



# environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATION

File Reference Number:	(For official use only) 14/12/16/3/3/2/456
NEAS Reference Number:	DEAT/EIA/0001773/2013
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2010

### PROJECT TITLE

**Proposed Photovoltaic (Solar) Energy Plant (referred to as du Plessis PV4) on Du Plessis Dam Farm near De Aar, Northern Cape**

#### Kindly note that:

1. This application form is current as of 2 August 2010. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
2. The application 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.
3. Where applicable **black out** the boxes that are not applicable in the form.
4. Incomplete applications may be returned to the applicant for revision.
5. The use of the phrase "not applicable" in the form must be done with circumspection. Should it be done in respect of material information required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the Regulations.
6. This application must be handed in at the offices of the relevant competent authority as determined by the Act and regulations.
7. No faxed or e-mailed applications will be accepted.
8. Unless protected by law, all information filled in on this application will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this application on request, during any stage of the application process.
9. 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 must also be submitted.

Queries must be addressed to the contact hereunder:

Departmental Details

**Postal address:**

Department of Environmental Affairs  
Attention: Director: Environmental Impact Evaluation  
Private Bag X447  
Pretoria  
0001

**Physical address:**

Department of Environmental Affairs  
Fedsure Forum Building (corner of Pretorius and Van der Walt Streets)  
2<sup>nd</sup> Floor North Tower  
315 Pretorius Street  
Pretoria  
0002

Queries should be directed to the Directorate: Environmental Impact Evaluation at:

Tel: 012-310-3268  
Fax: 012-320-7539

*Please note that this form **must** be copied to the relevant provincial environmental department/s.*

View the Department's website at <http://www.deat.gov.za/> for the latest version of the documents.

**SITE IDENTIFICATION AND LINKAGE**

Please indicate all the Surveyor-general 21 digit site (erf/farm/portion) reference numbers for all sites (including portions of sites) that are part of the application.

Annex Du Plessis Dam Farm 179																				
C	0	5	7	0	0	0	0	0	0	0	0	0	0	1	7	9	0	0	0	0

(if there are more than 6, please attach a list with the rest of the numbers)  
(These numbers will be used to link various different applications, authorisations, permits etc. that may be connected to a specific site)

**PROJECT TITLE**

**Proposed Photovoltaic (Solar) Energy Plant (referred to as du Plessis PV4) on Annex Du Plessis Dam Farm near De Aar, Northern Cape**

**1. BACKGROUND INFORMATION**

Project applicant:	Mulilo Renewable Energy (Pty) Ltd		
Trading name (if any):			
Contact person:	Warren Morse		
Physical address:	Office 301 Execujet Business Centre, Tower Road, Cape Town International		
Postal address:	PO Box 50, Cape Town International Airport		
Postal code:	7525	Cell:	083 760 9586
Telephone:	021 934 5278	Fax:	021 935 0505
E-mail:	warren@mulilo.com		

Provincial Authority:	Northern Cape Department of Environmental Affairs and Nature Conservation		
Contact person:	Thato Molese or Chamuwari J Ketano		
Postal address:	Private Bag X6102, Kimberley		
Postal code:	8300	Cell:	076 411 6609
Telephone:	0638077468	Fax:	053 831 3530
E-mail:	tmolese@ncpg.gov.za		

Landowner:	Roelof Stephanus Du Plessis (please see Annexure C).		
Contact person:	Roelof Stephanus Du Plessis		
Postal address:	PO Box 213, De Aar		
Postal code:	7000	Cell:	082 574 6371
Telephone:	053 631 0042	Fax:	
E-mail:	charlduplessis@telkomsa.net		

In instances where there is more than one landowner, please attach a list of landowners with their contact details to this application.

Local authority in whose jurisdiction the proposed activity will fall:	Emthanjeni Local Municipality		
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Nearest town or districts:	De Aar, Northern Cape.		
Contact person:	Mev. C. Kloppers		
Postal address:	45 Voortrekker street		
Postal code:	7000	Cell:	
Telephone:	053 632 9100	Fax:	053 631 0105
E-mail:	deaar@emthanjeni.co.za		

## 2. ACTIVITIES APPLIED FOR TO BE AUTHORISED

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

Indicate the number and date of the relevant notice:	Activity No (s) (in terms of the relevant notice):	Describe each listed activity as per project description <sup>1</sup> :
544, 2 August 2010	10	A 132kV overhead distribution line would be required to connect the PV facility to the onsite-substation. The 132kV distribution line would be approximately 2km long.
544, 2 August 2010	11 (x and xi)	Buildings and structures exceeding 50 m <sup>2</sup> are proposed for the PV facility and it is possible that these might be within 32 meters of small tributaries.
544, 2 August 2010	18 (i)	Attenuation ponds would need to be constructed within watercourses in order to manage the onsite storm water.
545, 2 August 2010	1	The proposed PV facility would each have a generation capacity of 75MW; as such this activity is triggered.
545, 2 August 2010	15	Based on our knowledge of the farm, the predominant farming activity is grazing. It is therefore assumed that this activity would be triggered as the DEA considers grazing land to be undeveloped.
546, 2 August 2010	4	An access road wider than 4m, but less than 8m, will be constructed. As De Aar is located within the Platberg-Karoo Conservancy, this activity will be triggered.
546, 2 August 2010	14	This activity may or may not be triggered depending on the extent of the indigenous vegetation. This will be confirmed by the botanical assessment.
546, 2 August 2010	16	It is assumed that buildings and infrastructure, exceeding 10m <sup>2</sup> would be constructed on the project site. Depending on the location of the respective buildings, this activity may be triggered.

Please note that any authorisation that may result from this application will only cover activities specifically applied for.

2.2 A project schedule, indicating the different phases and timelines of the project, must be attached to this application form (please see Annexure A).

<sup>1</sup> Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government Notice, but should be a brief description of activities to be undertaken as per the project description

### 3. OTHER AUTHORISATIONS REQUIRED

#### 3.1 DO YOU NEED ANY AUTHORISATIONS IN TERMS OF ANY OF THE FOLLOWING LAWS?

3.1.1 National Environmental Management: Waste Act	No
3.1.2 National Environmental Management: Air Quality Act	No
3.1.3 National Environmental Management: Protected Areas Act	No
3.1.4 National Environmental Management: Biodiversity Act	No
3.1.5 National Environmental Management: Integrated Coastal Management Act <sup>2</sup>	No
3.1.6 National Water Act	Yes
3.1.7 National Heritage Resources Act	Yes
3.1.8 Mineral Petroleum Development Resources Act	No
3.1.9 Other (please specify)	No
3.2 Have such applications been lodged already?	No

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<sup>2</sup> Where an environmental authorization in terms of chapter 5 of the National Environmental Management Act is required for coastal activities, the competent authority must take into account all the relevant factors including those listed in section 63(1) of the National Environmental Management: Integrated Coastal Management Act.

#### 4. DECLARATIONS

##### 4.1 The Applicant

I, Warren Morse of Mulilo Renewable Energy (PTY) Ltd, declare that I –

- am, or represent<sup>3</sup>, the applicant in this application;
- have appointed / will appoint (delete that which is not applicable) an environmental assessment practitioner to act as the independent environmental assessment practitioner for this application /
- will obtain exemption from the requirement to obtain an environmental assessment practitioner<sup>4</sup>;
- will provide the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the Environmental Impact Assessment

Regulations, 2010, including but not limited to –

- costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
- 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;

will ensure that the environmental assessment practitioner is competent to comply with the requirements of these Regulations and will take reasonable steps to verify whether the EAP complies with the Regulations;

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;

am responsible for complying with the conditions of any environmental authorisation issued by the competent authority;

hereby indemnify the Government of the Republic, 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 environmental assessment practitioner is responsible for in terms of these Regulations;

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;

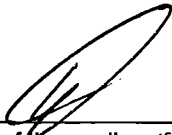
will perform all other obligations as expected from an applicant in terms of the Regulations;

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<sup>3</sup> If this is signed on behalf of the applicant, proof of such authority from the applicant must be attached (**please see Annexure B**).

<sup>4</sup> 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.

all the particulars furnished by me in this form are true and correct; and  
I realise that a false declaration is an offence in terms of regulation 71 and is punishable in terms  
of section 24F of the Act.



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Signature of the applicant<sup>5</sup>/ Signature on behalf of the applicant:

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Name of company (if applicable):

09.09.2013

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Date:

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<sup>5</sup> If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority. An EAP may not sign on behalf of an applicant.





# environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA


## DETAILS OF EAP AND DECLARATION OF INTEREST

File Reference Number:	(For official use only) 14/12/16/3/3/2/456
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Application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2010

## PROJECT TITLE

**Proposed Photovoltaic (Solar) Energy Plant (referred to as du Plessis PV4) on Du Plessis Dam Farm near De Aar, Northern Cape**

Environmental Assessment Practitioner (EAP): <sup>1</sup>	Aurecon South Africa (Pty) Ltd		
Contact person:	Miss Karen Versfeld		
Postal address:	PO Box 494, Cape Town		
Postal code:	8000	Cell:	
Telephone:	021 526 5737	Fax:	021 526 9500
E-mail:	karen.versfeld@aurecongroup.com		
Professional affiliation(s) (if any)	Miss Versfeld is registered as a Candidate Natural Scientist with SACNASP.		

Project Consultant:	N/A		
Contact person:			
Postal address:			
Postal code:		Cell:	
Telephone:		Fax:	
E-mail:			

#### 4.2 The Environmental Assessment Practitioner

I, Karen Versfeld of Aurecon South Africa (Pty) Ltd, declare that –

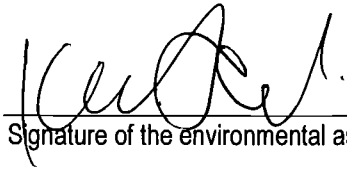
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##### General declaration:

- I act as the independent environmental practitioner in this application
- 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 declare that there are no circumstances that may compromise my objectivity in performing such work;
- 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 take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- 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;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of regulation 71 and is punishable in terms of section 24F 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 Environmental Impact Assessment Regulations, 2010;



Signature of the environmental assessment practitioner:

**Aurecon South Africa (Pty) Ltd**

Name of company:

06/09/2013

Date:

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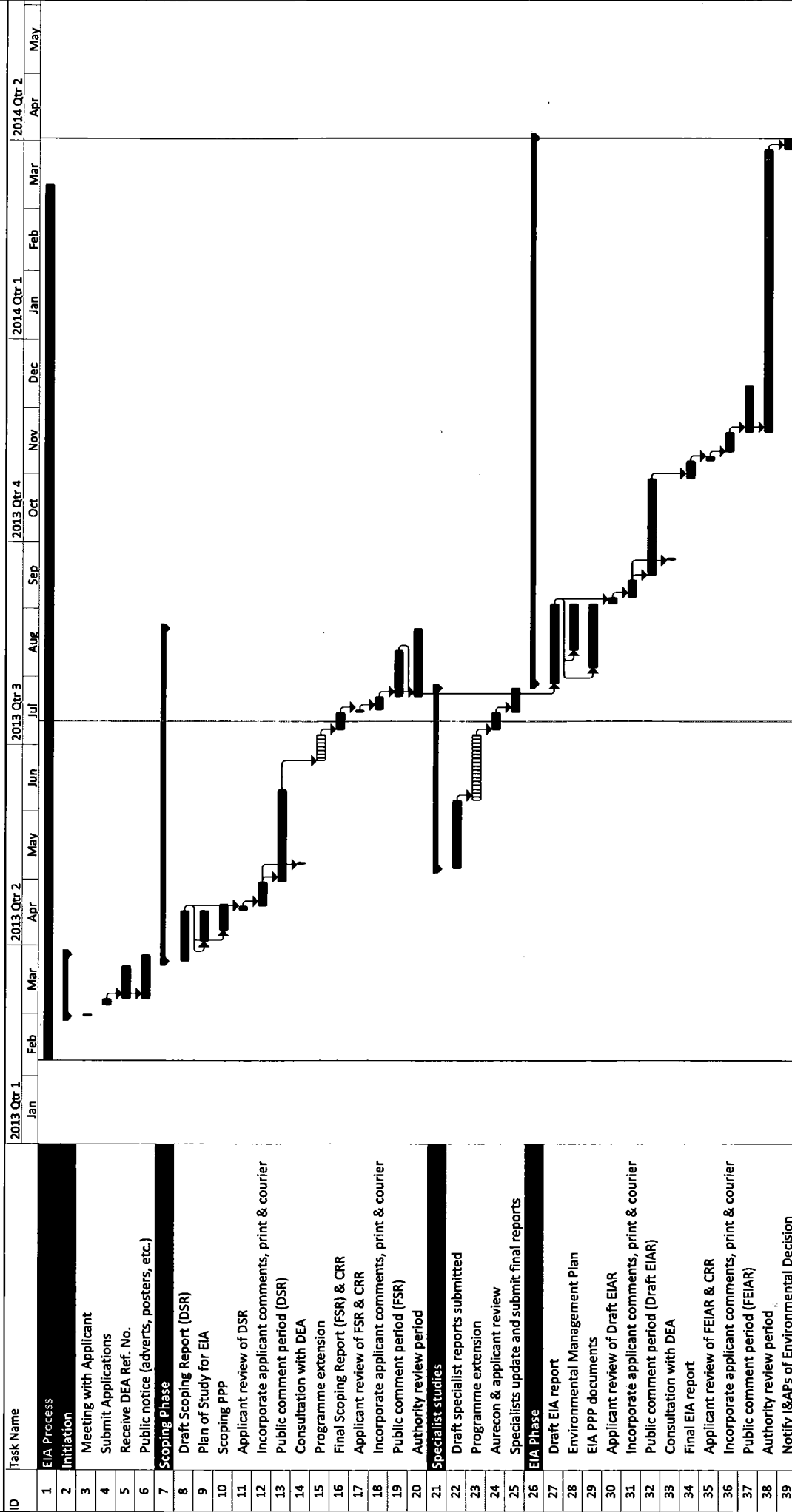
**ANNEXURE A**

**Project Programme**

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**FOUR ENVIRONMENTAL IMPACT ASSESSMENTS FOR THE EXPANSION OF APPROVED PHOTOVOLTAIC FACILITIES NEAR DE AAR AND PRIESKA, NORTHERN CAPE**

**VERSION 4: 12 JULY 2013**



**Task**  
 Project Summary: [Solid bar] External Tasks: [Dotted bar] External Milestone: [Diamond] Inactive Task: [Arrow]  
 Milestone: [Diamond] Summary: [Arrow]  
 Manual Summary Rollup: [Solid bar] Manual Summary: [Dotted bar] Start-only: [Arrow] Finish-only: [Arrow]  
 Inactive Milestone: [Diamond] Inactive Summary: [Dotted bar] Manual Task: [Arrow] Duration-only: [Arrow]  
 Deadline: [Arrow] Progress: [Arrow]

Project: 4 EIAs Near De Aar & Prieska  
 Date: Fri 13/07/12

Page 1

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## **ANNEXURE B**

### **Letter from Applicant Regarding Signing Rights**

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## Mulilo Renewable Energy (Pty) Ltd

**PHYSICAL ADDRESS**

Office 301  
Execujet Business Centre  
Tower Road  
Cape Town International Airport  
7525 South Africa

Telephone: +27 (0) 21 934 5268  
Facsimile: +27 (0) 21 935 0505 / 0866356809  
Email : [chris@capedeep.com](mailto:chris@capedeep.com)

**POSTAL ADDRESS**  
P O Box 50

Cape Town International Airports  
7525 South Africa

4<sup>th</sup> March 2013

### RESOLUTION

Further to a meeting of the board of Mulilo Renewable Energy (Pty) Ltd, held at Cape Town on 4<sup>th</sup> March 2013, it has been agreed that Warren Morse has the authority to sign the Application Forms for Environmental Authorisation.

