



forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATION

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

PROJECT TITLE

Basic Assessment and Water Use Licence Application for the development of Kiwano Solar Photovoltaic Facility and Battery Energy Storage System, including associated substation and 132kV loop-in loop-out powerlines

Indicate if the **DRAFT** report accompanies the application

Yes ☒
No ☐

PRE-APPLICATION CONSULTATION

Was a pre-application meeting held	Yes	<input checked="" type="checkbox"/>	
Date of the pre-application meeting	31 May 2022		
Reference number of pre-application meeting held	2022-05-0025		
Was minutes compiled and submitted to the Department for approval	Yes	<input checked="" type="checkbox"/>	

A copy of the pre-application meeting minutes must be appended to this application as **APPENDIX 1**.

Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This application form is current as of **April 2021**. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. The onus is on the Applicant/EAP to determine all applicable listed activities that would require Environmental Authorisation prior to the commencement of the construction activities. Should any revision of your development comprise any other activities that constitute a listed activity/ies as defined in Listing Notice 1, 2, or 3 of the EIA Regulations, 2014 as amended, it must also form part of the Application for Environmental Authorisation.
4. An application fee is applicable (refer to **Section 2**). Proof of payment must accompany this application. The application will not be processed without proof of payment unless one of the exclusions provided for in the Fee Regulations is applicable AND such information in the exclusion section of this application form has been confirmed by this Department.
5. A cover letter on your company letterhead indicating the nature of this application must be appended to this form i.e. new application for Environmental Authorisation, updated application for Environmental Authorisation.
6. An electronic copy of the signed application form must be submitted of both the Applicant and EAP.
7. This form must be marked **“for Attention: Chief Director: Integrated Environmental Authorisations”** and submitted to the Department at the format as prescribed in the process to upload documents form.
8. The required information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing. A legible font type and size must be used when completing the form. The font size should not be smaller than 10pt (e.g. Arial 10).

9. Where applicable black out the boxes that are not applicable in the form.
10. The use of the phrase “not applicable” in the form must be done with circumspection. Where it is used in respect of material information that is required by the Competent Authority for assessing the application, this may result in the rejection of the application as provided for in the Regulations.
11. Unless protected by law, all information contained in and attached to this application, will become public information on receipt by the Competent Authority. Upon request during any stage of the application process, the Applicant / EAP must provide any registered interested and affected party with the information contained in and attached to this application.
12. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report and declaration of interest of the specialist must also be submitted.
13. Please note that this form must be copied to the relevant Provincial Environmental Department(s)
14. An application for Environmental Authorisation lapses if the applicant fails to meet any of the timeframes prescribed in terms of the EIA Regulations, 2014, as amended.
15. An application for environmental authorisation must be accompanied by a report generated by the web based environmental screening tool (in Appendix 11). This has been stipulated as a requirement for the submission of applications for environmental assessment in the Environmental Impact Assessment Regulations. The Screening Tool allows for the generation of a Screening Report referred to in Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended, whereby a Screening Report is required to accompany any application for Environmental Authorisation.

Departmental Details

Online Submission:

EIAapplications@environment.gov.za or <https://sfiler.environment.gov.za:8443/>.

Please read the process for uploading files to determine how files are to be submitted to this Department.

Postal address:

Department of Forestry, Fisheries and the Environment
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
0001

Physical address:

Department of Forestry, Fisheries and the Environment
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1. COMPETENT AUTHORITY

Identified Competent Authority to consider the application:

Reason(s) in terms of S24C of NEMA:

Department of Forestry, Fisheries and the Environment (DFFE)

The Kiwano Solar PV and BESS development is a power generation project and therefore relates to the IRP 2010 – 2030. As such, the National Department of Forestry, Fisheries and the Environment (DFFE) has been determined as the Competent Authority in terms of GN R779 of 01 July 2016.

2. FEES

Applicants are required to tick the appropriate box below to indicate that either proof of payment is attached or that, in the applicant's view, an exclusion applies. Proof of payment or a motivation for exclusions must be attached as **APPENDIX 2** of this application form.

Proof of payment attached	<input type="checkbox"/>	No X
Payment Reference Number	<input type="checkbox"/>	
Exclusion in terms of Regulation 2(a) or 2(b) of GNR 141 of 28 February 2014	Yes X	<input type="checkbox"/>

An applicant is excluded from paying fees if:

- The activity is a community based project funded by a government grant; or
- The applicant is an organ of state.

TYPE OF EXCLUSION	Tick where applicable. Proper motivation must be attached to the application
The activity is a community based project funded by a government Grant	<input type="checkbox"/>
The applicant is an organ of state	X

FEE AMOUNT	Fee
Application for an environmental authorisation for which basic assessment is required in terms of the Environmental Impact Assessment Regulations	R2 000
Application for an environmental authorisation, for which S&EIR is required in terms of the Environmental Impact Assessment Regulations	R10 000

Department of Forestry, Fisheries and the Environment banking details for the payment of application fees:

<p>Payment Enquiries: Email: eiafee@environment.gov.za</p> <p>Banking details: ABSA Bank Branch code: 632005 Account number: 1044 2400 72 Current account</p> <p>Reference number: Reference number to be provided in the specific format indicating centre point coordinates of site in decimal degrees to 5 or 6 decimal places: latitude/longitude e.g. -33.918861/18.423300</p> <p>Status: Tax exempted</p>
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3. GENERAL INFORMATION

Name of the Applicant:	Eskom Holdings SOC Limited		
RSA Identity/ Passport Number:			
Name of contact person for applicant (if other):	Andrea Van Gensen		
RSA Identity/ Passport Number:	8210220027087		
Responsible position, e.g. Director, CEO, etc.:	Environmental Manager		
Company/ Trading name (if any):	Eskom		
Company Registration Number:	20002/015527/06		
BBBEE status:	Level Three Contributor		
Physical address:	Eskom Distribution, DSC Building, Ground floor (C Block), 69 Memorial Road, Monument Heights, Kimberley, 8301		
Postal address:	PO Box 606, Kimberley		
Postal code:	8301	Cell:	082 482 7579
Telephone:	053 830 5775	Fax:	
E-mail:	vGenseAL@eskom.co.za		

Name of the landowner:	Eskom Holdings SOC Limited		
Name of contact person for landowner (if other):	Debbie Harding		
Postal address:	PO Box 606, Kimberley		
Postal code:	8301	Cell:	084 689 5173
Telephone:	053 830 5774	Fax:	
E-mail:	hardind@eskom.co.za		

Name of Person in control of the land:	Eskom Holdings SOC Limited		
Name of contact person for person in control of the land:	Debbie Harding		
Postal address:	PO Box 606, Kimberley		
Postal code:	8301	Cell:	084 689 5173
Telephone:	053 830 5774	Fax:	
E-mail:	hardind@eskom.co.za		

In instances where there is more than one landowner, please attach a list of those landowners with their contact details as **APPENDIX 3**.

Unless the application is in respect of linear activities or Strategic Infrastructure Projects as contemplated in the Infrastructure Development Act (Act No. 23 of 2014), written consent of landowner/s must be submitted in **APPENDIX 3**.

The originally signed declaration undertaking by the applicant must be submitted as **APPENDIX 9**.

Provincial Environmental Authority:	Northern Cape Department of Environment and Nature Conservation		
Name of contact person:	Bryan Fisher		
Postal address:	Private Bag X6010, Kimberley		
Postal code:	8300	Cell:	083 270 8323
Telephone:	053 807 7431	Fax:	
E-mail:	bfisher@ncpg.gov.za		

Local Municipality:	Dawid Kruiper Local Municipality		
Name of contact person in (Environmental Section)	Jeremy Du Plessis		
Postal address:	Private Bag X6003, UPINGTON		
Postal code:	8800	Cell:	082 399 2705
Telephone:	054 338 7074	Fax:	054 337 2888
E-mail:	jeremy.duplessis@dkm.gov.za		

In instances where there is more than one Local/Provincial Authority involved, please attach a list of those Local/Provincial Authorities with their contact details as **APPENDIX 4**.

4. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

Company of Environmental Assessment Practitioner:	Zitholele Consulting (Pty) Ltd		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	1	Percentage Procurement recognition 135%
EAP name:	Ms. Natasha Lalie		
EAP Qualifications:	MSc (Environment and Society), University of Pretoria		
Professional affiliation/registration:	Registered EAP: Environmental Assessment Practitioners Association of South Africa (EAPASA), Registration No. 2021/3611		
Physical address:	Building 1, Maxwell Office Park, Magwa Crescent West, Waterfall City, Midrand		
Postal address:	P.O. Box 6002, Halfway House		
Postal code:	1685	Cell:	082 828 6832
Telephone:	011 207 2060	Fax:	086 674 6121
E-mail:	natashal@zitholele.co.za		

The appointed EAP must meet the requirements of Regulation 13 of the EIA Regulations, 2014 as amended. The declaration of independence of the EAP and undertaking under oath or affirmation that all the information submitted or to be submitted for the purposes of the application is true and correct must be submitted as **APPENDIX 10**.

5. PROJECT DESCRIPTION

Please provide a **detailed** description of the project.

Eskom proposes to install Solar PV plant, grid-scale battery storage, Substation, Powerline, pipeline and construct an access road on Olyvenhouts Drift Settlement Agricultural Holding 1080 Portion 0 in Upington, Northern Cape. The Proposed development aim to give an opportunity for Eskom to move to Renewables energy and storing energy to support the grid in any circumstance. The proposed development will also include the following infrastructures:

The proposed Kiwano BESS and PV facility will comprise of the following:

- PV installation with envisaged capacity of 58 MW,
- BESS installation with envisaged capacity of 40 MW / 200 MWh
- Kiwano 132 kV substation with 5 feeder bays
- Single Twin-Tern 132 kV overhead line on a double circuit support structure, connecting Kiwano substation to Upington substation.

The PV facility proposed for Kiwano will include the following associated infrastructure:

- Total site area for PV installation up to 1,150,000 m² (115 hectares) to allow for the construction of a PV facility with capacity of 58 MW.
- Solar PV modules, up to a total of 450,000 m², that convert solar radiation directly into electricity. The solar PV modules will be elevated above the ground and will be mounted on either fixed tilt systems or tracking systems (comprised of galvanised steel and aluminium). The Solar PV modules will be placed in rows in such a way that there is allowance for a perimeter road and security fencing along the site boundary, and access roads in between the PV module rows.
- Inverter stations, each occupying a footprint up to approximately 30 m², with up to 60 Inverter stations installed on the site. Each Inverter station will contain an inverter, step-up transformer, and switchgear. The Inverter stations will be distributed on the site, located alongside its associated Solar PV module arrays. The Inverter station will perform conversion of DC (direct current) to AC (alternating current), and step-up the LV voltage of the inverter to 22 kV, to allow the electricity to be fed into the Kiwano substation. Inverter stations will connect several arrays of Solar PV modules and will be placed along the internal roads for easy accessibility and maintenance.
- Below ground electrical cables with trenching - connecting PV arrays, Inverter stations, O&M buildings, and 132kV Kiwano substation.
- Adequately designed foundations and mounting structures that will support the Solar PV modules and Inverter stations.
- Where possible, existing roads that provide access to the Kiwano site will be used, upgraded, and extended as necessary. For Site A, an access road, approximately 6 m wide and estimated up to 5 km long, will be required to provide access to the PV site. For Site B, a new access road from the existing D3276 road to the site will be required, approximately 6 m wide and estimated up to 1 km long. The existing D3276 road will require upgrading, approximately 6 m wide and estimated up to 4 km long (from N14 to site access road).
- A perimeter road around the site, approximately 5 m wide and 4.5 km in length.
- Internal roads for access to the Inverter stations, approximately 5 m wide and 18 km total length.
- Internal roads/paths between the Solar PV module rows, approximately 2-3 m wide, to allow access to the Solar PV modules for operations and maintenance activities.
- Infrastructure required for the operation and maintenance of the Kiwano PV Plant installation:
 - Meteorological Station
 - O&M Building – comprising control room, server room, security equipment room, offices, boardroom, kitchen, and ablution facilities (including sewage infrastructure)

<ul style="list-style-type: none"> ○ Spares Warehouse and Workshop ○ Hazardous Chemical Store ○ Security Building ○ Parking areas and roads • Small diameter water supply pipeline connecting existing municipality pipeline, approximately 5 km long. • Stormwater channels • Perimeter fencing of the Kiwano site, with access gates. Detailed requirements will be determined following the security risk assessment. • Temporary laydown area, occupying a footprint up to 100,000 m² (10 hectares). The laydown area will be used during construction and rehabilitated thereafter. The laydown area will also accommodate water storage tanks or lined ponds (estimated 815 kl/month for the first 3 months and 408 kl/month for the remaining 21 months, until construction is completed). • Temporary concrete batching plant, occupying a footprint up to 10,000 m² (1 hectare). The concrete batching plant area will be used during construction and rehabilitated thereafter. <p>Temporary site construction office area, occupying a footprint up to 10,000 m² (1 hectare). This area will accommodate the offices for construction contractors during construction and rehabilitated thereafter.</p>
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Does the project form part of a Renewable Energy Development Zone (REDZ) as per GN 114?	YES	
Does the project form part of an Electricity Grid Infrastructure (EGI) as per GN 113?	YES	
Does the project form part of any of the Strategic Infrastructure Projects (SIPs) as described in the National Development Plan, 2011?		NO *
<p>* The Kiwano Solar PV and BESS project currently fall under Just Energy Transition (JET) projects. However, Eskom is in the process to register the proposed project as a Strategic Infrastructure Project (SIP). Once the project is gazetted, its SIP status will be confirmed.</p>		
Did you attached the confirmation of SIP obtained from the relevant sector representative (SIP Coordinators) and not a motivation from an EAP		NO

If **YES**, is selected:

- For an application in terms of GN 113 and/or 114, then a map confirming this must be attached;
- For a SIP project, kindly indicate which SIPs are applicable in **APPENDIX 5 and attach the** confirmation of SIP applications from the relevant sector representative in **APPENDIX 5**. Should no proof be provided, the application will be considered as a normal EIA Application.

Please indicate which sector the project falls under by ticking the relevant block in the table below:

Table 1: National Sector Classification in terms of Regulation 9 of the EIA Regulations, 2014 as amended

1	Infrastructure /Transport Services/Roads – Public	X	42	Services/Waste Management Services/Disposal facilities - General
2	Infrastructure /Transport Services/Roads – Private	X	43	Services/Waste Management Services/Treatment facilities - Hazardous

3	Infrastructure /Transport Services/Rail – Public		44	Services/Waste Management Services/Treatment facilities - General	
4	Infrastructure /Transport Services/Rail – Private		45	Services/Waste Management Services/Storage Facilities - General	
5	Infrastructure /Transport Services/Airport/Runways/Landing Strip/Helipad - Commercial		46	Services/Waste Management Services/Storage Facilities - Hazardous	
6	Infrastructure /Transport Services/Airport/Runways/Landing Strip/Helipad - Private		47	Services/Waste Management Services/Storage Facilities - Nuclear	
7	Infrastructure /Transport Services/Airport/Runways/Landing Strip/Helipad - Public Services		48	Services/Burial and cemeteries - Cemeteries	
8	Infrastructure /Transport Services - Ports		49	Services/Burial and cemeteries - Cremators	
9	Infrastructure /Transport Services - Inland Waterways		50	Services/Water services/Storage - Dams	
10	Infrastructure /Transport Services - Marina		51	Services/Water services/Storage - Reservoirs	
11	Infrastructure /Transport Services - Canal		52	Services/Water services - Desalination	
12	Infrastructure /Localised infrastructure - Infrastructure in the Sea/Estuary/Littoral Active Zone/Development Setback/100M Inland/or coastal public property.		53	Services/Water services - Treatment & Waste Water	
13	Infrastructure /Localised infrastructure - Zip Lines & Foefie Slides		54	Services - Hospitality	
14	Infrastructure /Localised infrastructure - Cableway or Funiculars		55	Mining - Prospecting rights	
15	Infrastructure /Localised infrastructure – Billboards		56	Mining - Mining Permit	
16	Infrastructure /Localised infrastructure/Storage/Dangerous Goods/Hydrocarbon - Gas		57	Mining - Mining Right	
17	Infrastructure /Localised infrastructure/Storage/Dangerous Goods/Hydrocarbon - Petroleum		58	Mining/Exploration Right - Gas or Oil Marine	

18	Infrastructure /Localised infrastructure/Storage/Dangerous good – Chemicals	X	59	Mining/Exploration Right - Gas or Oil Terrestrial
19	Utilities Infrastructure/Pipelines/water - Fresh/Storm Water		60	Mining/Production Right - Gas or Oil Marine
20	Utilities Infrastructure/Pipelines/water - Waste Water		61	Mining/Production Right - Gas or Oil Terrestrial
21	Utilities Infrastructure/Pipelines/Dangerous Goods - Chemicals		62	Mining/Underground gasification of coal - Oil
22	Utilities Infrastructure/Pipelines/Hydrocarbon – Petroleum		63	Mining/Beneficiation - Hydrocarbon
23	Utilities Infrastructure/Pipelines/Hydrocarbon - Gas		64	Mining/Beneficiation - Mineral
24	Utilities Infrastructure/Telecommunications/ Radio Broadcasting - Tower		65	Agriculture/Forestry/ Fisheries - Crop Production
25	Utilities Infrastructure/Telecommunications/ Radio Broadcasting - Mast		66	Agriculture/Forestry/ Fisheries - Animal Production
26	Utilities Infrastructure/Telecommunications/ Radio Broadcasting - Receivers		67	Agriculture/Forestry/ Fisheries - Afforestation
27	Utilities Infrastructure - Marine Cables		68	Agriculture/Forestry/ Fisheries/Aquaculture/Inland- Alien
28	Utilities Infrastructure/Electricity /Generation/Non Renewable/Hydrocarbon – Petroleum		69	Agriculture/Forestry/ Fisheries/Aquaculture/Inland- Indigenous
29	Utilities Infrastructure/Electricity /Generation/Non Renewable/Hydrocarbon – Coal		70	Agriculture/Forestry/ Fisheries/Aquaculture/Marine - Alien
30	Utilities Infrastructure/Electricity /Generation/Non Renewable - Nuclear		71	Agriculture/Forestry/ Fisheries/Aquaculture/Marine - Indigenous
31	Utilities Infrastructure/Electricity /Generation/Renewable - Hydro		72	Agriculture/Forestry/ Fisheries - Agro-Processing

32	Utilities Infrastructure/Electricity /Generation/Renewable/Solar - PV	X	73	Transformation of land - Indigenous vegetation	X
33	Utilities Infrastructure/Electricity /Generation/Renewable/Solar - CSP		74	Transformation of land - From open space or Conservation	
34	Utilities Infrastructure/Electricity /Generation/Renewable - Wind		75	Transformation of land - From agriculture or afforestation	X
35	Utilities Infrastructure/Electricity /Generation/Renewable - Biomass/ biofuels		76	Transformation of land - From mining or heavy industrial areas	
36	Utilities Infrastructure/Electricity /Generation/Renewable - Wave		77	Any activities within or close to a watercourse	X
37	Utilities Infrastructure/Electricity /Distribution and Transmission - Power line	X	78	Any activity in an estuary, on the seashore, in the littoral active zone, or in the sea.	
38	Utilities Infrastructure/Electricity /Distribution and Transmission – Substation	X	79	Activity requiring permit or licence in terms of National or Provincial legislation governing the release or generation of emissions - Emissions	
39	Utilities Infrastructure/Gas /Distribution and Transmission – Compressor Station		80	Activity requiring permit or licence - Marine Effluent	
40	Services/Waste Management Services/Disposal facilities - Hazardous		81	Activity requiring permit or licence - Fresh Water Effluent	
82	Release of Genetically Modified Organisms				

Table 1

Does the listed activity/ies applied for form part of a larger project which is not a listed activity itself e.g. a road that is a listed activity that is needed to access a drilling site where the drilling does not constitute a listed activity.		NO
If indicated yes above, please provide a brief description on how the activity/ies relate to the larger project that forms part there of:		

6. SITE DESCRIPTION

Provide a detailed description of the site involved in the application.

Province/s	Northern Cape
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District Municipality/ies	ZF Mgcawu District Municipality
Local Municipality/ies	Dawid Kruiper Local Municipality
Ward number/s	11
Nearest town/s	Upington
Farm name/s and number/s	Erf 1080 Olyvenhouts Drift Settlement Agricultural Holding
Portion number/s	0

Surveyor General 21 digit code:

(If there are more than 4, please attach a list with the rest of the codes as **APPENDIX 6**. Where the 21 digit SGID and farm name are not available, the coordinates of the boundary of the property or properties must be provided in **APPENDIX 6**.)

List of affected properties included in Appendix 6																			
1	2	3	4	5															

Locality map:	<p>A locality map must be attached to the application form, as APPENDIX 7. The scale of the locality map must be at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map. The map must include the following:</p> <ul style="list-style-type: none"> • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; • the prevailing wind direction; • site sensitivities, including but not limited to vegetation, wetlands, watercourses, heritage sites, critical biodiversity area/s, World Heritage Site, etc. and it must be overlaid by the study area; and • GPS co-ordinates (Indicate the position of the proposed activity with the latitude and longitude at the centre point for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should be to at least three decimal places. The projection that must be used in all cases is the WGS-84 spheroid in a national or local projection)
Project Plan (e.g. Gantt chart)	<p>A project schedule must be submitted as APPENDIX 8, and must include milestones for:</p> <ul style="list-style-type: none"> • public participation (dates for advertisements, workshops and other meetings, obtaining comment from organs of state including state departments); • the commencement of parallel application processes required in terms of other statutes and where relevant, the alignment of these application processes with the EIA process; • the submission of the key documents (e.g. Basic Assessment Report, Scoping Reports, EIA Reports and Environmental Management Programmes). <p>Note: All the above dates must take into account the statutory timeframes for authority responses that are stipulated in the 2014 NEMA EIA Regulations. Possible appeals may impact on project timeframes/milestones. Regulation 45 states that "An application in terms of these Regulations lapses, and a competent authority will deem the application as having lapsed, if the applicant fails to meet any of the time-frames prescribed in terms of these Regulations, unless extension has been granted in terms of regulation 3(7)." It is recommended that the Department be approached for guidance on the process to be followed, prior to submitting an application.</p>

7. ACTIVITIES APPLIED FOR

For an application for authorisation that involves more than one listed activity that, together, make up one development proposal, all the listed activities pertaining to this application must be provided below.

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 1 of the EIA Regulations, 2014 as amended	Describe the portion of the proposed project to which the applicable listed activity relates.
11	The development of facilities or infrastructure for the transmission and distribution of electricity— (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.	Eskom proposes the construction and operation of a new on-site 132 kV substation with 5 feeder bays substation to facilitate the connection of the facility to the national grid. The development area is located outside of an urban area. Eskom further propose to develop 132kV loop-in loop-out powerlines from the Solar PV and BESS facility substation to the existing Upington substation. The powerline associated with Site Alternative A will be approximately 1 330m in length, while the powerline associated with Site Alternative B will be approximately 5 568m in length.
12	The development of (ii) infrastructure or structures with a physical footprint of 100 square meters or more; where such development occurs (a) within a watercourse or (c) within 32 meters of a watercourse, measured from the edge of a watercourse.	The development of the Solar PV and BESS facility will require the establishment of solar PV panels and other associated infrastructure within natural drainage lines and within 32m of natural drainage lines identified within the study area. The solar PV panel area will be approximately 115ha in extent. The natural drainage features, although not strictly defined as a wetland or pan, is classified as a watercourse since it does channel water along its alignment during some periods of the year.
14	The development and related operations of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 m ³ .	The development of the BESS plant will include the installation of batteries that will contain substances and materials classified as dangerous goods. The development further includes the construction and use of a Hazardous chemical store with a 24m ² footprint size where chemicals will be stored. The chemical store will include oils and lubricants which will be required for the operation and maintenance of plant and machinery, and other industrial applications during the construction and operation phase of the proposed development. Collectively, the combined capacity of all the battery units and content of the chemical store will be more than 80m ³ .
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse.	The construction of the access road to Site Alternative A and B, as well as trenching associated with the construction of the potable water pipeline, will require dredging and construction across non-perennial drainage lines located within the development property. These non-perennial drainage lines are classified as watercourses by the Department of Water and Sanitation (DWS). The construction and installation of the Solar PV panels and BESS facility will result in a cumulative volume of infilling or dredging of more than 10 m ³ within the non-perennial drainage lines located across the development site.
28	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:	The proposed development is considered an industrial use and is proposed on land that was previously used for agricultural purposes, occurs outside of an urban area and will cover an area of more than 20 ha on land zoned for agriculture.

	(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare, excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	
Activity No(s):	Provide the relevant Scoping and EIA Activity(ies) as set out in Listing Notice 2 of the EIA Regulations, 2014 as amended	Describe the portion of the proposed project to which the applicable listed activity relates.
1	The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more, excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs — (a) within an urban area; or (b) on existing infrastructure.	Eskom is proposing to develop a 58 MW Solar PV facility as well as a 40 MW / 200 MWh BESS facility. In terms of section 3 of GN 114 of 2018, Solar projects that falls within a REDZ are exempted from following a full EIA process and may follow a Basic Assessment Process.
15	The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	The proposed Solar PV and BESS development areas for Site Alternative A and B are approximately 134 ha and 136.5 ha in extent. Although not all areas with the development footprint will be cleared, cumulatively the combined clearance of more than 20 ha of indigenous vegetation will occur during the development of the facility. The proposed Project is located outside an urban area and will not occur on existing infrastructure but on vacant land.
Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 3 of the EIA Regulations, 2014 as amended	Describe the portion of the proposed project to which the applicable listed activity relates.
4	The development of a road wider than 4 metres with a reserve less than 13,5 metres. g. Northern Cape: ii. Outside urban areas: (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;	The proposed development of Site Alternative A will require construction of an access road from the National Road (N14) to the boundary of the development property. This access road, which goes through a Critical Biodiversity Area (CBA) as identified in the Northern Cape Critical Biodiversity Areas of 2016, will be tarred and will be greater than 4m in width.
12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. g. Northern Cape i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans;	The proposed development of Site Alternative A will require construction of an access road from the National Road (N14) to the boundary of the development property. This access road alignment goes through a Critical Biodiversity Area (CBA) as identified in the Northern Cape Critical Biodiversity Areas of 2016 and will result in the clearance of more than 300m ² of indigenous vegetation. The construction of the potable water pipeline for Site Alternative A and B will require trenching that will result in the clearance of more than 300m ² of indigenous vegetation. The proposed Project is located outside an urban area and will not occur on existing infrastructure but on vacant land.

Please note that any authorisation that may result from this application will only cover activities specifically applied for. Only those activities listed above shall be considered for authorisation. The onus is on the applicant to ensure that all applicable listed activities are included in the application. Environmental Authorisation must be obtained prior to commencement with each applicable listed activity.

Coordinate points indicating the location of each listed activity must be provided as part of **APPENDIX 6** as well part of the reports to be submitted. Coordinates must be provided in degrees, minutes and seconds using the Hartebeesthoek94 WGS84 co-ordinate system.

8. PUBLIC PARTICIPATION

Provide details of the public participation process proposed for the application as required by Regulation 41(2) of the EIA Regulations, 2014 as amended.

The aim of the public participation process is primarily to ensure that the following:

- Information containing all relevant facts in respect of the proposed project will be made available to potential stakeholders and I&APs.
- Participation by potential I&APs will be facilitated in such a manner that all potential stakeholders and I&APs will be provided with a reasonable opportunity to comment on the proposed project.
- Comments received from stakeholders and I&APs during public review of the draft BAR will be recorded and incorporated into the Final BAR.

In order to accommodate the varying needs of stakeholders and I&APs within the study area, as well as capture their inputs regarding the project, various opportunities for stakeholders and I&APs to be involved in the BA Process are provided as follows:

- Telephonic consultation sessions with stakeholders and I&APs, as required.
- Written, faxed or e-mail correspondence to stakeholders and I&APs, as well as responding to correspondence received from stakeholders.
- Providing the opportunity to attend a public meeting to raise stakeholder issues and concerns.
- The Draft BAR is available for a 30-day public review period. The comments received from I&APs will be captured within a Comments and Response Report which will be included within the final BA Report, for submission to the DFFE for decision-making.

The following key public participation tasks have been undertaken in terms of the requirement of Chapter 6 of the NEMA EIA Regulations, 2014, as amended:

- Fixing a notice board at a place conspicuous to the public at the boundary or on the fence of:
 - the site where the activity to which the application relates is or is to be undertaken; and
 - any alternative site mentioned in the application;
- Giving written notice to:
 - the owner or person in control of that land if the applicant is not the owner or person in control of the land;
 - the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - the municipal councilor of the ward in which the site or alternative site is situated and any organization of ratepayers that represent the community in the area;
 - the municipality which has jurisdiction in the area;
 - any organ of state having jurisdiction in respect of any aspect of the activity; and
 - any other party as required by the competent authority.
- Placing an advertisement in a local newspaper; and

- I&APs application database is open and maintained throughout the BA process.
- The DBAR will be made available for Public Review.
- Comments received will be collated and addressed accordingly.

In compliance with the requirements of Chapter 6 of the NEMA EIA Regulations, 2014, the following summarises the key public participation activities conducted to date:

- Placement of an advertisement in Khathu Gazette on 06 August 2022.
- Placement of Site Notices and distribution of Background Information Documents (BIDs)
 - Site notices were placed on-site on and at the two local libraries i.e. Sandile Present Community Library and Paballelo Library; and
 - BIDs were also distributed to potential I&APs.
- Identification of I&APs and establishment of a project database that will be maintained and updated during the BA process.
- Key stakeholders, including the Local and District Municipality, were contacted and notified of the application, and any concerns raised, were noted as part of the stakeholder's registration on the application.
- All I&APs and stakeholders were notified of the availability of the DBAR for review via email and SMS notifications.

Identification of I&APs was undertaken by Zitholele through existing contacts and stakeholder databases, internet searches, other stakeholders and I&APs, recording responses to site notices and the newspaper advertisement, as well as through the process of networking. The key stakeholder groups identified include authorities, local and district municipalities, public stakeholders, Parastatals and Non-Governmental Organizations and is listed in Table 1.

Table 1: Key stakeholder groups notified during the BA process

Stakeholder Group	Relevant Stakeholders
National Government Departments	Department of Forestry, Fisheries and Environment (DFFE)
	Department of Water and Sanitation (DWS)
	South African Heritage Resources Agency (SAHRA)
	South African National Roads Agency Limited (SANRAL)
	Department of Agriculture, Land Reform & Rural Development
	Department of Defence
	Department of Energy
	Department of Mineral Resources and Energy
	Department of Public Works
	Department of Transport and Public Works
Government Bodies and State-Owned Companies	Eskom Holdings SOC Ltd
	National Energy Regulator of South Africa (NERSA)
	8 SA Infantry Battalion
	ACSA - Upington International Airport
	Air Traffic and Navigation Services (ATNS)
	Bakwena Ba Mogopa Traditional Authority
	South African Civil Aviation Authority (CAA)
	Council of Geoscience
	South Africa Army Foundation
	South African Radio Astronomy Observatory (SARAO)
Provincial Government Departments	Telkom SA SOC Ltd
	Transnet SOC Ltd
	Northern Cape Department of Environment and Nature Conservation
	Northern Cape Department of Co-operative Governance
	Northern Cape Economic Development Agency
	David Kruiper Local Municipality (DKLM)

Local Government Departments	Z F Mgcawu District Municipality
	Kai !Garib Local Municipality (KGLM)
IPPs	Various IPPs located within 50km of the development site
Conservation organisations, NPO, NGO,	Cape Nature
	BirdLife South Africa
	Endangered Wildlife Trust
	Wildlife & Environment Society of South Africa (WESSA)
	Olifants-Doorn Catchment Management Agency
	Agri South Africa / Agri Northern Cape
	Boegoeberg Water Use Association
	Orange River Farmers Union: Agri SA
	Oranje Vaal Water Use Association
	South African National Parks
	South African Bat Assessment Advisory Panel (SABAAP)
Organisations and Businesses	Kudumane Manganese Resources
	SENTECH
Landowners	Neighbouring landowners and tenants

9. OTHER AUTHORISATIONS REQUIRED

Are there any other applications for Environmental Authorisation on the same property?		YES	
If YES, please indicate the following:			
Competent Authority	Department of Water and Sanitation (DWS)		
Application Reference Number	WU24665		
Project Name	Construction of a solar PV Plant, BESS, substation and powerline near Upington, Northern Cape		
Please provide details of the steps taken to ascertain this information:			
<p>An application for the WULA has been launched on the DWS' e-WULAAS online submission system. The reference number (WU24665) have been allocated to the application and the pre-application enquiry was accepted and the application moved to Phase 1. It was confirmed a General Authorisation application must be undertaken by the DWS.</p>			

IF YES IS SELECTED, PLEASE ATTACH OTHER AUTHORISATIONS ISSUED.

