

The inverters are housed within the power stations (red blocks)

- The substation compound contains the following 3 demarcated areas, as per figure 69 of the EIR:

- o The substation (1.1 ha)
- o The office and parking (0.5ha)
- o The construction yard / to house the BESS at the end of construction.

a) Associated stormwater management infrastructure – The final locations of stormwater infrastructure will be within the buildable area as identified by the specialists (i.e. outside of high sensitivity zones), and will be shown in the final design layout to be submitted to the DFFE before construction commences, once the applicant has been confirmed as a preferred bidder. The design and layout will follow the principles of the Stormwater Management Plan, submitted as an appendix to the EIR report.

b) Battery Energy Storage System (BESS) – the location for the BESS is indicated on the layout map and Figure 69 of the EIR. Detailed designs to be submitted to the DFFE before construction commences, once the applicant has been confirmed as a preferred bidder.

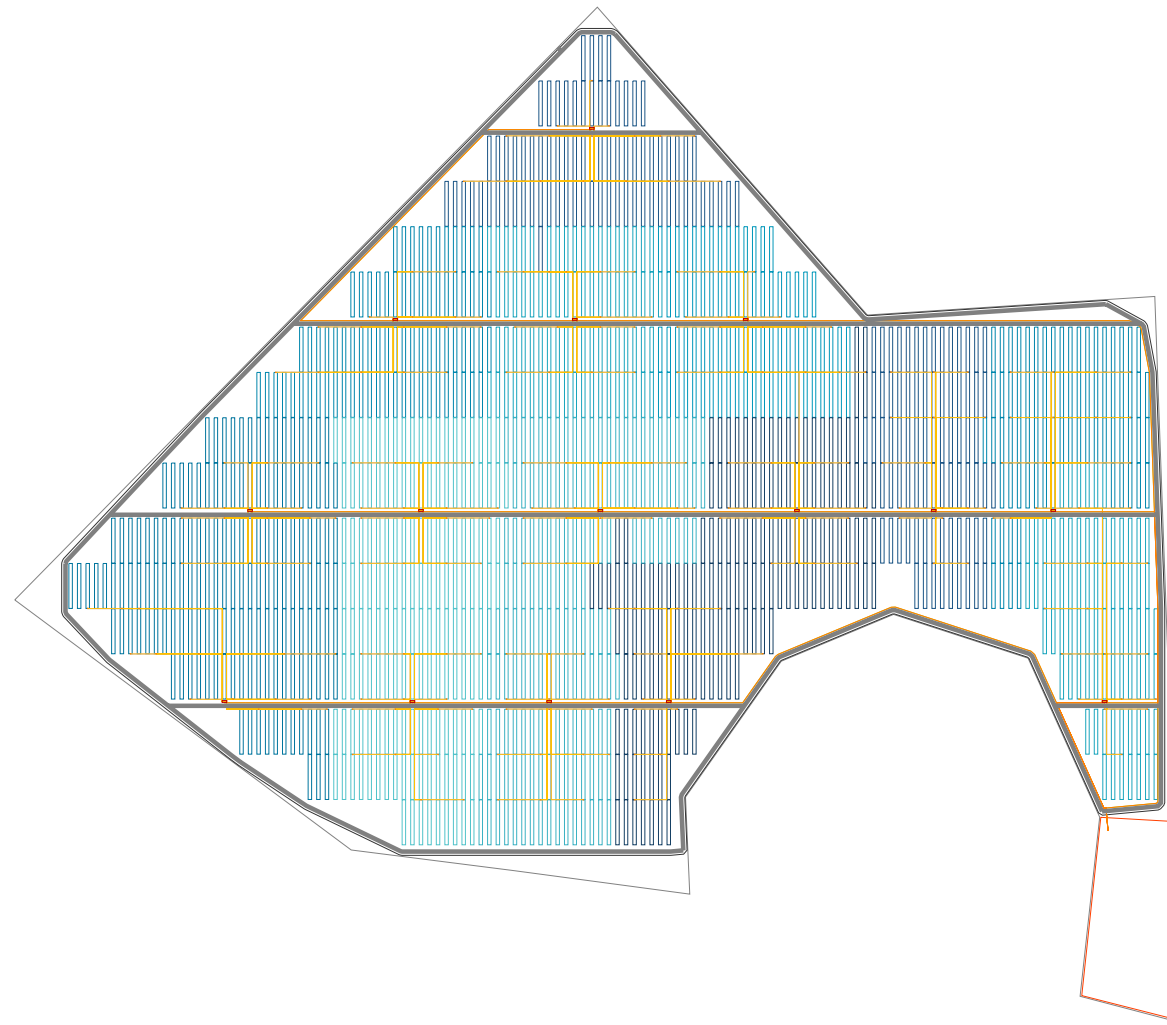
c) Auxiliary buildings (offices, parking, etc.) – an area has been set aside on the layout map. Detailed designs to be submitted to the DFFE before construction commences, once the applicant has been confirmed as a preferred bidder.

d) Ablution facilities and associated infrastructure - an area has been set aside on the layout map. Detailed designs to be submitted to the DFFE before construction commences, once the applicant has been confirmed as a preferred bidder.

e) Rainwater and/or groundwater storage tanks and associated water transfer infrastructure - The final locations of the infrastructure will be within the buildable area as identified by the specialists (i.e., outside of high sensitivity zones), and will be shown in the final design layout to be submitted to the DFFE before construction commences, once the applicant has been confirmed as a preferred bidder.

f) Grid connection infrastructure including medium-voltage cabling between the project components and the facility substation (underground cabling will be used where practical) - Underground medium-voltage (33kV) cables that connect the 33/132kV substation to the inverter for a cluster of panels will run in trenches along the internal roads. This level of detail will be shown in the final design layout to be submitted to the DFFE before construction commences, once the applicant has been confirmed as a preferred bidder.

Please note that the detailed design plan will be submitted to DFFE before construction commences, once the applicant is confirmed as a preferred RIEEPP bidder.



Notes

PV Plant: Khauta  
 Location: Free State, South Africa  
 UTM convergence: 0.0683 °  
 Altitude: 1387.54 m  
 Suitable area: 97.52 ha  
 Perimeter fence: 4.51 km

Rated Power: 55.7 MW  
 Peak Power: 66.9 MW  
 Ratio DC/AC: 1.20  
 Inverter output power factor: 0.928  
 Structure: Horizon L: TEC - Bifacial  
 PV Module: Longi Solar LR5-72HND-550M  
 Inverter: SMA Sunny Central 4000 UP  
 Power Station: 4000.0 kVA, 0.6/33.0kV  
 Pitch distance: 11.3 m  
 Modules per string: 26

Number of PV modules: 121576  
 Number of string boxes: 240  
 Number of inverters: 15  
 Number of secondary inverters: 0  
 Number of power stations: 15

Legend

- Available area
- Substation
- Power station
- Colors indicate solar field connection to each power station
- Mounting structure
- Roads
- Medium voltage trenches
- Low voltage trenches
- Fences
- Medium voltage lines
- String cables
- Cables from string box to inverter
- String boxes

REV	DESCRIPTION	BY	DATE
00	FIRST VERSION	RP	2022-05-31

FOR INFORMATION ONLY



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CLIENT:



PROJECT:

Khauta

DRAWING:

PV Plant Layout

SCALE:

1 : 10000

SHEET:

1 / 1

REVISION:

00

DATE:

2022-05-31

DIN A3