Signed at Cape Town on 4<sup>th</sup> March 2013

A handwritten signature in black ink, appearing to be 'J H Cullum', written over a set of diagonal lines.

J H Cullum

Director

A handwritten signature in black ink, appearing to be 'C Aberdeen', written in a cursive style.

C Aberdeen

Director

Directors: CD Aberdeen, J Coetsee, D J Crombie, J H Cullum

Mulilo Renewable Energy (Pty) Ltd Registration number: 2008 / 010114 / 07

PO Box 50 Cape Town International Airport Cape Town 7525 South Africa

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# **ANNEXURE C**

## **Landowner Consent**

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Du Plessis Dam farm No. 179

DA 28

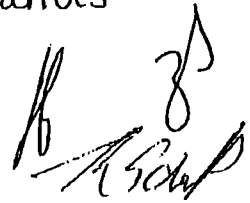
AWB/w/lease: 08/04/08

## MEMORANDUM VAN HUUROOREENKOMS

aangegaan en gesluit tussen

Du Plessis Rodof Stephanus  
Id 390921 5023 085

(Registrasienommer: )



(die 'VERHUURDER')

en

MULILO RENEWABLE ENERGY (EDMS) BPK


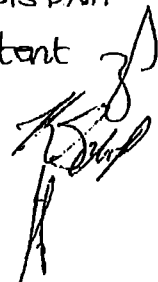
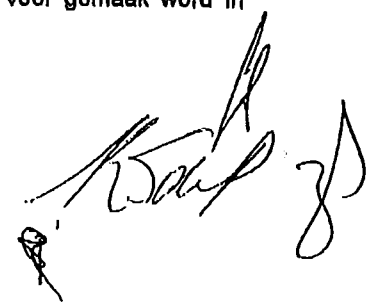
(Registrasienommer: 2008/010114/07)

(die 'HUURDER')



## 1. INTERPRETASIE

In hierdie Huurooreenkoms, tensy die konteks tot die teendeel aandui:

- 1.1 beteken die VERHUURDER:  
*Du Plessis, Roelof Stephanus* 
- 1.2 beteken die HUURDER Mullio Renewable Energy (Edms) Bpk Ltd, Registrasienommer: 2008/010114/07, verteenwoordig deur Johannes Coetsee, wie behoortlik gemagtig is om as sodanig op te tree, van p/a Keeromstraat 68, Kaapstad, 8001;
- 1.3 beteken die HUURPERSEEL die plaas beskryf as, *Du Plessis Dam*  
*Philipstown RD 17910 Remaining Extant*  
 gehou onder titelakte T...15093/1986....., en met oppervlakte van *1244,5563* ha, maar uitgesluit alle geboue, plaasgereedskap en -implemente, voorraad, voertuie en waterbronne, onderhewig aan die bepallings van klousule 8 hieronder en ook uitgesluit alle gedeeltes wat nie deur die HUURDER gebruik word vir wind- en sonkragopwekking doeleindes nie; 
- 1.4 beteken die AANVANGSDATUM die datum van ondertekening van hierdie Huurooreenkoms deur die party daartoe wat dit laaste onderteken;
- 1.5 beteken die OKKUPASIEDATUM die Aanvangsdatum;
- 1.6 beteken die AKTIVERINGSDATUM die eerste datum wat 'n turbine krag aan Eskom of 'n ander kommersiële gebruiker lewer, soos voorsiening voor gemaak word in klousule 5.4 hieronder.
- 

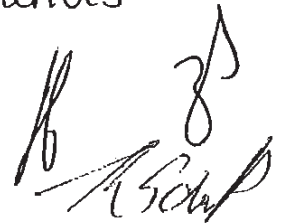
AWS/ww/lease : 06/04/09

## MEMORANDUM VAN HUUROOREENKOMS

aangegaan en gesluit tussen

Du Plessis Roelof Stephanus  
Id 390921 5023 085

(Registrasienommer: )



(die 'VERHUURDER')

en

**MULILO RENEWABLE ENERGY (EDMS) BPK**

(Registrasienommer: 2008/010114/07)

(die 'HUURDER')



## 1. INTERPRETASIE

In hierdie Huurooreenkoms, tensy die konteks tot die teendeel aandui:

1.1 beteken die VERHUURDER:

Du Plessis, Roelof Stephanus

1.2 beteken die HUURDER Mulilo Renewable Energy (Edms) Bpk Ltd, Registrasienommer: 2008/010114/07, verteenwoordig deur Johannes Coetsee, wie behoorlik gemagtig is om as sodanig op te tree, van p/a Keeromstraat 68, Kaapstad, 8001;

1.3 beteken die HUURPERSEEL die plaas beskryf as, Philipstown RD 179/0 Remaining Extent gehou onder titelakte T...15093/1986....., en met oppervlakte van 1244,5563 ha, maar uitgesluit alle geboue, plaasgereedskap en -implemente, voorraad, voertuie en waterbronne, onderhewig aan die bepalings van klousule 6 hieronder en ook uitgesluit alle gedeeltes wat nie deur die HUURDER gebruik word vir wind- en sonkragopwekking doeleindes nie;

Du Plessis DAm

Philipstown RD 179/0 Remaining Extent

1.4 beteken die AANVANGSDATUM die datum van ondertekening van hierdie Huurooreenkoms deur die party daartoe wat dit laaste onderteken;

1.5 beteken die OKKUPASIEDATUM die Aanvangsdatum;

1.6 beteken die AKTIVERINGSDATUM die eerste datum wat 'n turbine krag aan Eskom of 'n ander kommersiële gebruiker lewer, soos voorsiening voor gemaak word in klousule 5.4 hieronder.

Paarde Valley Farm No. 145 Portion 2

DA27

082 822 4557  
Mrs Davies

AWSAW03333 : 08/04/09

**MEMORANDUM VAN HUUROOREENKOMS**

aangegaan en gesluit tussen

Marais Louis Charles Trustee  
MT 1189/99

(Registrasienommer: )

(die 'VERHUURDER')

en

**MULO RENEWABLE ENERGY (EDMS) BPK**

(Registrasienommer: 2008/010114/07)

(die 'HUURDER')

## 1. INTERPRETASIE

In hierdie Huurooreenkoms, tensy die konteks tot die teendeel aandui:

- 1.1 beteken die VERHUURDER:  
Marais Louis Charles Trustee  
MT 1189/99
- 1.2 beteken die HUURDER Multi Renewable Energy (Edms) Bpk Ltd, Registrasienommer: 2008/010114/07, verteenwoordig deur Johannes Coetsee, wie behoorlik gemagtig is om as sodanig op te tree, van p/a Keeromstraat 68, Kaapstad, 8001;
- 1.3 beteken die HUURPERSEEL die plaas beskryf as 145/2 Philipstown Rd Paarde Valley..... gehou onder titelakte T...19715/1986....., en met oppervlakte van 1102,4954 ha, maar uitgesluit alle geboue, plaasgeredskap en -implemente, voorraad, voertuie en waterbronne, onderhewig aan die bepatings van Klousule 6 hieronder en ook uitgesluit alle gedeeltes wat nie deur die HUURDER gebruik word vir wind- en sonkragopwekking doeleindes nie;
- 1.4 beteken die AANVANGSDATUM die datum van ondertekening van hierdie Huurooreenkoms deur die party daartoe wat dit laaste onderteken;
- 1.5 beteken die OKKUPASIEDATUM die Aanvangsdatum;
- 1.6 beteken die AKTIVERINGSDATUM die eerste datum wat 'n turbine krag aan Eskom of 'n ander kommersiële gebruiker lewer, soos voorsiening voor gemaak word in Klousule 5.4 hieronder.







DE AAR TRANSMISSIELYN	
PROJEK NR:	ITEM NR:

### OPSIE OM 'N SERWITUUT TE VERKRY

Ons, die ondergetekendes,

- Emthanjeni Munispaliteit hierin verteenwoordig deur Mnr. Isak Visser Munisipale bestuurder  
 Adres: ..... Voortrekkerstraat 45, De Aar.....  
 Poskode..... 7000..... ID Nr: ..... 700215 5520 082.....  
 Tel Nr..... 0536329100..... Cel Nr:.....  
 C/O: Ms C Klopper..... Epos: ..... cklopper@emthanjeni.co.za.....
- .....  
 Adres:.....  
 Poskode..... ID Nr:.....  
 Tel Nr..... Cel Nr.....  
 Getroud buite/binne GVG op:..... Epos:..... synde  
 die GEREГИСТРЕERDE EIENAAR/S (hierna genoem die "geregistreerde eienaar") en
- Mulilo Hemubare Energie (Pty) Ltd.....  
 Adres:..... Posbus 50, Kaapstad Internasionale Lughawe.....  
 Poskode..... 7525..... ID Nr:.....  
 Tel Nr..... 0219345268..... Cel Nr:.....  
 Getroud buite/binne GVG op:..... Epos:.....  
 synde die KOPER/S : HUURDER/S (hierna genoem die koper/huurder") en
- .....  
 Adres: .....  
 Poskode..... ID Nr:.....  
 Tel Nr..... Cel Nr:..... Epos:.....  
 synde die VRUGGEBRUIKER/ERFGENAME (hierna genoem die "vruggebruiker/erfgenaar")

Hierna almal gesamentlik of afsonderlik genoem die "EIENAAR" van die volgende elendom/me, volgens titelaktes:

PLAAS NAAM: .....De Aar.....  
 REGISTRASIE AFDELING: .....29/145.....  
 PLAASLIKE OWERHEID: .....Philipstown RD.....  
 GROOTTE: ..... 643.1545 H.....  
 TITELAKTE NR: Gehou kragtens Akte nommer ..... T8181/1971..... gedateer ..... 1971/03/29.....  
 (hierna genoem die "elendom") verleen hiermee aan

CH  
 OP  
 [Handwritten signatures and initials]

Geteken te De Aar op hierdie 5<sup>e</sup> dag van JULIE 2010 in die  
teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. [Handwritten Signature]
- 2. [Handwritten Signature]

[Handwritten Signature] X  
Geregistreerde Eienaar of Gemagtigde Agent

Geteken te ..... op hierdie ..... dag van ..... 20..... in die  
teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. ....
- 2. ....

.....  
Geregistreerde Eienaar of Gemagtigde Agent

Geteken te KAAPSTAD op hierdie 12 dag van JULIE 2010 in die  
teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. [Handwritten Signature]
- 2. [Handwritten Signature]

[Handwritten Signature]  
Koper/Huurder

Geteken te ..... op hierdie ..... dag van ..... 20..... in die  
teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. ....
- 2. ....

.....  
Vruggebruiker/Erfgenaam

<p>Die eienaar/s gee hiermee toestemming dat die vergoeding in hierdie opsie in die vlogende bank rekening betaal word:</p> <p>Rekening Houer: Emthanjeni Munisipaliteit.....</p> <p>Bank Rek. No.: ... 185 000 0081.....</p> <p>Bank: ... ABSA De Aar.....</p> <p>Tak naam : ... De Aar.....</p> <p>Tak kode:..... 33 4308.....</p>	<p><u>Eienaar/s tite akte en verband besonderhede:</u></p> <p>Title Akte in bewaring by: ..... Emthanjeni Munisipaliteit .....</p> <p>Adres..... Voortrekkerstraat 45..... De Aar.....</p> <p>Versand Houer: .....</p> <p>Adres: .....</p> <p>Tel:.....</p>
<p><u>Eienaar Belasting Besonderhede:</u></p> <p>SARS (Belasting) No. ....</p>	<p><b>MULILO Verteenwoordiger</b></p> <p><b>ZELDA STRAUSS - 082 494 6313</b></p>

[Handwritten Signature]





DE AAR TRANSMISSIELYN	
PROJEK NR:	ITEM NR:

### OPSIE OM 'N SERWITUUT TE VERKRY

Ons, die ondergetekendes,

- Emthanjeni Munisipaliteit hierin verteenwoordig deur Mnr. Isak Visser Munisipale bestuurder  
 Adres: ..... Voortrekkerstraat 45, De Aar.....  
 Poskode..... 7000..... ID Nr: ..... 700215 5520 082.....  
 Tel Nr..... 0536329100..... Cel Nr:.....  
 C/O: Ms C Kloppe..... Epos: ..... cklopper@emthanjeni.co.za.....
- .....  
 Adres:.....  
 Poskode..... ID Nr:.....  
 Tel Nr..... Cel Nr.....  
 Getroud buite/binne GVG op:..... Epos:..... synde  
 die GEREГИSTREERDE EIENAAR/S (hierna genoem die "geregistreerde eienaar") en
- Mulilo Hernubare Energie (Pty) Ltd.....  
 Adres:..... Posbus 60, Kaapstad Internasionale Lughawe.....  
 Poskode..... 7525 ..... ID Nr:.....  
 Tel Nr..... 0219345268..... Cel Nr:.....  
 Getroud buite/binne GVG op:..... Epos:.....  
 synde die KOPER/S : HUURDER/S (hierna genoem die koper/huurder") en
- .....  
 Adres: .....  
 Poskode..... ID Nr:.....  
 Tel Nr..... Cel Nr..... Epos:.....  
 synde die VRUGGEBRUIKER/ERFGENAME (hierna genoem die "vruggebruiker/erfgenaar")

Hiema almal gesamentlik of afsonderik genoem die "EIENAAR" van die volgende eiendom/me, volgens titelaktes:

PLAAS NAAM: ..... De Aar.....  
 REGISTRASIE AFDELING: ..... Re/180.....  
 PLAASLIKE OWERHEID: ..... Philipstown RD.....  
 GROOTTE: ..... 1040.4083 H.....  
 TITELAKTE NR: Gehou kraglens Akte nommer ..... T2197/1921..... gedateer ..... 1921/03/15.....  
 (hierna genoem die "eiendom") verleen hiermee aan

Handwritten signatures and initials: CH, H, 46, and other marks.

Geleken te De Aar op hierdie 5 dag van Julie 2010 in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. [Handwritten Signature]
- 2. [Handwritten Signature]

[Handwritten Signature] X  
 Geregistreerde Eienaar of Gemagtigde Agent

Geleken te ..... op hierdie ..... dag van ..... 20..... in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. ....
- 2. ....