Applications in terms of the National Environmental Management Act ("NEMA") & specific environmental management Acts ("SEMA's"):

LEGISLATION	AUTHORISATION REQUIRED		APPLICATION SUBMITTED	
Is Section 50(5) of the National Environmental Management: Protected Areas Act applicable to your proposed development? (The proposed development is within a proclaimed protected area as defined the Act.)		NO		NO
National Water Act (Act No. 36 of 1998)	YES			NO
National Environmental Management: Air Quality Act (Act No. 39 of 2004)		NO		NO
National Environmental Management: Biodiversity Act (Act No. 10 of 2004)		NO		NO
National Environmental Management: Integrated Coastal Management Act (Act No. 24 of 2008)		NO		NO
National Environmental Management: Protected Areas Act (Act No. 57 of 2003)		NO		NO
National Environmental Management: Waste Act (Act No. 59 of 2008)		NO		NO
Others: Please specify	YES	NO	YES	NO

Please be advised that:

- If a Waste Management license is required in terms of the National Environmental Management: Waste Act, please contact the Department for guidance on the **Integrated Permitting System**. **An IPS application can only be lodged with this Department in the event that this Department is the Competent Authority for both the EIA and Waste related activities;**
- If Sections 7B and 7C of the National Environmental Management: Integrated Coastal Management Act is applicable to your proposed development, you are required to obtain pre-approval for a reclamation application prior to an Application for Environmental Authorisation being lodged with the Competent Authority;
- If Section 50(5) of the National Environmental Management: Protected Areas Act is applicable to your proposed development, you are required to obtain approval from the Management Authority prior to an Application for Environmental Authorisation being lodged with the Competent Authority; and
- If Section 38 of the National Heritage Resources Act (Act No. 25 of 1999) is applicable to your proposed development, you are requested to submit the Notice of Intent form to the relevant SAHRA or a Provincial Heritage Resources Authority and attach a copy to this form. If it is indicated that a Heritage Impact Assessment will be required, the Heritage Impact Assessment must be undertaken as one of the specialist studies of the EIA process to be undertaken in terms of the NEMA EIA Regulations, 2014, as amended.

10. LIST OF APPENDICES

		SUBMITTED	
APPENDIX 1	Copy of the pre-application meeting minutes	YES	
APPENDIX 2	Proof of Payment / Motivation for exclusion		NO
APPENDIX 3	List of land owners (with contact details) and written consent of land owners.	YES	
APPENDIX 4	List of Local/Provincial Authority involved (with contact details)		NO
APPENDIX 5	Strategic Infrastructure Projects		NO
APPENDIX 6	List of SGIDs and coordinates	YES	
APPENDIX 7	Locality map	YES	
APPENDIX 8	Project schedule	YES	
APPENDIX 9	Declaration of Applicant	YES	
APPENDIX 10	Declaration of EAP and undertaking under oath or affirmation	YES	
APPENDIX 11	Screening Tool Report	YES	
APPENDIX 12	Undertaking under Oath / Affirmation	YES	

APPENDIX 1
COPY OF THE PRE-APPLICATION MEETING MINUTES

Mathys Vosloo

From: Olivia Letlalo <OLetlalo@dfre.gov.za>
Sent: Thursday, 21 July 2022 13:34
To: Mathys Vosloo
Subject: RE: 21139 Kiwano Solar PV and BESS - DFFE preapplication meeting minutes for review

Dear Mathys

Thanks for the approved minutes.

Regards
Olivia

From: Mathys Vosloo <mathysv@zitholele.co.za>
Sent: Thursday, 21 July 2022 09:35
To: Mahlatse Shubane <MSHUBANE@dfre.gov.za>; Makhosi Yeni <MYeni@dfre.gov.za>; MpelaZ@eskom.co.za; SoniM@eskom.co.za; MtshaliM@eskom.co.za; NneneTM@eskom.co.za; ZwaneN@eskom.co.za; Olivia Letlalo <OLetlalo@dfre.gov.za>; SinghMo@eskom.co.za; HeeraV@eskom.co.za; RadebeF@eskom.co.za; AppoleA@eskom.co.za; Thembisile Hlatshwayo <THLATSHWAYO@dfre.gov.za>; vGenseAL@eskom.co.za; MazibuNY@eskom.co.za; MMatlala Rabothata <MRABOTHATA@dfre.gov.za>; Portia Makitla <PMakitla@dfre.gov.za>
Cc: Jessica Morwasehla <jessicam@zitholele.co.za>
Subject: RE: 21139 Kiwano Solar PV and BESS - DFFE preapplication meeting minutes for review
Importance: High

Good morning colleagues,



Please find attached the final minutes of the pre-application meeting held on 31 May 2022 for the Kiwano Solar PV and BESS project for your records.

Kind regards,

DR. MATHYS VOSLOO [Ph.D., Pr.Sci.Nat.]
Associate Director & Environmental Lead



Building 1, Maxwell Office Park, Magwa Crescent West, Waterfall City, Midrand, RSA

T: +27 11 207 2060 | **F:** +27 86 674 6121 | **W:** www.zitholele.co.za | **C:** +27 84 748 3018 | **E:** mathysv@zitholele.co.za

Please consider the environment before printing this e-mail!

From: Mathys Vosloo
Sent: Wednesday, 29 June 2022 16:07
To: MSHUBANE@dfre.gov.za; MYeni@dfre.gov.za; MpelaZ@eskom.co.za; SoniM@eskom.co.za;

MtshaliM@eskom.co.za; NneneTM@eskom.co.za; ZwaneN@eskom.co.za; Oletlalo@dfpe.gov.za;
SinghMo@eskom.co.za; HeeraV@eskom.co.za; RadebeF@eskom.co.za; AppoleA@eskom.co.za;
THLATSHWAYO@dfpe.gov.za; vGenseAL@eskom.co.za; MazibuNY@eskom.co.za; MRABOTHATA@dfpe.gov.za; Portia
Makitla <PMakitla@dfpe.gov.za>
Cc: Jessica Morwasehla <jessicam@zitholele.co.za>
Subject: 21139 Kiwano Solar PV and BESS - DFFE preapplication meeting minutes for review
Importance: High

Good day colleagues,

Please find attached the minutes of the pre-application meeting held on 31 May 2022 for review.



Can I please receive your comments/corrections by 6 July 2022, after which I will finalise and send it to DFFE for approval.

Kind regards,

DR. MATHYS VOSLOO [Ph.D., Pr.Sci.Nat.]
Associate Director & Environmental Lead



Building 1, Maxwell Office Park, Magwa Crescent West, Waterfall City, Midrand, RSA

T: +27 11 207 2060 | **F:** +27 86 674 6121 | **W:** www.zitholele.co.za | **C:** +27 84 748 3018 | **E:**
mathysv@zitholele.co.za

Please consider the environment before printing this e-mail!

**KIWANO SOLAR PHOTOVOLTAIC AND BATTERY ENERGY STORAGE SYSTEM
FACILITY INCLUDING ASSOCIATED SUBSTATION AND 132KV LOOP-IN LOOP-
OUT POWERLINE NEAR UPINGTON, NORTHERN CAPE PROVINCE**

DFFE PRE-APPLICATION MEETING – DRAFT MINUTES

CLIENT : Eskom Holdings SOC Ltd
CONSULTANT : Zitholele Consulting (Pty) Ltd
PROJECT NO. : 21139
DATE : 31 May 2022
TIME : 10h00 to 11h30
VENUE : Virtual Meeting - MS Teams
REFERENCE : 21139-11-Min-001

PRESENT

Andrea Van Gensen (Eskom)	AvG	Mohil Singh (Eskom)	MSi
Archibold Appoles (Eskom)	AA	Monde Soni (Eskom)	MSo
Florence Dube-Jacobs (Eskom)	FD	Olivia Letlalo (DFFE – CD:IEA)	OL
Mahlatse Shubane (DFFE – CD:IEA)	MS	Portia Makitla (DFFE)	PM
Makhosi Yeni (DFFE – CD:IEA)	MY	Thembisile Hlatshwayo (DFFE)	TH
Mathys Vosloo (Zitholele)	MV	Tshegofatso Nnene (Eskom)	TN
Mbali Mtshali (Eskom)	MM	Viren Heera (Eskom)	VH
Ndzalama Zwane (Eskom)	NZ	Yvonne Mazibuko	YM
MMatlala Rabothata	MR	Zakes Mpela (Eskom)	ZM

APOLOGIES





None

ITEM	DISCUSSION POINTS	ACTION, DATE
1	AGENDA	
	<ol style="list-style-type: none"> 1. Welcome and Attendance 2. Project Background, Development Site and Proposed Activities 3. Project Screening Outcome 4. Development Site Sensitivities <ol style="list-style-type: none"> a. Terrestrial Ecology and Biodiversity b. Avifauna c. Aquatic and Wetlands d. Heritage and Palaeontology e. Visual 5. Listed Activities triggered 6. Impact Assessment Process 7. Project Alternatives 8. Public Participation Process requirements 9. Specific DFFE requirements and considerations 10. Discussion 11. Closure 	

ITEM	DISCUSSION POINTS	ACTION, DATE
2	WELCOME AND ATTENDANCE	
2.1	MV welcomed all attendees to the pre-application meeting and requested all attendees to introduce themselves. All attendees introduced themselves.	
2.2	A record of the meeting attendance is included in Appendix A.	
3	PROJECT PRESENTATION	
3.1	MV presented the presentation in the meeting. A copy of the presentation is provided in Appendix B.	Note
4	DISCUSSION	
4.1	MS stated that the presentation only mention farm 1080. The EAP must ensure that all farm portions affected by the powerlines for both alternatives form part of the application. MV responded that it is correct that a few other farm portions will be crossed by the powerlines. MV confirmed that this is noted.	
4.2	MS stated that no details were given regarding the fence. Can you provide details regarding the fence, e.g. height etc. MV replied that full details regarding the fence will be included in the application. AA confirmed that the details of the fence and fence types will be included in the technical information for the development. OL responded that the concern regarding the fence revolves around the height of the fence and, for example, whether some species will be able to move through the fence. MV noted OL 's comment.	
4.3	MS stated that the presentation indicates that all the BESS technologies alternatives stated in the presentation will be considered and the preferred alternative will only be finalized during tender stage. The applicant must know which preferred alternative they will go with when the final report is submitted as the Department cant approve all the BESS alternatives. AvG requested FD to provide some input in terms of the BESS technology alternatives. FD replied that Eskom have had prior engagements with DFFE. Eskom generally goes into these applications technology-agnostic as this is the requirement from the World Bank that is funding the project. So if the final report is ready to be submitted and Eskom has not gone to the market with the bidding documents it will be difficult for Eskom to know what the preferred technology will be. OL confirmed that an agreement was reached with Eskom that when the Department issues a decision it will be with the condition that the EMPr and layout will not be approved. At a later stage the BESS technology will then be approved within the amended EMPr as well as the location of the BESS technology in the final Layout Map.	
4.4	MS stated that when the Screening Tool report is considered you need to know what the protocols state and must comply with the protocols. MS further stated that a socio-economic study should be undertaken for this proposed project. MV acknowledged that there will be some positive benefits associated with the development such as job opportunities during construction, however we have proposed that the study not be undertaken because there is no direct impact on communities or	

ITEM	DISCUSSION POINTS	ACTION, DATE
	households within the development site. MV asked whether the need for the socio-economic study is recommended by the Department as a whole? PM stated that knowing that each and every development must meet the sustainable development definition, you need to address the socio-economic aspects as a result of this proposed development. Currently we don't have an idea who will be affected and who will gain from this proposed development, e.g. local community within the area. This information must form part of the socio-economic study. MV noted PM 's response and indicated that if there are any further questions we will engage further with the Department.	
4.5	MS stated that in terms of Listing Notice 1 Activity 14 the presentation mentions other chemicals that will be stored. You need to be clear in terms of what other chemicals will be stored. MV noted this recommendation.	
4.6	MS stated that the presentation indicates that Listing Notice 3 Listed Activity 4 is triggered for Site Alternative A. However, if its not triggered for Site Alternative B this needs to be indicated. MV noted this recommendation.	
4.7	MS stated that the application follows the Basic Assessment process because the site falls within the Renewable Energy Development Zone (REDZ). Therefore when you submit the application you need to include a map indicating the REDZ. MV noted this requirement.	
4.8	OL asked whether the two development alternatives will be a phased development or not? MV replied that with regards to the site alternatives, it will only be one of the two alternatives, either Site A or Site B, that will be preferred and not a phased approach.	
4.9	OL indicated that consent letters from the landowners must form part of the application. MV confirmed that consent letters will be obtained from the landowners and included in the application.	
4.10	OL asked whether the application will have a corridor for the proposed line or whether it will be within the corridor of the existing lines. MV replied that the proposed powerlines will not fall within the existing powerline servitudes but we have proposed a powerline corridor for consideration and approval. The powerlines will however be aligned as far as possible next to existing powerline infrastructure.	
4.11	OL indicated that from the 1 st of May the Department has done away with submission of the Public Participation Plan. Therefore, the Department does not require a Public Participation Plan for approval. The EAP will have to comply with the requirements of the regulations with regards to the public participation process. MV replied that we take note of the change with regard to the public participation plan no longer being necessary, but will however still take cognisance of the Covid protocols and requirements in the PPP process.	
4.12	PM requested whether the EAP can share the screening tool results. MV scrolled back to the results of the screening tool assessment during the meeting for PM 's information.	
4.13	PM noted that the terrestrial biodiversity is very high sensitivity. What is it that triggered the very high sensitivity? And if it is very high do you think that at the end of the process the biodiversity impact will be managed to	

ITEM	DISCUSSION POINTS	ACTION, DATE
	an acceptable level? MV replied that there is a small section where the proposed access road crosses a Critical Biodiversity Area (CBA) and an Ecological Support Area (ESA) near the N14 road. MV stated that the biodiversity specialist will address this impact.	
4.14	PM noted that she does not see avifauna assessment with regards to the impact assessments. MV replied that the avifauna has been considered and will be included in the specialist report that will be submitted.	
4.15	OL stated that the Department will be expecting the minutes for approval, which must be submitted with the application form. Also, during the commenting period with regards to the BESS technology, the Department will request such information in terms of the preferred technology being indicated in the report, however, the Department does take note of the agreement between the Department and Eskom as per the previous meeting held. However the preferred BESS technology needs to be requested as a standard requirement. MV asked whether we need to include some specific correspondence around this aspect with the Department. OL replied that Eskom has undertaken some similar projects where they have responded to the Department regarding this. The applicant can formulate a similar response for this application. AvG requested clarity that although the applicant has a number of technology alternatives, the consultant must still put forth the preferred technology however that it has not been confirmed yet when the report goes out to Interested and Affected Parties. OL replied that you need to provide a response what your preferred technology is and provide reasons why it has not yet been finalised.	
5	CLOSURE	
5.1	With no further matters arising, MV thanked all attendees for their participation and closed the meeting.	

ACTION	FUNCTION	NAME	DATE	SIGNATURE
Prepared	EAP	Ms J. Morwasehla	13/06/2022	
Reviewed	Project Associate	Dr M. Vosloo	14/06/2022	
Approved	Divisional Lead	Dr M. Vosloo	14/06/2022	
Approved	DFFE: IEA	Ms Olivia Letlalo	04/07/2022	

Appendix A – Record of Meeting Attendance

Meeting Summary	
Total Number of Participants	18
Meeting Title	2022-05-0025 Pre-application meeting for Kiwano Solar PV and BESS
Meeting Start Time	31/05/2022, 09:52:36
Meeting End Time	31/05/2022, 11:27:27
Meeting Id	77a8bfec-6e0e-4010-895f-1fab95677aa9

Full Name	Join Time	Leave Time	Duration	Email	Participant ID (UPN)
Mathys Vosloo	31/05/2022, 09:52:36	31/05/2022, 11:27:01	1h 34m	mathysv@zitholele.co.za	mathysv@zitholele.co.za
Mahlatse Shubane	31/05/2022, 09:53:02	31/05/2022, 11:26:02	1h 32m	MSHUBANE@dffe.gov.za	mshubane@environment.gov.za
Makhosi Yeni	31/05/2022, 09:55:34	31/05/2022, 11:26:01	1h 30m	MYeni@dffe.gov.za	myeni@environment.gov.za
Zakes Mpela	31/05/2022, 09:58:49	31/05/2022, 10:16:12	17m 23s	MpelaZ@eskom.co.za	MpelaZ@eskom.co.za
Zakes Mpela	31/05/2022, 10:17:34	31/05/2022, 11:26:07	1h 8m	MpelaZ@eskom.co.za	MpelaZ@eskom.co.za
Monde Soni	31/05/2022, 10:00:31	31/05/2022, 11:25:58	1h 25m	SoniM@eskom.co.za	SoniM@eskom.co.za
Mbali Mtshali	31/05/2022, 10:00:41	31/05/2022, 11:26:11	1h 25m	MtshaliM@eskom.co.za	MtshaliM@eskom.co.za
Tshegofatso Nnene	31/05/2022, 10:00:45	31/05/2022, 11:26:09	1h 25m	NneneTM@eskom.co.za	NneneTM@eskom.co.za
Ndzalama Zwane	31/05/2022, 10:00:47	31/05/2022, 11:25:59	1h 25m	ZwaneN@eskom.co.za	ZwaneN@eskom.co.za
Olivia Letlalo	31/05/2022, 10:00:52	31/05/2022, 11:26:10	1h 25m	OLetlalo@dffe.gov.za	oletlalo@environment.gov.za
Mohil Singh	31/05/2022, 10:00:54	31/05/2022, 10:46:54	45m 59s	SinghMo@eskom.co.za	SinghMo@eskom.co.za
Viren Heera	31/05/2022, 10:01:28	31/05/2022, 11:06:10	1h 4m	HeeraV@eskom.co.za	HeeraV@eskom.co.za
Florence Dube-Jacobs	31/05/2022, 10:03:53	31/05/2022, 11:26:18	1h 22m	RadebeF@eskom.co.za	RadebeF@eskom.co.za
Archibold Appoles	31/05/2022, 10:04:38	31/05/2022, 11:27:13	1h 22m	AppoleA@eskom.co.za	AppoleA@eskom.co.za
Thembisile Hlatshwayo	31/05/2022, 10:04:45	31/05/2022, 11:27:27	1h 22m	THLATSHWAYO@dffe.gov.za	thlatshwayo@environment.gov.za
Andrea Van Gensen	31/05/2022, 10:06:11	31/05/2022, 11:26:03	1h 19m	vGenseAL@eskom.co.za	vGenseAL@eskom.co.za
Yvonne Mazibuko	31/05/2022, 10:16:01	31/05/2022, 11:26:04	1h 10m	MazibuNY@eskom.co.za	MazibuNY@eskom.co.za
MMatlala Rabothata	31/05/2022, 10:20:37	31/05/2022, 10:26:58	6m 21s	MRABOTHATA@dffe.gov.za	mrabothata@environment.gov.za
MMatlala Rabothata	31/05/2022, 10:28:51	31/05/2022, 11:26:07	57m 16s	MRABOTHATA@dffe.gov.za	mrabothata@environment.gov.za
Portia Makitla	31/05/2022, 10:39:44	31/05/2022, 11:26:06	46m 21s	PMakitla@dffe.gov.za	pmakitla@environment.gov.za

Appendix B – Meeting Presentation

**Development of the proposed Kiwano Solar
Photovoltaic and Battery Energy Storage System
Facility including associated substation and 132kV
loop-in loop-out powerline near Upington, Northern
Cape Province.**

Pre-Application Meeting

Mathys Vosloo
31 May 2022
21139

Presentation Structure

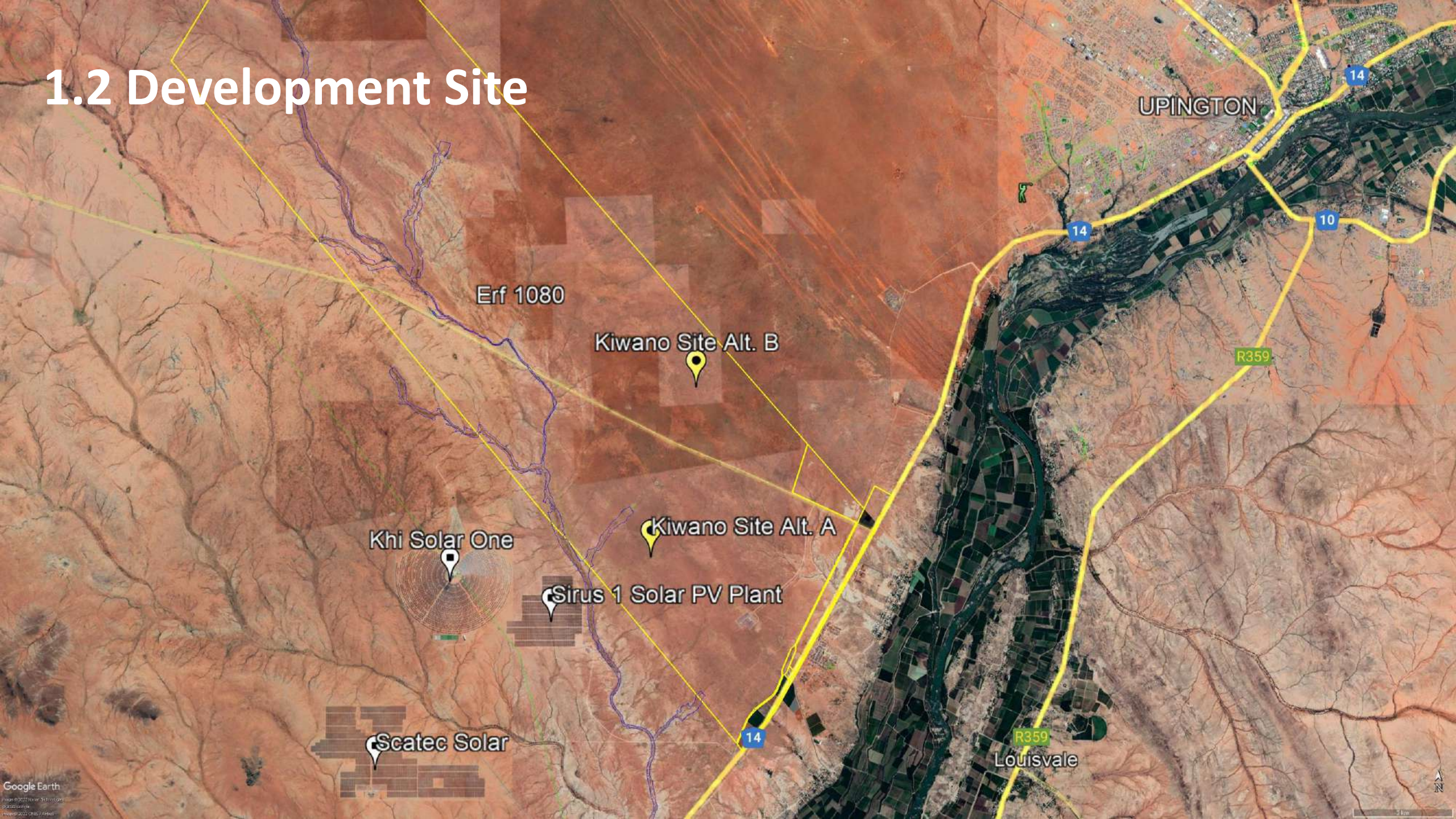
1. Project Background, Development Site and Proposed Activities
2. Project Screening Outcome
3. Development Site Sensitivities
 - a. Terrestrial Ecology and Biodiversity
 - b. Avifauna
 - c. Aquatic and Wetlands (Freshwater)
 - d. Heritage and Palaeontology
 - e. Visual
4. Listed Activities triggered
5. Impact Assessment Process
6. Project Alternatives
7. Public Participation Process requirements
8. Specific DFFE requirements and considerations
9. Discussion
10. Closure

1.1 Project Background

Eskom Holdings SOC Ltd is proposing the development of a Solar Photovoltaic (PV) and Battery Energy Storage System (BESS) facility, including construction of a substation, overhead powerlines and associated infrastructure on Erf 1080 Portion 0 Olyvenhouts Drift Settlement Agricultural Holding.

Development site is located approx. 15km southeast of Upington and falls within the jurisdiction of Dawid Kruiper Local Municipality and within Z F Mgcawu District Municipality.

1.2 Development Site



1.3 Proposed Activities

The proposed development entail:

- PV installation with envisaged capacity of 58 MW
- BESS installation with envisaged capacity of 40 MW / 200 MWh
- Kiwano 132 kV substation with 5 feeder bays
- Single Twin-Tern 132 kV overhead line on a double circuit support structure, connecting Kiwano substation to Upington substation

Associated activities and infrastructure:

- Development area of 115 hectares
- Solar PV modules covering 450 000m²
- Existing access roads to be utilised where possible
- 6m wide access road to site (Site A ~ 5km, Site B ~ 1km)
- Access roads in between the PV module rows
- Perimeter road around site, ~ 5 m wide and 4.5 km in length

- Security fencing along the site boundary
- Up to 60 Inverter stations (~ 30m²)
- Below ground electrical cables with trenching - connecting PV arrays, Inverter stations, O&M buildings, and 132kV Kiwano substation
- Foundations and mounting structures to support the Solar PV modules and Inverter stations
- Infrastructure for operations and maintenance (e.g. O&M building, Spares Warehouse, Hazardous Chemical Store, Security Building, Parking, etc.)
- Small diameter water supply pipeline connecting existing municipality pipeline, ~ 5 km long
- Stormwater channels
- Temporary laydown area during construction (~ 10 hectares)
- Temporary concrete batching plant during construction (~ 1 hectare)
- Temporary site construction office area during construction (~ 1 hectare)

