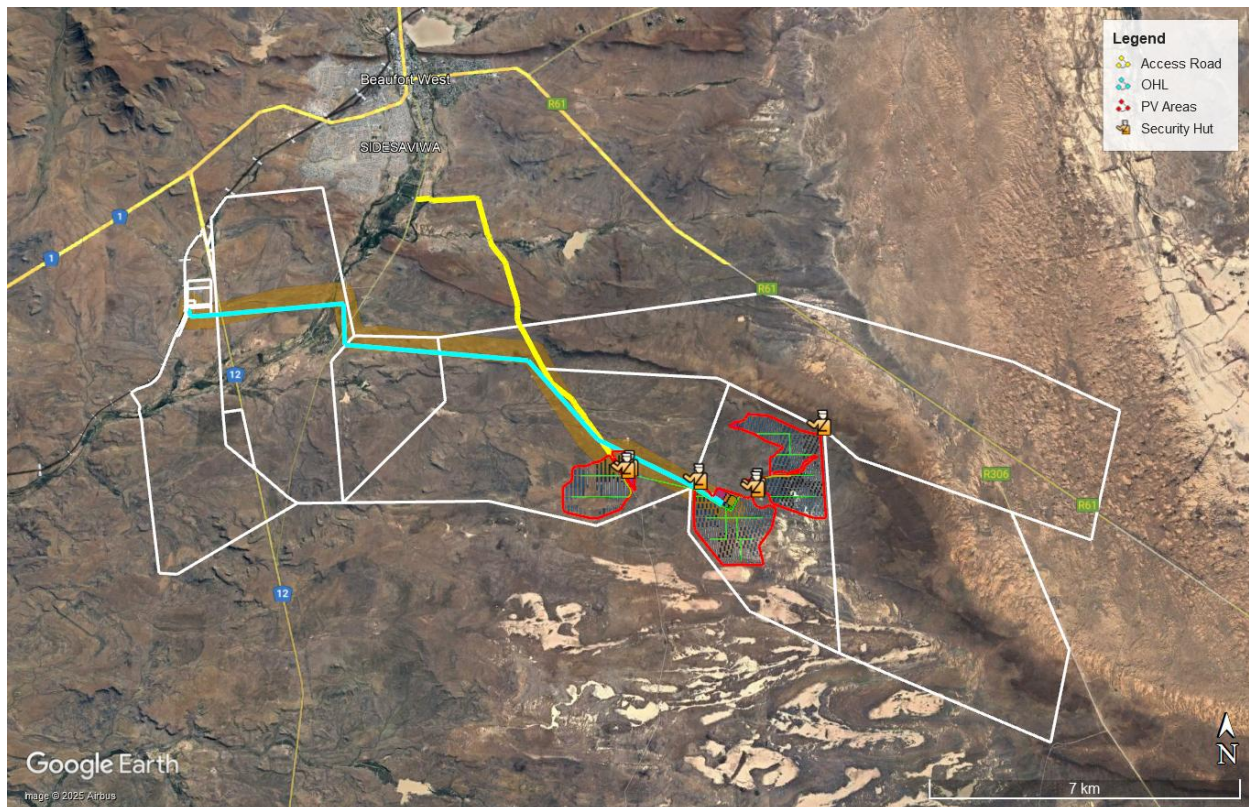


Figure B: Proposed Layout (Preferred)

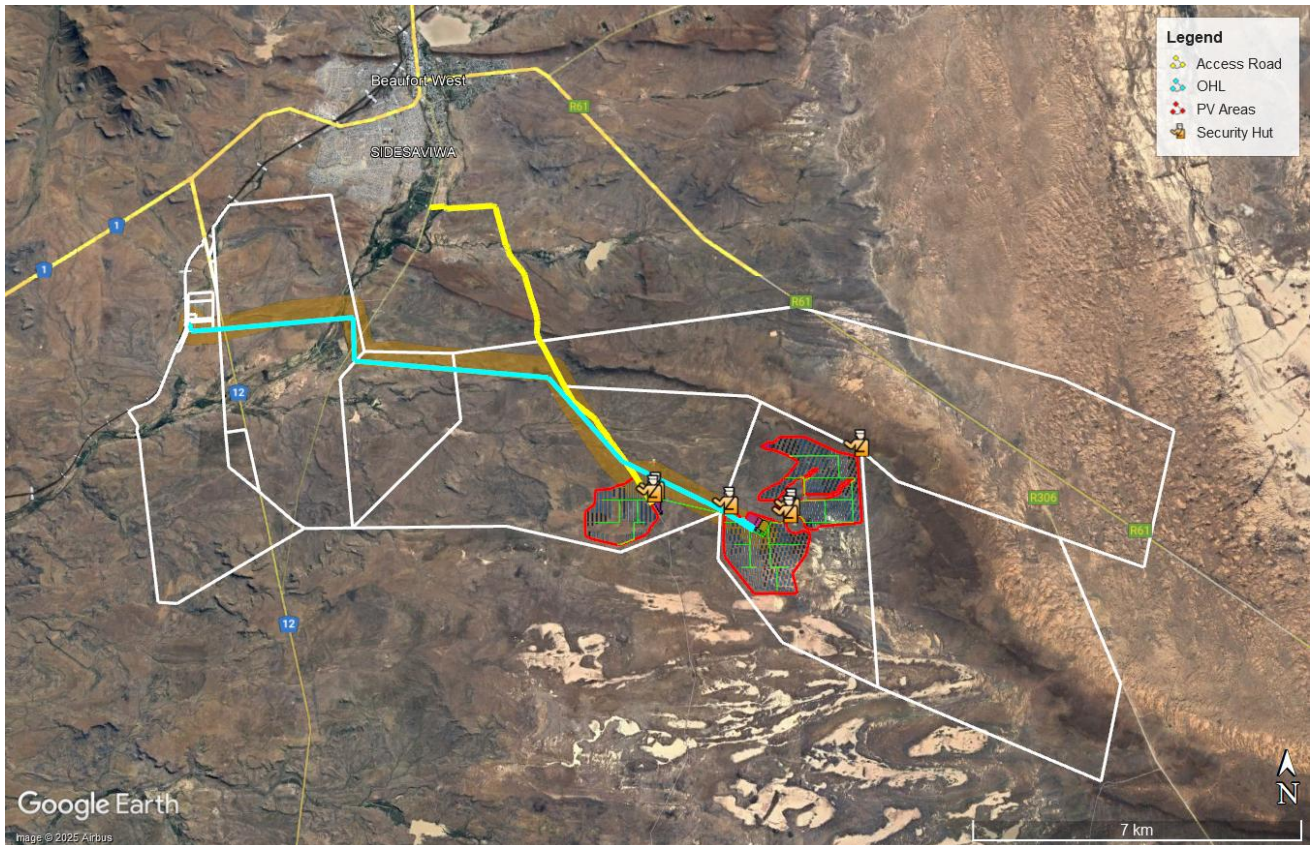


Figure C: Proposed Layout (Alternative)