.....  
Geregistreerde Eienaar of Gemagtigde Agent

Geleken te KAARSTAD op hierdie 12 dag van JULIE 20..... in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. C.O. Procter
- 2. [Handwritten Signature]

[Handwritten Signature]  
 Koper/Huider

Geleken te ..... op hierdie ..... dag van ..... 20..... in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. ....
- 2. ....

.....  
Vruggebruiker/Erfgenaam

<p>Die eienaar/s gee hiermee toestemming dat die vergoeding in hierdie opsie in die vlogende bank rekening betaal word:</p> <p>Rekening Houer: Emthanjeni Munisipaliteit.....</p> <p>Bank Rek. No.: ... 185 000 0081.....</p> <p>Bank: ... ABSA De Aar.....</p> <p>Tak naam : ... De Aar.....</p> <p>Tak kode:..... 33 4308.....</p>	<p>Eienaar/s tite akte en verband besonderhede:</p> <p>Title Akte in bewaring by: ..... Emthanjeni Munisipaliteit .....</p> <p>Adres.... Voortrekkerstraat 46..... De Aar.....</p> <p>Versand Houer: .....</p> <p>Adres: .....</p> <p>Tel: .....</p>
<p><u>Eienaar Belasting Besonderhede:</u></p> <p>SARS (Belasting) No. ....</p>	<p><b>MULILO</b> Verteenwoordiger</p> <p><b>ZELDA STRAUSS - 082 494 6313</b></p>

*OP*

WS

Farm No. 180 Portion 3

So. 21/11/07  
10/2/2008

DA26

AWS/vw/lease : 06/04/09

## MEMORANDUM VAN HUUROORENKOMS

aangegaan en gesluit tussen

Davies Eric Kenneth

Id 470928 5056083

(Registrasienommer: )



(die 'VERHUURDER')

en

MULILO RENEWABLE ENERGY (EDMS) BPK

(Registrasienommer: 2008/010114/07)

(die 'HUURDER')



## 1. INTERPRETASIE

In hierdie Huurooreenkoms, tensy die konteks tot die teendeel aandui:

- 1.1 beteken die VERHUURDER:  
 Davies.....Eric Kenneth
- 1.2 beteken die HUURDER Mulilo Renewable Energy (Edms) Bpk Ltd, Registrasienommer: 2008/010114/07, verteenwoordig deur Johannes Coetsee, wie behoorlik gemagtig is om as sodanig op te tree, van p/a Keeromstraat 68, Kaapstad, 8001;
- 1.3 beteken die HUURBERSEEL die plaas beskryf as, Philipstown Rd 180/3..... gehou onder titelakte T 72998/1994....., en met oppervlakte van 198,4424 ha, maar uitgesluit alle geboue, plaasgereedskap en -implemente, voorraad, voertuie en waterbronne, onderhewig aan die bepalings van klousule 6 hieronder en ook uitgesluit alle gedeeltes wat nie deur die HUURDER gebruik word vir wind- en sonkragopwekking doeleindes nie;
- 1.4 beteken die AANVANGSDATUM die datum van ondertekening van hierdie Huurooreenkoms deur die party daartoe wat dit laaste onderteken;
- 1.5 beteken die OKKUPASIEDATUM die Aanvangsdatum;
- 1.6 beteken die AKTIVERINGSDATUM die eerste datum wat 'n turbine krag aan Eskom of 'n ander kommersiële gebruiker lewer, soos voorsiening voor gemaak word in klousule 5.4 hieronder.

Farm 180 Portion 9

45



DE AAR TRANSMISSIELYN	
PROJEK NR:	ITEM NR:

### OPSIE OM 'N SERWITUUT TE VERKRY

Ons, die ondergetekendes,

- Emthanjeni Munisipaliteit hierin verteenwoordig deur Mnr. Isak Visser Munisipale bestuurder  
 Adres: Voortrekkerstraat 45, De Aar  
 Poskode: 7000 ID Nr: 700215 5520 082  
 Tel Nr: 0536329100 Cel Nr:  
 C/O: Ms C Klopper Epos: cklopper@emthanjeni.co.za
- Adres:  
 Poskode ID Nr:  
 Tel Nr Cel Nr:  
 Getroud buite/binne GVG op: Epos: synde  
 die GEREgistreerde EIENAAR/S (hierna genoem die "geregistreerde eienaar") en
- Mulilo Hernubare Energie (Pty) Ltd.  
 Adres: Posbus 50, Kaapstad Internasionale Lughawe  
 Poskode: 7525 ID Nr:  
 Tel Nr: 0219345268 Cel Nr:  
 Getroud buite/binne GVG op: Epos:  
 synde die KOPER/S : HUURDER/S (hierna genoem die koper/huurder") en
- Adres:  
 Poskode ID Nr:  
 Tel Nr Cel Nr: Epos:  
 synde die VRUGGEBRUIKER/ERFGENAME (hierna genoem die "vruggebruiker/erfgenaar")

Hierna almal gesamenlik of afsonderlik genoem die "EIENAAR" van die volgende eiendom/me, volgens titelaktes:

PLAAS NAAM: De Aar  
 REGISTRASIE AFDELING: 9/180  
 PLAASLIKE OWERHEID: Philipstown RD  
 GROOTTE: 144.0820 H  
 TITELAKTE NR: Gehou kragtens Akte nommer T105482/2000 gedateer 200/12/13  
 (hierna genoem die "eiendom") verleen hiermee aan

CH [Signature] [Signature] [Signature] [Signature]

Geteken te De Aar op hierdie 5 dag van Julie 2010 in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. [Handwritten Signature]
- 2. [Handwritten Signature]

[Handwritten Signature]  
Geregistreerde Eienaar of Gemagtigde Agent

Geteken te ..... op hierdie ..... dag van ..... 20..... in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. ....
- 2. ....

.....  
Geregistreerde Eienaar of Gemagtigde Agent

Geteken te KAAPSTAD op hierdie 12 dag van JULIE 2010 in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. C.O. Booysse
- 2. [Handwritten Signature]

[Handwritten Signature]  
Koper/Huurder

Geteken te ..... op hierdie ..... dag van ..... 20..... in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. ....
- 2. ....

.....  
Vruggebruiker/Erfgenaam

<p>Die eienaar/s gee hiermee toestemming dat die vergoeding in hierdie opsie in die vloegende bank rekening betaal word:</p> <p>Rekening Houer: Emthanjeni Munisipaliteit.....</p> <p>Bank Rek. No.: ..185 000 0081.....</p> <p>Bank: ...ABSA De Aar.....</p> <p>Tak naam : ...De Aar.....</p> <p>Tak kode:..... 33 4308.....</p>	<p><u>Eienaar/s tittle akte en verband besonderhede:</u></p> <p>Tittle Akte in bewaring by: ..... Emthanjeni Munisipaliteit .....</p> <p>Adres..... Voortrekkerstraat 45.....De Aar.....</p> <p>Versand Houer: .....</p> <p>Adres: .....</p> <p>Tel:.....</p>
<p><u>Eienaar Belasting Besonderhede:</u></p> <p>SARS (Belasting) No. ....</p>	<p><b>MULILO Verteenwoordiger</b></p> <p><b>ZELDA STRAUSS - 082 494 6313</b></p>

[Handwritten Initials]

# SOLAR & WIND

AWS/w/lease : 08/04/09

## MEMORANDUM VAN HUUROOREENKOMS

aangegaan en gesluit tussen

De Aar Stone Crushers Bk

Bk 1998/012 728/23  
(Registrasienommer: )

(die 'VERHUURDER')

en

MULILO RENEWABLE ENERGY (EDMS) BPK

(Registrasienommer: 2008/010114/07)

(die 'HUURDER')

## 1. INTERPRETASIE

In hierdie Huurooreenkoms, tensy die konteks tot die teendeel aandui:

1.1 beteken die VERHUURDER:

De Aar Stone Crushers Bk

1.2 beteken die HUURDER Mulilo Renewable Energy (Edms) Bpk Ltd, Registrasienommer: 2008/010114/07, verteenwoordig deur Johannes Coetsee, wie behoorlik gemagtig is om as sodanig op te tree, van p/a Keeromstraat 68, Kaapstad, 8001;

1.3 beteken die HUURPERSEEL die plaas beskryf as, Philipstown Rd De Aar 180 Portion 1 gehou onder titelakte T.589.64.1.1983....., en met oppervlakte van ~~2563~~, ~~8824~~ ha, maar uitgesluit alle geboue, plaasgereedskap en -implemente, voorraad, voertuie en waterbronne, onderhewig aan die bepalinge van klousule 6 hieronder en ook uitgesluit alle gedeeltes wat nie deur die HUURDER gebruik word vir wind- en sonkragopwekking doeleindes nie;

1.4 beteken die AANVANGSDATUM die datum van ondertekening van hierdie Huurooreenkoms deur die party daartoe wat dit laaste onderteken;

1.5 beteken die OKKUPASIEDATUM die Aanvangsdatum;

1.6 beteken die AKTIVERINGSDATUM die eerste datum wat 'n turbine krag aan Eskom of 'n ander kommersiële gebruiker lewer, soos voorsiening voor gemaak word in klousule 5.4 hieronder.

*Handwritten signatures and initials, including "ML" and "JL".*





DE AAR TRANSMISSIELYN VIR WINDPLAAS	
PROJEK NR:	ITEM NR:

### OPSIE OM 'N SERWITUUT TE VERKRY

Ons, die ondergetekendes,

**DIE DE PUT TRUST**

Registrasienommer: IT177/1997 hierin verteenwoordig deur

**WILLEM STERREBERG OLOFF MARAIS**

Adres: POSBUS 94, NUWEJAARSFONTEIN, DE AAR

Poskode 7000

ID. 531015 5052 08

Tel Nr:

Cel

GETROUD BUIE GEMEENSKAP VAN GOEDERE en

**GABRIEL VAN HEERDEN**

Adres: POSBUS 444, LEOSINGEL 31, DE AAR

Poskode 7000

ID. 650725 5033 08 4

Tel Nr:

Cel

ONGETROUD en

**HENDRIK DE JAGER**

Adres: POSBUS 87, DE PUT, DE AAR

Poskode 7000

ID. 560727 5011 08 5

Tel Nr: 084 517 5554

Cel 084 517 5554

ONGETROUD

synde die GEREGETREERDE EIENAAR (hierna genoem die "geregetreerde eienaar") en

Hierna almal gesamentlik of afsonderlik genoem die "TRUSTEES" van die volgende eiendom, volgens titelaktes:

PLAAS NAAM: **HARTEBEESTPLAAT NR. 135**

REGISTRASIE AFDELING: **BRITSTOWN**

PLAASLIKE OWERHEID: **.PIXLEY KA SEME DISTRIKSMUNISIPALITEIT**

GROOTTE: **2539,8802 HEKTAAR**

TITELAKTE NR: Gehou kragtens Akte nommer: T16882/1998 gedateer 27 AUGUSTUS 1998

(hierna genoem die "eiendom") verleen hiermee aan

Handwritten signatures and initials: "CH", "u", "W. de Put", "G. van Heerden", "H. de Jager", and other illegible marks.

Geteken te De Aar op hierdie 27 dag van Mei 2010  
in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. [Handwritten Signature]
- 2. [Handwritten Signature]

[Handwritten Signature]  
Geregistreeerde Eienaar of Gemagtigde Agent

Geteken te De Aar op hierdie 27 dag van Mei 2010  
in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. [Handwritten Signature]
- 2. [Handwritten Signature]

[Handwritten Signature]  
Geregistreeerde Eienaar of Gemagtigde Agent

Geteken te De Aar op hierdie 27 dag van Mei 2010  
in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. [Handwritten Signature]
- 2. [Handwritten Signature]

[Handwritten Signature]  
Geregistreeerde Eienaar of Gemagtigde Agent

Geteken te ..... op hierdie 9de dag van Julie 2010  
in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. [Handwritten Signature]
- 2. [Handwritten Signature]

[Handwritten Signature]  
Koper/Huurder

Geteken te ..... op hierdie ..... dag van ..... 20.....  
in die teenwoordigheid van die ondergetekende getuies:  
AS GETUIES:

- 1. ....
- 2. ....

Vruggebruiker/Erfgenaam

<p>Die eienaar/s gee hiermee toestemming dat die vergoeding in hierdie opsie in die volgende bank rekening betaal word:</p> <p>Rekening Houer: DE PUT TRUST Bank Rek. No.: 40 6863 2336 Bank: ABSA BANK BEPERK Tak naam : DE AAR Tak kode: 632005</p>	<p><u>Eienaar/s title akte en verband besonderhede:</u></p> <p>Title Akte in bewaring by:</p> <p>Naam..... Adres..... Verband Houer: ..... Adres: ..... Tel:.....</p>
<p><u>Eienaar Belasting Besonderhede:</u></p> <p>SARS (Belasting) No. 0128/063/06/2 SARS (BTW) No. 4930167319</p>	<p><u>MULILO Verteenwoordiger</u></p> <p><b>ZELDA STRAUSS – 082 494 6313</b></p>

[Handwritten Signatures]

AWS/w/lease : 06/04/09

## MEMORANDUM VAN HUUROOREENKOMS

aangegaan en gesluit tussen

Tropical Eden Trading 532 cc  
2005 147 43 823

(Registrasienuommer: )

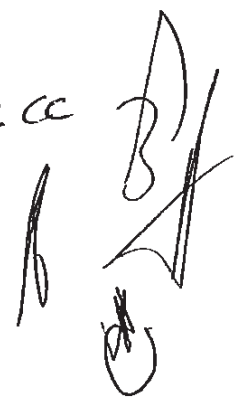
(die 'VERHUURDER')

en

**MULILO RENEWABLE ENERGY (EDMS) BPK**

(Registrasienuommer: 2008/010114/07)

(die 'HUURDER')



## 1. INTERPRETASIE

In hierdie Huurooreenkoms, tensy die konteks tot die teendeel aandui:

1.1 beteken die VERHUURDER:

Tropical Eden Trading 532 CC  
2005 147 43 823

1.2 beteken die HUURDER Mulilo Renewable Energy (Edms) Bpk Ltd, Registrasienommer: 2008/010114/07, verteenwoordig deur Johannes Coetsee, wie behoorlik gemagtig is om as sodanig op te tree, van p/a Keeromstraat 68, Kaapstad, 8001;

1.3

beteken die HUURPERSEEL die plaas beskryf as, Hanover Rd 31/0 (Remaining Extent) Hartekraaihoek gehou onder titelakte T.19018/2007, en met oppervlakte van 3627,1900 ha, maar uitgesluit alle geboue, plaasgereedskap en -implemente, voorraad, voertuie en waterbronne, onderhewig aan die bepalings van klousule 6 hieronder en ook uitgesluit alle gedeeltes wat nie deur die HUURDER gebruik word vir wind- en sonkragopwekking doeleindes nie;

1.4 beteken die AANVANGSDATUM die datum van ondertekening van hierdie Huurooreenkoms deur die party daartoe wat dit laaste onderteken;

1.5 beteken die OKKUPASIEDATUM die Aanvangsdatum;

1.6 beteken die AKTIVERINGSDATUM die eerste datum wat 'n turbine krag aan Eskom of 'n ander kommersiële gebruiker lewer, soos voorsiening voor gemaak word in klousule 5.4 hieronder.