Site Alt. A

Development site

Substation

Proposed powerline

Existing powerlines

Water pipeline

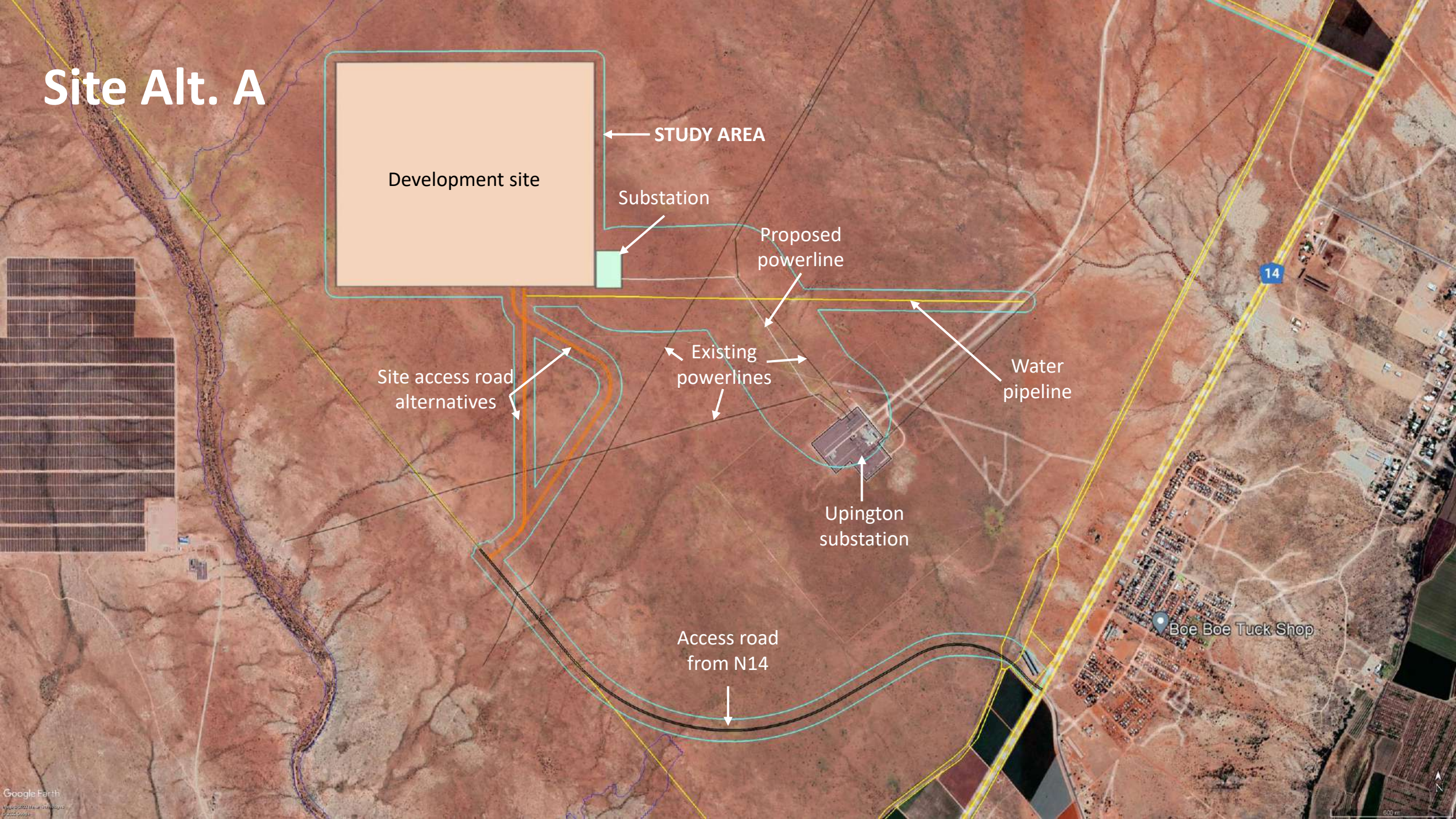
Site access road alternatives

Upington substation

Access road from N14

Boe Boe Tuck Shop

Site Alt. A



Site Alt. B



Substation

Proposed powerline

Site access road alternatives

Water pipeline

Existing powerlines

Upington substation

14

14

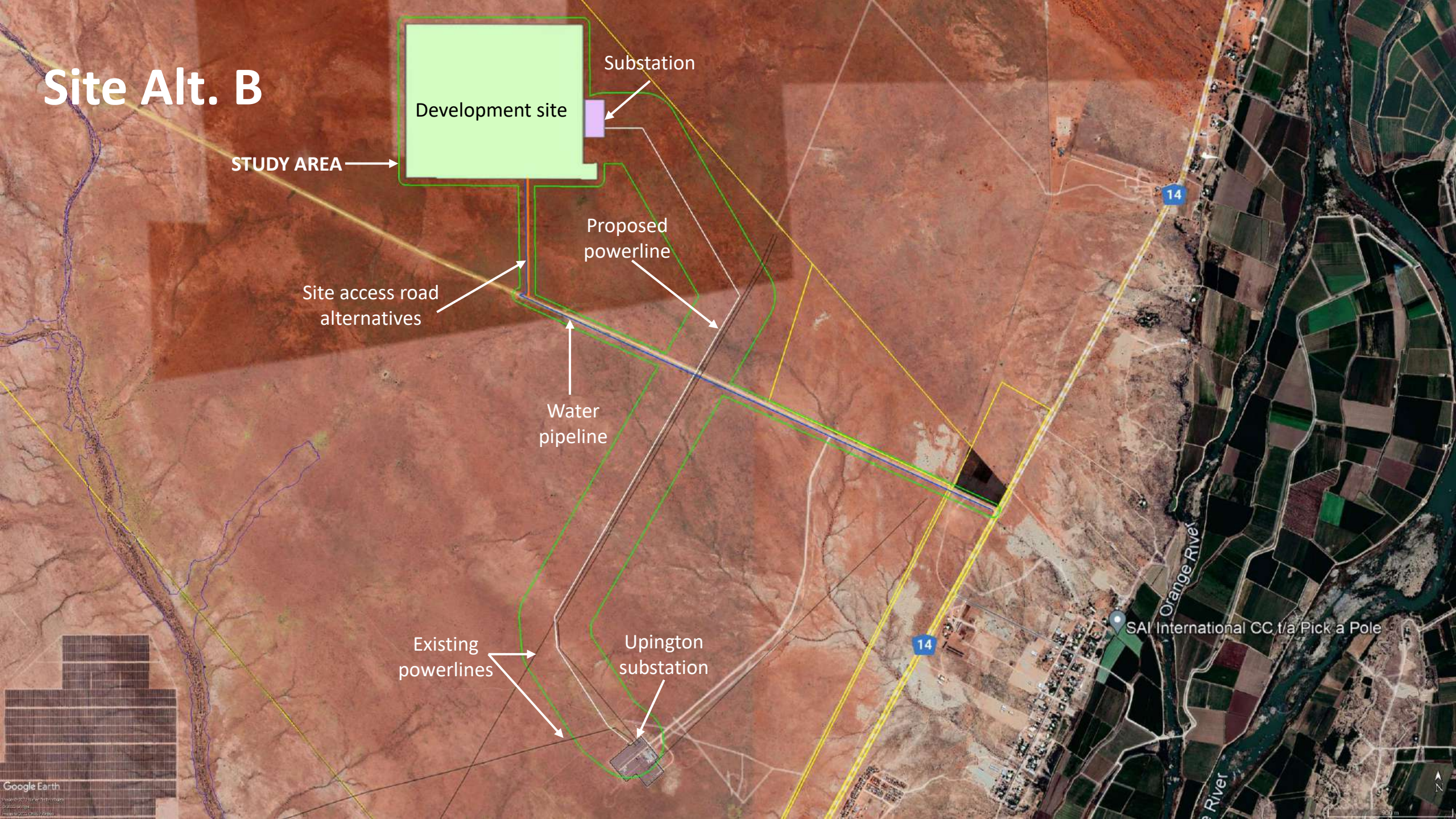
Orange River

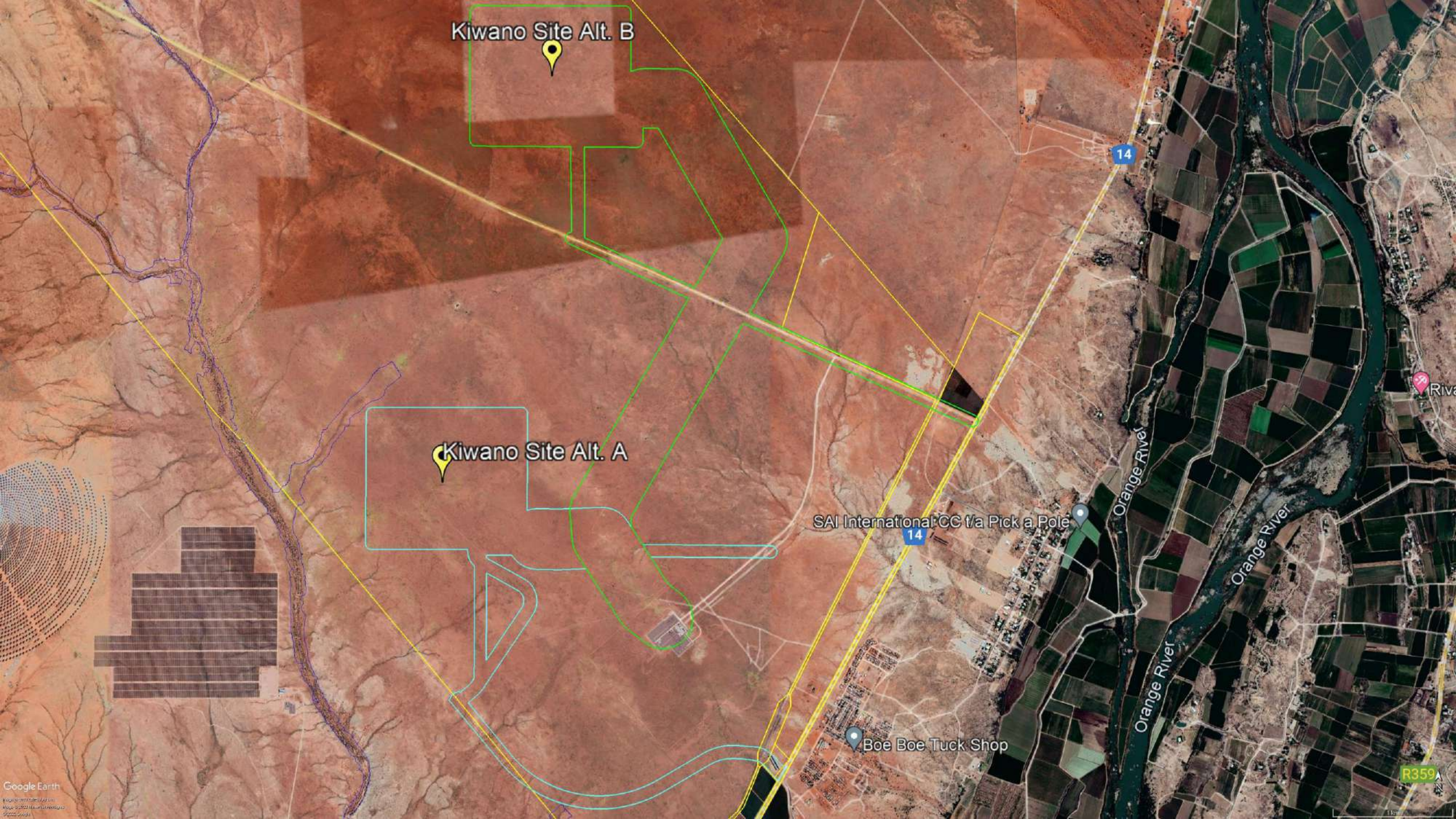
SAI International CC t/a Pick a Pole



200m

Site Alt. B





Kiwano Site Alt. B

Kiwano Site Alt. A

SAI International CC /a Pick a Pole

Boe Boe Tuck Shop

14

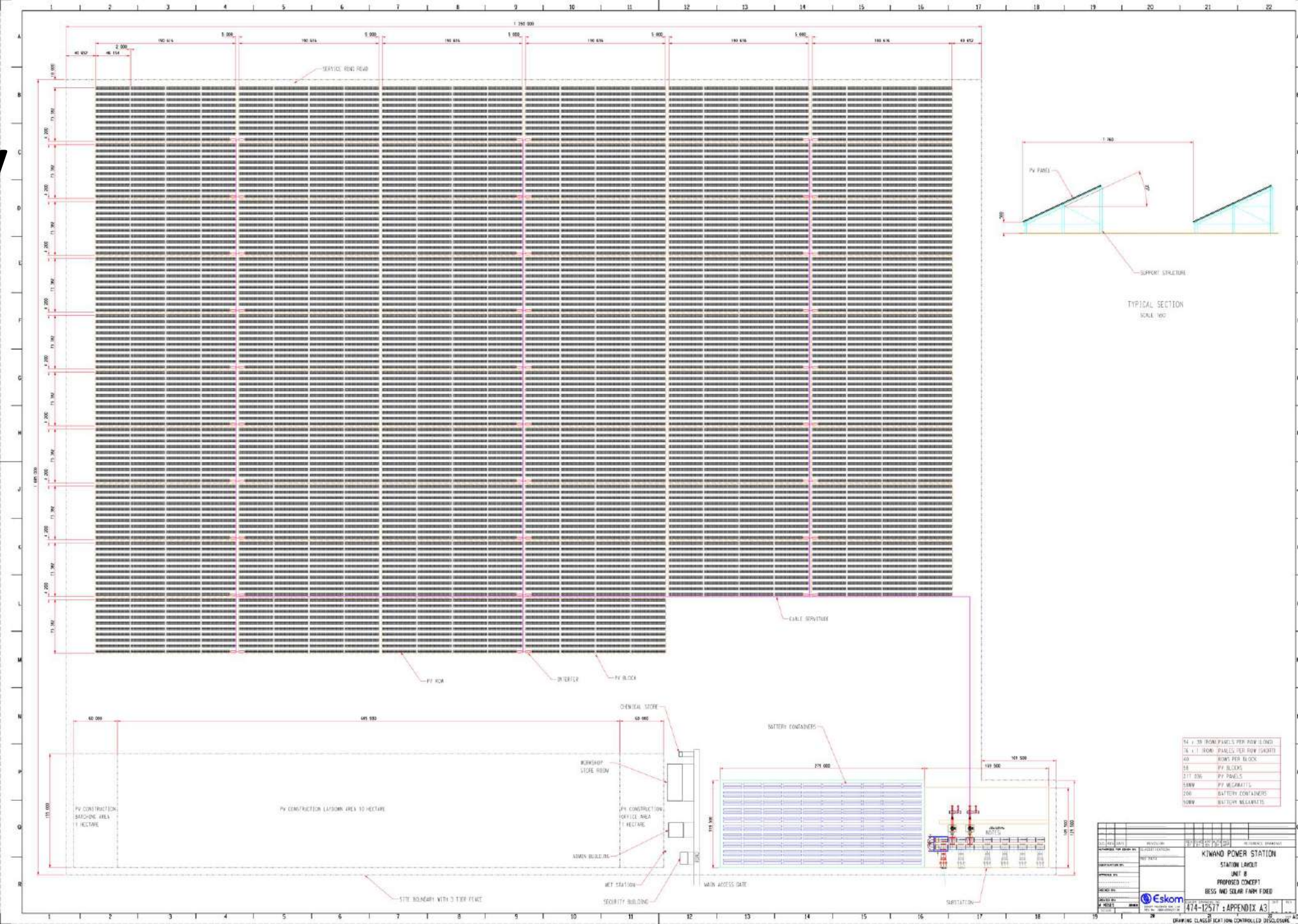
14

Orange River

Orange River

R359

Site Alt. A Preliminary Layout Drawing

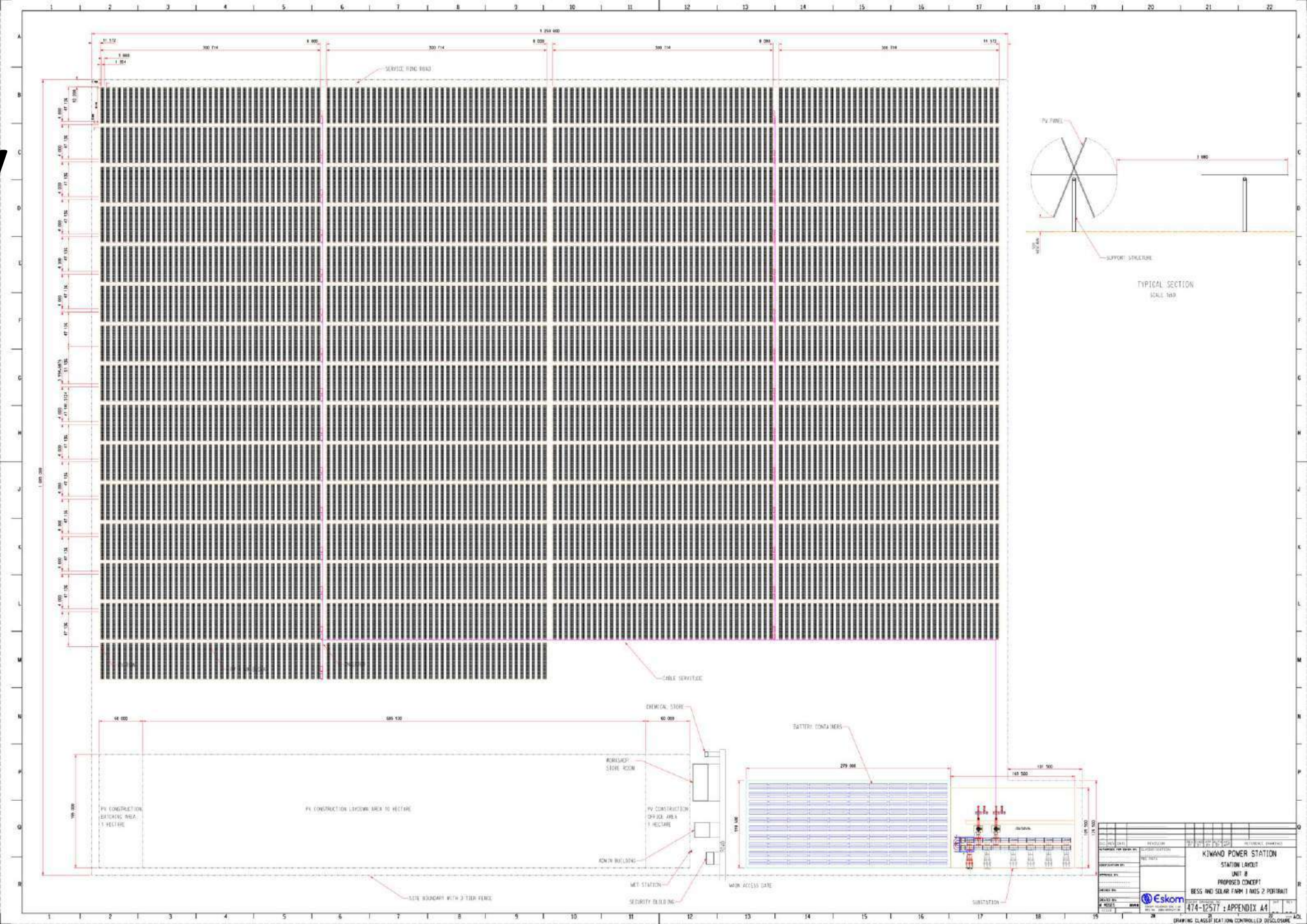


Site Alt. B

Preliminary

Layout

Drawing



2 Project Screening

The proposed development site:

- Falls within Siyanda District Development Framework
- Falls entirely within Strategic Tx Corridor and REDZ 7 - Upington

Theme	Sensitivity
Agriculture	Low
Animal Species	High
Aquatic Biodiversity	Low
Archaeological and Cultural Heritage	Low
Avian	High
Civil Aviation (Solar PV)	Low
Defense	Medium
Landscape (Solar)	Very High
Palaeontology	Medium
Plant Species	Low
Terrestrial Biodiversity	Very High

Agricultural Impact Assessment	No – No agricultural activities on site
Visual Impact Assessment	Yes
Archaeological and Cultural Heritage Impact Assessment	Yes
Palaeontology Impact Assessment	Yes
Terrestrial Biodiversity Impact Assessment	Yes
Aquatic Biodiversity Impact Assessment	Yes
Civil Aviation Assessment	No – Site surrounded by CSP and other PV
Defense Assessment	No – Site surrounded by CSP and other PV
RFI Assessment	No – Site surrounded by CSP and other PV
Geotechnical Assessment	Undertaken during design
Socio Economic Assessment	No – Site uninhabited
Plant & Animal Species Assessment	Yes

2 Site photos



3. Development Site Sensitivities

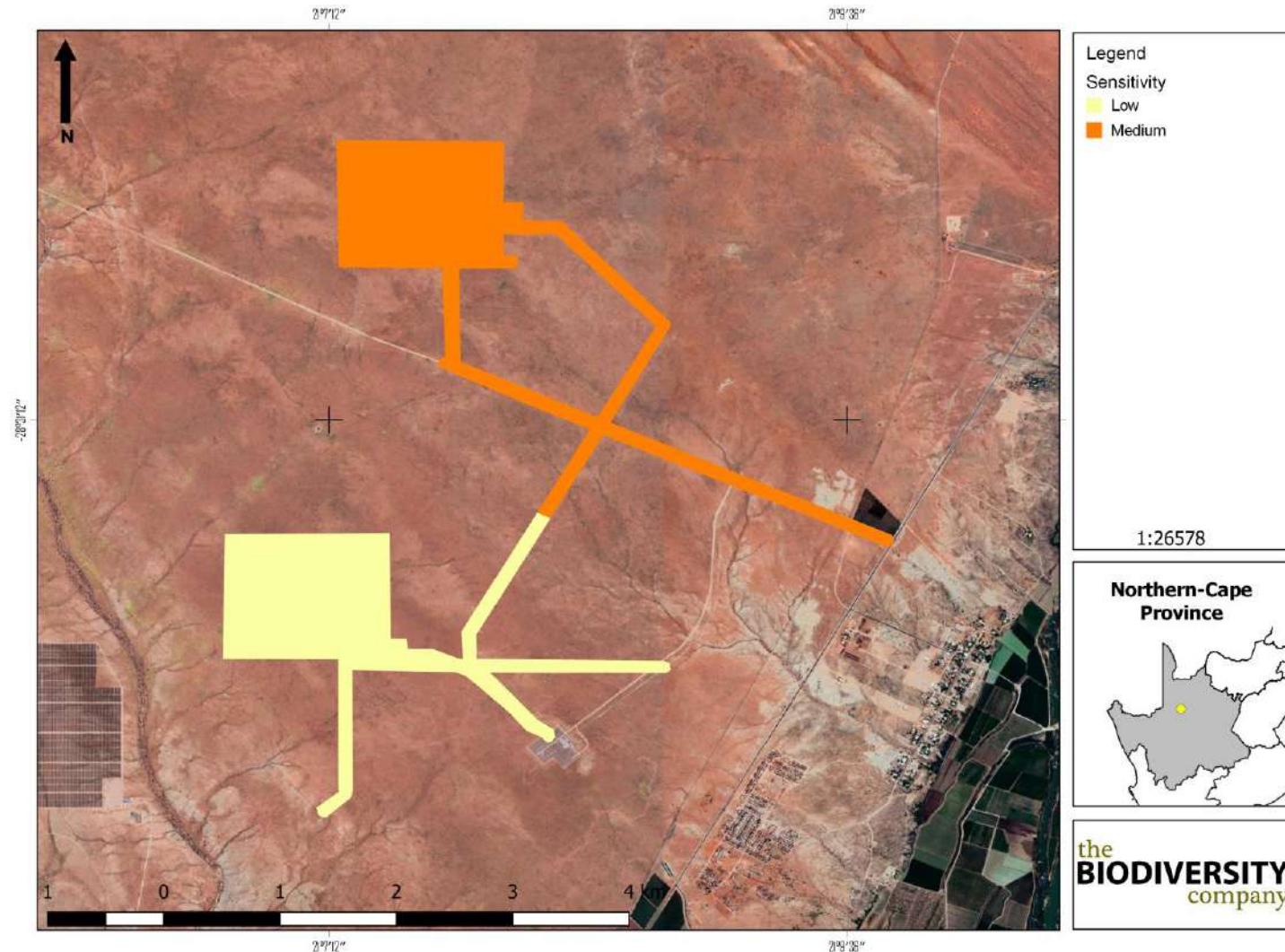
a. Terrestrial Ecology

- Both sites and all servitudes, homogenous.
- Habitat types similar, dominated Karroid grassland.
- No difference in faunal composition.
- Dominated by geophytic species, with Provincial protection.
- The SEI for both areas:
 - Alternative A – Very Low
 - Alternative B – Medium
- Although Site A is slightly preferred, both sites are feasible



3. Development Site Sensitivities

a. Terrestrial Ecology



3. Development Site Sensitivities

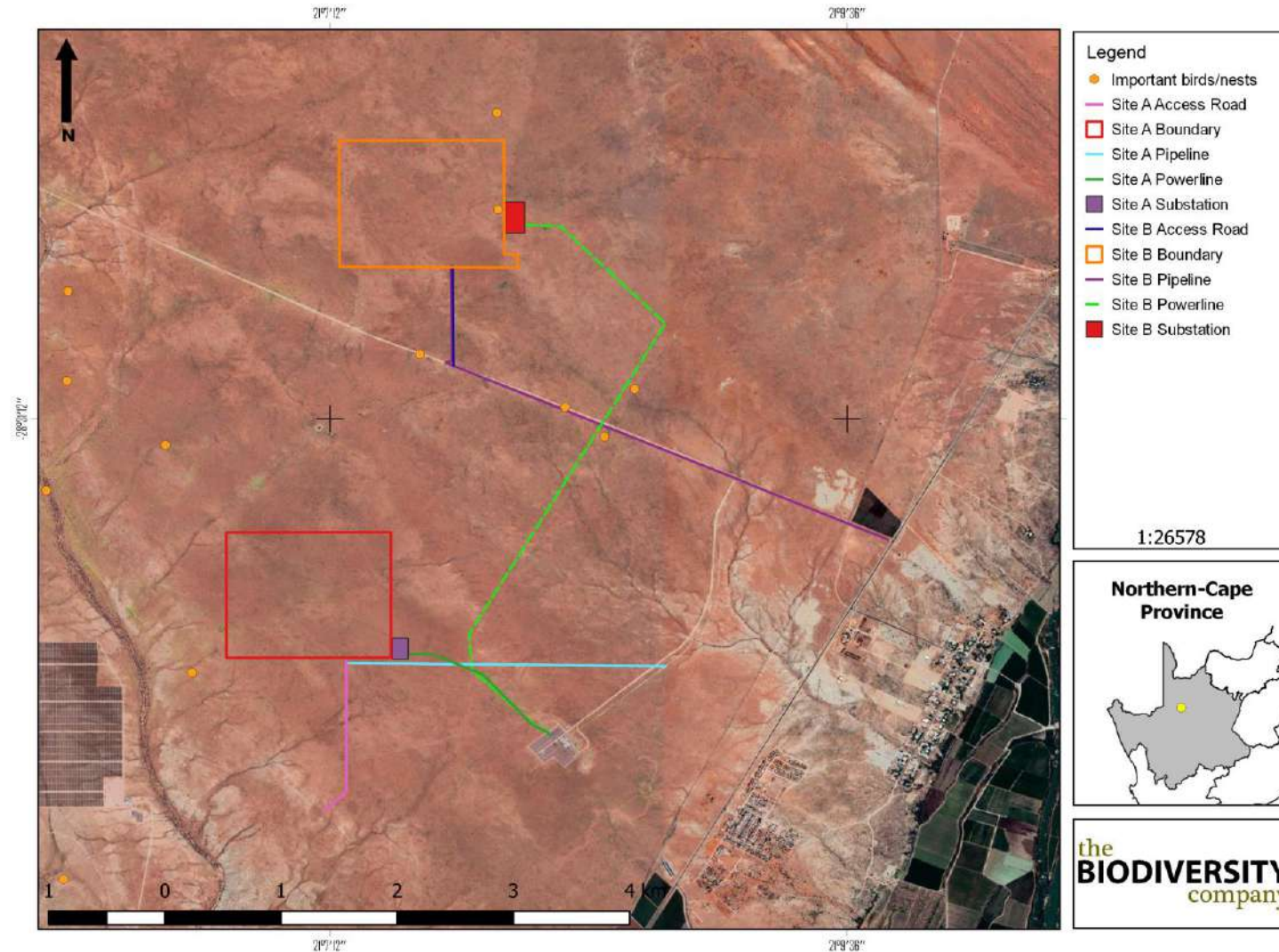
b. Avifauna

- The number of the SCcs recorded were high, i.e. 30 Red footed falcons, 200 Abdims stork, 2 lanners.
 - Lanner Falcon *Falco biarmicus* VU, LC
 - Red-footed Falcon *Falco vespertinus* NT, NT
 - Abdim's Stork *Ciconia abdimii* NT, LC
- The site with the dry river bed had sociable weaver nests and would likely support Pygmy Falcon as well. Pygmy protected in NC.
- The SEI for both alternatives would be High.



3. Development Site Sensitivities

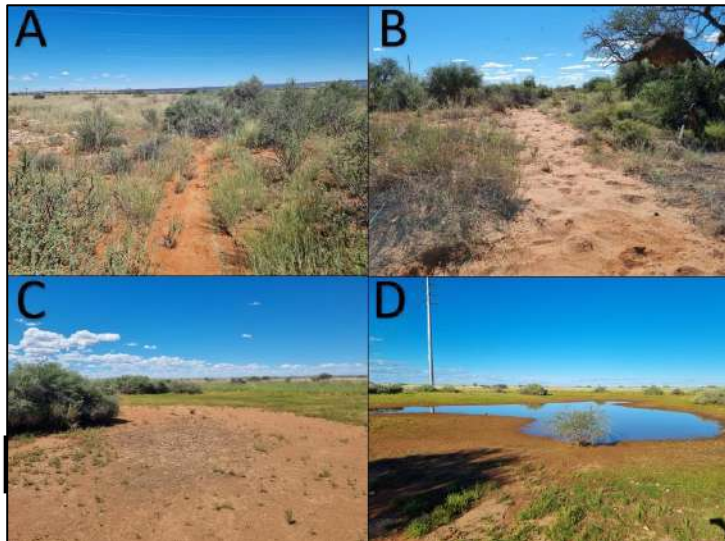
b. Avifauna



3. Development Site Sensitivities

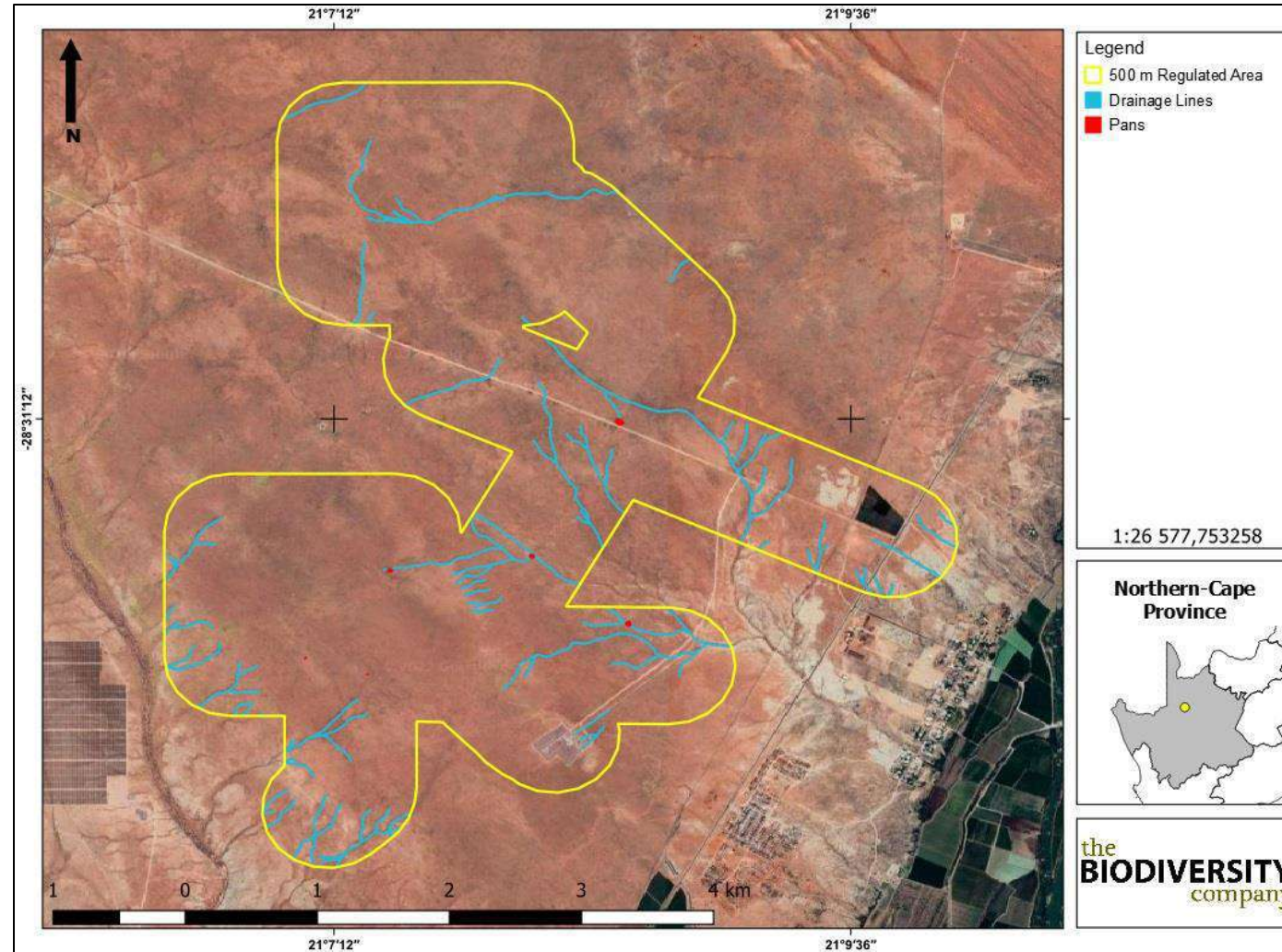
c. Freshwater

- Various non-wetland drainage features and depressions were identified within the 500 m regulated area.
- None of these systems are characterised by wetland features.
- Either alternative may be chosen as neither pose any threats towards wetland resources.



