Generic EMPr: Appendix 1 - Substations

PART B: SECTION 2

7. SITE SPECIFIC INFORMATION AND DECLARATION

7.1 Sub-section 1: Contact details and description of the project

7.1.1 Details of the applicant

Applicant name	Kleinfontein Solar PV1 (Pty) Ltd			
Contact person	Mr Warren Morse (The Director of Solar)			
Physical address	Top Floor Golf Park 4, Raapenberg Rd, Mowbray, 7700			
Postal address	PostNet Suite #53 Private Bag X21 Howard Place, 7450			
Email	warren@mulilo.com			
Telephone	021 685 3240 / 083 760 9586			

7.1.2 Details and expertise of the EAP

EAP Name	Annelize Erasmus				
EAP qualifications	 BL (Landscape Architecture) Degree – University of Pretoria, 1988 "Integrated Environmental Management – Theory and Practice"; University of Cape Town, 1992 Assessor of EAP Applications for registration with EAPASA (since 1 February 2020) Various workshops and webinars in the environmental consultancy field 				
Professional affiliation/ registration	 EAPASA Registered: Annelize Erasmus (Grobler): 2019/1728 Member of the IAIASA 				
Physical address	91 Wenning Street, Groenkloof, Pretoria, 0181				
Postal address	PO Box 947, Groenkloof, Pretoria, 0027				
Email	info@landscapedynamics.co.za / annelize@landscapedynamics.co.za				
Telephone	082 566 4530 / 012 460 6043				
Curriculum Vitae	The Landscape Dynamics Company Profile and condensed CV of the EAPS are attached hereto				

7.1.3 Project name

Kleinfontein Solar PV1

7.1.4 Description of the project

The **Kleinfontein Solar PV1** facility will have a contracted capacity of up to 120MW with a total development footprint of approximately 248 hectares.

Infrastructure associated with the **Kleinfontein Solar PV1** facility will include the following (relevant to this document is the Onsite 132kV IPP Substation marked in blue below):

Infrastructure	Specifications
Solar PV Array	 The Solar PV Array includes the following components: Bifacial PV Modules Mounting structures using single axis tracking technology Inverters Combiner boxes Transformers Cabling between panels The total development footprint area is approximately 248 ha of which the area available for PV modules is approximately 221,8ha
Onsite 132 kV Independent Power Producer (IPP) Substation	 The IPP Substation includes the following components: HV Step-up transformer MV Interconnection building Total area approximately 100m x 100m (1ha)
Access and internal roads	 Access is required for the purpose of the Kleinfontein Solar PV1 as follows: Main access point for road to the IPP substation area S729 Coordinates: 27° 0'18.43"S 26°49'20.92"E Construction & maintenance access points T3762 – Coordinates: 27° 1'23.04"S 26°49'52.32"E The main access road up to the IPP substation area will be approximately 3 000m (3km) long and approximately 8m wide. All proposed access roads will be developed to approximately 8m wide. All proposed access roads, including the main access point, will align with existing tracks and routes where possible. Existing internal farm roads to be utilised where possible, Internal roads to be constructed up to 6m wide. Regraveling of roads to take place if required by the provincial roads authority.
Laydown area	 A temporary construction site area of approximately 4ha directly adjacent to the IPP and Eskom substation will be required. All temporary infrastructure will be rehabilitated following the completion of the construction phase, where it is not required for the operation phase.
Battery Energy Storage System (BESS)	 Solid State Batteries (SSB) is the preferred battery technology. It will be delivered to the site pre-assembled.

	It will be constructed on approximately 4ha.
Storage of Dangerous Goods	 Storage of dangerous goods (Including lubrications, oils, paints, fuel/diesel, etc.) with a combined capacity less than 80 cubic metres on a site of 2 500m² (0,25ha). Diesel/fuel is generally required for the following purposes: During construction for construction vehicles as well as generators for the construction camp and commissioning whilst waiting for the Eskom grid connection works to be completed During operations required for Operations & Maintenance vehicles at the PV plants but also required for backup diesel generators at the substation. The generators supply auxiliary power to the substation's protection and communications systems, should there be outages on the grid. This is an Eskom requirement together with a battery room at the substations to act as UPS for these critical systems.
Ancillary facilities	 Operations and Maintenance (O&M) Buildings 100m x 100m (1ha) Site Offices Construction camps Storage Warehouse Workshop Guard House Ablutions with conservancy tanks During the construction phase, temporary sanitation facilities will be provided (i.e. chemical toilets) and these toilets will be regularly serviced by a licensed company.

Refer to the Site Layout of the **Kleinfontein Solar PV1** provided on the following page. The position of the IPP substation is indicated in light blue.