## **environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA  
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

NEAS Reference: DEA/EIA/0001774/2013, DEA/EIA/0001772/2013, DEA/EIA/0001773/2013  
DEA Reference: 14/12/16/3/3/2/454, 14/12/16/3/3/2/455, 14/12/16/3/3/2/456

Enquiries: Thabile Sangweni

Telephone: (012) 395 1761 Fax: (012) 320 7539 E-mail: TSangweni@environment.gov.za

Ms Karen Versfeld  
Aurecon South Africa (Pty) Ltd  
PO Box 494  
**CAPE TOWN**  
8000

Fax Number: (021) 526 9500

**PER FACSIMILE / MAIL**

Dear Ms Versfeld

**APPLICATION FOR ENVIRONMENTAL AUTHORISATION: PROPOSED PHOTOVOLTAIC (SOLAR) ENERGY FACILITY ON DU PLESSIS DAM FARM NEAR DE AAR, EMTHANJENI LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE**

The Final Scoping Report (FSR) and Plan of Study for Environmental Impact Assessment (PoSEIA) dated July 2013 and received by this Department on 18 July 2013 refer.

This Department has evaluated the submitted FSR and the PoSEIA dated July 2013 and is satisfied that the documents comply with the minimum requirements of the Environmental Impact Assessment (EIA) Regulations, 2010. The FSR is hereby accepted by the Department in terms of Regulation 30(1)(a) of the EIA Regulations, 2010.

You may proceed with the Environmental Impact Assessment process in accordance with the tasks contemplated in the Plan of Study for Environmental Impact Assessment and the requirements of the EIA Regulations, 2010.

All comments and recommendations made by all stakeholders and Interested and Affected Parties (I&APs) in the Draft Scoping Report and submitted as part of the FSR must be taken into consideration when preparing an environmental impact assessment report in respect of the proposed development. Please ensure that all mitigation measures and recommendations in the specialist studies are addressed and included in the final EIR and Environmental Management Programme (EMPr).

Please ensure that comments from all relevant stakeholders are submitted to the Department with the Final Environmental Impact Report (EIR). This includes but is not limited to the Northern Cape Department of Environmental Affairs and Nature Conservation, the Department of Agriculture, Forestry & Fisheries (DAFF), the South African Civil Aviation Authority (SACAA), the Northern Cape Department of Transport, the Emthanjeni Local Municipality, the district municipality, the Department

of Water Affairs (DWA), the Department of Energy, the South African National Roads Agency Limited (SANRAL), Transnet, the South African Heritage Resources Agency (SAHRA) and the Square Kilometre Array (SKA).

Please be advised that the contact person for renewable projects at the SKA office is Dr Adrian Tiplady and he can be contacted on Tel: 011 442 2434 or E-mail: [atiplady@ska.ac.za](mailto:atiplady@ska.ac.za).

You are also required to address all issues raised by organs of state and Interested and Affected Parties (I&APs) prior to the submission of the EIR to the Department.

Proof of correspondence with the various stakeholders must be included in the Final EIR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments.

The EAP must, in order to give effect to Regulation 56(2), give registered interested and affected parties access to, and an opportunity to comment on the report in writing within 21 days before submitting the final Environmental Impact Assessment report to the Department.

Please ensure that the Final EIR includes at least one legible A3 regional map of the area and the site layout map to illustrate the panel positions and associated infrastructure. The maps must be of acceptable quality and as a minimum, have the following attributes:

- Maps are relatable to one another;
- Cardinal points;
- Co-ordinates;
- Legible legends;
- Indicate alternatives;
- Latest land cover;
- Vegetation types of the study area; and,
- A3 size locality map.

In addition, the following additional information are required for the EIR:

- i. The application form must be amended to include the correct listed activities. The Environmental Impact Assessment report must provide an assessment of the impacts and mitigation measures for each of the listed activities applied for.
- ii. Details of the future plans for the site and infrastructure after decommissioning in 20-30 years and the possibility of upgrading the proposed infrastructure to more advanced technologies.
- iii. The total footprint of the proposed development should be indicated. Exact locations of the infrastructure, power lines and associated infrastructure should be mapped at an appropriate scale.
- iv. Should a Water Use License be required, proof of application for a license needs to be submitted.
- v. Information on services required on the site, e.g. sewage, refuse removal, water and electricity. Who will supply these services and has an agreement and confirmation of capacity been obtained? Proof of these agreements must be provided.
- vi. A copy of the final site layout map. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:
  - Panel positions and its associated infrastructure;
  - Foundation footprint;
  - Permanent laydown area footprint;
  - Construction period laydown footprint;

- Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible);
  - Wetlands, drainage lines, rivers, stream and water crossing of roads and cables indicating the type of bridging structures that will be used;
  - The location of sensitive environmental features on site e.g. CBAs, heritage sites, wetlands, drainage lines etc. that will be affected by the facility and its associated infrastructure;
  - Sub-station(s) and/or transformer(s) sites including their entire footprint;
  - Cable routes and trench dimensions (where they are not along internal roads);
  - Connection routes (including pylon positions) to the distribution/transmission network;
  - Cut and fill areas at panel sites, along roads and at sub-station/transformer sites indicating the expected volume of each cut and fill;
  - Borrow pits;
  - Spoil heaps (temporary for topsoil and subsoil and permanently for excess material);
  - All existing infrastructure on the site, especially roads;
  - Buffer areas;
  - Buildings, including accommodation; and
  - All "no-go" areas.
- vii. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.
- viii. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map.
- ix. A shapefile of the preferred development layout/footprint must be submitted to this Department. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 (please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title.

The shape file must be submitted to:

**Postal Address:**

Department of Environmental Affairs  
Private Bag X447  
Pretoria  
0001

**Physical address:**

Department of Environmental Affairs  
Fedsure Forum Building (corner of Pretorius and Lillian Ngoyi Streets)  
4<sup>th</sup> Floor South Tower  
315 Pretorius Street  
Pretoria  
0002

For Attention: Muhammad Essop  
Integrated Environmental Authorisations  
Strategic Infrastructure Developments

Telephone Number: (012) 395 1734  
Fax Number: (012) 395 7539  
Email Address: MEssop@environment.gov.za

The Environmental Management Programme (EMPr) to be submitted as part of the EIR must include the following:

- i. All recommendations and mitigation measures recorded in the EIR and the specialist studies conducted.
- ii. The final site layout map.
- iii. Measures as dictated by the final site layout map and micro-siting.
- iv. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.
- v. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map.
- vi. An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.
- vii. A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled by a vegetation specialist familiar with the site and be implemented prior to commencement of the construction phase.
- viii. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoration must be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.
- ix. An open space management plan to be implemented during the construction and operation of the facility.
- x. A traffic management plan for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
- xi. A transportation plan for the transport of panel components, main assembly cranes and other large pieces of equipment.
- xii. A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.
- xiii. An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.
- xiv. An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.
- xv. Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.



The EIR must include a cumulative assessment of the facility if there are other similar facilities in the region. The specialist studies e.g. biodiversity, visual, noise, etc. must also assess the facility in terms of potential cumulative impacts.

Please ensure that all the relevant Listing Notice activities are applied for, that the Listing Notice activities applied for are specific and that they can be linked to the development activity or infrastructure in the project description.

The applicant is hereby reminded to comply with the requirements of Regulation 67 with regard to the time period allowed for complying with the requirements of the Regulations, and Regulations 56 and 57 with regard to the allowance of a comment period for interested and affected parties on all reports submitted to the competent authority for decision-making. The reports referred to are listed in Regulation 56(3a-3h).

Furthermore, it must be reiterated that, should an application for Environmental Authorisation be subject to the provisions of Chapter II, Section 38 of the National Heritage Resources Act, Act 25 of 1999, then this Department will not be able to make nor issue a decision in terms of your application for Environmental Authorisation pending a letter from the pertinent heritage authority categorically stating that the application fulfils the requirements of the relevant heritage resources authority as described in Chapter II, Section 38(8) of the National Heritage Resources Act, Act 25 of 1999.

You are requested to submit two (2) electronic copies (CD/DVD and two (2) hard copies of the Environmental Impact Report (EIR) to the Department as per regulation 34(1)(b) of the EIA Regulations, 2010.

Please also find attached information that must be used in the preparation of the Environmental Impact Report. This will enable the Department to speedily review the EIR and make a decision on the application.

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.

Yours faithfully



**Mr Ishaam Abader**  
**Deputy Director-General: Legal, Authorisations, Compliance and Enforcement**  
**Department of Environmental Affairs**  
Letter signed by: Ms Millicent Solomons  
Designation: Director: Integrated Environmental Authorisations  
Date: 12/08/2018.

cc:	Ms Anga Yaphi	Northern Cape Department of Environmental Affairs and Nature Conservation	Tel: 054 332 2885	Fax: 054 331 1155
	Ms C Kloppers	Emthanjeni Local Municipality	Tel: 053 632 9100	Fax: 053 631 0105
	Mr Warren Morse	Mulilo Renewable Energy (Pty) Ltd	Tel: 021 934 5278	Fax: 021 935 0505

## **A. EIA INFORMATION REQUIRED FOR SOLAR ENERGY FACILITIES**

### **1. General site information**

The following general site information is required:

- Descriptions of all affected farm portions
- 21 digit Surveyor General codes of all affected farm portions
- Copies of deeds of all affected farm portions
- Photos of areas that give a visual perspective of all parts of the site
- Photographs from sensitive visual receptors (tourism routes, tourism facilities, etc.)
- Solar plant design specifications including:
  - Type of technology
  - Structure height
  - Surface area to be covered (including associated infrastructure such as roads)
  - Structure orientation
  - Laydown area dimensions (construction period and thereafter)
  - Generation capacity
- Generation capacity of the facility as a whole at delivery points

This information must be indicated on the first page of any Scoping or EIA document. It is also advised that it be double checked as there are too many mistakes in the applications that have been received that take too much time from authorities to correct.

### **2. Site maps and GIS Information**

Site maps and GIS information should include at least the following:

- All maps/information layers must also be provided in ESRI Shapefile format
- All affected farm portions must be indicated
- The exact site of the application must be indicated (the areas that will be occupied by the application)
- A status quo map/layer must be provided that includes the following:
  - Current use of land on the site including:
    - Buildings and other structures
    - Agricultural fields
    - Grazing areas
    - Natural vegetation areas (natural veld not cultivated for the preceding 10 years) with an indication of the vegetation quality as well as fine scale mapping in respect of Critical Biodiversity Areas and Ecological Support Areas
    - Critically endangered and endangered vegetation areas that occur on the site
    - Bare areas which may be susceptible to soil erosion
    - Cultural historical sites and elements
  - Rivers, streams and water courses
  - Ridgelines and 20m continuous contours with height references in the GIS database
  - Fountains, boreholes, dams (in-stream as well as off-stream) and reservoirs
  - High potential agricultural areas as defined by the Department of Agriculture, Forestry and Fisheries

- Buffer zones (also where it is dictated by elements outside the site):
  - 500m from any irrigated agricultural land
  - 1km from residential areas
- Indicate isolated residential, tourism facilities on or within 1km of the site
- A slope analysis map/layer that include the following slope ranges:
  - Less than 8% slope
  - between 8% and 12% slope
  - between 12% and 14% slope
  - steeper than 18 % slope
- A site development proposal map(s)/layer(s) that indicate:
  - Positions of solar facilities
  - Foundation footprint
  - Permanent laydown area footprint
  - Construction period laydown footprint
  - Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible)
  - River, stream and water crossing of roads and cables indicating the type of bridging structures that will be used
  - Substation(s) and/or transformer(s) sites including their entire footprint.
  - Cable routes and trench dimensions (where they are not along internal roads)
  - Connection routes to the distribution/transmission network (the connection must form part of the EIA even if the construction and maintenance thereof will be done by another entity such as ESKOM)
  - Cut and fill areas along roads and at substation/transformer sites indicating the expected volume of each cut and fill
  - Borrow pits
  - Spoil heaps (temporary for topsoil and subsoil and permanently for excess material)
  - Buildings including accommodation

With the above information authorities will be able to assess the strategic and site impacts of applications.

### 3. Regional map and GIS information

The regional map and GIS information should include at least the following:

- All maps/information layers must also be provided in ESRI Shapefile format
- The map/layer must cover an area of 20km around the site
- Indicate the following:
  - roads including their types (tared or gravel) and category (national, provincial, local or private)
  - Railway lines and stations
  - Industrial areas
  - Harbours and airports
  - Electricity transmission and distribution lines and substations
  - Pipelines
  - Waters sources to be utilised during the construction and operational phases
  - A visibility assessment of the areas from where the facility will be visible
  - Critical Biodiversity Areas and Ecological Support Areas
  - Critically Endangered and Endangered vegetation areas
  - Agricultural fields
  - Irrigated areas

- An indication of new road or changes and upgrades that must be done to existing roads in order to get equipment onto the site including cut and fill areas and crossings of rivers and streams

#### 4. Important stakeholders

Amongst other important stakeholders, comments from the National Department of Agriculture, Forestry and Fisheries must be obtained and submitted to the Department. Any application, documentation, notification etc. should be forwarded to the following officials:

Ms Mashudu Marubini  
Delegate of the Minister (Act 70 of 1970)  
E-mail: [MashuduMa@daff.gov.za](mailto:MashuduMa@daff.gov.za)  
Tel 012- 319 7619

Ms Thoko Buthelezi  
AgriLand Liaison office  
E-mail: [ThokoB@daff.gov.za](mailto:ThokoB@daff.gov.za)  
Tel 012- 319 7634

All hardcopy applications / documentation should be forwarded to the following address:

Physical address:

Delpen Building  
Cnr Annie Botha and Union Street  
Office 270  
Attention: Delegate of the Minister Act 70 of 1970

Postal Address:

Department of Agriculture, Forestry and Fisheries  
Private Bag X120  
Pretoria  
0001  
Attention: Delegate of the Minister Act 70 of 1970

In addition, comments must be requested from Eskom regarding grid connectivity and capacity. Request for comment must be submitted to:

Mr John Geeringh  
Eskom Transmission  
Megawatt Park D1Y38  
PO Box 1091  
**JOHANNESBURG**  
2000

Tel: 011 516 7233  
Fax: 086 661 4064  
[John.geeringh@eskom.co.za](mailto:John.geeringh@eskom.co.za)

#### **B. AGRICULTURE STUDY REQUIREMENTS**

- Detailed soil assessment of the site in question, incorporating a radius of 50 m surrounding the site, on a scale of 1:10 000 or finer. The soil assessment should include the following:

- Identification of the soil forms present on site
- The size of the area where a particular soil form is found
- GPS readings of soil survey points
- The depth of the soil at each survey point
- Soil colour
- Limiting factors
- Clay content
- Slope of the site
- A detailed map indicating the locality of the soil forms within the specified area,
- Size of the site
- Exact locality of the site
- Current activities on the site, developments, buildings
- Surrounding developments / land uses and activities in a radius of 500 m of the site
- Access routes and the condition thereof
- Current status of the land (including erosion, vegetation and a degradation assessment)
- Possible land use options for the site
- Water availability, source and quality (if available)
- Detailed descriptions of why agriculture should or should not be the land use of choice
- Impact of the change of land use on the surrounding area
- A shape file containing the soil forms and relevant attribute data as depicted on the map.