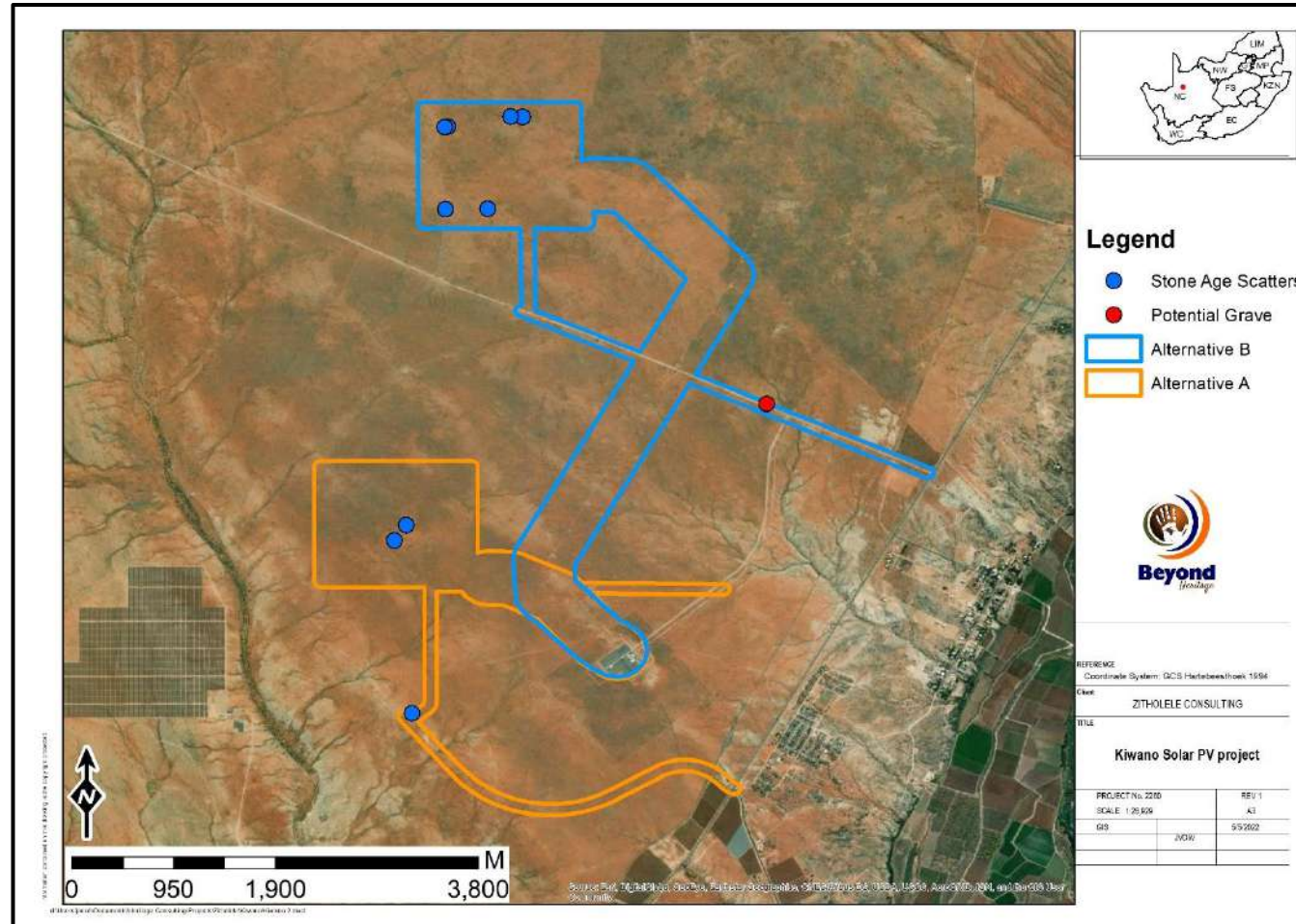
3. Development Site Sensitivities

c. Freshwater



3. Development Site Sensitivities

d. Heritage and Palaeontology



3. Development Site Sensitivities

d. Heritage and Palaeontology



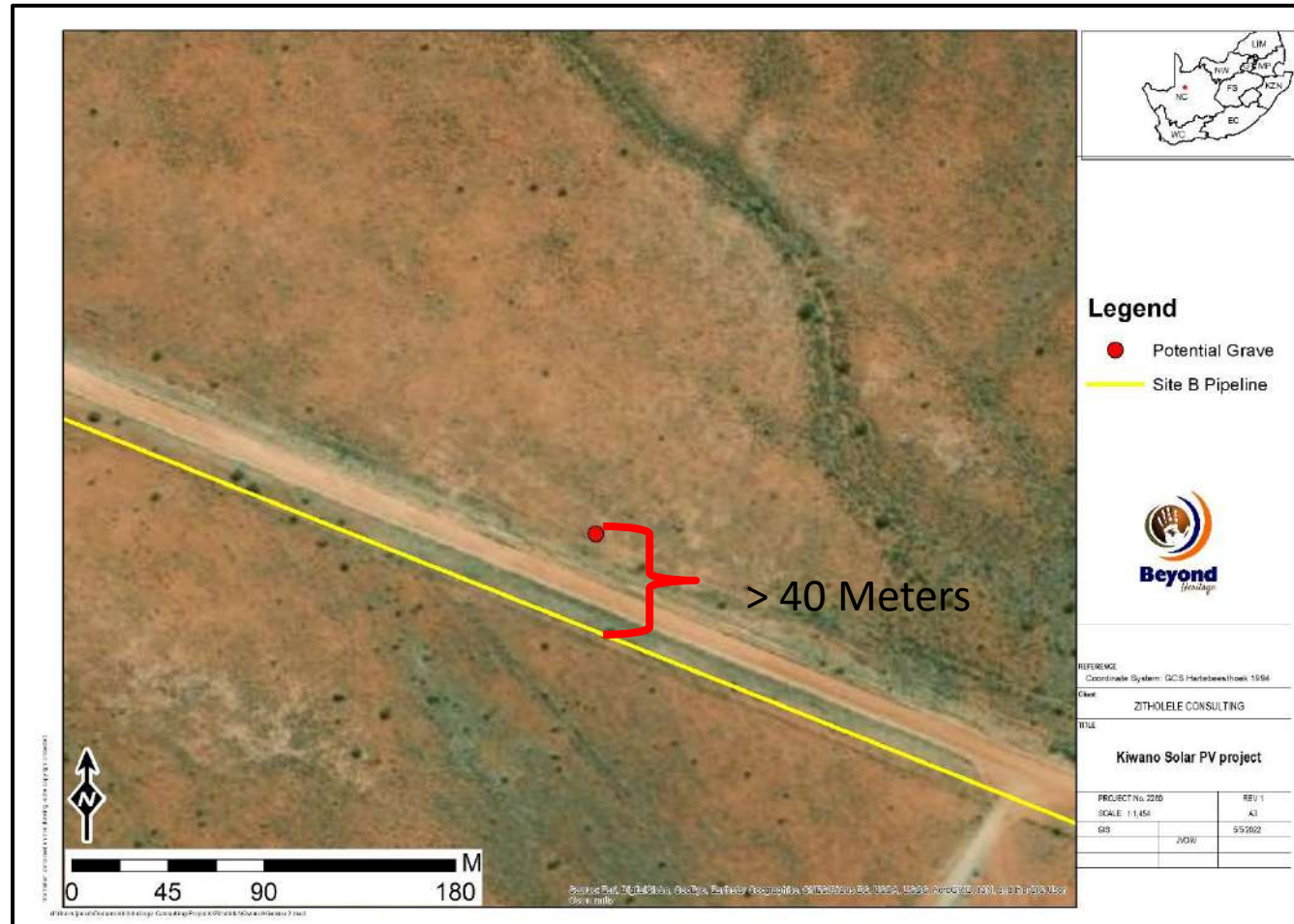
Stone Age Scatters



Potential burial site

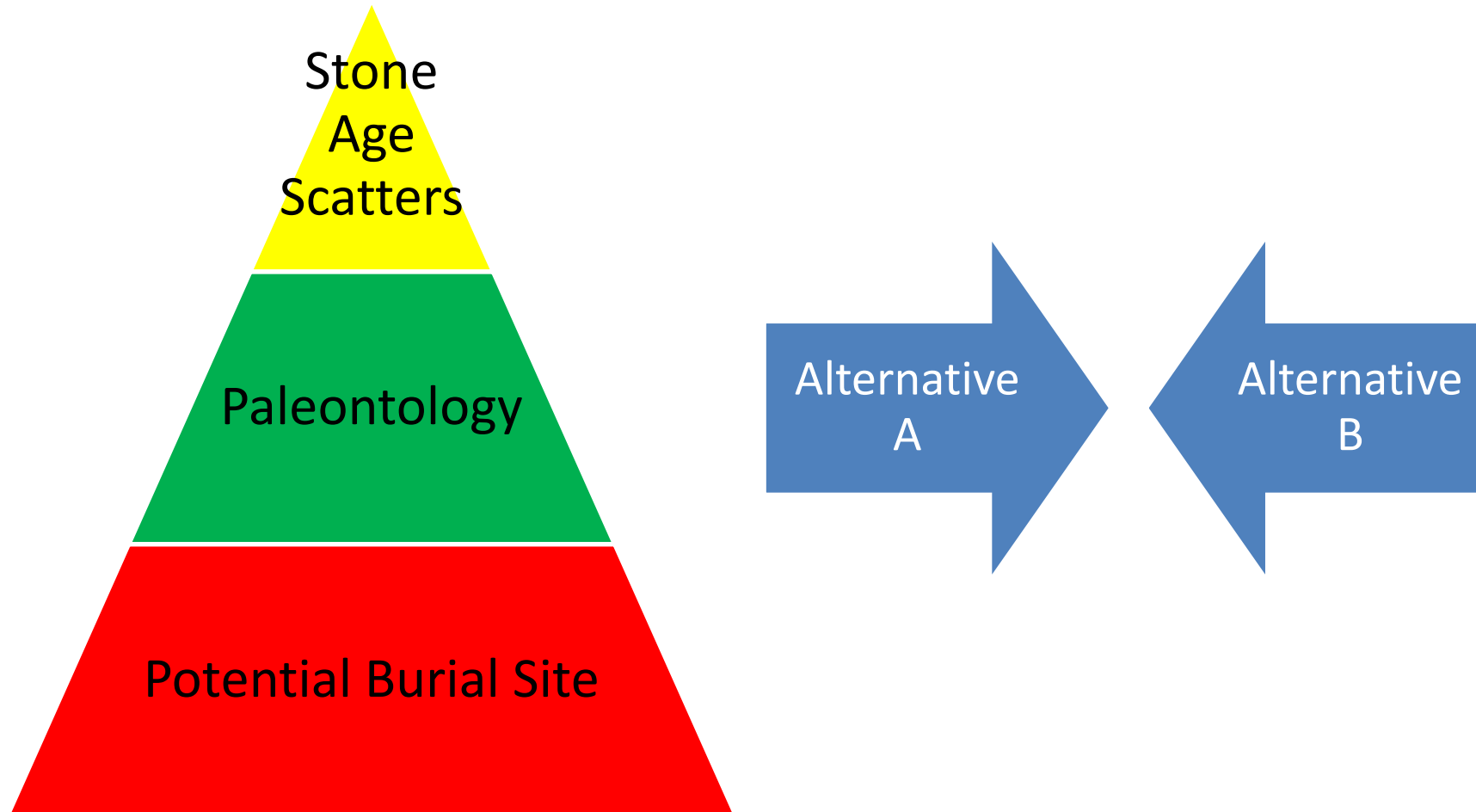
3. Development Site Sensitivities

d. Heritage and Palaeontology



3. Development Site Sensitivities

d. Heritage and Palaeontology



3. Development Site Sensitivities

e. Visual

- Development of Renewable Energy infrastructure is in keeping with National, Provincial and Local government planning policy.
- Very few sensitive receptors identified due to low population density in Kalahari Rangelands (North and West of Sites)
- Low profile of PV panels limits visual impact extent and intensity
- Whilst very flat and lacking relief, the gentle undulations associated with a small ephemeral river are sufficient to screen most sensitive receptors.
- Key views in the area are associated with the Orange River and not the Rangelands – This area has relatively high visual contrast and greater absorption capacity
- Powerlines more widely visible, but mitigated by alignment with existing powerlines and the low density of such features.
- Existing impacts are significantly more imposing than proposed development.
- Visual impact of either site is moderate-low (leaning to low)
- Site A is slightly preferred given this will cluster impacts with existing infrastructure and reduce the length of powerline required.

4. Listed Activities triggered

Activity No(s):	Listing Notice 1 of the EIA Regulations, 2014 as amended.	Describe the portion of the proposed project to which the applicable listed activity relates.
11	The development of facilities or infrastructure for the transmission and distribution of electricity— (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts;	Eskom propose to develop 132kV loop-in loop-out powerlines from the Solar PV and BESS facility substation to the existing Upington substation. The powerline associated with Site Alternative A will be approx. 1330m in length, while the powerline associated with Site Alternative B will be approx. 5568m in length.
14	The development and related operations of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 m ³	The development of the BESS plant will include the installation of batteries that will contain substances and materials classified as dangerous goods. The development further include the construction and use of a Hazardous Chemical Store of 24m ² in size where chemicals will be stored. Collectively, the combined capacity of all the battery units will be more than 80m ³ .
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;	The construction of the access road to Site Alternative A and B, as well as trenching associated with the construction of the potable water pipeline, will require dredging and construction across non-perennial drainage lines located within the development property. These non-perennial drainage lines are classified as watercourses by the Department of Water and Sanitation, hence it will trigger Listed Activity 19.
28	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	The proposed development is considered an industrial use, occurs outside of an urban area and will cover an area of more than 20 ha on land zoned for agriculture.

4. Listed Activities triggered

Activity No(s):	Listing Notice 3 of the EIA Regulations, 2014 as amended.	Describe the portion of the proposed project to which the applicable listed activity relates.
4	<p>The development of a road wider than 4 metres with a reserve less than 13,5 metres.</p> <p>g. Northern Cape:</p> <p>ii. Outside urban areas:</p> <p>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p>	<p>The proposed development of Site Alternative A will require construction of an access road from the National Road (N14) to the boundary of the development property. This access road will be tarred and will be greater than 4m in width, while the road alignment goes through a Critical Biodiversity Area (CBA) as identified in the Northern Cape Critical Biodiversity Areas of 2016.</p>
12	<p>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p> <p>g. Northern Cape</p> <p>i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</p> <p>ii. Within critical biodiversity areas identified in bioregional plans;</p>	<p>The proposed development of Site Alternative A will require construction of an access road from the National Road (N14) to the boundary of the development property. This access road alignment goes through a Critical Biodiversity Area (CBA) as identified in the Northern Cape Critical Biodiversity Areas of 2016 and will result in the clearance of more than 300m² of indigenous vegetation.</p> <p>The construction of the potable water pipeline for Site Alternative A and B will require trenching that will result in the clearance of more than 300m² of indigenous vegetation. The proposed Project is located outside an urban area and will not occur on existing infrastructure but on vacant land.</p>

4. Listed Activities triggered

Activity No(s):	Listing Notice 2 of the EIA Regulations, 2014 as amended.	Describe the portion of the proposed project to which the applicable listed activity relates.
1	<p>The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more, excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs —</p> <p>(a) within an urban area; or</p> <p>(b) on existing infrastructure.</p>	<p>Eskom is proposing to develop a 58MW Solar PV facility. The development further falls outside the urban edge.</p>
15	<p>The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for—</p> <p>(i) the undertaking of a linear activity; or</p> <p>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</p>	<p>The proposed Solar PV and BESS development areas for Site Alternative A and B are approx. 134ha and 136.5ha in extent. Although not all areas with the development footprint will be cleared, the combined clearance of more than 20 ha of indigenous vegetation will occur during the development of the facility.</p> <p>The proposed Project is located outside an urban area and will not occur on existing infrastructure but on vacant land.</p>

5. Impact Assessment process

- Basic Assessment process to be followed - Site falls entirely within REDZ zone and transmission corridor – GN 113 and GN 114).
- 3 EMPs
 - EMP for Solar PV and BESS
 - Generic EMP for the Development and Expansion of Substation Infrastructure for Transmission and Distribution of Electricity
 - Generic EMP for the Development and Expansion of Overhead Electricity Transmission and Distribution Infrastructure
- WULA will be undertaken

6. Project Alternatives

- Site alternatives: Site A and Site B
- Access road alternatives for Site Alternative A
- BESS Technology Alternatives – All battery technology considered as preferred technology only identified as construction tender stage
 - Vanadium Redox
 - Zinc Bromine (ZBr)
 - Iron-Chromium (FeCr)
 - Zinc-Iron Redox (ZnFe)
 - Polysulfide Bromide
 - Lead Acid (Pb) and Advanced Lead Acid / Lead Carbon
 - Nickel Cadmium (NiCd)
 - Lithium Ion (Li-Ion)
 - Sodium Sulphur (NaS)
 - Sodium Nickel Chloride (NaNiCl)

7. Public Participation Process requirements

- Public Participation Plan?
- PPP take cognisance of COVID protocols
- Standard NEMA PPP process to be followed

7. Specific DFFE requirements and considerations

- ???

Thank you

Questions and Discussion

**APPENDIX 2
PROOF OF PAYMENT/ MOTIVATION FOR EXCLUSION**

APPENDIX NOT APPLICABLE – ESKOM IS AN ORGAN OF STATE

**APPENDIX 3
LIST OF LAND OWNERS
WRITTEN CONSENT OF LAND OWNERS**

APPENDIX 3-1: LIST OF DIRECTLY AFFECTED PROPERTIES AND LANDOWNERS

Surveyor General 21 digit code for affected properties.

SG21 Digital Code	Parcel No	Portion No	Erf/Farm	Landowner	Property applicability
C02800130000108000000	1080	0	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	Eskom Holdings SOC Ltd	Main property where development planned. Landowner consent provided.
C02800130000053700000	537	0	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	Government of South Africa	Road or pipeline cross this property. The infrastructure thus constitute a linear activity and landowner consent is not mandatory.
C02800060000056300000	563	0	Erf 563 KEIMOES	Chantel Papier	Road or pipeline cross this property. The infrastructure thus constitute a linear activity and landowner consent is not mandatory.
C02800060000064400000	644	0	Erf 644 KEIMOES	Michael Bernard Johan Siepker	Road or pipeline cross this property. The infrastructure thus constitute a linear activity and landowner consent is not mandatory.
C02800130000108200000	1082	0	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	Willem Michael Kennedy	Road or pipeline cross this property. The infrastructure thus constitute a linear activity and landowner consent is not mandatory.
C02800130000199300000	1993	0	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	Does not exist on Windeed	The property is the N14 National Road. Road or pipeline tie into this property. The infrastructure thus constitute a linear activity and landowner consent is not mandatory.

APPENDIX 3-2: LANDOWNER CONSENT FORMS

Zitholele Consulting

Reg. No. 2000/000392/07

PO Box 6002 Halfway House 1685, South Africa
Building 1, Maxwell Office Park, Magwa Crescent West
c/o Allandale Road & Maxwell Drive, Waterfall City, Midrand
T : 011 207 2060 F : 086 674 6121 E : mail@zitholele.co.za



Our Ref : 21139-Let-001-Erf 1080

24 August 2022

LANDOWNER ACKNOWLEDGEMENT OF THE INTENT TO UNDERTAKE A BASIC ASSESSMENT & WULA FOR THE PROPOSED DEVELOPMENT OF THE KIWANO SOLAR PHOTOVOLTAIC FACILITY AND BATTERY ENERGY STORAGE SYSTEM, INCLUDING ASSOCIATED SUBSTATION AND 132KV LOOP-IN LOOP-OUT POWERLINES

- Landowner Consent is required in terms of Chapter 6 of Regulation 39 (1) of the Environmental Impact Assessment Regulations 2014, as amended.

I, Debbie Harding

As:

☐ Owner (Individual), or☐ Director of Company: _____, or☒ Designated Representative and Authorised signatory of Company: **Eskom Holdings SOC Ltd**The lawful owner of: **Erf 1080, Olyvenhouts Drift Settlement Agricultural Holding**

give consent for the undertaking of a Basic Assessment (BA) and Water Use Licence Application (WULA) process for the proposed development of the Kiwano Solar Photovoltaic (PV) facility and Battery Energy Storage System (BESS), including associated substation and 132kV loop-in loop-out powerline on my property provided all required consents are obtained.

This serves to confirm that I have been informed that a BA and WULA process will be undertaken by Zitholele Consulting (Pty) Ltd for the proposed activity. I am further aware of my right to participate as a stakeholder throughout the process that will be undertaken as part of the process. Please note your contact details are protected by the POPI Act of 2013.

☐ I am aware / ☒ am not aware, of any land claims, prospecting rights, mining rights and/or other applications taking place on the property. The details of such applications / projects include:

Debbie Harding

02/09/2022

Name

Date

Signature

A handwritten signature in cursive script, appearing to read 'Debbie Harding', written over a horizontal line.



Directors: S. Pillay
Associate Directors: J. Heera (Ms.), T. Kaponda, Dr. M. Vosloo



APPENDIX 3-: AFFECTED PROPERTY INFORMATION (WINDEED)

WinDeed Database D/O Property

OLYVENHOUTS DRIFT SETTLEMENT AGRICULTURAL HOLDING, 1080, 0,
VRYBURG

Lexis® WinDeed



Any personal information obtained from this search will only be used as per the Terms and Conditions agreed to and in accordance with applicable data protection laws including the Protection of Personal Information Act, 2013 (POPI), and shall not be used for marketing purposes.

SEARCH CRITERIA

Search Date	2022/05/26 11:19	LPI Code	C02800130000108000000
Reference	21139	Search Source	WinDeed Database
Report Print Date	2022/05/26 11:20		

PROPERTY INFORMATION

Property Type	AGRICULTURAL HOLDING	Diagram Deed Number	G1463/1991
Holding Area	OLYVENHOUTS DRIFT SETTLEMENT AGRICULTURAL HOLDING	Local Authority	SIYANDA DISTRICT MUNICIPALITY
Holding Number	1080	Province	NORTHERN CAPE
Portion Number	0	Remaining Extent	NO
Registration Division	GORDONIA RD	Extent	8385.5689H
Previous Description	-	LPI Code	C02800130000108000000

OWNER INFORMATION (1)

ESKOM HOLDINGS LIMITED		Owner 1 of 1	
Company Type	COMPANY	Document	T3236/2010
Registration Number	200201552706	Microfilm / Scanned Date	-
Name	ESKOM HOLDINGS LIMITED	Purchase Price (R)	11 000 000
Multiple Owners	NO	Purchase Date	2010/11/02
Multiple Properties	NO	Registration Date	2010/12/15
Share (%)	-		

ENDORSEMENTS (1)

#	Document	Institution	Amount (R)	Microfilm / Scanned Date
1	K13/2012S	-	Unknown	-

HISTORIC DOCUMENTS (1)

#	Document	Institution	Amount (R)	Microfilm / Scanned Date
1	G1463/1991	VAALDOORN BOERDERY & BELEGGINGS CC	Unknown	-

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This report is compiled exclusively from the very latest data directly supplied to WinDeed by the Deeds Office.

Any personal information obtained from this search will only be used as per the Terms and Conditions agreed to and in accordance with applicable data protection laws including the Protection of Personal Information Act, 2013 (POPI), and shall not be used for marketing purposes.

**** ASTERISKS INDICATE THE INFORMATION IS ENRICHED FROM THE WINDEED DATABASE.**

SEARCH CRITERIA

Search Date	2022/11/09 16:26	LPI Code	C02800130000053700000
Reference	21139	Search Source	Deeds Office
Report Print Date	2022/11/09 16:27		

PROPERTY INFORMATION

Property Type	AGRICULTURAL HOLDING	Diagram Deed Number	T527/1952
Holding Area	OLYVENHOUTS DRIFT SETTLEMENT AGRICULTURAL HOLDING	Local Authority	SIYANDA DISTRICT MUNICIPALITY
Holding Number	537	Province	NORTHERN CAPE
Portion Number	0	Remaining Extent	NO
Registration Division	GORDONIA RD	Extent	6.9638 M
Previous Description	-	LPI Code	C02800130000053700000
Suburb / Town**	-	Co-ordinates (Lat/Long)**	-28.55234 / 21.146184

OWNER INFORMATION (1)

GOVERNMENT OF THE UNION OF S A		Owner 1 of 1	
Company Type**	-	Document	T527/1952
Registration Number	-	Microfilm / Scanned Date	-
Name	GOVERNMENT OF THE UNION OF S A	Purchase Price (R)	-
Multiple Owners**	NO	Purchase Date	-
Multiple Properties**	NO	Registration Date	1952/07/01
Share (%)	-		

ENDORSEMENTS (1)

#	Document	Institution	Amount (R)	Microfilm / Scanned Date
1	I-1382/2002LG	-	-	-

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SEARCH CRITERIA

Search Date	2022/08/01 13:07	LPI Code	C02800060000056300000
Reference	21139	Search Source	WinDeed Database
Report Print Date	2022/08/01 13:08		

PROPERTY INFORMATION

Property Type	ERF	Diagram Deed Number	G17/1926
Township	KEIMOES	Local Authority	KAI !GARIB LOCAL MUNICIPALITY
Erf Number	563	Province	NORTHERN CAPE
Portion Number	0	Remaining Extent	NO
Registration Division	-	Extent	991.000SQM
Previous Description	-	LPI Code	C02800060000056300000

OWNER INFORMATION (1)

PAPIER CHANTEL		Owner 1 of 1	
Person Type	PRIVATE PERSON	Document	T2332/2019
ID Number	8701210155086	Microfilm / Scanned Date	-
Name	PAPIER CHANTEL	Purchase Price (R)	85 000
Multiple Owners	NO	Purchase Date	2019/03/20
Multiple Properties	NO	Registration Date	2019/07/26
Share (%)	-		

ENDORSEMENTS

No endorsements to display

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HISTORIC DOCUMENTS (12)				
#	Document	Institution	Amount (R)	Microfilm / Scanned Date
1	T524/1988	ENGELBRECHT JOHANNES	Unknown	0000000000
2	T375/1984	KEMPER ANDRE JOHAN	Unknown	0000000000
3	T552/1943	KEMPER ANDRE JOHAN	Unknown	-
4	T1693/1996	KOK CORNELIUS NICHOLAS	10 000	0000000000
5	T1693/1996	KOK KATRINA	10 000	0000000000
6	B718/2000	FIRSTRAND BANK LTD	Unknown	-
7	T2637/2008	WYK ROELF JACOBUS VAN	25 000	-
8	T2637/2008	WYK ELMARY CHANTELE VAN	25 000	-
9	T2638/2008	HATTINGH ANNA JACOBA CATHARINA	32 500	-
10	T2638/2008	HATTINGH JOHANNES CHRISTIAAN	32 500	-
11	T2727/2010	RICHARDS MARTIN FRANK	48 000	-
12	T2727/2010	RICHARDS IRENE	48 000	-

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SEARCH CRITERIA

Search Date	2022/08/01 13:08	LPI Code	C02800060000064400000
Reference	21139	Search Source	WinDeed Database
Report Print Date	2022/08/01 13:09		

PROPERTY INFORMATION

Property Type	ERF	Diagram Deed Number	GQ10/33-FT2206
Township	KEIMOGES	Local Authority	KAI GARIB MUNICIPALITY
Erf Number	644	Province	NORTHERN CAPE
Portion Number	0	Remaining Extent	NO
Registration Division	GORDONIA RD	Extent	3027.0000SQM
Previous Description	-	LPI Code	C02800060000064400000

OWNER INFORMATION (2)

SIEPKER MICHAEL BERNARD JOHAN		Owner 1 of 2	
Person Type	PRIVATE PERSON	Document	T2287/2003
ID Number	3904045041084	Microfilm / Scanned Date	-
Name	SIEPKER MICHAEL BERNARD JOHAN	Purchase Price (R)	63 500
Multiple Owners	NO	Purchase Date	2003/05/12
Multiple Properties	NO	Registration Date	2003/07/16
Share (%)	-		
SIEPKER ELIZABETH HENDRIKA		Owner 2 of 2	
Person Type	PRIVATE PERSON	Document	T2287/2003
ID Number	4405180024082	Microfilm / Scanned Date	-
Name	SIEPKER ELIZABETH HENDRIKA	Purchase Price (R)	63 500
Multiple Owners	NO	Purchase Date	2003/05/12
Multiple Properties	NO	Registration Date	2003/07/16
Share (%)	-		

DISCLAIMER

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ENDORSEMENTS

No endorsements to display

HISTORIC DOCUMENTS (3)

#	Document	Institution	Amount (R)	Microfilm / Scanned Date
1	T995/2001	PAYNE SUSANNA MARIA	VESTING	-
2	T890/1968	PAYNE ALFRED EUGENE	Unknown	-
3	T2179/1993	PAYNE BELLA	-	-

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WinDeed Database D/O Property

OLYVENHOUTS DRIFT SETTLEMENT AGRICULTURAL HOLDING, 1082, 0,
VRYBURG

Lexis® WinDeed



Any personal information obtained from this search will only be used as per the Terms and Conditions agreed to and in accordance with applicable data protection laws including the Protection of Personal Information Act, 2013 (POPI), and shall not be used for marketing purposes.

SEARCH CRITERIA

Search Date	2022/08/01 13:12	LPI Code	C02800130000108200000
Reference	21139	Search Source	WinDeed Database
Report Print Date	2022/08/01 13:13		

PROPERTY INFORMATION

Property Type	AGRICULTURAL HOLDING	Diagram Deed Number	T1141/1993
Holding Area	OLYVENHOUTS DRIFT SETTLEMENT AGRICULTURAL HOLDING	Local Authority	SIYANDA DISTRICT MUNICIPALITY
Holding Number	1082	Province	NORTHERN CAPE
Portion Number	0	Remaining Extent	NO
Registration Division	OLYVENHOUTS DRIFT SETTLEMENT AGRICULTURAL HOLDING	Extent	102.4019H
Previous Description	GED VAN PERS 644	LPI Code	C02800130000108200000

OWNER INFORMATION (1)

KENNEDY WILLEM MICHAEL		Owner 1 of 1	
Person Type	PRIVATE PERSON	Document	T3418/2002
ID Number	4110075037088	Microfilm / Scanned Date	-
Name	KENNEDY WILLEM MICHAEL	Purchase Price (R)	400 000
Multiple Owners	NO	Purchase Date	2001/08/20
Multiple Properties	NO	Registration Date	2002/12/09
Share (%)	-		

ENDORSEMENTS (2)

#	Document	Institution	Amount (R)	Microfilm / Scanned Date
1	K48/1995S	-	Unknown	0000000*
2	B2037/199	-	-	-

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HISTORIC DOCUMENTS (15)				
#	Document	Institution	Amount (R)	Microfilm / Scanned Date
1	T438/1996	KENNEDY MARIUS JACOBUS	330 000	-
2	T362/1937	REPUBLIEK VAN SUID AFRIKA	Unknown	0000000000
3	B1254/1996	EERSTE NASIONALE BANK LTD	600 000	-
4	B1980/2002	LANDBANK	340 000	-
5	B1981/2002	LANDBANK	580 000	-
6	B1982/2002	FIRSTRAND BANK LTD	900 000	20150807 08:36:27
7	B2037/1996	LANDBANK LTD	580 000	-
8	B2574/2005	FIRSTRAND BANK LTD	1 000 000	20150807 08:41:48
9	BC2571/2002	-	600 000	-
10	BC2572/2002	-	Unknown	-
11	BC2639/2005	-	Unknown	-
12	BC2640/2005	-	Unknown	-
13	T1141/1993	CRAFFORD MARIA CAROLINA	5 529	-
14	T1141/1993	CRAFFORD BAREND PETRUS	5 529	-
15	T1141/1993	CRAFFORD MARIA CAROLINA R	5 529	-

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This report is compiled exclusively from the very latest data directly supplied to WinDeed by the Deeds Office.

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SEARCH CRITERIA

Search Date	2022/08/01 13:21	LPI Code	C02800130000199300000
Reference	-	Search Source	Deeds Office
Report Print Date	2022/08/01 13:21		

THERE IS NO INFORMATION AVAILABLE THAT MATCHES YOUR SEARCH CRITERIA.