7.1.5 Project location

The development site is situated on Remainder of Ratpan No 441, north of the R76 close to the town of Viljoenskroon in the Free State Province. It falls within the jurisdiction of the Moqhaka Local Municipality (MLM) in the Fezile Dabi District Municipality.

The project is situated on the Portion 1 of the farm Kleinfontein No 369.

The 21 digit codes are as follows:

N	lajor	regio	n	N	linor	regio	n		Farm / Erf number				Portion number							
F	0	3	6	0	0	0	0	0	0	0	0	0	3	6	9	0	0	0	0	1

The coordinates of the IPP Substation is as follows:

А	27° 0' 21" S, 26° 49' 22" E
В	27° 0' 11" S, 26° 49' 37" E
С	27° 0' 5" S, 26° 50' 5" E
D	27° 1' 58" S, 26° 49' 55" E
E	27° 1' 59" S, 26° 49' 44" E
F	27° 0' 26" S, 26° 49' 23" E

7.2 Sub-section 2: Development footprint site map

This sub-section must include a map of the site sensitivity overlaid with the preliminary infrastructure layout. The sensitivity map must be prepared from the national web based environmental screening tool, when available for compulsory use at: https://screening.environment.gov.za/screeningtool. The sensitivity map shall identify the nature of each sensitive feature e.g. threatened plant species, archaeological site, etc. Sensitivity maps shall identify features both within the planned working area and any known sensitive features within 50m from the development footprint.

Key results from the Screening Tool Report (attached as Appendix H(2)(c) to this EMPR are as follows:

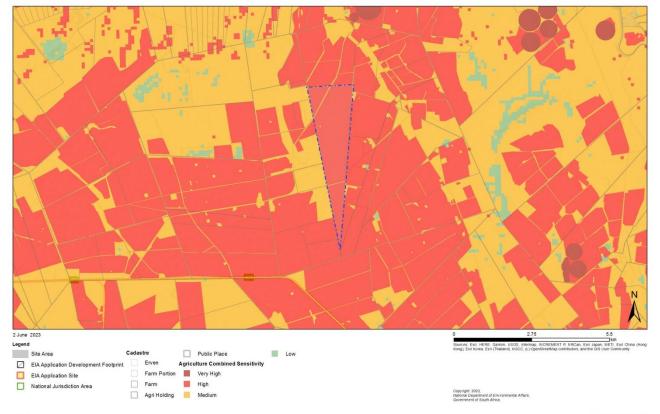
Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		Χ		
Animal Species Theme				X
Aquatic Biodiversity Theme	Χ			
Archaeological and Cultural Heritage Theme				X
Avian Theme				X
Civil Aviation (Solar PV) Theme				X
Defence Theme				Χ
Landscape (Solar) Theme	Χ			
Palaeontology Theme	Χ			
Plant Species Theme				Χ
RFI Theme				Χ
Terrestrial Biodiversity Theme	Χ			

The Screening Tool maps provided on the following pages were compiled on 2 June 2023.