**C. ASTRONOMY GEOGRAPHIC ADVANTAGE ACT, 2007 (ACT NO. 21 OF 2007)**

The purpose of the Act is to preserve the geographic advantage areas that attract investment in astronomy. The entire Northern Cape Province excluding the Sol Plaatje Municipality had been declared an astronomy advantage area. The Northern Cape optical and radio telescope sites were declared core astronomy advantage areas. The Act allowed for the declaration of the Southern Africa Large Telescope (SALT), MeerKAT and Square Kilometre Array (SKA) as astronomy and related scientific endeavours that had to be protected.

You are requested to indicate the applicability of the Astronomy Geographic Advantage Act, Act No. 21 of 2007 on the application in the BAR/EIR. You must obtain comments from the Southern African Large Telescope (SALT) if the proposed development is situated within a declared astronomy advantage area.

# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

The information required in column one corresponds with the items in the Letter from the Department of Environmental Affairs (DEA) accepting the Final Scoping Report (FSR) and the Plan of Study for Environmental Impact Assessment (EIA) (please see Annexure A for the letter from DEA dated 12 August 2013). For ease of reference, some documents have been appended to this Additional Information Required by DEA document in an Appendix. Reference is also made to documents included in Annexures.

These documents are appended to the Final EIA Report.

Nr	Information required	Where to find it in the report
1	All comments and recommendations made by all stakeholders and interested and Affected Parties (I&APs) in the Draft Scoping Report and submitted as part of the FSR must be taken into consideration when preparing an environmental impact assessment report in respect of the proposed development.	All comments received to date were included in the Comments and Responses Reports as included in Annexure B of the Draft and Final EIA Report. All comments received were taken into consideration throughout the preparation of the EIA report.
2	Please ensure that all mitigation measures and recommendations in the specialist studies are addressed and included in the final EIR and Environmental Management Programme (EMPr)	Summaries of the specialist assessment as well as all the proposed mitigation measures were included in Section 4 of the Draft and Final EIA Reports. The specialists reports are included in Annexure E and all mitigation measures were included in the Life-cycle EMP as included in Annexure D.
3	Please ensure that comments from all relevant stakeholders are submitted to the department with the Final Environmental Impact Report (EIR). This includes but is not limited to the Northern Cape Department of Environmental Affairs and Nature Conservation, The Department of Agriculture, Forestry & Fisheries (DAFF), the South African Civil Aviation Authority (SACAA), the Northern Cape. Department of Transport, the Emthanjeni local Municipality, the district municipality, the Department of Water (DWA), the Department of Energy, the South African National Roads Agency Limited(SANRAL), Transnet, the South African Heritage Resources Agency (SAHRA) and the Square Kilometre Array (SKA).	<p>The following authorities and stakeholders are included as key stakeholders and have received copies of the Draft EIR, as indicated in the report transmittal note:</p> <ul style="list-style-type: none"> <li>• Northern Cape (Department of Environmental Affairs and Nature Conservation) DEANC;</li> <li>• Department of Agriculture, Forestry and Fisheries : Directorate: Forestry Management (Other Regions);</li> <li>• South African Civil Aviation Authority SACAA;</li> <li>• Northern Cape Department of Transport;</li> <li>• Emthanjeni Local Municipality;</li> <li>• Pixley ka Seme District Municipality;</li> <li>• Department of Water Affairs (DWA): LOWMA;</li> <li>• Department of Energy (Northern Cape): Regional Energy Director;</li> <li>• South African National Roads Agency Limited (SANRAL);</li> <li>• Transnet Ltd;</li> <li>• SAHRA; and</li> <li>• Square Kilometer Array (SKA).</li> </ul> <p>Request for comment on the Draft EIR has been made and all comments received</p>

# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

		are included in the Final EIA Report (please see Annexure B).
4	Please be advised that the contact person for renewable projects at the SKA office is Dr Adrian Tiplady and he can be contacted on Tel: 011 442 2434 or Email: <a href="mailto:atiplady@ska.ac.za">atiplady@ska.ac.za</a> .	Noted. Square Kilometre Array (SKA) has been included as a key stakeholder and has commented (refer to Annexure B).
5	You are also required to address all issues raised by organs of state and Interested and Affected Parties (I&APS) prior to the submission of the EIR to the Department.	All issues raised to date were recorded in the Comments and Responses Reports as included in Annexure B of the Draft and Final EIA Reports.
6	Proof of correspondence with the various stakeholders must be included in the Final EIR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments.	Proof of correspondence with Authorities and I&APs were included in Annexure B of the Draft and Final EIA Reports.
7	The EAP must, in order to give effect to Regulation 56(2), give registered interested and affected parties access to, and an opportunity to comment on the report in writing within 21 days before submitting the final environmental impact assessment report to the Department.	Letters requesting comments were sent to all registered I&APs. In addition the Final EIA Report was made available at the De Aar Public Library and on the Aurecon website for a period of 21 days.
8	Please ensure that the Final EIR includes at least one legible A3 regional map of the area and the site layout map to illustrate the turbines positions and associated infrastructure. The maps must be of acceptable quality and as a minimum, have the following attributes: <ul style="list-style-type: none"> <li>• Maps are relateable to one another</li> <li>• Cardinal points</li> <li>• Co-ordinates</li> <li>• Legible legends</li> <li>• Indicate alternatives</li> <li>• Latest land cover</li> <li>• Vegetation types of the study area; and</li> <li>• A3 size locality map</li> </ul>	Please refer to Annexure A for the following: <ul style="list-style-type: none"> <li>• Locality map;</li> <li>• Site layout</li> <li>• Sensitivities map;</li> <li>• Land cover map; and</li> <li>• Preliminary design.</li> </ul> <p>The vegetation types of the study area are described in the Botanical Impact Assessment summarised in Section 4.1.</p>
9	In addition, the following additional information are required for the EIR: <ol style="list-style-type: none"> <li>I. The application form must be amended to include the correct listed activities. The EIA report must provide an assessment of the impacts and mitigation measures for each of the listed activities applied for.</li> <li>II. Details of the future plans for the site and infrastructure after decommissioning in 20-30 years and the possibility of upgrading the proposed infrastructure to more advanced technologies</li> <li>III. The total footprint of the proposed development should be indicated.</li> </ol>	<ol style="list-style-type: none"> <li>I) The revised application forms are included in Annexure A of the Final EIA Report. All impacts and mitigation measures have been considered.</li> <li>II) Please see section 3.1.6 of the EIA Report. The future plans for the site and infrastructure are also included in Annexure G.</li> <li>III) The revised total footprints are indicated in Chapter 3 of the Final EIA Report and in Annexure A.</li> </ol>

# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

<p>Exact locations of the infrastructure, power lines and associated should be mapped at an appropriate scale.</p> <p>IV. Should a Water use license be required, proof of application for a license needs to be submitted.</p> <p>V. Information on services required on the site, e.g. sewage, refuse removal, water and electricity. Who will supply these services and has an agreement and confirmation of capacity been obtained? Proof of these agreements must be provided</p> <p>VI. A copy of the final site layout map. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:</p> <ul style="list-style-type: none"> <li>• Panel positions and its associated infrastructure</li> <li>• Foundation footprint</li> <li>• Permanent laydown area footprint</li> <li>• Construction period laydown footprint</li> <li>• Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible)</li> <li>• Wetlands, drainage lines, rivers, stream and water crossing of roads and cables indicating the type of bridging structures that will be used</li> <li>• The location of sensitive environment features on site e.g. CBAs, heritage sites, wetlands, drainage lines etc. that will be affected by the facility and its associated infrastructure</li> <li>• Sub-station(s) and/or transformer(s) sites including their entire</li> </ul>	<p>IV) The Department of Water Affairs requested that Water Use Licence Applications only be submitted for renewable energy projects after the environmental process has been completed. Therefore the Water Use Licence will be applied for as a separate process to the EIA.</p> <p>V) As indicated in Section 3.1.3 of the Final EIA Report, it is proposed that potable water be obtained from the Emthanjeni Municipality via a proposed underground pipeline linking to the nearest municipal supply point. Water would be stored onsite in a jo-jo tank. The Municipality still needs to confirm available capacity to facilitate this water requirement however, the Municipality previously confirmed in excess of 15 times the amount of water required for the construction of a 75MW facility and some 18 times the amount required for operations of a 75MW facility. Based on this excess allocation it can be confirmed that there will be no deficit in terms of municipal supply, however the municipality would have to confirm once preliminary design commences.</p> <p>VI) A final site layout map is provided in section 3 of the Final EIA report and in Annexure A.</p> <ul style="list-style-type: none"> <li>• The panel positions and foundation footprints would only be determined during the detailed design phase. A draft detailed design was undertaken for the PV facility. Please see Annexure A for a map indicating the laydown areas and the internal roads. There will be no permanent laydown areas.</li> <li>• Please see Section 4.5 of the Final EIA report for maps indicating wetland, drainage lines, rivers and streams.</li> <li>• The sensitive areas are indicated in the sensitivity map included in Annexure A.</li> <li>• The location of the substation and transformers, cable routes and connection routes would be determined during the detailed design. The cable routes will follow the internal roads and arrays as far as possible. Trenches will be up to 1.5m deep and 0.75m wide. However, all buildings would be restricted to the areas investigated</li> </ul>
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# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

	<p>footprint</p> <ul style="list-style-type: none"> <li>• Cable routes and trench dimensions (where they are not along internal roads)</li> <li>• Connection routes (including pylon positions) to the distribution/transmission network</li> <li>• Cut and fill areas at panel sites, along roads and at sub-station/transformer sites indicating the expected volume of each cut and fill</li> <li>• Borrow pits</li> <li>• Spoil heaps (temporary for topsoil and subsoil and permanently for excess material)</li> <li>• All existing infrastructure on the site, especially roads</li> <li>• Buffer areas</li> <li>• Building, including accommodation; and</li> <li>• All “no-go” areas</li> </ul> <p>VII. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.</p> <p>VIII. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map.</p> <p>IX. A shapefile of the preferred development layout/footprint must be submitted to this Department. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, xml (Metadata file). If specific symbology was assigned to the file, then the avl and /or the lyf file must also be included. Data must be mapped at a scale of 1:10 000 (Please specify if an alternative scale was used). The</p>	<p>by specialists as part of this EIA.</p> <ul style="list-style-type: none"> <li>• Cut and fills are expected to be approximately 2,000m<sup>3</sup> per substation, 600m<sup>3</sup> per 100m of roads and 20m<sup>3</sup> per 20m array.</li> <li>• There will be no borrow pits.</li> <li>• Information on spoil stockpiles and the management of these stockpiles will be defined in the method statements which the ECO will approve prior to construction commencing.</li> <li>• Existing infrastructure is indicated in a map included in Annexure A.</li> <li>• The buffer areas are indicated in the sensitivity map included in Annexure A.</li> <li>• The proposed buildings, such as Inverter Pad Blocks, AC DC Station, Interconnection Cabin, Substations and O&amp;M Building including waste septic tank would be restricted to the areas assessed in the EIA process.</li> <li>• All no-go areas are indicated in the sensitivity map included in Annexure A.</li> </ul> <p>VII) An environmental sensitivity map is included in Chapter 5 in the Final EIA Report. It is also included in Annexure A.</p> <p>VIII) The final layout is included in Annexure A as well as Chapter 3 of the EIA report.</p> <p>IX) Please see the enclosed electronic copy of the Final EIA Report.</p>
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# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

	<p>metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as te title.</p> <p>The shape file must be submitted to: Postal Address: Department of Environmental Affairs Private Bag X447 Pretoria 0001</p> <p>Physical address: Department of Environmental Affairs Fedsure Forum Building (corner of Pretorius and Lillian Ngoyi Streets) 4<sup>th</sup> Floor South 315 Pretorius Street Pretoria 0002</p> <p>For Attention: Muhammad Essop Integrated Environmental Authorisations Strategic Infrastructure Developments Telephone Number: (012) 395 1734 Fax Number: (012) 395 7539 Email Address: (MEssop@environment.gov.za</p>	
10	<p>The Environmental Management Programme (EMPr) to be submitted as part of the EIR must include the following:</p> <ol style="list-style-type: none"> <li>I. All recommendations and mitigation measures recorded in the EIR and the specialist studies conducted.</li> <li>II. The final site layout map.</li> <li>III. Measures as dictated by the final site layout map and micro-siting.</li> <li>IV. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process</li> </ol>	<p>The LEMP, included in Annexure D of the Draft and Final EIA Reports includes the following:</p> <ol style="list-style-type: none"> <li>I) All recommendations and mitigation measures.</li> <li>II) Final site layout map (this is also included in Annexure A). Please note that the preliminary design is included but the final micro-siting would only be available after detailed designs have been undertaken.</li> <li>III) Final environmental sensitivity map included in Figure 1 of the LEMP and Annexure A.</li> </ol>

# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

<p>V. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map.</p> <p>VI. An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.</p> <p>VII. A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habits.</p> <p>VIII. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoring must be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.</p> <p>IX. An open space management plan to be implemented during the construction and operation of the facility.</p> <p>X. A traffic management plan for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.</p> <p>XI. A transportation plan for the transport of panel components, main assembly cranes and other large pieces of equipment.</p> <p>XII. A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface movement of water along</p>	<p>IV) Final layout map superimposed on the environmental sensitivity map included in Figure 1 of the LEMP and Annexure A. Please note that the preliminary design is included but the final micro-siting would only be available after detailed designs have been undertaken.</p> <p>V) Measures to manage alien invasive species are included in the LEMP.</p> <p>VI) A plant rescue and protection plan is included in the LEMP.</p> <p>VII) A re-vegetation and habitat rehabilitation plan is included in the LEMP.</p> <p>VIII) As indicated in the LEMP, the open space management plan will be undertaken during the planning phase.</p> <p>IX) As indicated in the LEMP, the traffic management plan will be undertaken during the planning phase.</p> <p>X) As indicated in the LEMP, the transportation plan will be undertaken during the planning phase.</p> <p>XI) The storm water management plan is included in Annexure C of the LEMP and Annexure E of the EIA Report.</p> <p>XII) The erosion management plan is included in Section 7 of the LEMP</p> <p>XIII) Recommendations for monitoring systems to detect any leakage or spillage of hazardous substances are included in the LEMP.</p> <p>XIV) Measures to protect hydrological features are included in Annexure E of the EIA report.</p>
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# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

	<p>drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.</p> <p>XIII. An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.</p> <p>XIV. An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.</p> <p>XV. Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spelling of pollutants.</p>	
11	The EIR must include a cumulative assessment of the facility if there are other similar facilities in the region. The specialist studies e.g. biodiversity, visual, noise, etc. must also assess the facility in terms of potential cumulative impacts.	Please see Section 4 of the EIA report describing the potential cumulative impacts
12	Please ensure that all the relevant listing notice activities are applied for, that the listing notice activities applied for are specific and that they can be linked to the development activity or infrastructure in the project description	Please see the revised Application Form included in Annexure A and the project description provided in Section 3.
13	The applicant is hereby reminded to comply with the requirements of Regulation 67 with regard to the time period allowed for complying with the requirements of the regulations, and regulations 56 and 57 with regard to the allowance of a comment period for interested and affected parties on all reports submitted to the competent authority for decision-making. The reports referred to are listed in Regulation 56(3a-3h)	Noted.
14	Furthermore, it must be reiterated that, should an application for Environmental authorisation be subject to the provisions of Chapter 11, section 38 of the National Heritage Resources Act, Act 25 of 1999, then this Department will not be able to make nor issue a decision in terms of your application for Environmental Authorisation pending a letter from the pertinent heritage authority categorically stating that the application fulfils the requirements of the relevant heritage resources authority as described in Chapter 11, Section 38(8) of the National	Noted. Heritage and Palaeontology Impact Assessments were undertaken (as included in Annexure E). The Heritage and Palaeontological specialists confirmed that an application in terms of Chapter 11, section 38 of the NHRA would not be required.

# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

	Heritage Resources Act, Act 25 of 1999.	
15	You are requested to submit two (2) electronic copies (CD/DVD and two(2) hard copies of the Environmental Impact Report (EIR) to the Department as per regulation 34(1)(b) of the EIA Regulation, 2010	Please find enclosed.
16	Please also find attached information that must be used in the preparation of the environmental impact report. This will enable the department to speedily review the EIR and make a decision on the application.	Noted.
17	You are hereby reminded of Section 24F of the National Environmental Management Act, Act no 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.	Noted.
18	<p>A. EIA INFORMATION REQUIRED FOR SOLAR ENERGY FACILITIES</p> <p>1. General site information</p> <p>The following general site information is required:</p> <ul style="list-style-type: none"> <li>• Descriptions of all affected farm portions</li> <li>• 21 digit surveyor general codes of all affected farm portions</li> <li>• Copies of deeds of all affected farm portions</li> <li>• Photos of areas that give a visual perspective of all parts of the site</li> <li>• Photographs from sensitive visual receptors (tourism routes, tourism facilities, etc.)</li> <li>• Solar plant design specifications including: <ul style="list-style-type: none"> <li>➤ Type of technology</li> <li>➤ Structure height</li> <li>➤ Surface area to be covered (including associated infrastructure such as roads)</li> <li>➤ Structure orientation</li> <li>➤ Laydown area dimensions (construction period and thereafter)</li> <li>➤ Generation capacity</li> </ul> </li> <li>• Generation capacity of the facility as a whole at deliver points</li> </ul> <p>This information must be indicated on the first page of any scoping or EIA document. It is also advised that it be double checked as there are too many mistakes in the applications that have been received that take too much time from</p>	<p>The following information was included:</p> <ul style="list-style-type: none"> <li>• For a description of the affected farm portions please see Section 3 of the Final EIA Report.</li> <li>• 21 digit surveyor general codes were included in the Application Forms (Annexure A of the EIA Report).</li> <li>• Copies of deeds of all affected farm portions are provided in Annexure A of the Final EIA report.</li> <li>• Please see Section 3 and 4 of the Final EIA Report for photographs of the site.</li> <li>• The Visual Impact Assessment Report, including photographs from sensitive visual receptors, is summarised in Section 4.9 of the EIA Report and the full specialist Report is included in Annexure E.</li> <li>• Solar plant design specifications are included in Section 3 of the Final EIA report.</li> <li>• Generation capacity of the two layout alternatives are described in Section 3 of the Final EIA report.</li> </ul>

# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

	authorities to correct.	
19.	<p>2. Site Maps and GIS information Site maps and GIS information should include at least the following:</p> <ul style="list-style-type: none"> <li>• All maps/information layers must also be provided in ESRI Shapefile format</li> <li>• All affected farm portions must be indicated</li> <li>• The exact site of the application must be indicated (the areas that will be occupied by the application:</li> <li>• A status quo map/layer must be provided that includes the following:             <ul style="list-style-type: none"> <li>➤ Current use of land on the site including:                 <ul style="list-style-type: none"> <li>▪ Buildings and other structures</li> <li>▪ Agricultural fields</li> <li>▪ Grazing areas</li> <li>▪ Natural vegetation areas (natural veld not cultivated for the preceding 10 years) with an indication of the vegetation quality as well as fine scale mapping in respect of critical biodiversity areas and ecological support areas</li> <li>▪ Critically endangered and endangered vegetation areas that occur on the site</li> <li>▪ Bare areas which may be susceptible to soil erosion</li> <li>▪ Cultural historical sites and elements</li> </ul> </li> <li>➤ Rivers, streams and water courses</li> <li>➤ Ridgelines and 20m continuous contours with height references in the GIS database</li> <li>➤ Fountains, boreholes, dams (in-stream as well as off-stream) and reservoirs</li> <li>➤ High potential agricultural areas as defined by the department of agriculture, forestry and fisheries</li> <li>➤ Buffer zones (Also where it is dictated by elements outside the site)                 <ul style="list-style-type: none"> <li>▪ 500m from any irrigated agricultural land</li> <li>▪ 1km from residential areas</li> </ul> </li> </ul> </li> </ul>	<p>All of the shapefiles will be enclosed in the Final EIR. Please note that some of the information requested would only be available after detailed designs have been undertaken.</p> <p>The land use map is included in Annexure A.</p> <ul style="list-style-type: none"> <li>• Water courses are indicated and discussed in Section 4.5 of the EIA Report.</li> <li>• Please see the enclosed shapefiles for information on ridgelines and boreholes.</li> <li>• For the Agricultural Assessment, please see Annexure E and Section 4.4 of the Final EIA Report.</li> <li>• The environmental sensitivity map includes the buffer zones, which have been recommended by specialists and authorities.</li> <li>• A slope analysis has been undertaken and the development area is relatively flat. The site does contain a number of small rocky outcrops and ridges however only the flat areas would be developed.</li> <li>• A final site layout map is included in Section 3 of the Final EIA report and</li> </ul>

# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

	<ul style="list-style-type: none"> <li>➤ Indicate isolated residential, tourism facilities on or withing 1km of the site</li> <li>• A slope analysis map/layer that include the following slope ranges:             <ul style="list-style-type: none"> <li>➤ Less than 8% slope</li> <li>➤ Between 8% and 12% slope</li> <li>➤ Between 12% and 14% slope</li> <li>➤ Steeper than 18% slope</li> </ul> </li> <li>• A site development proposal map(s)/layer(s) that indicate:             <ul style="list-style-type: none"> <li>➤ Positions of solar facilities</li> <li>➤ Foundation footprint</li> <li>➤ Permanent laydown area footprint</li> <li>➤ Construction period laydown footprint</li> <li>➤ Internal roads indication width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible)</li> <li>➤ River, stream and water crossing of roads and cables indicating the type of bridging structures that will be used</li> <li>➤ Substation (s) and/or transformer (s) sites including their entire footprint.</li> <li>➤ Cable routes and trench dimensions (where they are not along internal roads)</li> <li>➤ Connection routes to the distribution/transmission network (the connection must form part of the EIA even if the construction and maintenance thereof will be done by another entity such as ESKOM)</li> <li>➤ Cut and fill areas along roads and at substation/transformation sites indicating the expected volume</li> <li>➤ Borrow pits</li> <li>➤ Spoil heaps (temporary for topsoil and subsoil and permanently for excess material)</li> <li>➤ Buildings including accommodation</li> </ul> </li> </ul> <p>With the above information authorities will be able to assess the strategic and site impacts of applications.</p>	<p>Annexure A.</p>
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# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

20.	<p>3. Regional map and GIS information The regional map and GIS information should include at least the following:</p> <ul style="list-style-type: none"> <li>• All maps/information layers must also be provided in ESRI shapefile format</li> <li>• The map/layer must cover an area of 20km around the site</li> <li>• Indicate the following: <ul style="list-style-type: none"> <li>➤ Roads including their types (tarred or gravel) and category (national, provincial, local or private)</li> <li>➤ Railway lines and stations</li> <li>➤ Industrial areas</li> <li>➤ Harbours and airports</li> <li>➤ Electricity transmission and distribution lines and substations</li> <li>➤ Pipelines</li> <li>➤ Waters sources to be utilised during the construction and operational phases</li> <li>➤ A visibility assessment of the areas from where the facility will be visible</li> <li>➤ Critical biodiversity areas and ecological support areas</li> <li>➤ Critically endangered and endangered vegetation areas</li> <li>➤ Agricultural fields</li> <li>➤ Irrigated areas</li> <li>➤ An indication of new road or changes and upgrades that must be done to existing roads in order to get equipment onto the site including cut and fill areas and crossings of rivers and streams</li> </ul> </li> </ul>	<p>GIS information is included on a CD submitted with this Final EIA Report. The regional map is included in Annexure A.</p>
	<p>5. Important stakeholders Amongst other important stakeholders, comments from the National Department of Agriculture, forestry and fisheries must be obtained and submitted to the Department. Any application, documentation, notification etc. should be forwarded to the following officials:</p>	<p>Noted. These departments have been included as key stakeholders. Requests for comment have been made.</p>



# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

<p>Ms Mahudu Marubini Delegate of the Minister (Act 70 of 1970) E-mail: <a href="mailto:MashuduMa@daff.gov.za">MashuduMa@daff.gov.za</a> Tel: 012 319 7619</p> <p>Ms Thoko Buthelezi Agriland Liaison office E-mail: <a href="mailto:ThokoB@daff.gov.za">ThokoB@daff.gov.za</a> Tel 012 319 7634</p> <p>All hardcopy applications/ documentation should be forwarded to the following address:</p> <p><u>Physical address:</u> Delpen Building Cnr annie botha and Union Street Office 270 Attention: Delegate of the Minister Act 70 of 1970</p> <p><u>Postal Address:</u> Department of agriculture, Forestry and fisheries Private Bag x120 Pretoria 0001 Attention: Delegate of the Minister Act 70 of 1970</p> <p>In addition, comments must be requested from Eskom regarding grid connectivity and capacity. Request for comment must be submitted to:</p> <p>Mr John Geeringh Eskom Transmission Megawatt Park D1Y38 PO Box 1091 Johannesburg</p>	<p>Mr John Geeringh has been included as a key stakeholder and has commented on the report (refer to Annexure B)</p>
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# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

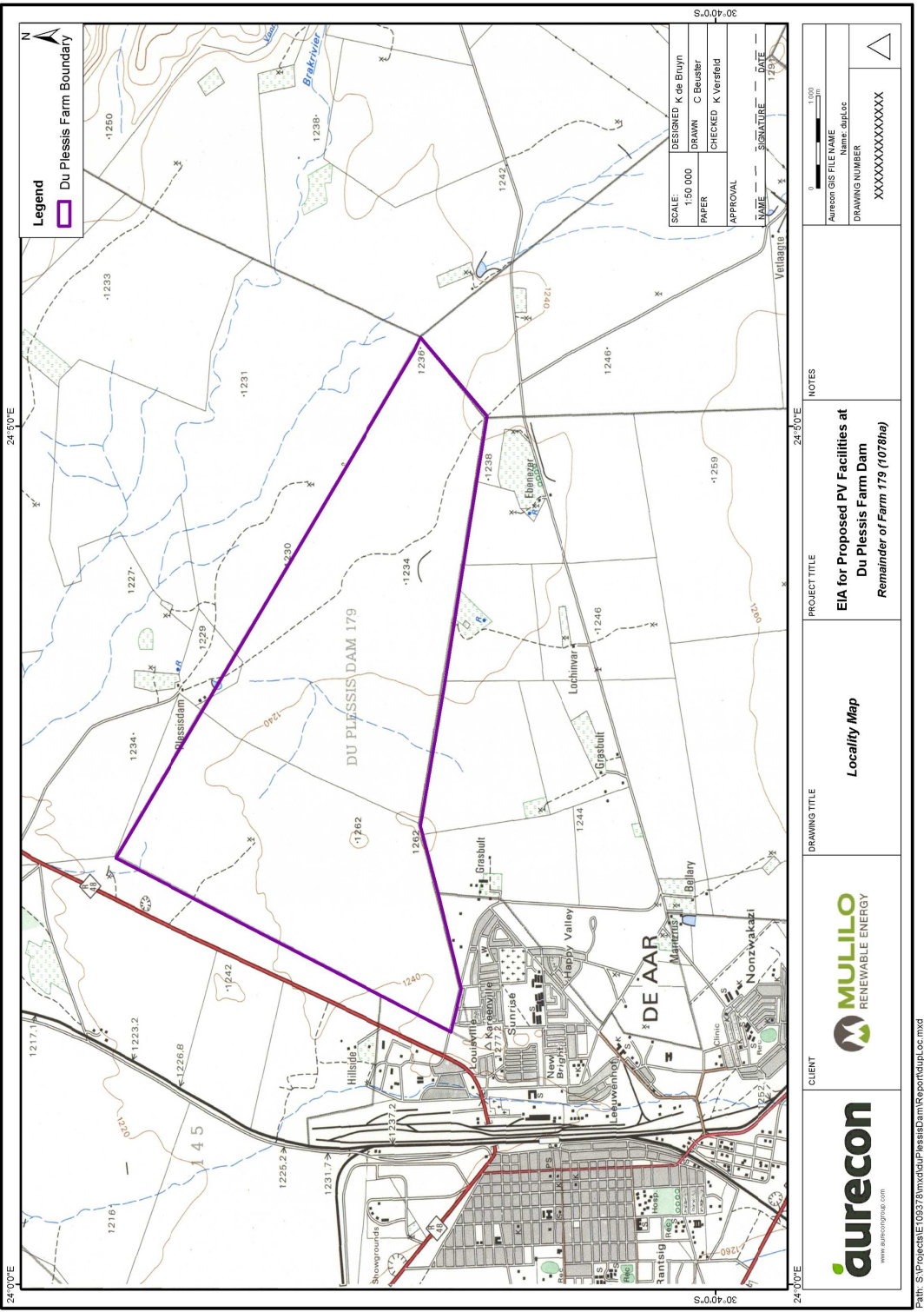
## ADDITIONAL INFORMATION REQUIRED BY THE DEA

	<p>2000</p> <p>Tel: 011 516 7233          Fax: 086 661 4064  <a href="mailto:John.geeringh@eskom.co.za">John.geeringh@eskom.co.za</a></p>	
	<p>C. AGRICULTURE STUDY REQUIREMENTS</p> <ul style="list-style-type: none"> <li>• Detailed soil assessment of the site in question, incorporation a radius of 50m surrounding the site, on a scale of 1:10 000 or finer. The soil assessment should include the following:             <ul style="list-style-type: none"> <li>— Identification of the soil forms present on site</li> <li>— The size of the area where a particular soil form is found</li> <li>— GFA reading of soil survey points</li> <li>— The depth of the soil at each survey point</li> <li>— Soil colour</li> <li>— Limiting factors</li> <li>— Clay content</li> <li>— Slope of the site</li> <li>— A detailed map indicating the locality of the soil forms within the specific area;</li> <li>— Size of the site</li> </ul> </li> <li>• Exact locality of the site</li> <li>• Current activities on the site, developments, buildings</li> <li>• Surrounding developments/ land uses and activities in a radius of 500m of the site</li> <li>• Access routes and the condition thereof</li> <li>• Current status of the land (including erosion, vegetation and a degradation assessment)</li> <li>• Possible land use options for the site</li> <li>• Water availability, source and quality (if available)</li> <li>• Detailed descriptions of why agriculture</li> <li>• Impact of the change of land use on the surrounding area</li> </ul>	<p>Please see Annexure E for the Agricultural Impact Assessment.</p>