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APPENDIX 4
LIST OF LOCAL/PROVINCIAL AUTHORITY INVOLVED

ONLY ONE LOCAL AUTHORITY, DAWID KRUIPER LOCAL MUNICIPALITY, IS INVOLVED

APPENDIX 5 STRATEGIC INFRASTRUCTURE PROJECTS

<p>SIP 1: Unlocking the northern mineral belt with Waterberg as the catalyst</p> <ul style="list-style-type: none"> • Unlock mineral resources • Rail, water pipelines, energy generation and transmission infrastructure • Thousands of direct jobs across the areas unlocked • Urban development in Waterberg - first major post-apartheid new urban centre will be a “green” development project • Rail capacity to Mpumalanga and Richards Bay • Shift from road to rail in Mpumalanga • Logistics corridor to connect Mpumalanga and Gauteng.
<p>SIP 2: Durban-Free State-Gauteng logistics and industrial corridor</p> <ul style="list-style-type: none"> • Strengthen the logistics and transport corridor between SA’s main industrial hubs • Improve access to Durban’s export and import facilities • Integrate Free State Industrial Strategy activities into the corridor • New port in Durban • Aerotropolis around OR Tambo International Airport.
<p>SIP 3: South-Eastern node & corridor development</p> <ul style="list-style-type: none"> • New dam at Mzimvubu with irrigation systems • N2-Wild Coast Highway which improves access into KwaZulu-Natal and national supply chains • Strengthen economic development in Port Elizabeth through a manganese rail capacity from Northern Cape • A manganese sinter (Northern Cape) and smelter (Eastern Cape) • Possible Mthombo refinery (Coega) and transshipment hub at Ngqura and port and rail upgrades to improve industrial capacity and performance of the automotive sector.
<p>SIP 4: Unlocking the economic opportunities in North West Province</p> <ul style="list-style-type: none"> • Acceleration of investments in road, rail, bulk water, water treatment and transmission infrastructure • Enabling reliable supply and basic service delivery • Facilitate development of mining, agricultural activities and tourism opportunities • Open up beneficiation opportunities in North West Province.
<p>SIP 5: Saldanha-Northern Cape development corridor</p> <ul style="list-style-type: none"> • Integrated rail and port expansion • Back-of-port industrial capacity (including an IDZ) • Strengthening maritime support capacity for oil and gas along African West Coast • Expansion of iron ore mining production and beneficiation.
<p>SIP 6: Integrated municipal infrastructure project</p> <p>Develop national capacity to assist the 23 least resourced districts (19 million people) to address all the maintenance backlogs and upgrades required in water, electricity and sanitation bulk infrastructure. The road maintenance programme will enhance service delivery capacity thereby impacting positively on the population.</p>
<p>SIP 7: Integrated urban space and public transport programme</p> <p>Coordinate planning and implementation of public transport, human settlement, economic and social infrastructure and location decisions into sustainable urban settlements connected by densified transport corridors. This will focus on the 12 largest urban centres of the country, including all the metros in South Africa. Significant work is underway on urban transport integration.</p>
<p>SIP 8: Green energy in support of the South African economy</p> <p>Support sustainable green energy initiatives on a national scale through a diverse range of clean energy options as envisaged in the Integrated Resource Plan (IRP2010) and support bio-fuel production facilities.</p>

Indicate capacity in MW:
<p>SIP 9: Electricity generation to support socioeconomic development</p> <p>Accelerate the construction of new electricity generation capacity in accordance with the IRP2010 to meet the needs of the economy and address historical imbalances. Monitor implementation of major projects such as new power stations: Medupi, Kusile and Ingula.</p>
Indicate capacity in MW:
<p>SIP 10: Electricity transmission and distribution for all</p> <p>Expand the transmission and distribution network to address historical imbalances, provide access to electricity for all and support economic development.</p> <p>Align the 10-year transmission plan, the services backlog, the national broadband roll-out and the freight rail line development to leverage off regulatory approvals, supply chain and project development capacity.</p>
<p>SIP 11: Agri-logistics and rural infrastructure</p> <p>Improve investment in agricultural and rural infrastructure that supports expansion of production and employment, small-scale farming and rural development, including facilities for storage (silos, fresh-produce facilities, packing houses); transport links to main networks (rural roads, branch train-line, ports), fencing of farms, irrigation schemes to poor areas, improved R&D on rural issues (including expansion of agricultural colleges), processing facilities (abattoirs, dairy infrastructure), aquaculture incubation schemes and rural tourism infrastructure.</p>
<p>SIP 12: Revitalisation of public hospitals and other health facilities</p> <p>Build and refurbish hospitals, other public health facilities and revamp 122 nursing colleges. Extensive capital expenditure to prepare the public healthcare system to meet the requirements of the National Health Insurance (NHI) system. The SIP contains major builds for 6 hospitals.</p>
<p>SIP 13: National school build programme</p> <p>A national school build programme driven by uniformity in planning, procurement, contract management and provision of basic services. Replace inappropriate school structures and address basic service backlog and provision of basic services under the Accelerated School Infrastructure Delivery Initiative (ASIDI). In addition, address national backlogs in classrooms, libraries, computer labs and admin buildings. Improving the learning environment will strengthen outcomes especially in rural schools, as well as reduce overcrowding.</p>
<p>SIP 14: Higher education infrastructure</p> <p>Infrastructure development for higher education, focusing on lecture rooms, student accommodation, libraries and laboratories, as well as ICT connectivity. Development of university towns with a combination of facilities from residence, retail to recreation and transport. Potential to ensure shared infrastructure such as libraries by universities, FETs and other educational institutions. Two new universities will be built - in Northern Cape and Mpumalanga.</p>
<p>SIP 15: Expanding access to communication technology</p> <p>Provide for broadband coverage to all households by 2020 by establishing core Points of Presence (POPs) in district municipalities, extend new Infracore fibre networks across provinces linking districts, establish POPs and fibre connectivity at local level, and further penetrate the network into deep rural areas.</p> <p>While the private sector will invest in ICT infrastructure for urban and corporate networks, government will co-invest for township and rural access, as well as for e-government, school and health connectivity.</p> <p>The school roll-out focus is initially on the 125 Dinaledi (science and maths-focussed) schools and 1525 district schools. Part of digital access to all South Africans includes TV migration nationally from analogue to digital broadcasting.</p>
<p>SIP 16: SKA & Meerkat</p> <p>SKA is a global mega-science project, building an advanced radio-telescope facility linked to research infrastructure and high-speed ICT capacity and provides an opportunity for Africa and South Africa to contribute towards global advanced science projects.</p>
<p>SIP 17: Regional integration for African cooperation and development</p> <p>Participate in mutually beneficial infrastructure projects to unlock long-term socio-economic benefits by partnering with fast growing African economies with projected growth ranging between 3% and 10%.</p>

The projects involving transport, water and energy also provide competitively-priced, diversified, short and medium to long-term options for the South African economy where, for example, electricity transmission in Mozambique (Cesul) could assist in providing cheap, clean power in the short-term whilst Grand Inga in the DRC is long-term. All these projects complement the Free Trade Area (FTA) discussions to create a market of 600 million people in South, Central and East Africa.

SIP 18: Water and sanitation infrastructure

A 10-year plan to address the estimated backlog of adequate water to supply 1.4m households and 2.1m households to basic sanitation.

The project will involve provision of sustainable supply of water to meet social needs and support economic growth. Projects will provide for new infrastructure, rehabilitation and upgrading of existing infrastructure, as well as improve management of water infrastructure.

SIP 19: Water and Sanitation

- a. Vaal River System including Phase 2 of the Lesotho Highlands Water Project: Gauteng
- b. Phase 2A of the Mokolo Crocodile River (West) Augmentation Project: Limpopo
- c. uMkhomazi Water Project: KwaZulu Natal
- d. Olifants River Water Resource Development Project - Phase 2: Limpopo
- e. Vaal-Gamagara: Northern Cape
- f. Mzimvubu Water Project: Eastern Cape
- g. Rehabilitation of the Vaalharts-Taung Irrigation Scheme: Northern Cape & North West
- h. Groot Letaba River Water Development Project - Nwamitwa Dam: Limpopo
- i. Berg River Voëlklei Augmentation Scheme: Western Cape
- j. Rustfontein Water Treatment Works: Free State
- k. Orange-Riet Canal Increase of Bulk Raw Water Supply: Free State

SIP 20: Energy

- a. Emergency/Risk Mitigation Power Purchase Procurement Programme (2000MW): National
- b. Small IPP Power Purchase Procurement Programme (100MW): National
- c. Embedded Generation Investment Programme (EGIP)-400MW: National

SIP 21: Transport

- a. N1 Windburg Interchange to Windburg Station: Free State
- b. N1 Musina Ring Road: Limpopo
- c. N1 Polokwane Eastern Ring Rd Phase 2: Limpopo
- d. N1 Ventersburg to Kroonstad: Free State (2 projects in One)
- e. N2 Mtunzini Toll Plaza to Empangeni T-Junction: KwaZulu Natal
- f. N3 Cato Ridge to Dardanelles: KwaZulu Natal
- g. N3 Dardanelles to Lynnfield Park: KwaZulu Natal
- h. N3 Paradise Valley to Mariannhill Toll Plaza: KwaZulu Natal
- i. N2 Edwin Swales to South of EB Cloete Interchange: KwaZulu Natal
- j. N3 Ashburton Interchange to Murray Road: KwaZulu Natal
- k. N3 Mariannhill Toll Plaza to Key Ridge: KwaZulu Natal
- l. N2 EB Cloete Interchange: KwaZulu Natal
- m. Small Harbours Development: National
- n. N3 New alignment via De Beers Pass: Free State
- o. Boegoebaai Port and Rail Infrastructure Project: Northern Cape

SIP 22: Digital Infrastructure

- a. National Spatial Infrastructure Hub

SIP 23: Agriculture and Agro-processing

- a. Marine Tilapia Industry: Eastern Cape
- b. Natural Dehydrated Foods: Mpumalanga

SIP 24: Human Settlements

- a. Greater Cornubia: KwaZulu-Natal
- b. Vista Park II & III: Free State

- c. Lufhereng: Gauteng
- d. Malibongwe Ridge: Gauteng
- e. N2 Nodal Development: Eastern Cape
- f. Matlosana N12 West: North West
- g. Green Creek: Gauteng
- h. Mooikloof Mega Residential City: Gauteng
- i. Fochville Extension 11: Gauteng
- j. Germiston Ext 4 Social Housing Project: Gauteng
- k. Newcastle Hospital Street Social Housing Project: KwaZulu Natal
- l. Hull Street Social Housing Project Phase 1: Northern Cape
- m. Kwandokuhle Social Housing Project: Mpumalanga
- n. Phola Heights - Tembisa Social Housing Project: Gauteng
- o. Sondela Phase 2: Gauteng
- p. Willow Creek Estate: Mpumalanga
- q. Joe's Place Social Housing: Gauteng
- r. Jeppetown Social Housing Project (Unity House): Gauteng

SIP 25: Rural Bridges "Welisizwe" Programme

SIP 26: Rural Roads Upgrade Programme

SIP 27: Upgrading and Repair of Township Roads in Municipalities Programme

SIP 28: PV and Water Savings on Government Buildings Programme

SIP 29: Comprehensive Urban Management Programme

SIP 30: Digitising of Government Information Programme

SIP 31: Removal of Alien Vegetation and Innovative Building Materials Programme

SIP 32: National Upgrading Support Programme (NUSP)

SIP 33: Solar Water Initiatives Programme

SIP 34: Student Accommodation

SIP 35: SA Connect Phase 1B Programme

SIP 36: Salvokop Precinct

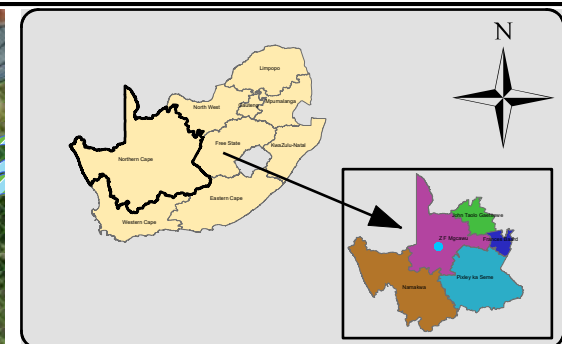
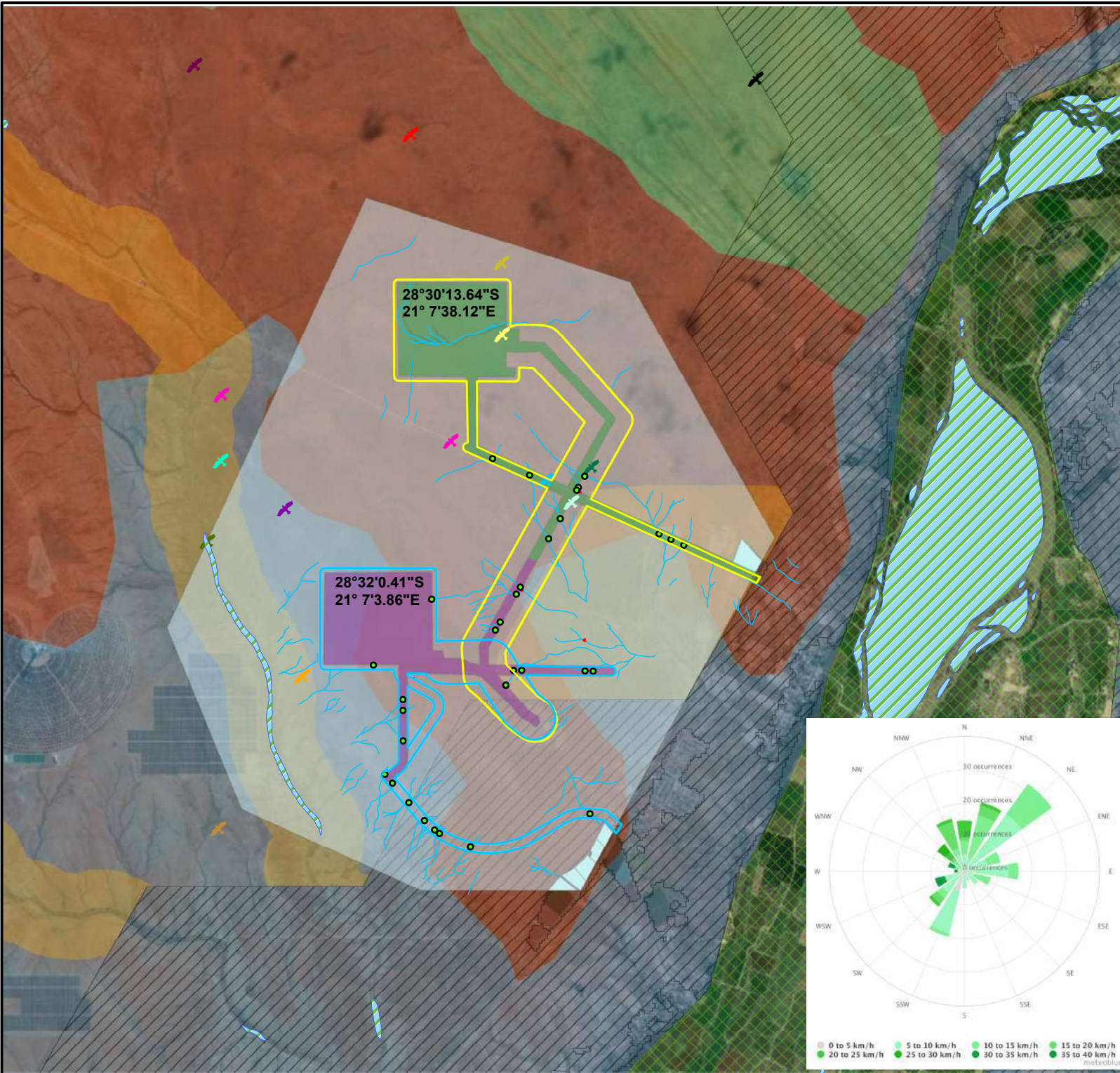
PLEASE ATTACH PROOF FROM THE RELEVANT SIP CO-ORDINATOR FOR EACH OF THE SIP PROJECT SELECTED.

APPENDIX 6
LIST OF SGIDS / COORDINATES OF THE BOUNDARY OF THE PROPERTY OR PROPERTIES / COORDINATES
OF LISTED ACTIVITIES

Surveyor General 21 digit code for affected properties.

SG21 Digital Code	Parcel No	Portion No	Erf/Farm	Landowner	Property applicability
C02800130000108000000	1080	0	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	Eskom Holdings SOC Ltd	Main property where development planned. Landowner consent provided.
C02800130000053700000	537	0	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	Government of South Africa	Road or pipeline cross this property. The infrastructure thus constitute a linear activity and landowner consent is not mandatory.
C02800060000056300000	563	0	Erf 563 KEIMOES	Chantel Papier	Road or pipeline cross this property. The infrastructure thus constitute a linear activity and landowner consent is not mandatory.
C02800060000064400000	644	0	Erf 644 KEIMOES	Michael Bernard Johan Siepker	Road or pipeline cross this property. The infrastructure thus constitute a linear activity and landowner consent is not mandatory.
C02800130000108200000	1082	0	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	Willem Michael Kennedy	Road or pipeline cross this property. The infrastructure thus constitute a linear activity and landowner consent is not mandatory.
C02800130000199300000	1993	0	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	Does not exist on Windeed	The property is the N14 National Road. Road or pipeline tie into this property. The infrastructure thus constitute a linear activity and landowner consent is not mandatory.

**APPENDIX 7
LOCALITY MAP**



Legend

- Site A Study Area
- Site B Study Area
- Drainage Possible Impact Point
- Impact Points Option A
- Wetlands
- Pans
- Drainage Features

Karroid grassland

- Low Site Sensitivity
- Medium Medium Site Sensitivity
- Agriculture Theme - Low Sensitivity
- Annual Crop Cultivation - High Sensitivity
- High impacts drain

- Site A Study Area
- Site B Study Area
- Critical Biodiversity Area
- Ecological Support Area
- Lower Gariep Alluvial Vegetation (Endangered)
- Bushmanland Arid Grassland (Least Concern)
- Gordonia Duneveld (Least Concern)
- Kalahari Karroid Shrubland (Least Concern)

Important bird

- 1000x Amur Falcons
- 200+ abdim storks fly N (345-360°)
- 2x Lanner Falcons
- 2x Pale Chanting Goshawks
- 50 + Amur Falcons
- 50+ Abdim storks perch and fly N (345-360°)
- 6x Amur Falcons
- 6x Amur Falcons 1x kestrel Falcon
- 9x Amur 1x Red Footed Falcon
- Black Chested Snake Eagle
- Greater Kestrel
- Pale Chanting Goshawk
- Pale chanting Goshawk
- Pale chanting goshawk
- Pygmy Falcon
- Sociable weavers nest

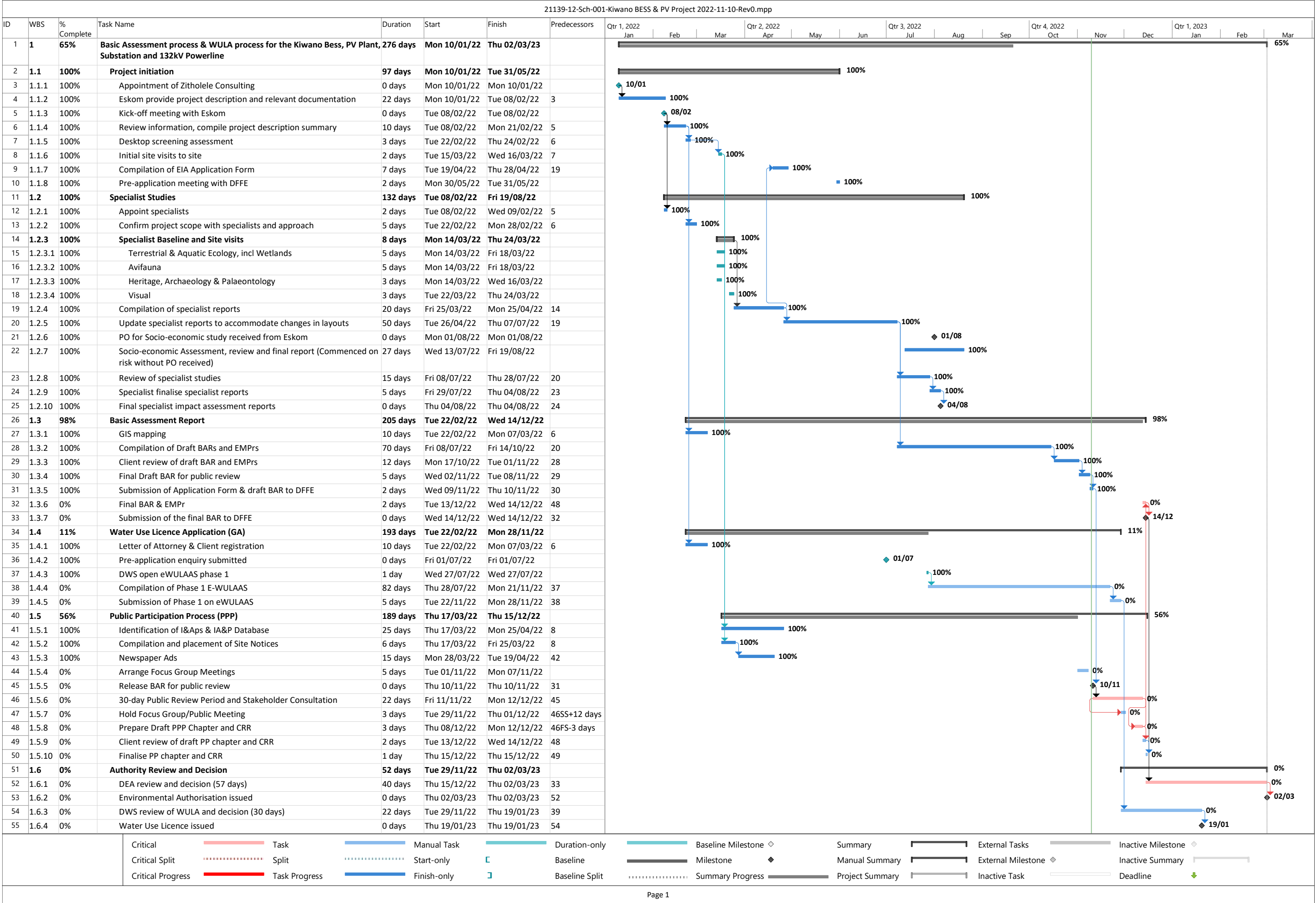
KIWANO SOLAR PV

SENSITIVITY MAP

1 000 500 0 1 000 Kilometers WGS 1984 World Mercator

	GIS	JM	10 Oct 2022	PROJECT No. 21139
	CHECK	MV	10 Oct 2022	SCALE 1:70 000
	REVIEW	MV	10 Oct 2022	A3 REV 0

**APPENDIX 8
PROJECT SCHEDULE**



**APPENDIX 9
DECLARATION OF THE APPLICANT**

I, Andrea van Gensen, declare that –

- I am, or represent¹, the applicant in this application;
- I have appointed an Environmental Assessment Practitioner (EAP) to act as the independent EAP for this application ~~/have obtained exemption from the requirement to obtain an EAP²;~~
- I will take all reasonable steps to verify whether the EAP and specialist/s appointed are independent and have expertise in conducting environmental impact assessments or undertaking specialist work as required, including knowledge of the Act, the EIA Regulations and any guidelines that have relevance to the proposed activity;
- I will provide the EAP and the Competent Authority with access to all information at my disposal that is relevant to the application;
- I will be responsible for the costs incurred in complying with the Regulations, including but not limited to –
 - costs incurred in connection with the appointment of the EAP or any person contracted by the EAP;
 - costs incurred in respect of the undertaking of any process required in terms of the Regulations;
 - costs in respect of any fee prescribed by the Minister or MEC in respect of the Regulations;
 - costs in respect of specialist reviews, if the Competent Authority decides to recover costs; and
 - the provision of security to ensure compliance with conditions attached to an environmental authorisation, should it be required by the Competent Authority;
- I will inform all registered interested and affected parties of any suspension of the application as well as of any decisions taken by the Competent Authority in this regard;
- I am responsible for complying with the conditions of any environmental authorisation issued by the Competent Authority;
- I hereby indemnify the Government of the Republic of South Africa, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action which the applicant or EAP is responsible for in terms of these Regulations;
- I will not hold the Competent Authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to obtaining an environmental authorisation or prior to an appeal being decided in terms of these Regulations;
- I will perform all obligations as expected from an applicant in terms of the Regulations;
- all the particulars furnished by me in this form are true and correct; and
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in section 49B of the Act.
- I am aware that in terms of Section 24F of the National Environmental Management Act, as amended (Act No. 107 of 1998) that no listed activity may commence prior to an environmental authorisation being granted by the Competent Authority.

Signature³ of the applicant/ Signature on behalf of the applicant

Eskom Holdings SOC Limited

Name of company (if applicable)

10/11/2022

Date:

¹ If this is signed on behalf of the applicant, proof of such authority from the applicant must be attached. If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority.

² If exemption is obtained from appointing an EAP, the responsibilities of an EAP will automatically apply to the person conducting the environmental impact assessment in terms of the Regulations.

³ Only original signatures will be accepted. No scanned, copied or faxed signatures will be accepted. An EAP may not sign on behalf of an applicant.

**APPENDIX 10
DECLARATION OF THE EAP**

I, Natasha Lalie, declare that –

- I act as the independent environmental assessment practitioner in this application;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I will take into account, to the extent possible, the matters listed in Regulation 13 of the Regulations when preparing the application and any report relating to the application;
- I undertake to disclose to the applicant and the Competent Authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the Competent Authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the Competent Authority, unless access to that information is protected by law, in which case it will be indicated that such information exists and will be provided to the Competent Authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;
- ~~• I have a vested interest in the proposed activity proceeding, such vested interest being:~~



Signature of the environmental assessment practitioner

Zitholele Consulting (Pty) Ltd

Name of company:

09/11/2022

Date

APPENDIX 11
SCREENING TOOL REPORT

APPENDIX 11-1 : SCREENING TOOL ASSESSMENT FOR SITE A

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS
REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE
ENVIRONMENTAL SENSITIVITY**

EIA Reference number:


Project name: Kiwano Solar PV & BESS

Project title: Basic Assessment and Water Use Licence Application for the proposed Kiwano Solar Photovoltaic and Battery Energy Storage System Facility including associated substation and 132kV loop-in loop-out powerline near Upington, Northern Cape Province.

Date screening report generated: 02/05/2022 12:42:59

Applicant: Eskom Holdings SOC Ltd

Compiler: Zitholele Consulting (Pty) Ltd

Compiler signature: 

Application Category: Utilities Infrastructure|Electricity|Generation|Renewable|Solar|PV

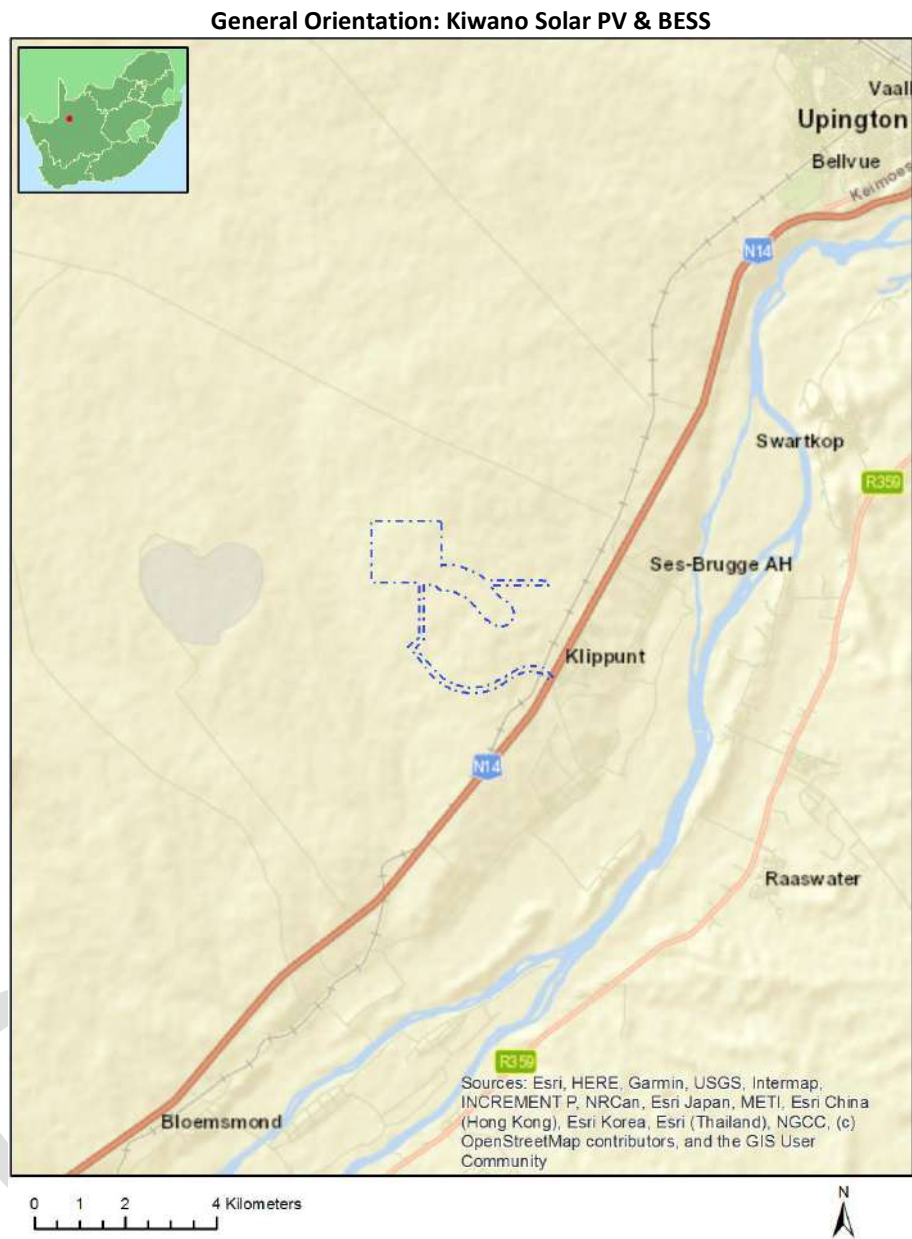


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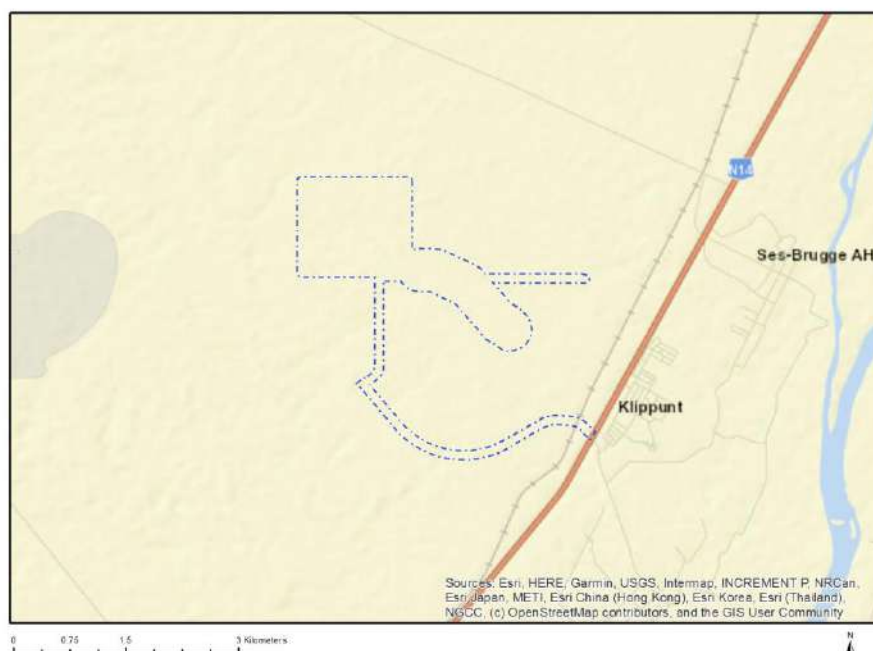
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Cadastral details of the proposed site	4
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	4
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Environmental screening results and assessment outcomes	6
Relevant development incentives, restrictions, exclusions or prohibitions	6
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MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY	12
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY	13
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY	14
MAP OF RELATIVE AVIAN THEME SENSITIVITY	15
MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY	16
MAP OF RELATIVE DEFENCE THEME SENSITIVITY	17
MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY	18
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Proposed Project Location

Orientation map 1: General location



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	KEIMOES	537	0	28°33'8.99S	21°8'46E	Erven
2	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	1993	0	28°33'21.45S	21°8'47.32E	Erven
3	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	537	0	28°33'8.73S	21°8'45.98E	Erven
4	KEIMOES	563	0	28°33'17.14S	21°8'46.99E	Erven
5	KEIMOES	1080	0	28°29'12.24S	21°5'24.72E	Erven
6	TUNGSTEN LODGE	638	0	28°33'48.72S	21°6'7.52E	Farm
7		628	0	28°33'44.65S	21°6'8.39E	Farm Portion

Development footprint¹ vertices:

No development footprint(s) specified.