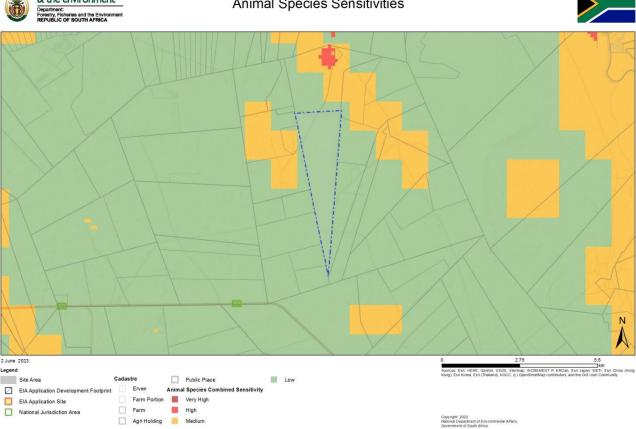
Agricultural Sensitivities







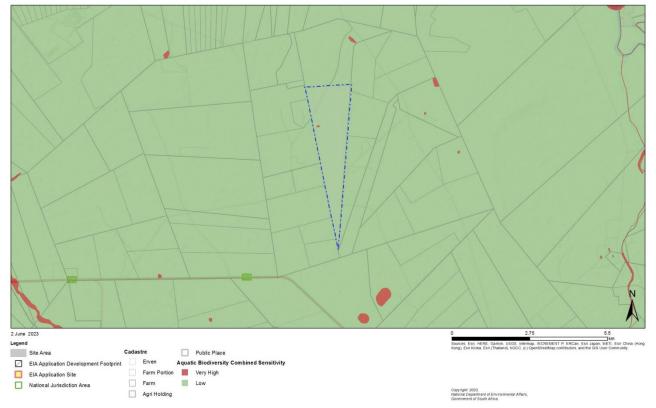
Animal Species Sensitivities





Aquatic Biodiversity Sensitivities







Farm Portion Agri Holding Low

Archaeological and Cultural Heritage Sensitivities



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Avian Sensitivities

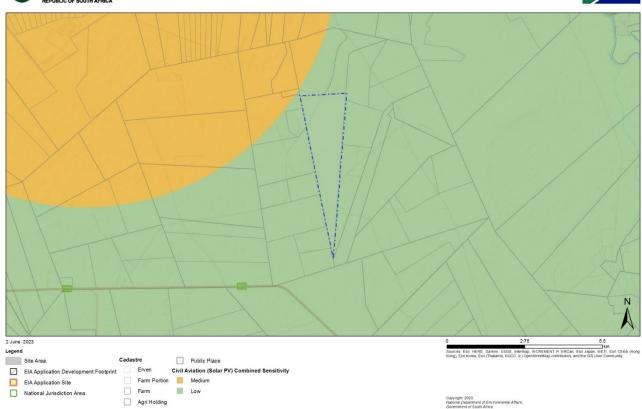






Civil Aviation Sensitivities







Defence Sensitivities

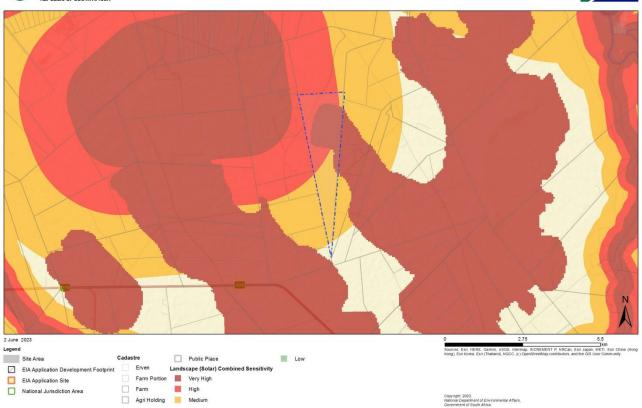






Landscape Sensitivities

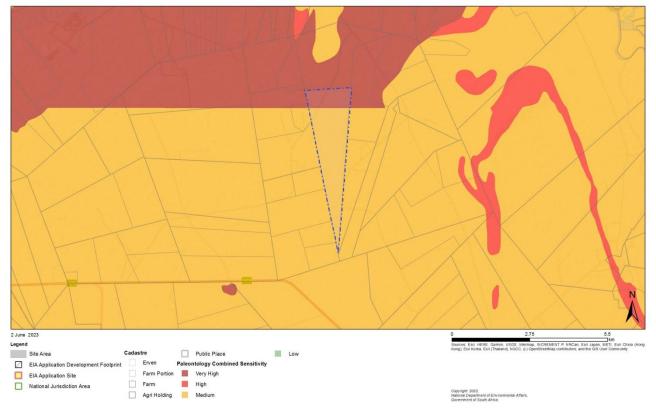


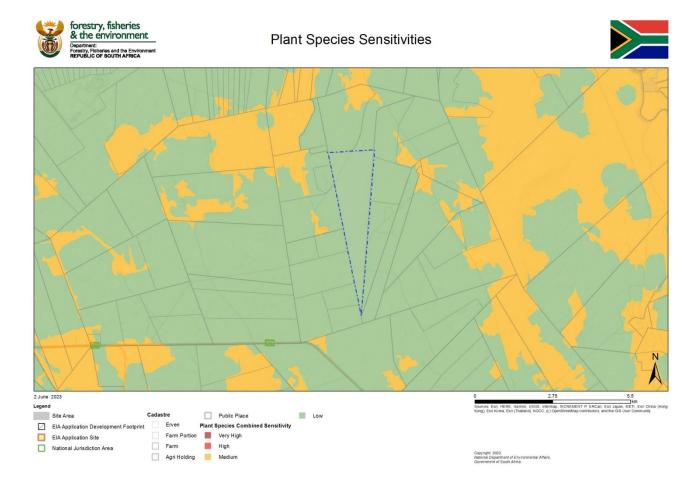




Palaeontological Sensitivities









RFI Sensitivities







Terrestrial Biodiversity Sensitivities





7.3 Sub-section 3: Declaration

The proponent/applicant or holder of the EA affirms that he/she will abide and comply with the prescribed impact management outcomes and impact management actions as stipulated in part B: section 1 of the generic EMPr and have the understanding that the impact management outcomes and impact management actions are legally binding. The proponent/applicant or holder of the EA affirms that he/she will provide written notice to the CA 14 day prior to the date on which the activity will commence of commencement of construction to facilitate compliance inspections.

149	20 July 2023
Signature Proponent/applicant/ holder of EA	Date