# EIA FOR THE PROPOSED PV1 PHOTOVOLTAIC (SOLAR) ENERGY FACILITY FOR DU PLESSIS DAM FARM, NEAR DE AAR

## ADDITIONAL INFORMATION REQUIRED BY THE DEA

	<ul style="list-style-type: none"> <li>• A shape file containing the soil forms and relevant attribute data as depicted on the map.</li> </ul>	
	<p><b>E. <u>Astronomy geographic advantage act, 2007 (Act No. 21 of 2007)</u></b></p> <p>The purpose of the Act is to preserve the geographic advantage areas that attract investment in astronomy. The entire Northern Cape Province excluding the Sol Plaatjie Municipality had been declared an astronomy advantage area. The northern Cape optical and radio telescope sites were declared core astronomy advantage areas. The Act allowed for the declaration of the Southern Africa Large Telescope (SALT), MeerKAT and Square Kilometre array (SKA) as astronomy and related scientific endeavours that had to be protected.</p> <p>You are requested to indicate the applicability of the Astronomy geographic Advantage Act, Act No. 21 of 2007 on the application in the BAR/EIR. You must obtain comments from the Southern African Large Telescope (SALT) if the proposed development is situated within a declared astronomy advantage area.</p>	<p>The proposed development is not situated within a declared astronomy advantage area (refer to SKA's comment in Annexure B).</p>



**Legend**

Du Plessis Farm Boundary

SCALE:	DESIGNED	K de Bruyn
1:50 000	DRAWN	C Beesler
PAPER	CHECKED	K Verheid
APPROVAL	NAME	SIGNATURE
	DATE	DATE
	1797	1797

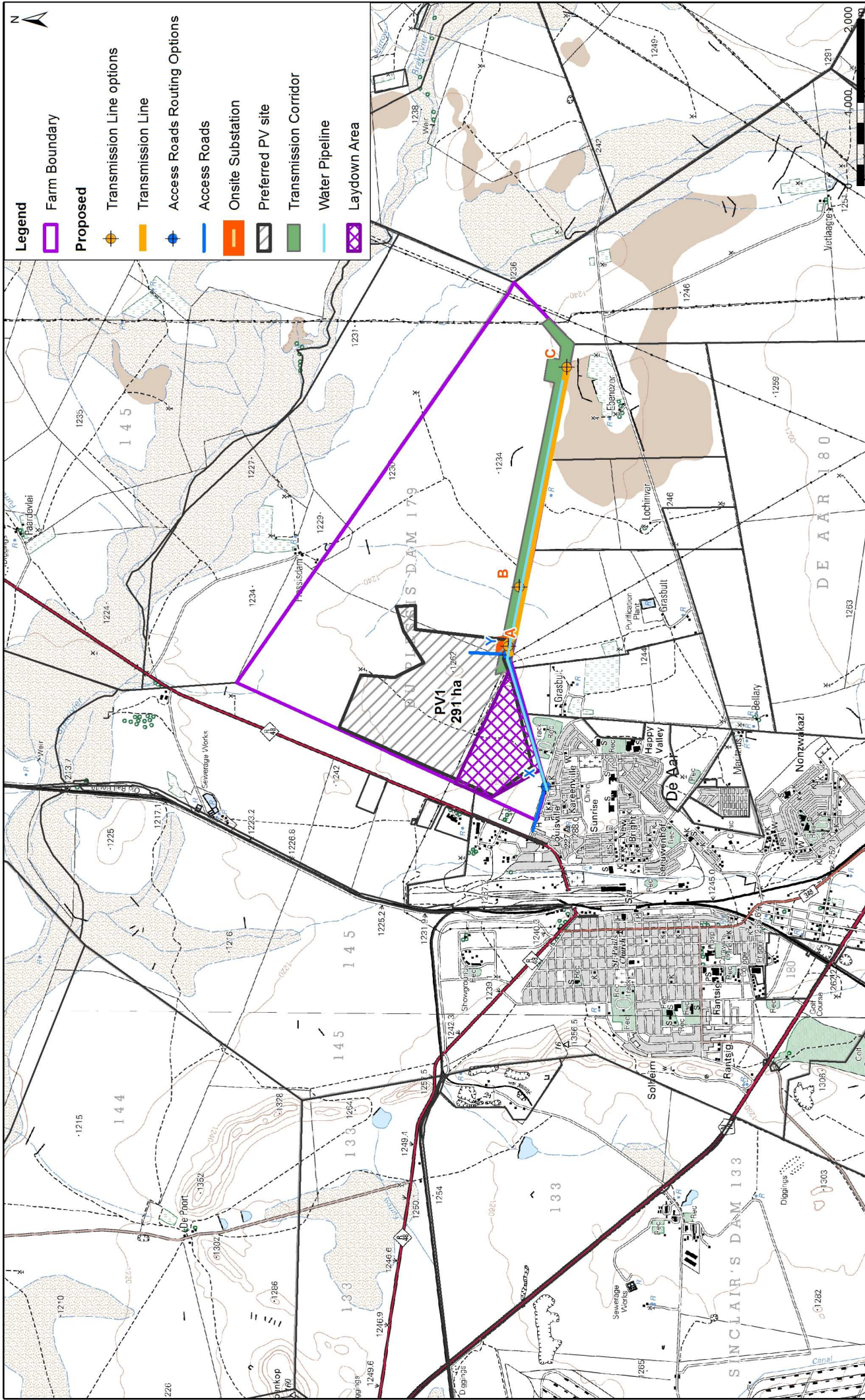
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DRAWING NUMBER	XXXXXXXXXXXXXXXXXX

PROJECT TITLE	EIA for Proposed PV Facilities at Du Plessis Farm Dam Remainder of Farm 179 (078ha)
NOTES	

DRAWING TITLE	Locality Map
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CLIENT	 MULILO RENEWABLE ENERGY
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CLIENT	 aurecon www.aurecongroup.com
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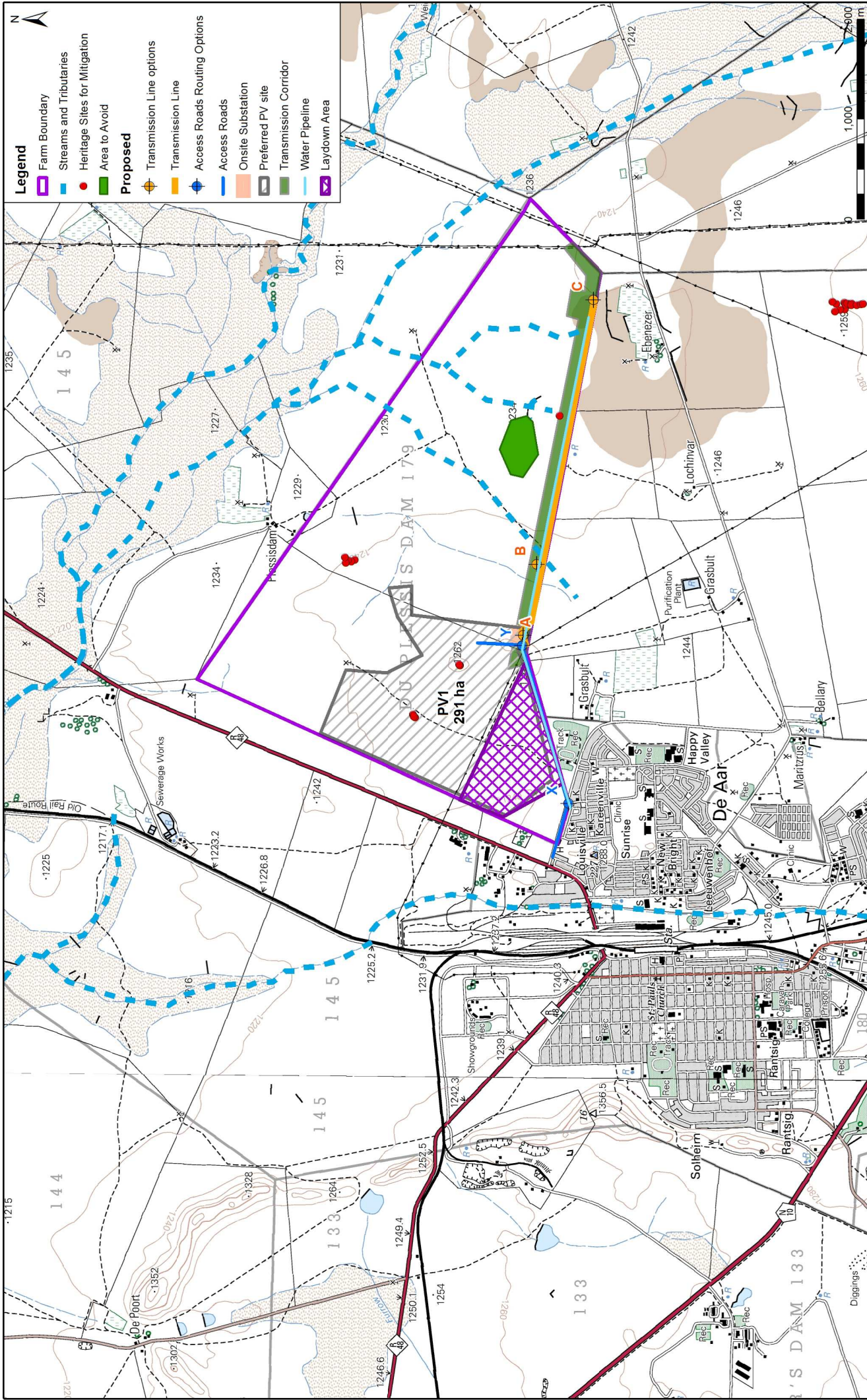


**Legend**

- Farm Boundary
- Proposed**
- Transmission Line options
- Transmission Line
- Access Roads Routing Options
- Access Roads
- Onsite Substation
- Preferred PV site
- Transmission Corridor
- Water Pipeline
- Laydown Area

<b>PROJECT TITLE</b>		<b>DRAWING TITLE</b>		<b>NOTES</b>									
<b>PROPOSED PV1 PHOTOVOLTAIC ENERGY FACILITY ON FARM DU PLESSIS NEAR DE AAR, NORTHERN CAPE</b>		<b>Preferred Layout</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">DESIGNED</td> <td style="width: 25%;">DRAWN</td> <td style="width: 25%;">CHECKED</td> <td style="width: 25%;">APPROVAL</td> </tr> <tr> <td style="text-align: center;">1:60,000</td> <td style="text-align: center;">D Ogler</td> <td></td> <td style="text-align: center;">-----</td> </tr> </table>		DESIGNED	DRAWN	CHECKED	APPROVAL	1:60,000	D Ogler		-----
DESIGNED	DRAWN	CHECKED	APPROVAL										
1:60,000	D Ogler		-----										
<b>SCALE</b>		<b>SCALE</b>		<b>SCALE</b>									
1:60,000		1:60,000		1:60,000									
PAPER		PAPER		PAPER									
APPROVAL		APPROVAL		APPROVAL									
Aurecon GIS FILE NAME		Document Name: PreferredLayout		DRAWING NUMBER									
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**Legend**

- Farm Boundary
  - Streams and Tributaries
  - Heritage Sites for Mitigation
  - Area to Avoid
- Proposed**
- Transmission Line options
  - Transmission Line
  - Access Roads Routing Options
  - Access Roads
  - Onsite Substation
  - Preferred PV site
  - Transmission Corridor
  - Water Pipeline
  - Laydown Area

<p><b>Environmental Sensitive areas with the preferred PV site overlaid</b></p>	<p><b>PROPOSED PV1 PHOTOVOLTAIC ENERGY FACILITY ON FARM DU PLESSIS NEAR DE AAR, NORTHERN CAPE</b></p>	<p>SCALE: 1:50,000</p> <p>DESIGNED: _____</p> <p>DRAWN: D Ogler</p> <p>CHECKED: _____</p> <p>APPROVAL: _____</p>	<p>NOTES</p> <p>XXXXXXXXXXXXXXXXXX</p>
<p><b>PROJECT TITLE</b></p>		<p><b>DRAWING TITLE</b></p>	<p><b>AURECON GIS FILE NAME</b></p> <p>Document Name: EnviroSens</p> <p><b>DRAWING NUMBER</b></p>