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

¹ "development footprint", means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	14/12/16/3/3/2/1106	Solar PV	Approved	15.6
2	12/12/20/2230	Solar PV	Approved	11.9
3	14/12/16/3/3/1/1754	Solar PV	Approved	25.9
4	12/12/20/2518	Solar PV	Approved	26.7
5	14/12/16/3/3/2/657	Solar CSP	Approved	1.9
6	14/12/16/3/3/2/1107	Solar PV	Approved	6.4
7	14/12/16/3/3/1/2207	Solar PV	Approved	11.9
8	12/12/20/1831/3	Solar PV	Approved	1.9
9	12/12/20/2169	Solar PV	Approved	27.5
10	14/12/16/3/3/2/821	Solar PV	Approved	18.7
11	14/12/16/3/3/2/1105	Solar PV	Approved	15.6
12	14/12/16/3/3/1/2206	Solar PV	Approved	11.9
13	12/12/20/2229	Solar PV	Approved	24.2
14	14/12/16/3/3/1/2208	Solar PV	Approved	11.9
15	14/12/16/3/3/2/815	Solar PV	Approved	8.4
16	14/12/16/3/3/1/2205	Solar PV	Approved	11.9
17	14/12/16/3/3/1/2075	Solar PV	Approved	0
18	14/12/16/3/3/1/2209	Solar PV	Approved	11.9
19	14/12/16/3/3/2/656	Solar CSP	Approved	1.9
20	14/12/16/3/3/1/2111	Solar PV	Approved	1.2
21	12/12/20/777	Solar CSP	Approved	2.8
22	12/12/20/1831	Solar CSP	Approved	1.9
23	14/12/16/3/3/2/816	Solar PV	Approved	8.4
24	12/12/20/2146	Solar PV	Approved	19
25	12/12/20/2056	Solar CSP	Approved	29.8
26	14/12/16/3/3/2/1108	Solar PV	Approved	6.4
27	12/12/20/1831/2	Solar CSP	Approved	1.9
28	14/12/16/3/3/1/2231	Solar PV	Approved	4.6
29	12/12/20/1831/1	Solar CSP	Approved	1.9
30	14/12/16/3/3/3/82	Solar CSP	Approved	14.7
31	14/12/16/3/3/1/2210	Solar PV	Approved	11.9

Environmental Management Frameworks relevant to the application



Environmental Management Framework	LINK
Siyanda District Municipality EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/SIYANDA_EMF_REPORT_2008.doc

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

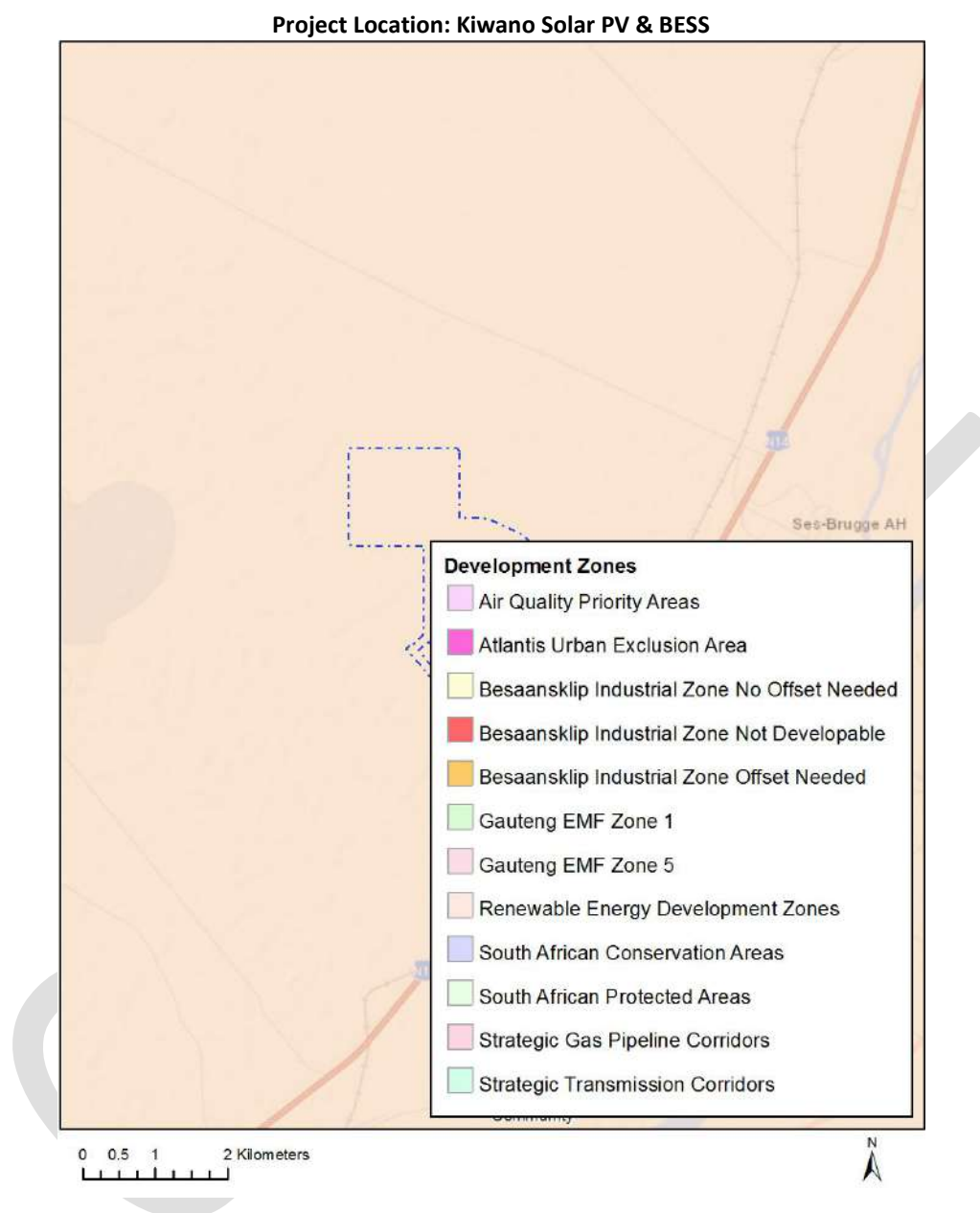
Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV.

Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Northern corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Renewable energy development zones 7-Upington	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_REDZ.pdf

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones



Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme				X
Animal Species Theme			X	

Aquatic Biodiversity Theme				X
Archaeological and Cultural Heritage Theme		X		
Avian Theme		X		
Civil Aviation (Solar PV) Theme				X
Defence Theme			X	
Landscape (Solar) Theme	X			
Paleontology Theme			X	
Plant Species Theme				X
RFI Theme			X	
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

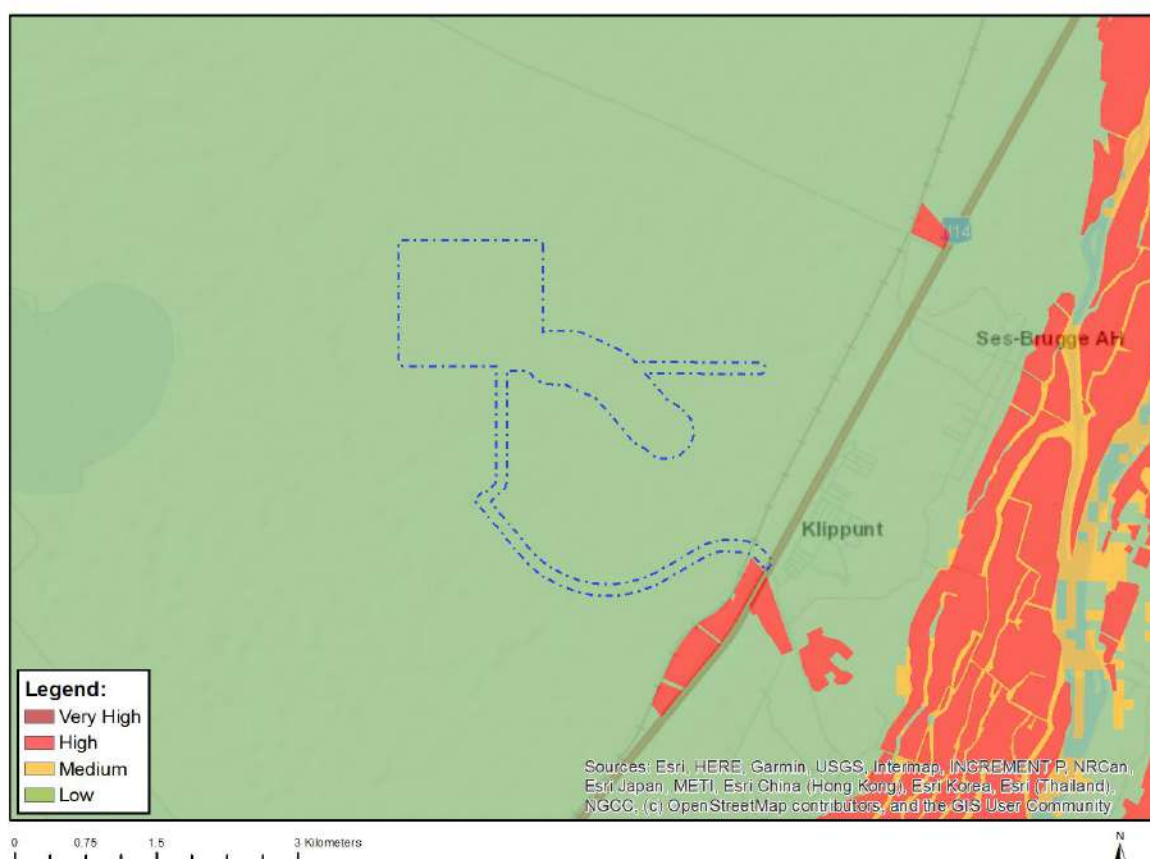
N o	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Paleontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf

	Impact Assessment	
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Defence_Installations_Assessment_Protocols.pdf
9	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
11	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
13	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

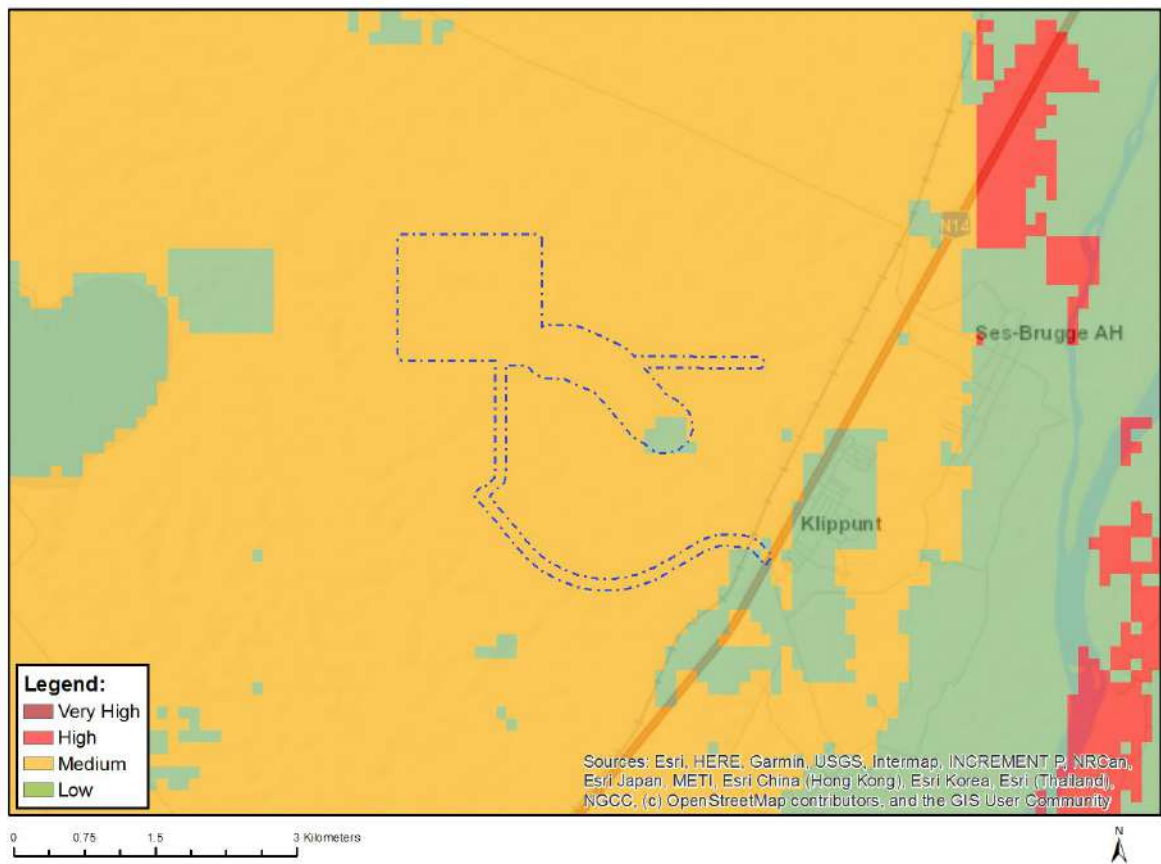


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



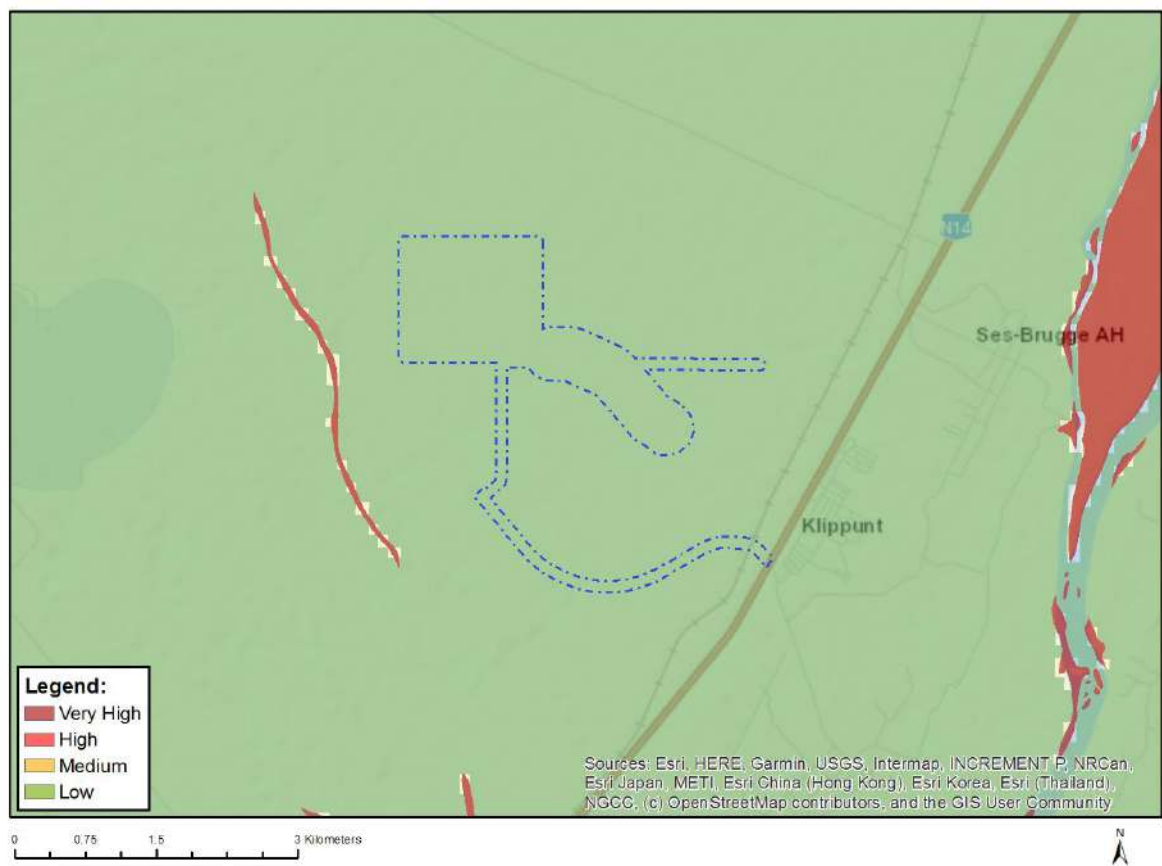
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Medium	Aves-Neotis ludwigii

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

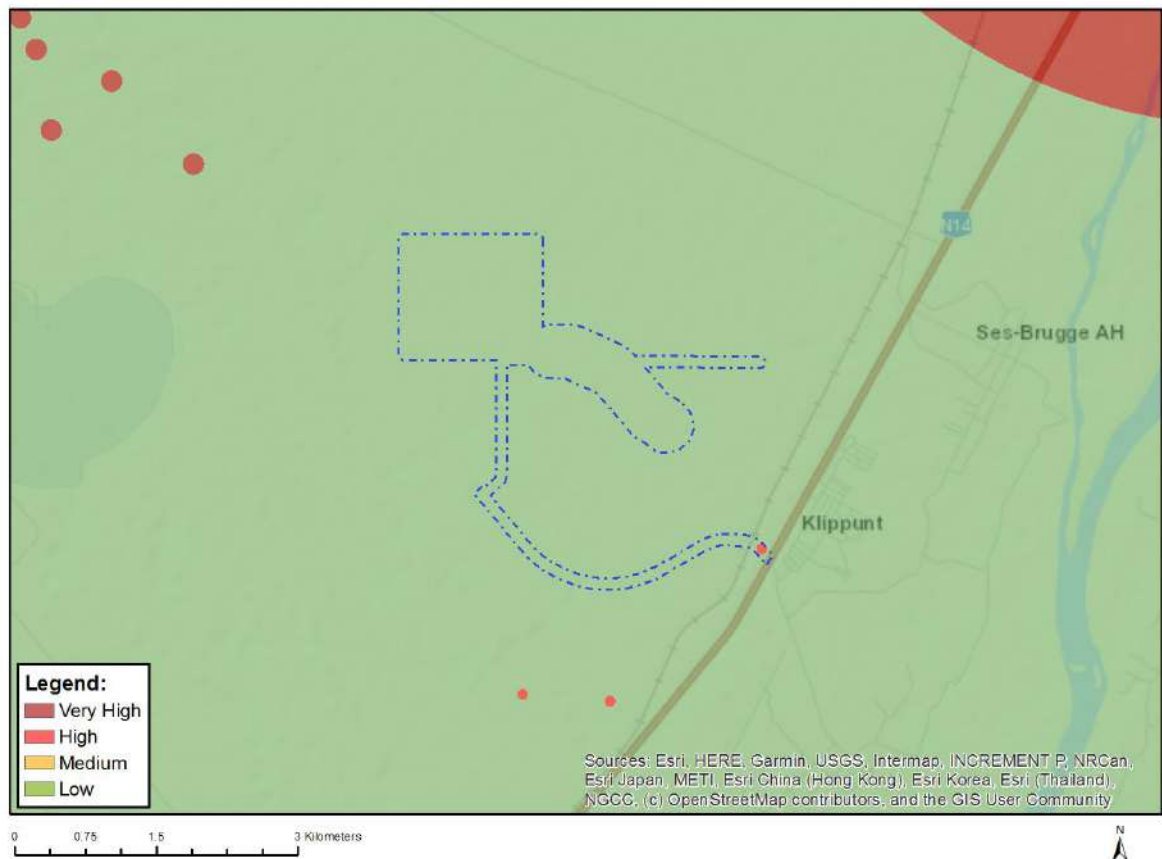


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

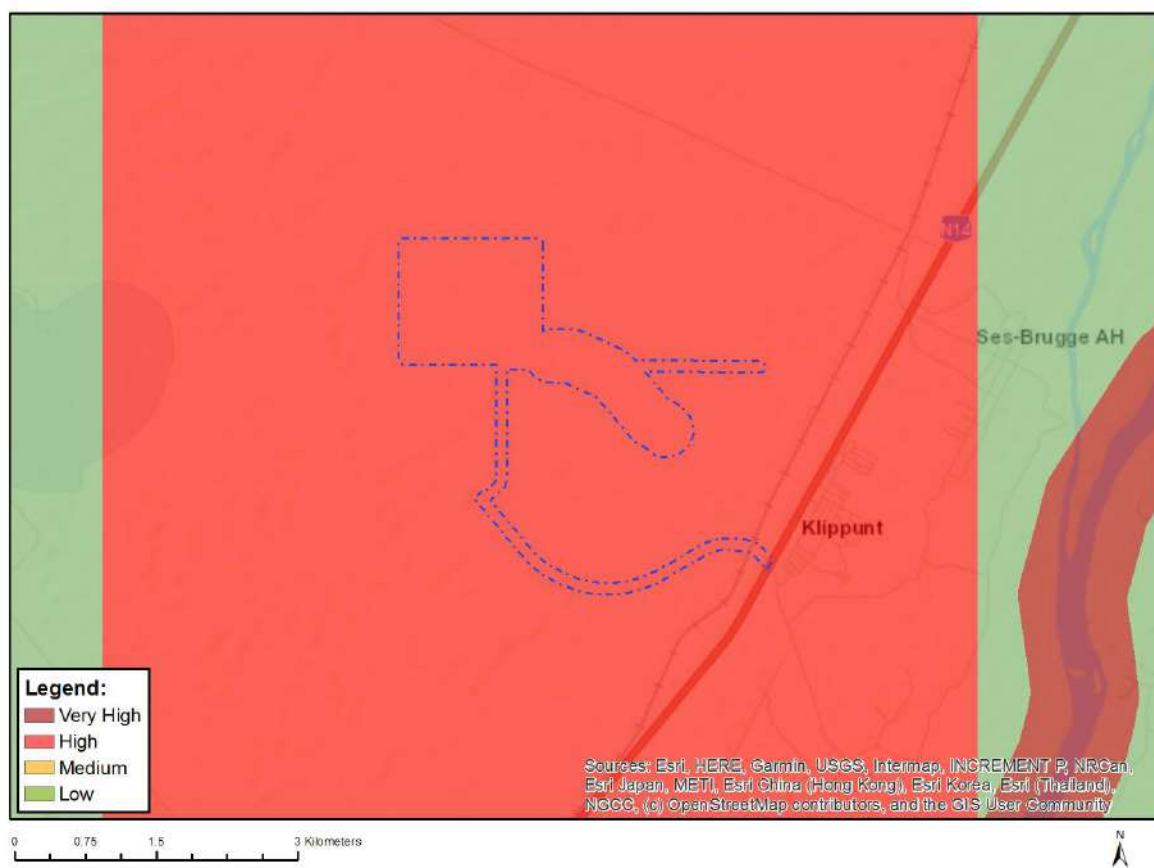


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 50m of a Grade IIIc Heritage site
Low	Low sensitivity

MAP OF RELATIVE AVIAN THEME SENSITIVITY

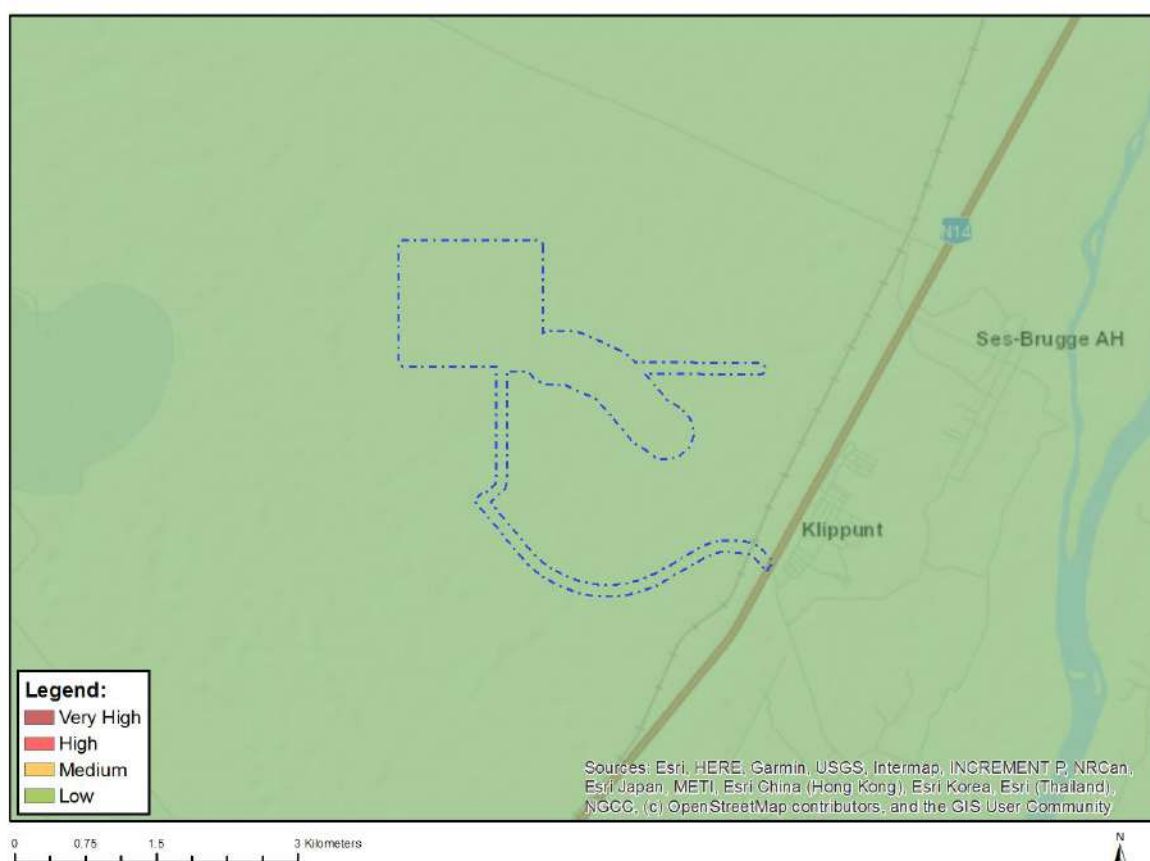


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	areas where susceptible large savannah raptors were found to be present

MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY

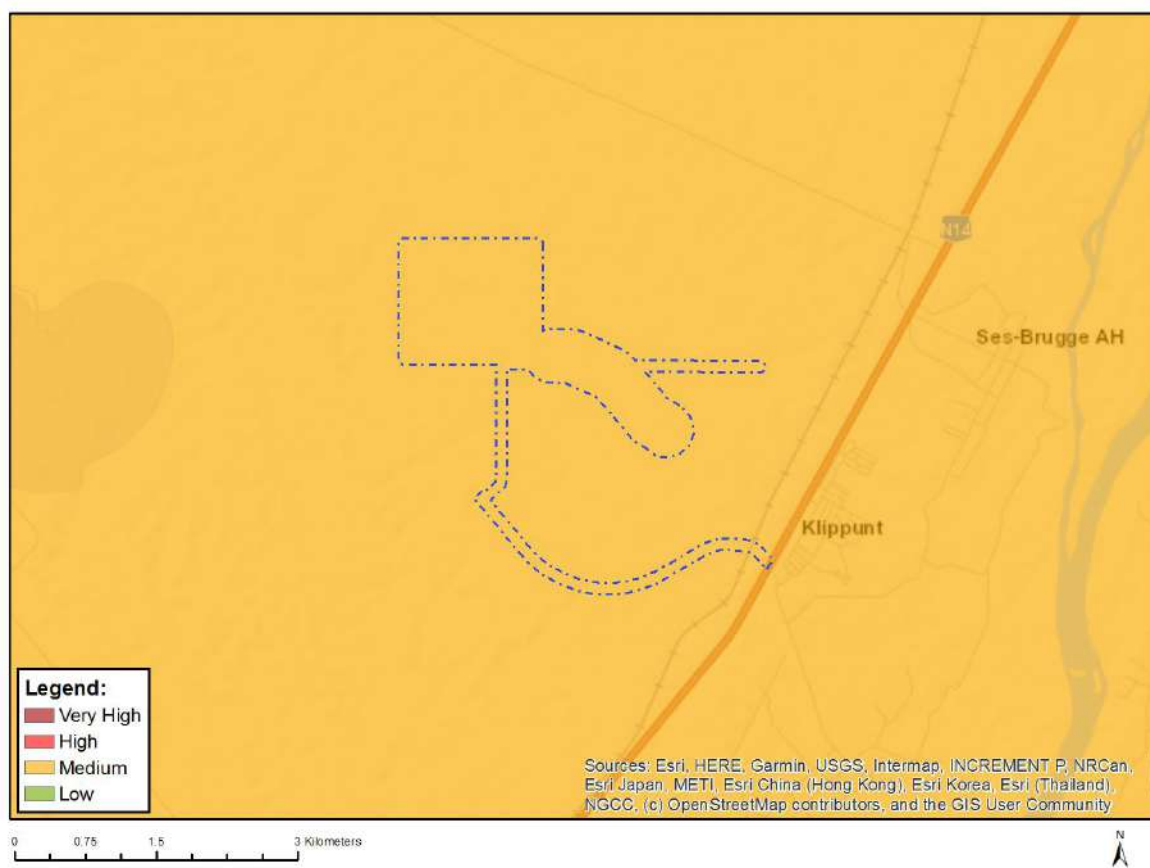


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	No major or other types of civil aviation aerodromes

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

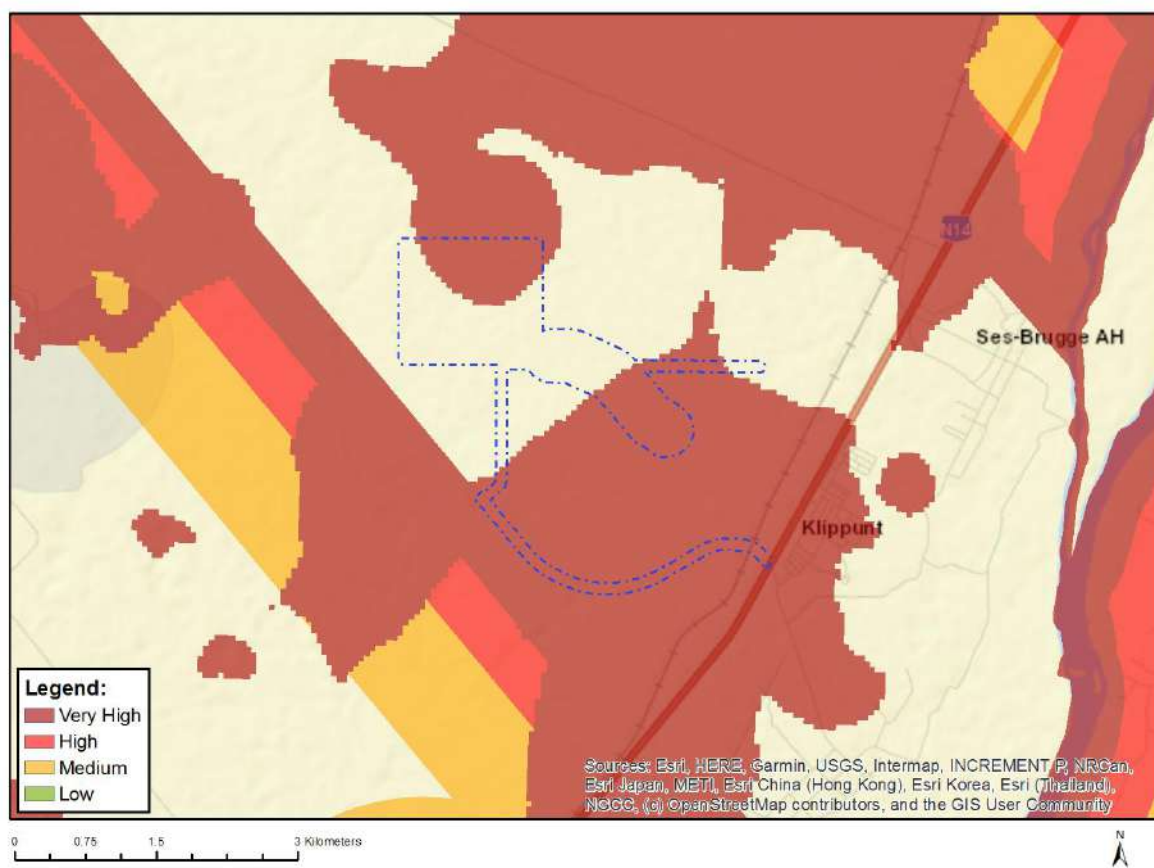


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Defence Site

MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY

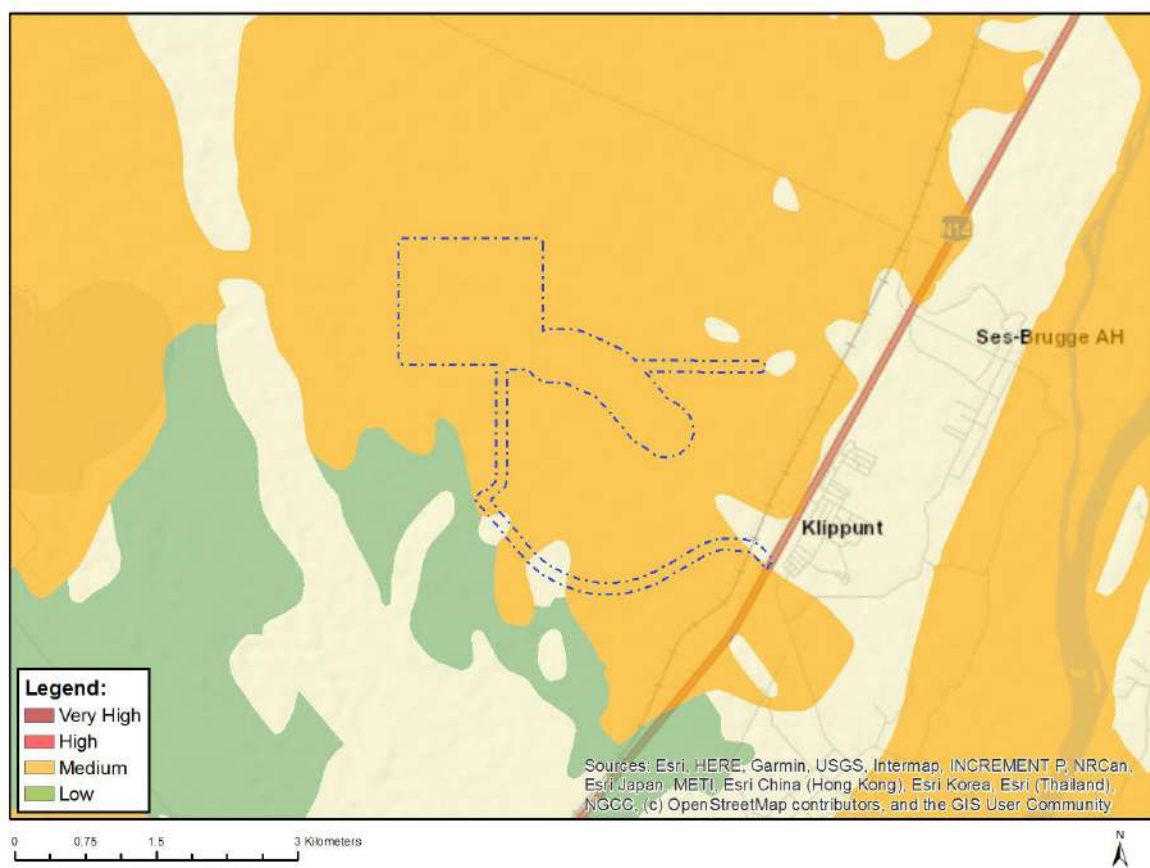


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Between 500 and 1000 m of a town or village
Medium	Between a and 2 km of a town or village
Very High	Mountain tops and high ridges
Very High	Within 500 m of a town or village

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Features with a Medium paleontological sensitivity

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



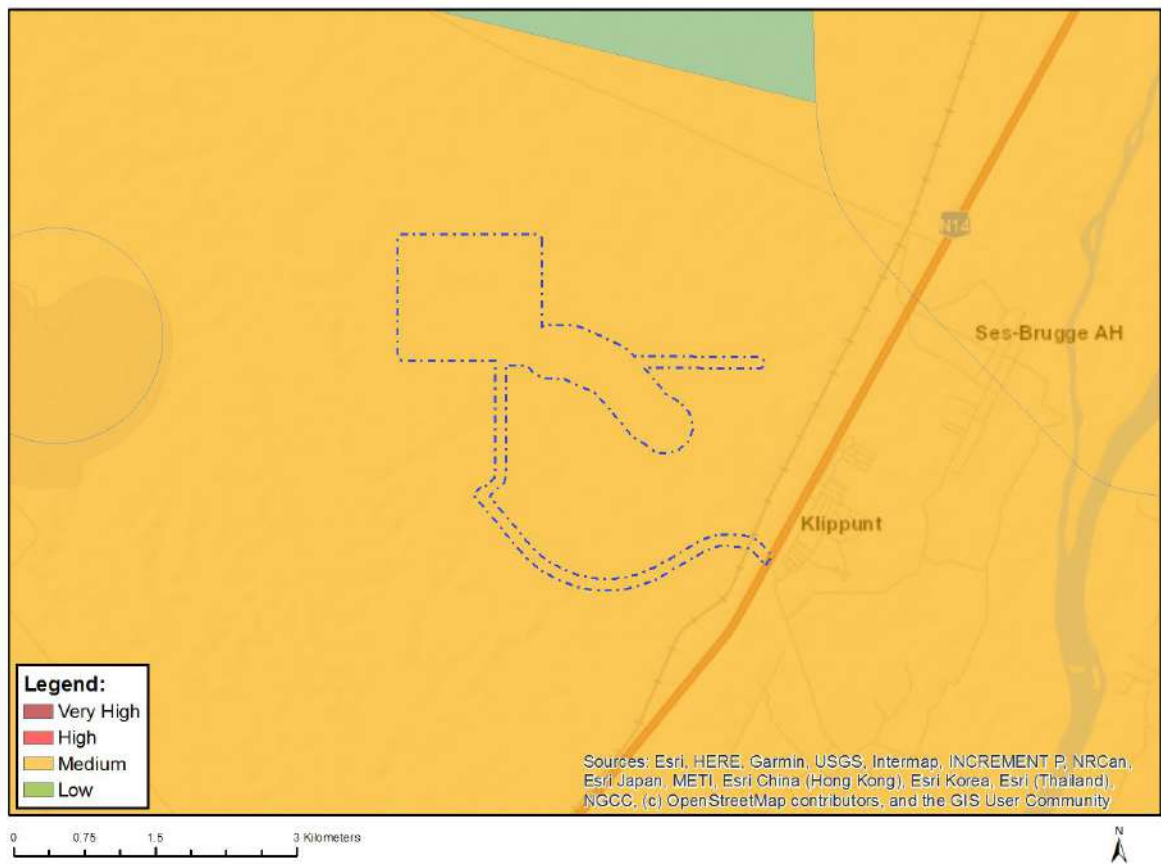
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE RFI THEME SENSITIVITY

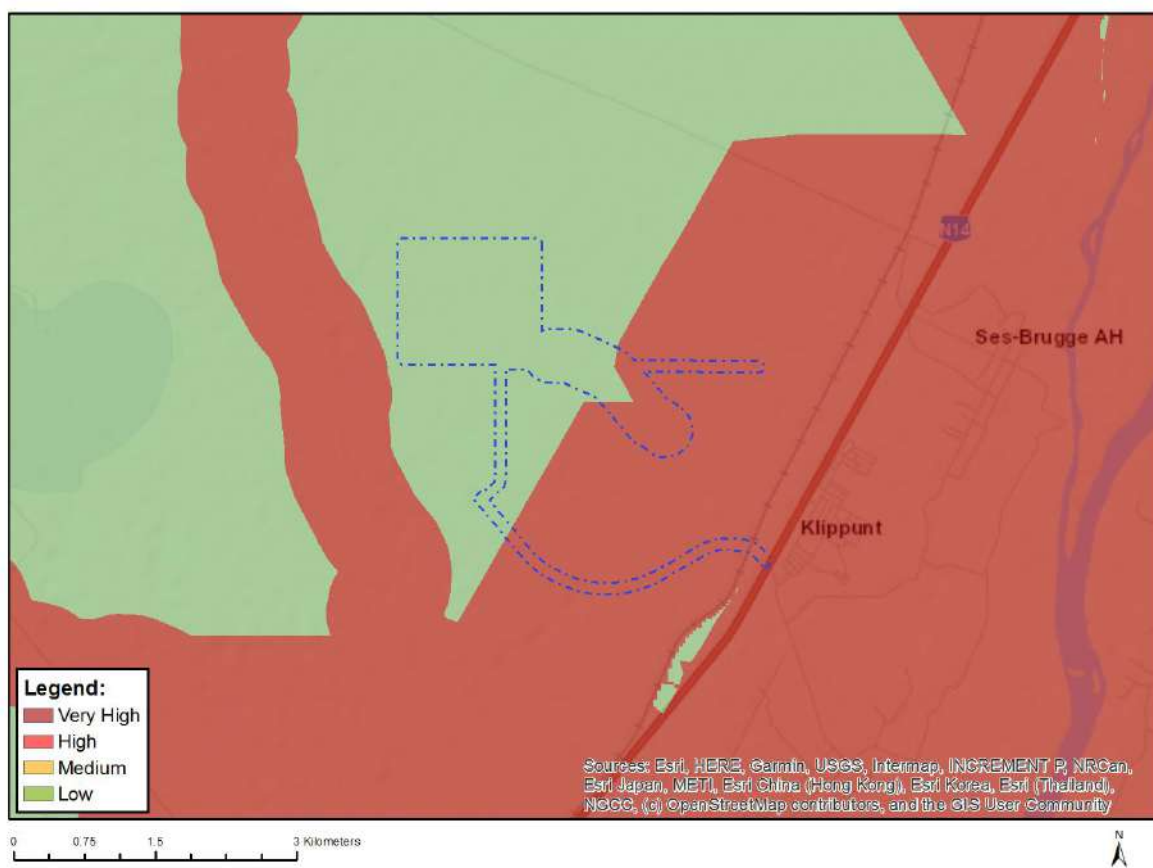


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Between 14 and 32 km of the Radio Astronomy Advantage Area

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	Critical biodiversity area 2
Very High	Ecological support area
Very High	Protected Areas Expansion Strategy

APPENDIX 11-2 : SCREENING TOOL ASSESSMENT FOR SITE B

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS
REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE
ENVIRONMENTAL SENSITIVITY**

EIA Reference number:


Project name: Kiwano Solar PV and BESS - Site B

Project title: Basic Assessment and Water Use Licence Application for the proposed Kiwano Solar Photovoltaic and Battery Energy Storage System Facility including associated substation and 132kV loop-in loop-out powerline near Upington, Northern Cape Province - Site Alternative B

Date screening report generated: 02/05/2022 13:13:17

Applicant: Eskom Holdings SOC Ltd

Compiler: Zitholele COnsulting (Pty) Ltd

Compiler signature: 

Application Category: Utilities Infrastructure|Electricity|Generation|Renewable|Solar|PV



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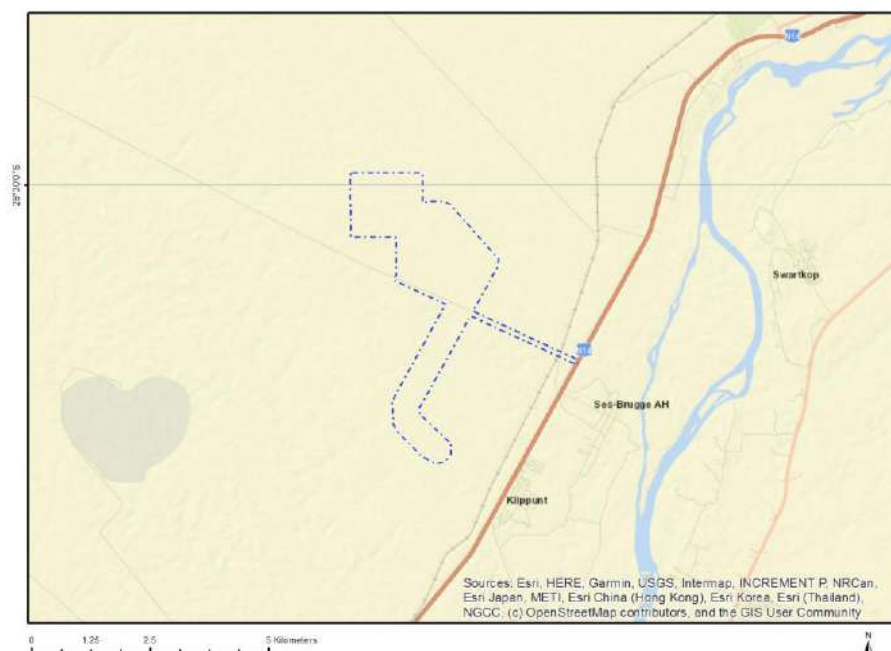
Proposed Project Location	3
Orientation map 1: General location	3
Map of proposed site and relevant area(s)	4
Cadastral details of the proposed site	4
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	4
Environmental Management Frameworks relevant to the application	6
Environmental screening results and assessment outcomes	6
Relevant development incentives, restrictions, exclusions or prohibitions	6
Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones	8
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MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY	16
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MAP OF RELATIVE RFI THEME SENSITIVITY	21
MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	22

Proposed Project Location

Orientation map 1: General location



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	1993	0	28°33'21.45S	21°8'47.32E	Erven
2	KEIMOES	644	0	28°31'22.38S	21°9'13.64E	Erven
3	OLYVENHOUTS DRIFT SETTLEMENT (Gordonia)	1082	0	28°32'13.33S	21°9'25.4E	Erven
4	KEIMOES	1080	0	28°29'12.24S	21°5'24.72E	Erven

Development footprint¹ vertices:

No development footprint(s) specified.

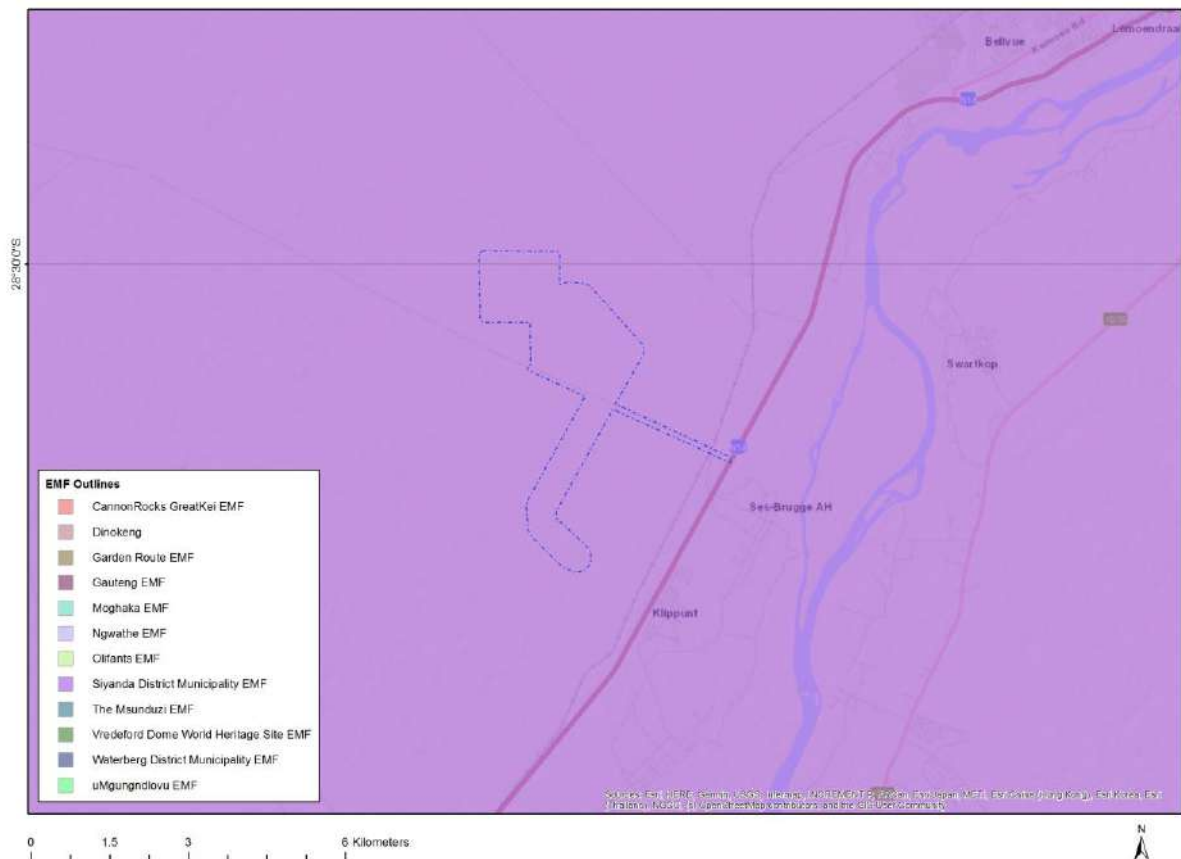
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	14/12/16/3/3/2/1106	Solar PV	Approved	11.7

¹ "development footprint", means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

2	12/12/20/2230	Solar PV	Approved	13.5
3	14/12/16/3/3/1/1754	Solar PV	Approved	27.7
4	12/12/20/2518	Solar PV	Approved	28.4
5	14/12/16/3/3/2/657	Solar CSP	Approved	3.8
6	14/12/16/3/3/2/1107	Solar PV	Approved	3.4
7	14/12/16/3/3/1/2207	Solar PV	Approved	13.5
8	12/12/20/1831/3	Solar PV	Approved	3.8
9	12/12/20/2169	Solar PV	Approved	25.2
10	14/12/16/3/3/2/821	Solar PV	Approved	16.5
11	14/12/16/3/3/2/1105	Solar PV	Approved	11.7
12	14/12/16/3/3/1/2206	Solar PV	Approved	13.5
13	12/12/20/2229	Solar PV	Approved	25.8
14	14/12/16/3/3/1/2208	Solar PV	Approved	13.5
15	14/12/16/3/3/2/815	Solar PV	Approved	10
16	14/12/16/3/3/1/2205	Solar PV	Approved	13.5
17	14/12/16/3/3/1/2075	Solar PV	Approved	1.6
18	14/12/16/3/3/1/2209	Solar PV	Approved	13.5
19	14/12/16/3/3/2/656	Solar CSP	Approved	3.8
20	14/12/16/3/3/1/2111	Solar PV	Approved	3.1
21	12/12/20/777	Solar CSP	Approved	0.8
22	12/12/20/1831	Solar CSP	Approved	3.8
23	14/12/16/3/3/2/816	Solar PV	Approved	10
24	12/12/20/2146	Solar PV	Approved	16.2
25	12/12/20/2056	Solar CSP	Approved	27.6
26	14/12/16/3/3/2/1108	Solar PV	Approved	3.4
27	12/12/20/1831/2	Solar CSP	Approved	3.8
28	14/12/16/3/3/1/2231	Solar PV	Approved	6.2
29	12/12/20/1831/1	Solar CSP	Approved	3.8
30	14/12/16/3/3/3/82	Solar CSP	Approved	13.3
31	14/12/16/3/3/1/2210	Solar PV	Approved	13.5

Environmental Management Frameworks relevant to the application



Environmental Management Framework	LINK
Siyanda District Municipality EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/SIYANDA_EMF_REPORT_2008.doc

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

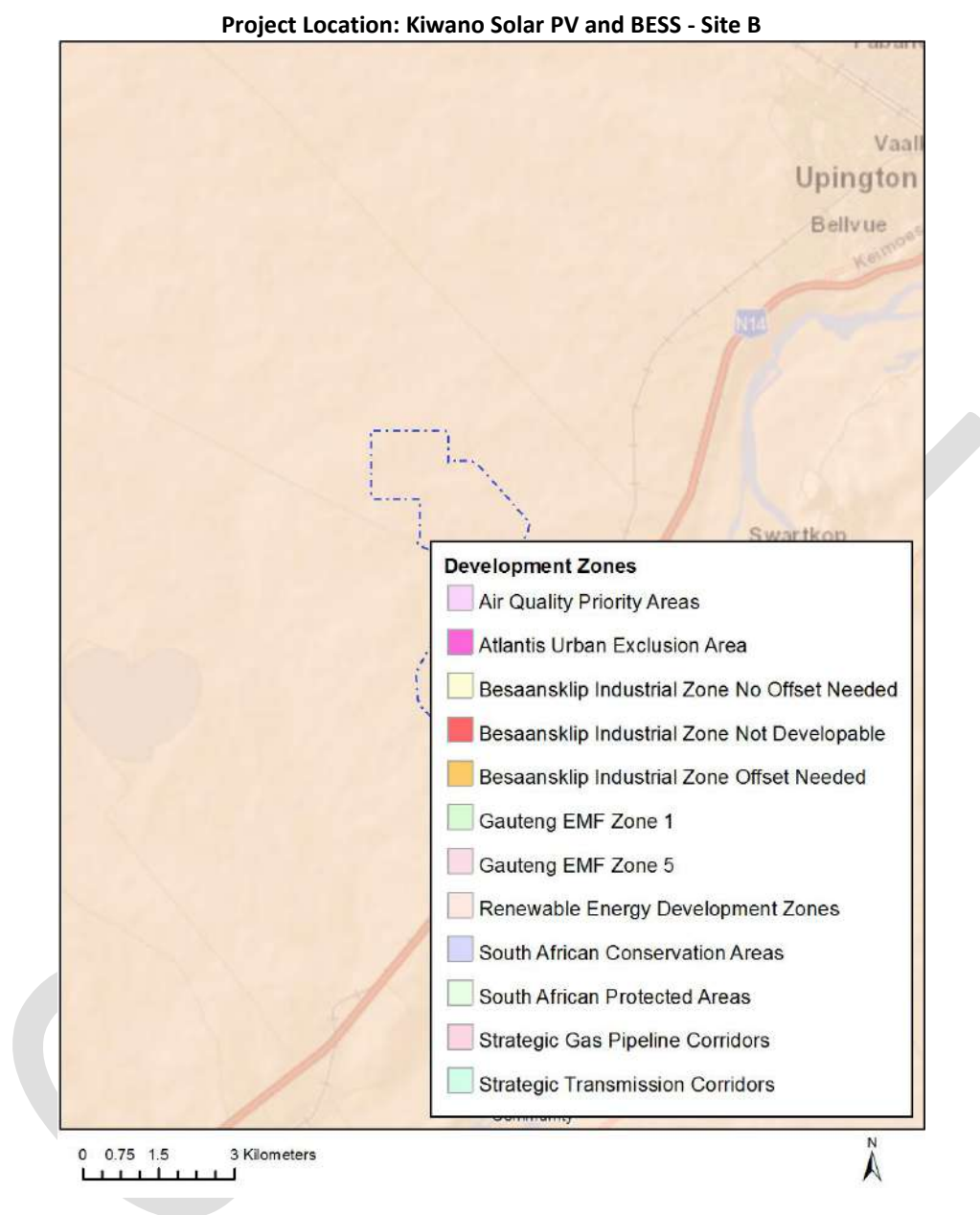
Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV.

Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Northern corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
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Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones



Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme				X
Animal Species Theme		X		

Aquatic Biodiversity Theme				X
Archaeological and Cultural Heritage Theme				X
Avian Theme		X		
Civil Aviation (Solar PV) Theme				X
Defence Theme			X	
Landscape (Solar) Theme	X			
Paleontology Theme			X	
Plant Species Theme				X
RFI Theme			X	
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

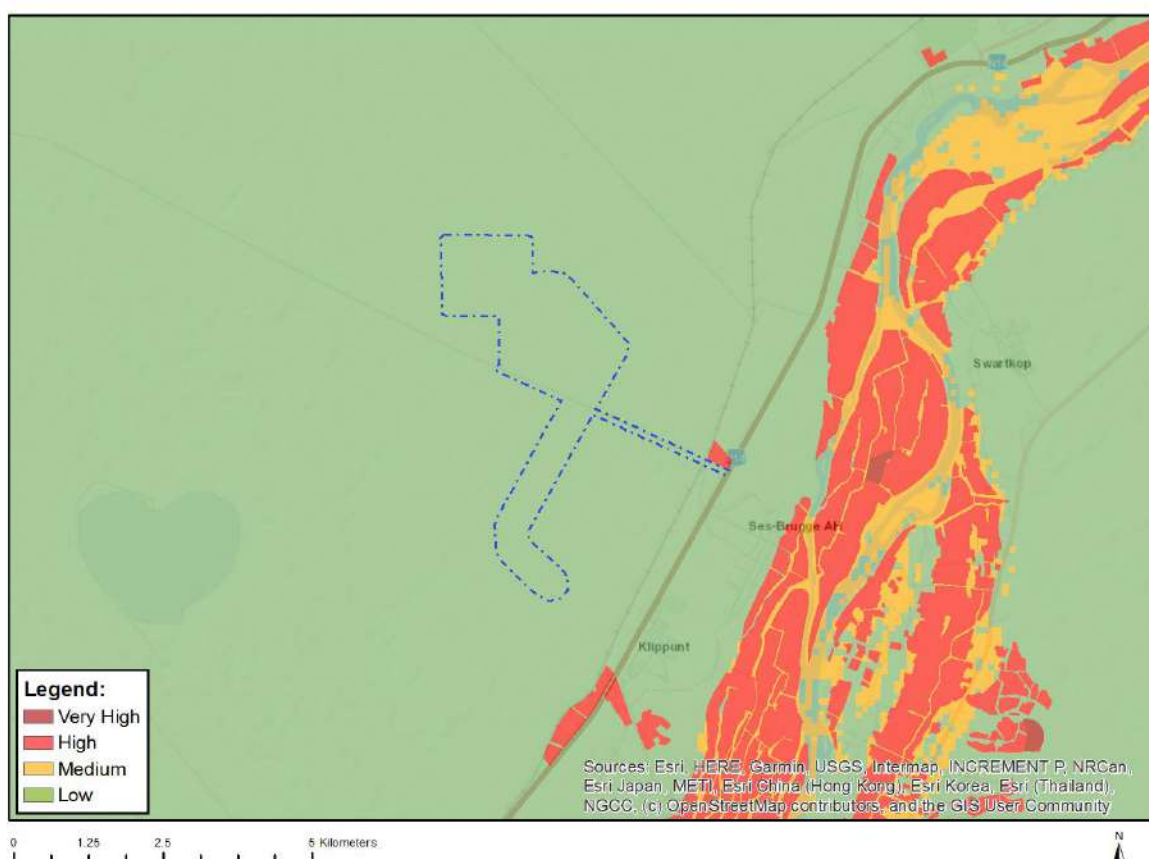
N o	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Paleontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf

	Impact Assessment	
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Defence_Installations_Assessment_Protocols.pdf
9	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
11	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
13	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

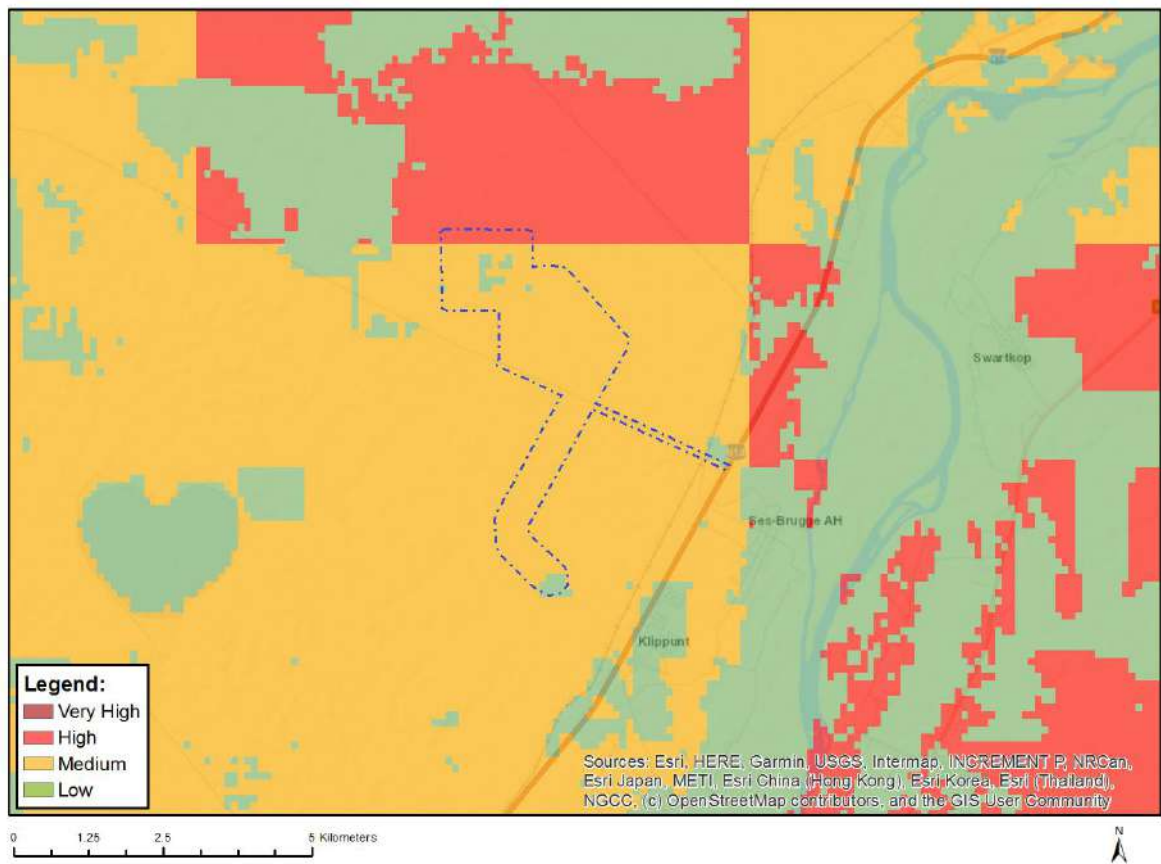


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



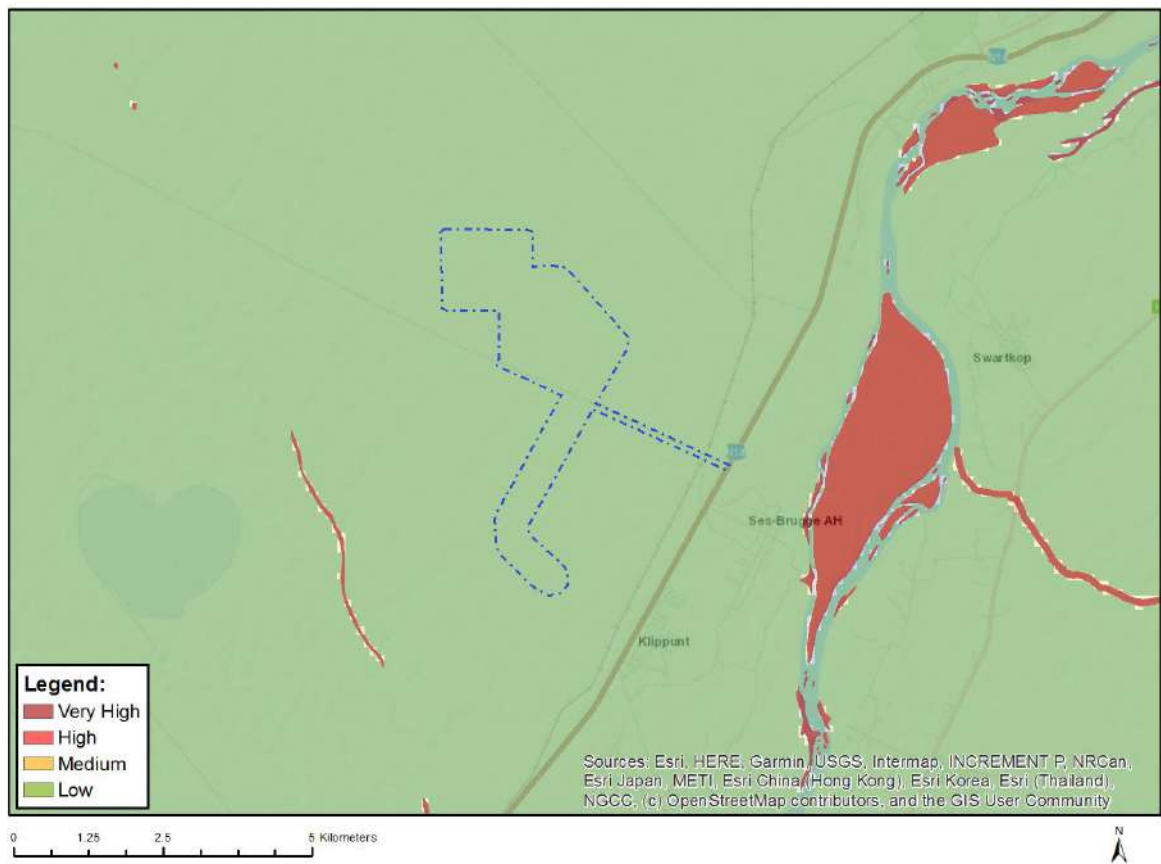
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Aves-Neotis ludwigii
Low	Low sensitivity
Medium	Aves-Neotis ludwigii

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

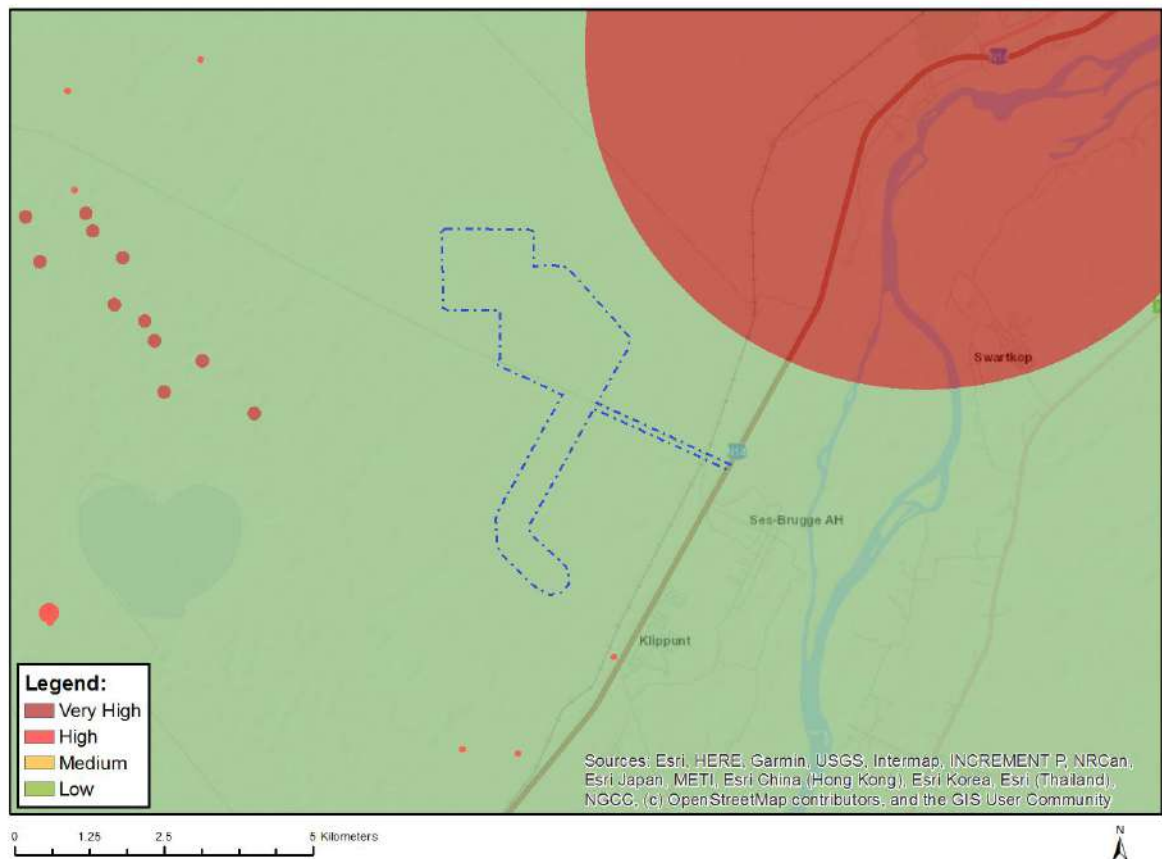


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

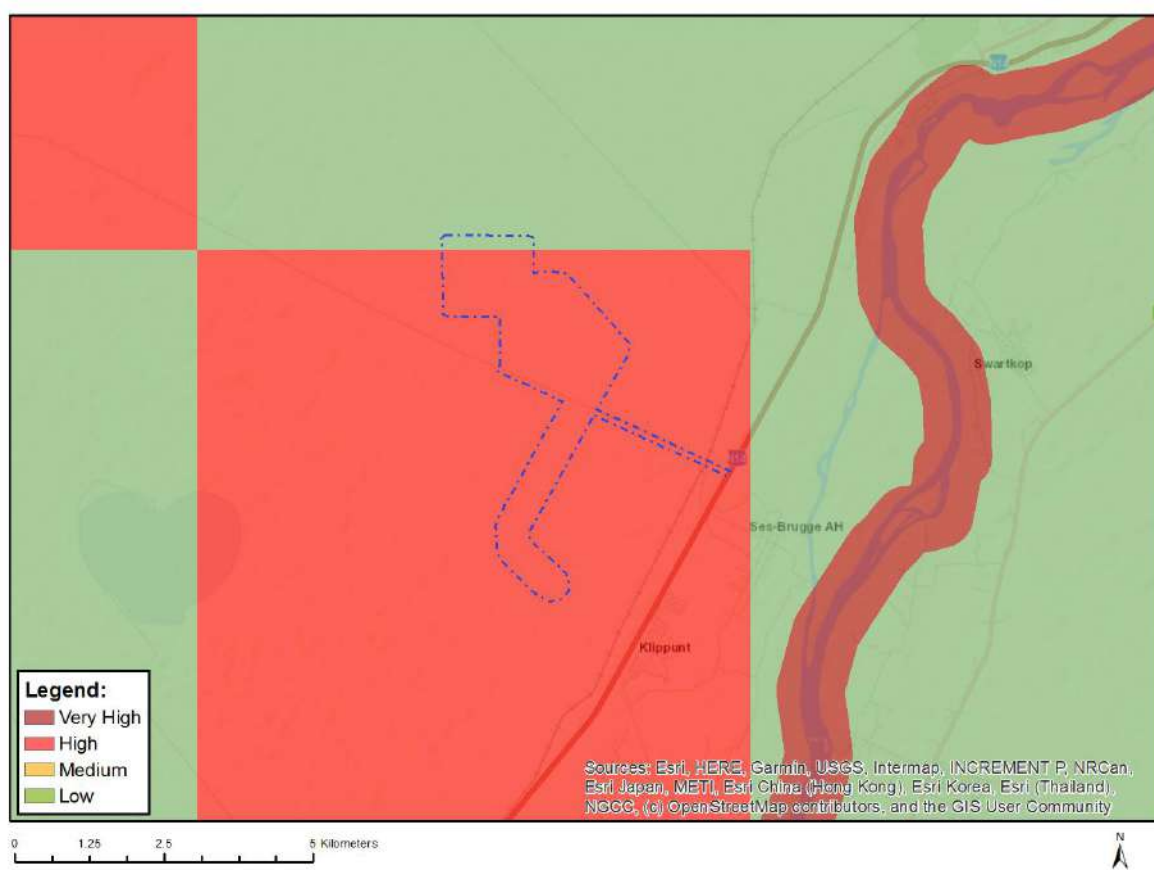


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE AVIAN THEME SENSITIVITY

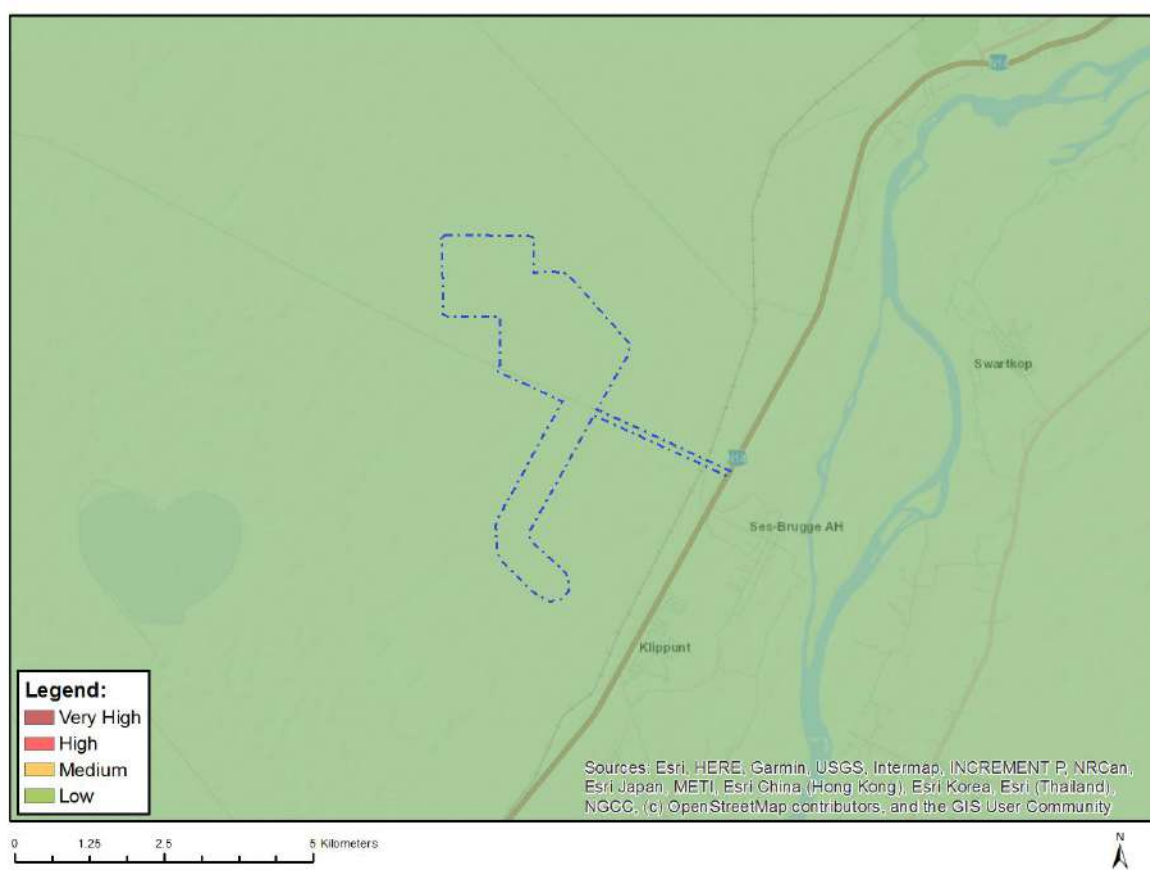


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	areas where susceptible large savannah raptors were found to be present
Low	Low Sensitivity

MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY

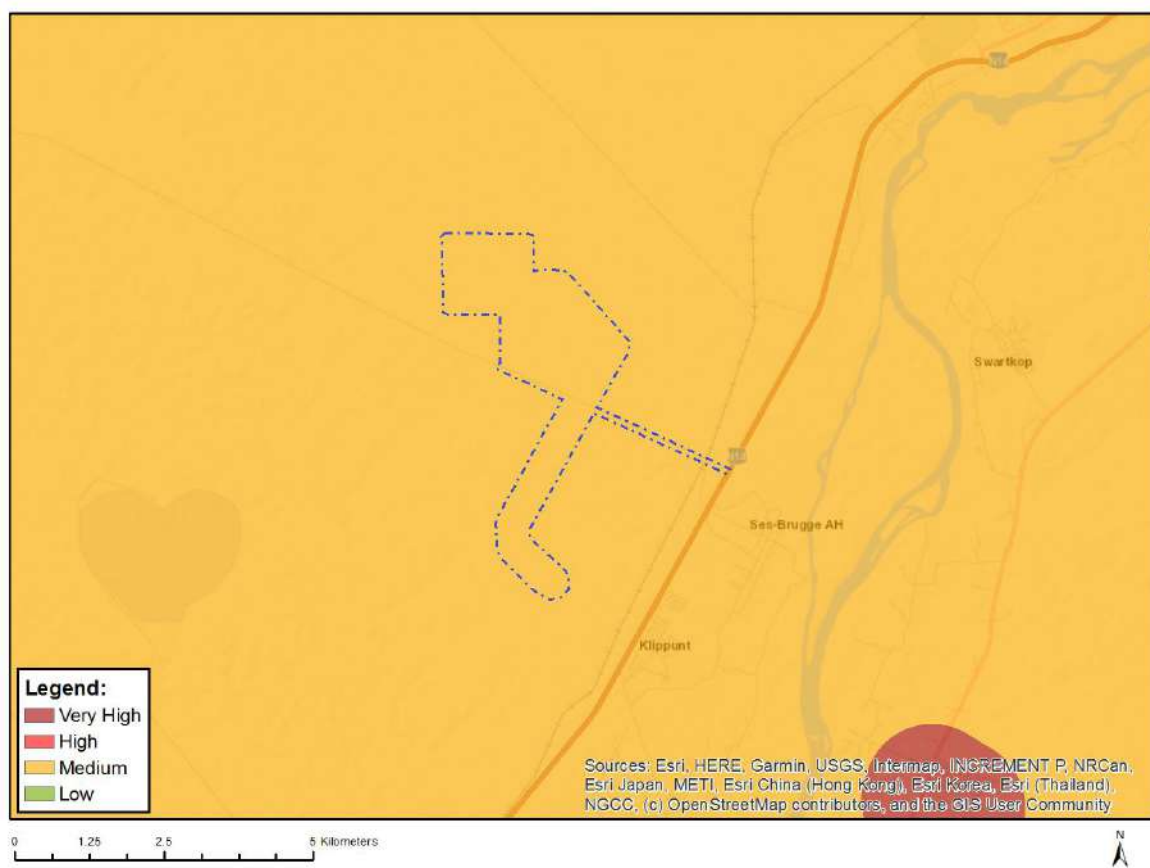


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	No major or other types of civil aviation aerodromes

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

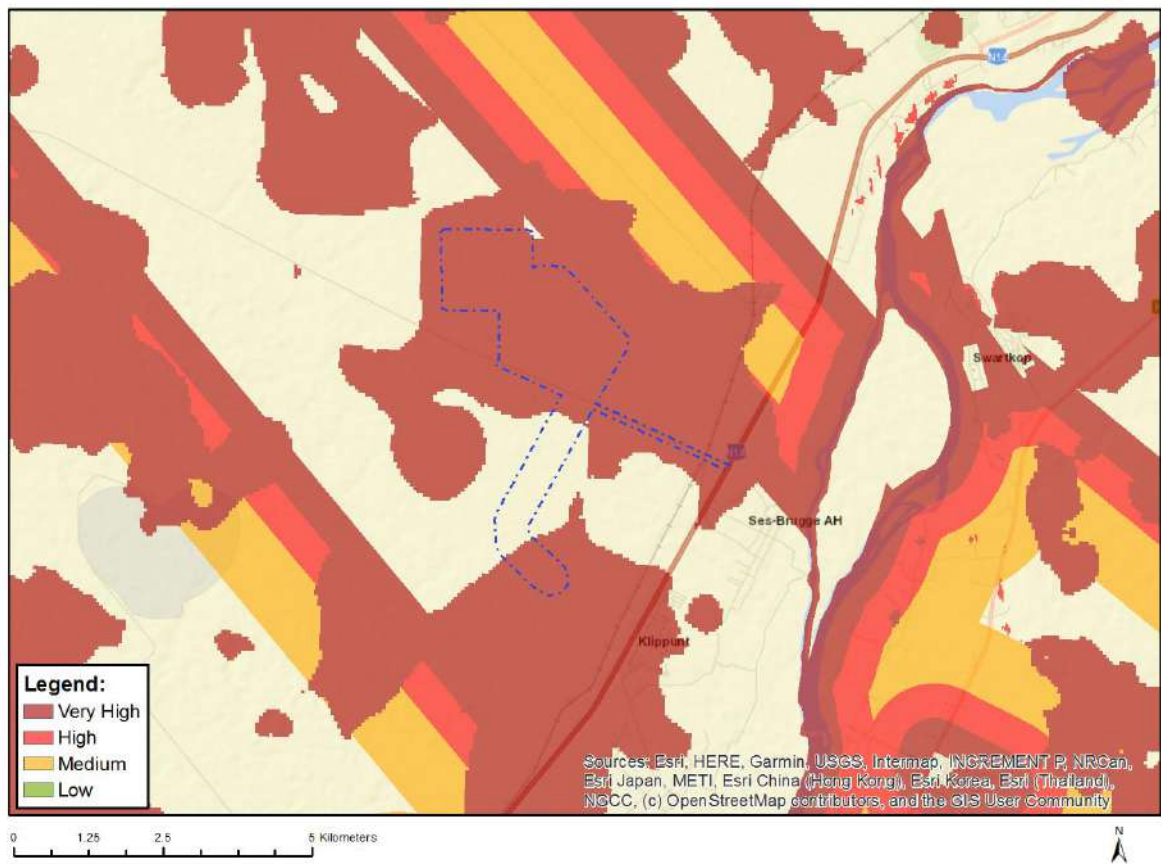


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Defence Site

MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY

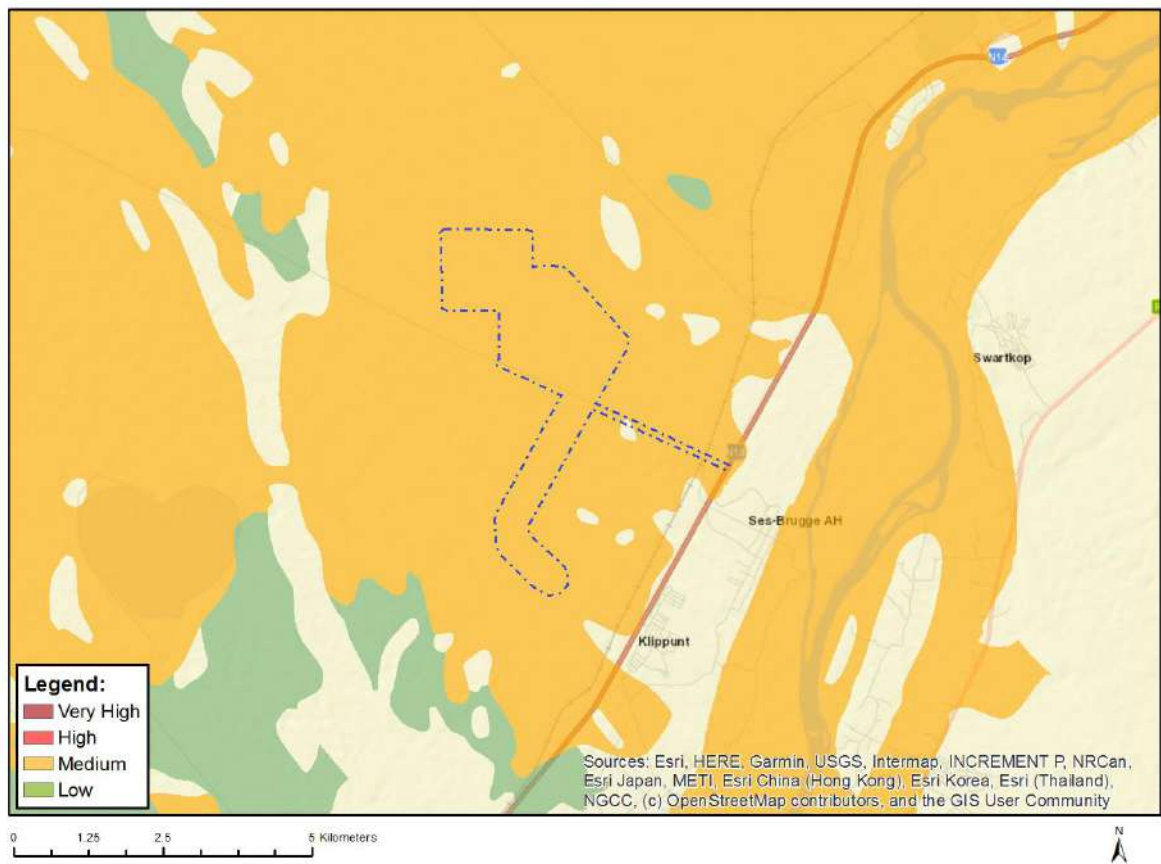


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Mountain tops and high ridges

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

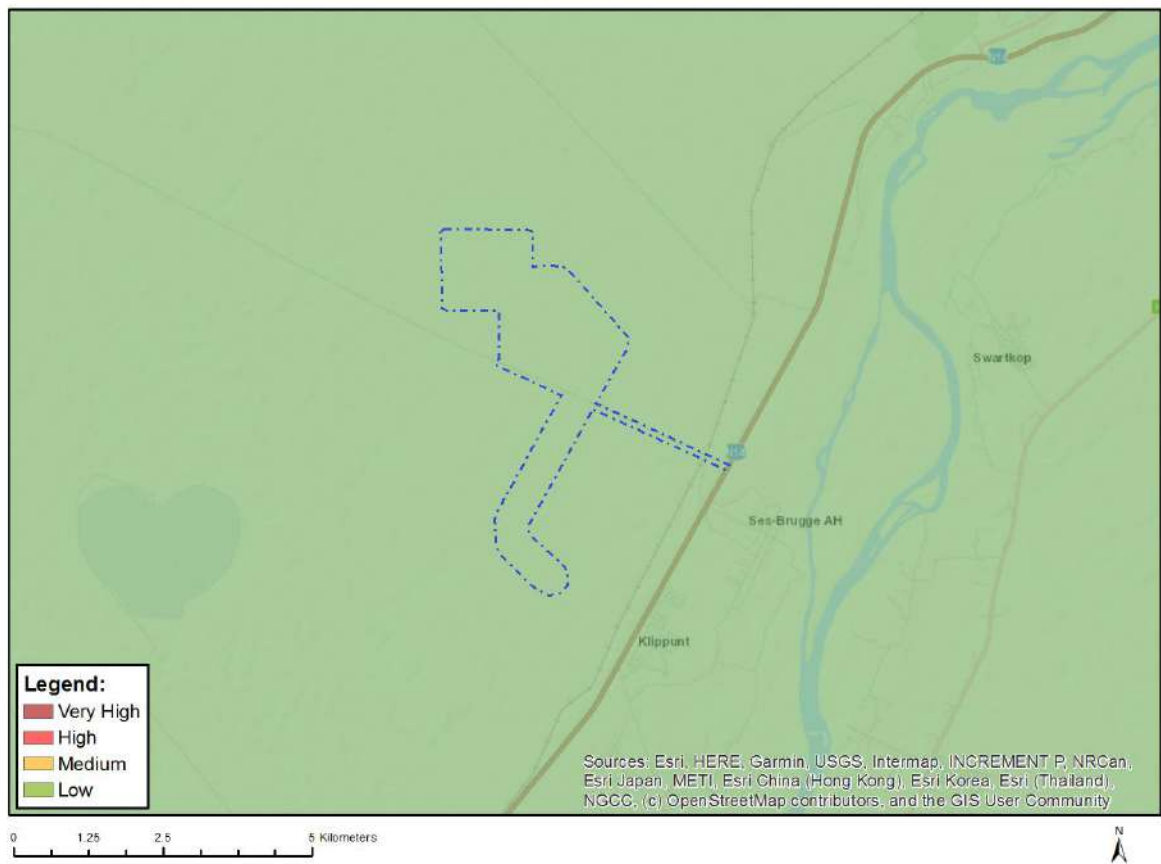


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Features with a Medium paleontological sensitivity

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



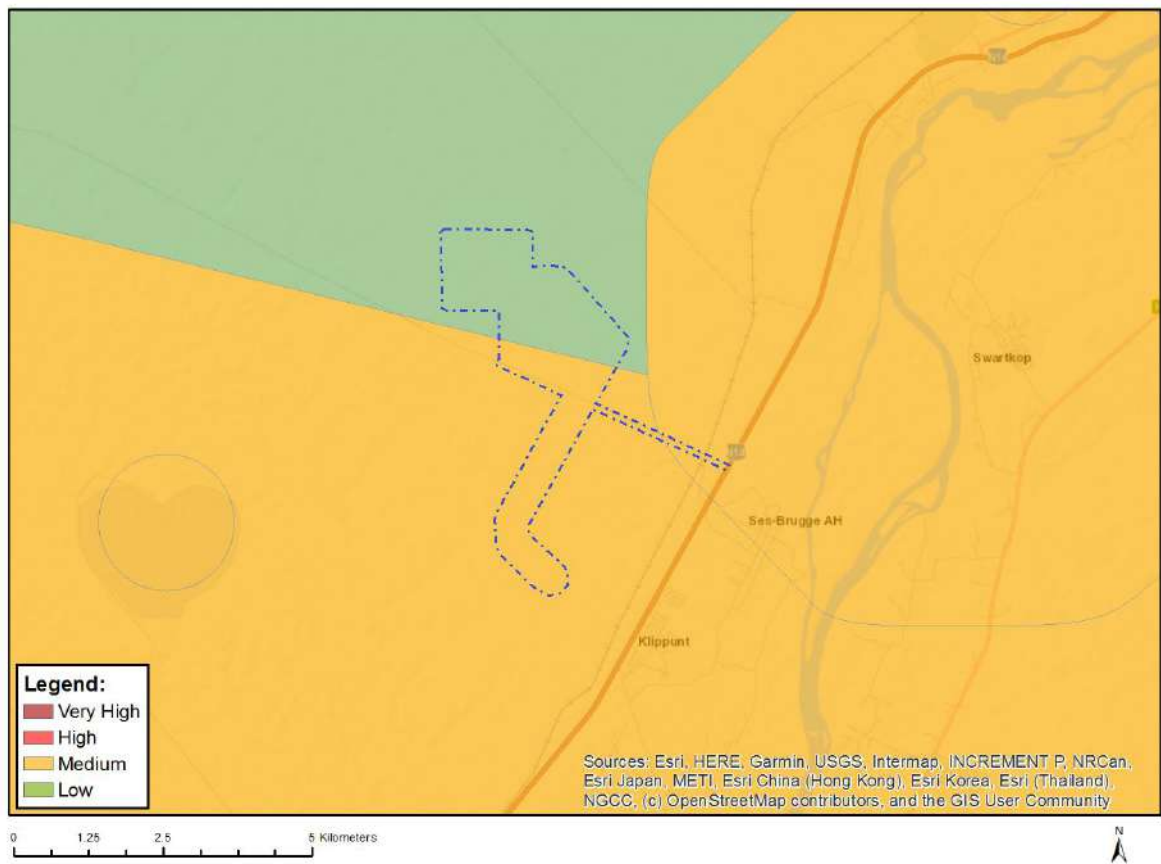
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE RFI THEME SENSITIVITY

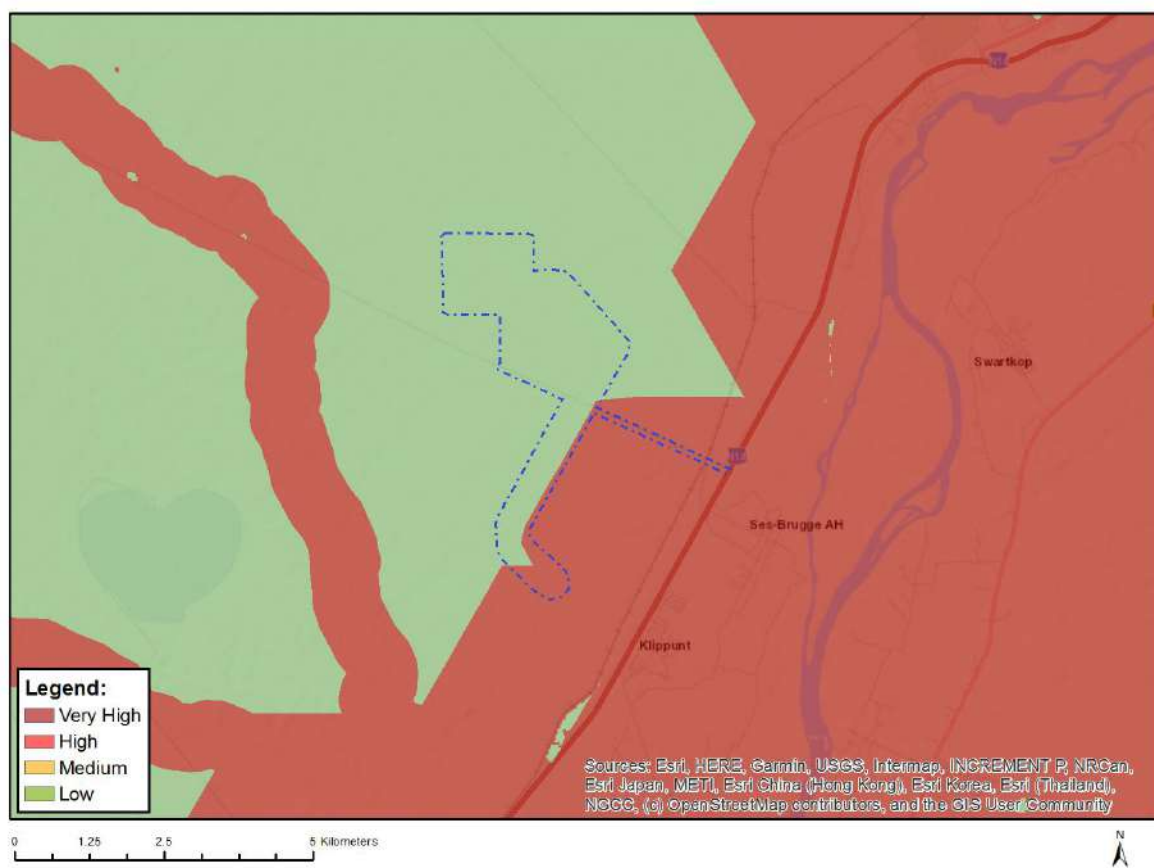


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Medium	Between 14 and 32 km of the Radio Astronomy Advantage Area
Medium	Within 5 km of a Sentech High Power Terrestrial Broadcasting Facility

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



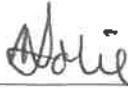
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	Critical biodiversity area 2
Very High	Ecological support area
Very High	Protected Areas Expansion Strategy

**APPENDIX 12
UNDERTAKING UNDER OATH/ AFFIRMATION**

I, Natasha Lalie, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.



Signature of the Environmental Assessment Practitioner

Zitholele Consulting (Pty) Ltd
Name of Company

09/11/2022
Date



Signature of the Commissioner of Oaths

10/11/2022
Date



COMMISSIONER OF OATHS (RSA)
Lizzy Monareng
Professional Accountant (SA)
Practice No.: 35130
Building 1, Maxwell Office Park
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