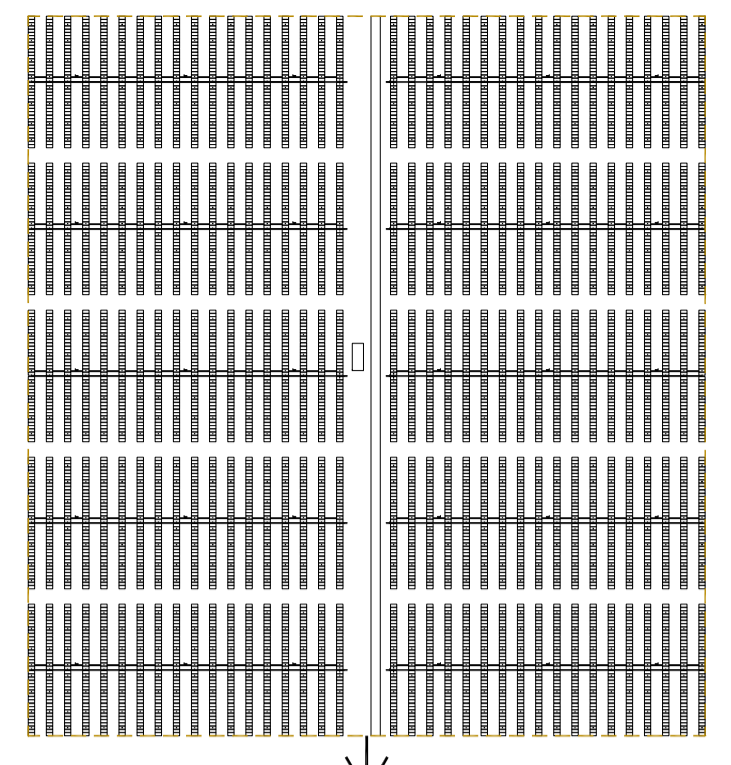
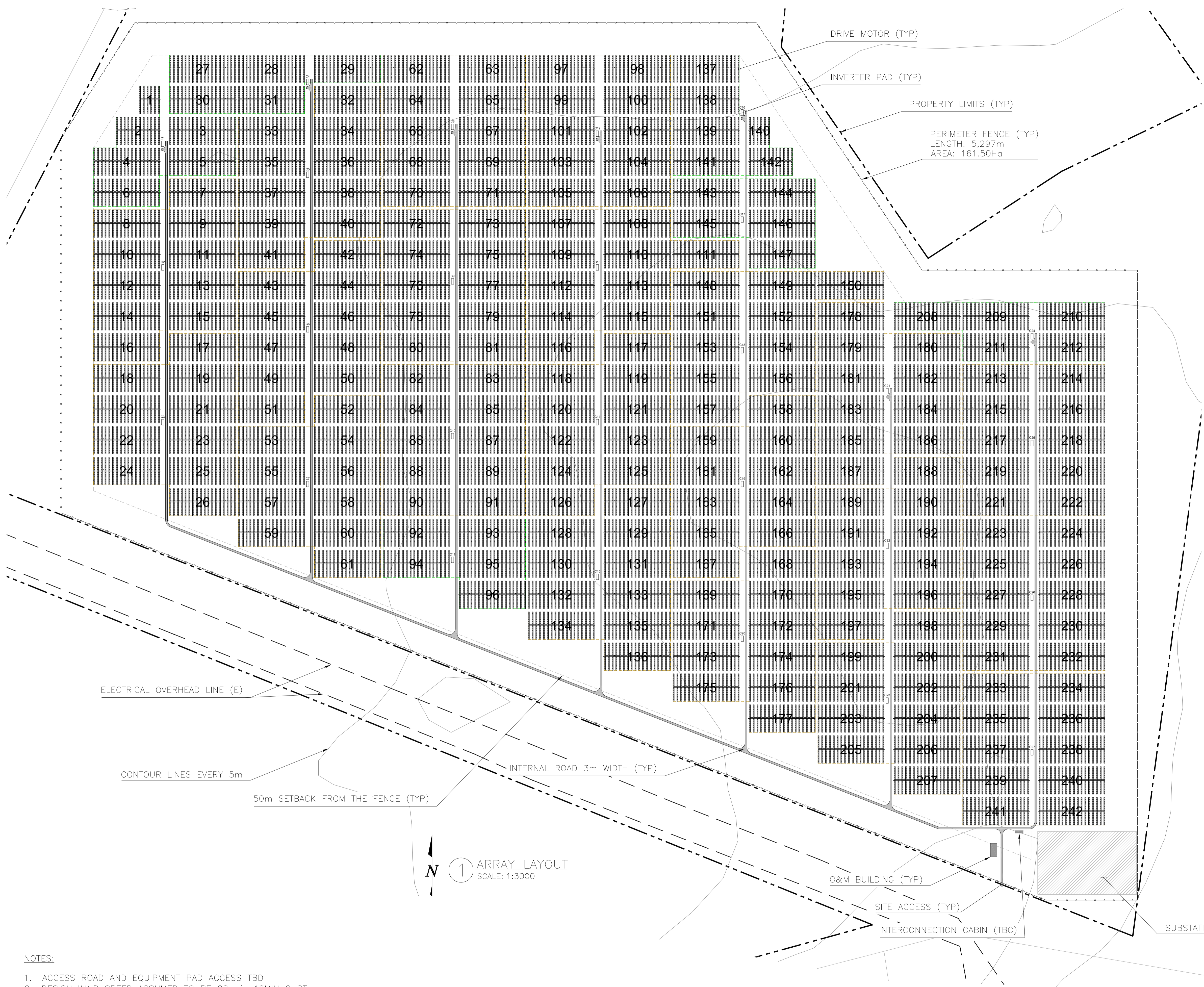
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 NOT FOR  
 CONSTRUCTION

ENGINEER'S STAMP

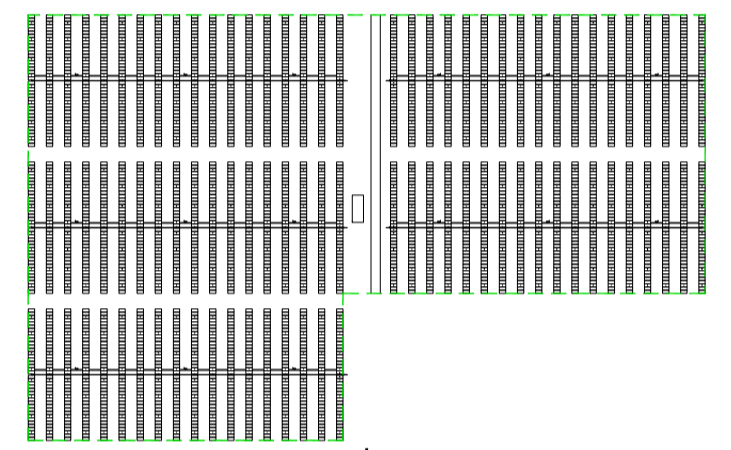
MULO DU PLESSIS 75.16 MWP  
 PV POWER GENERATION PLAN  
 SOUTH AFRICA

REV	DESIGN #	DATE	DB	CB	LS	AA
A	D-0061101	05/22/13				

OPPORTUNITY	740627
PROJECT	-
DATE DRAWN	05/14/13
DRAWN BY	L. SOLIER

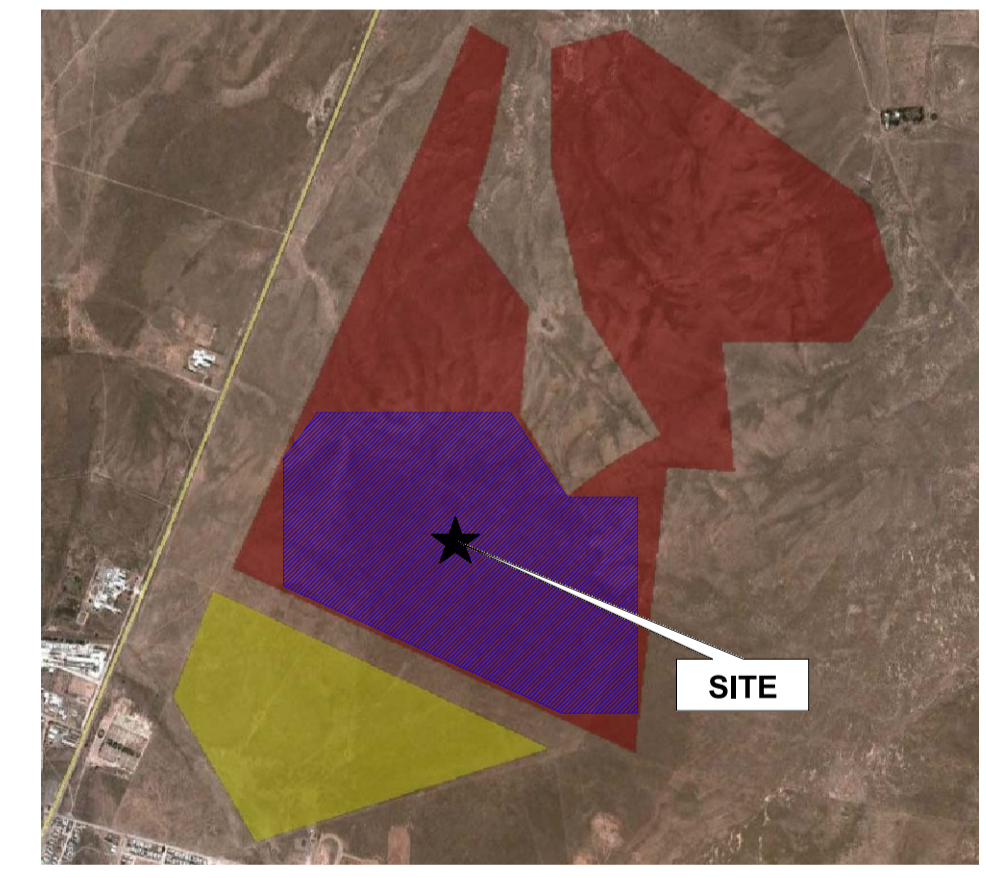


**OASIS V2.0 BLOCK**  
 7,200 MODULES SPWR 435W  
 10 MOD/STRING, 720 STRINGS  
 3,132.00 kWp  
 1490 PIERS, 10 DRIVE MOTORS  
 18 ROWS PER TRACKER  
 30 COMBINER BOXES (24 INPUTS)



**OASIS V2.0 BLOCK**  
 3,600 MODULES SPWR 435W  
 10 MOD/STRING, 360 STRINGS  
 1,566.00 kWp  
 745 PIERS, 5 DRIVE MOTORS  
 18 ROWS PER TRACKER  
 15 COMBINER BOXES (24 INPUTS)

**2 ENLARGED OASIS BB**  
 SCALE: 1:2500



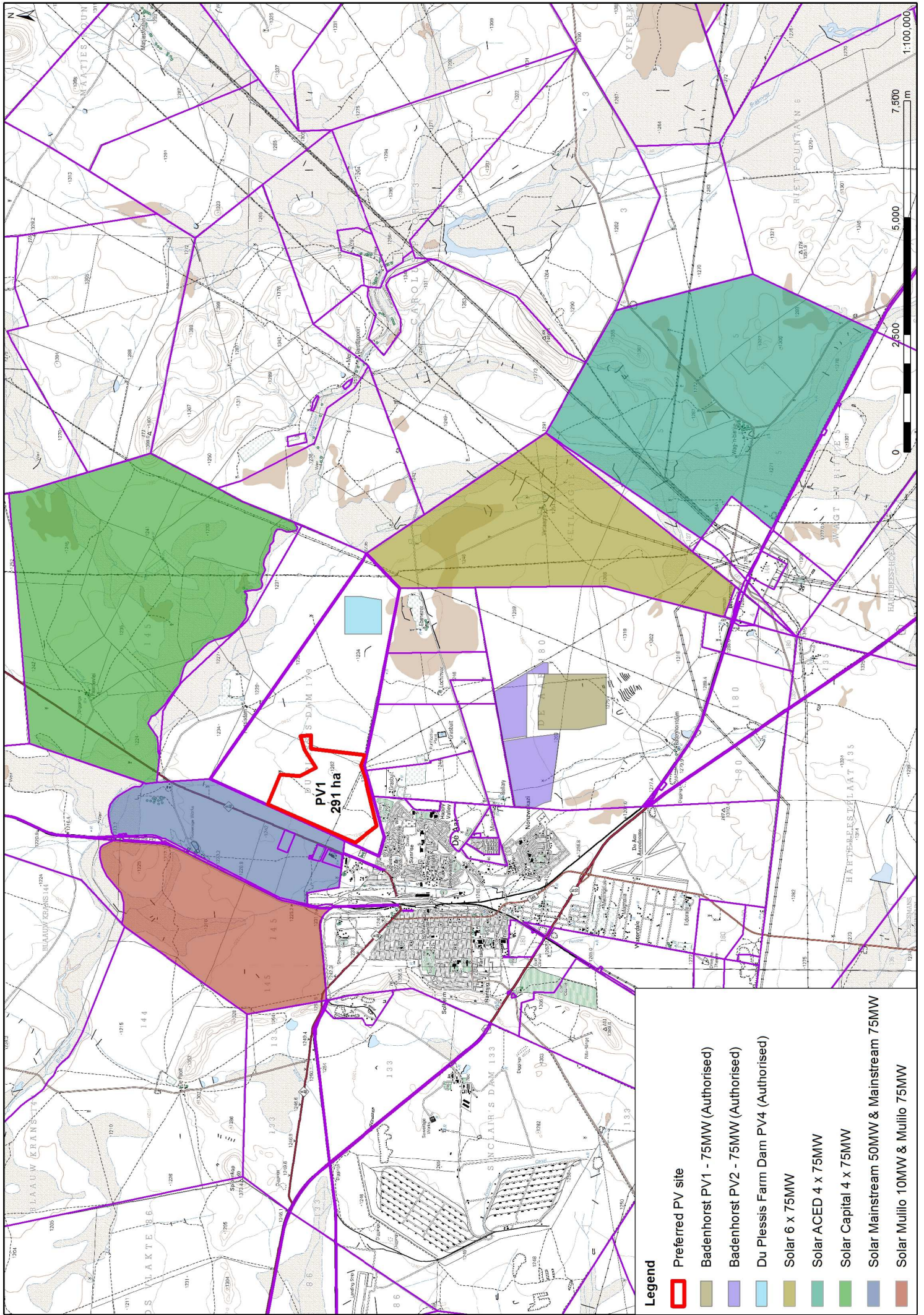
**3 SITE LOCATION**  
 SCALE: NTS  
 LON: 24° 03' 03.04"E  
 LAT: 30° 37' 38.19"S

- NOTES:**
1. ACCESS ROAD AND EQUIPMENT PAD ACCESS TBD
  2. DESIGN WIND SPEED ASSUMED TO BE 28m/s 10MIN GUST.
  3. ALL OBSTRUCTIONS WITHIN THE ARRAY BOUNDARY, AND THOSE WHICH COULD SHADE THE ARRAY, NEED TO BE REMOVED PRIOR TO INSTALLATION
  4. BB LENGTH, PIERS QUANTITY/ROW & QUANTITY OF MOTORS COULD CHANGE UPON DETAILED STRUCTURAL ANALYSIS REPORT
  5. DESIGN PAD QTY AND SIZE MAY CHANGE UPON FINAL MANUFACTURER BRAND SELECTION.
  6. PROPERTY LIMITS HAVE BEEN PROVIDED BY THE CLIENT.
  7. THE DESIGN ASSUMES THAT THE SITE WILL BE GRADED AND/OR PREPARED AS REQUIRED TO MEET ALL TOLERANCES (<10.5%) OF THE PROPOSED LAYOUT.
  8. SITE ACCESS HAS BEEN PROVIDED BY CLIENT.

- INVERTER PAD SITE:**
- 1x1,560 kWac INVERTERS PER CABIN (6)
  - 2x1,560 kWac INVERTERS PER CABIN (21)

**PROPOSED SYSTEM SPECIFICATIONS:**  
 75,168.00 kWp; 74.880 kWac  
 (172,800) HIGH EFF. (SPWR435W) MODULES  
 48x1,560 kWac INVERTERS  
 10 MODULES/STRING, 17,280 STRINGS  
 35,764 PIERS; 242 DRIVE MOTORS  
 GCR=0.35  
 AZIMUTH ANGLE: 0°

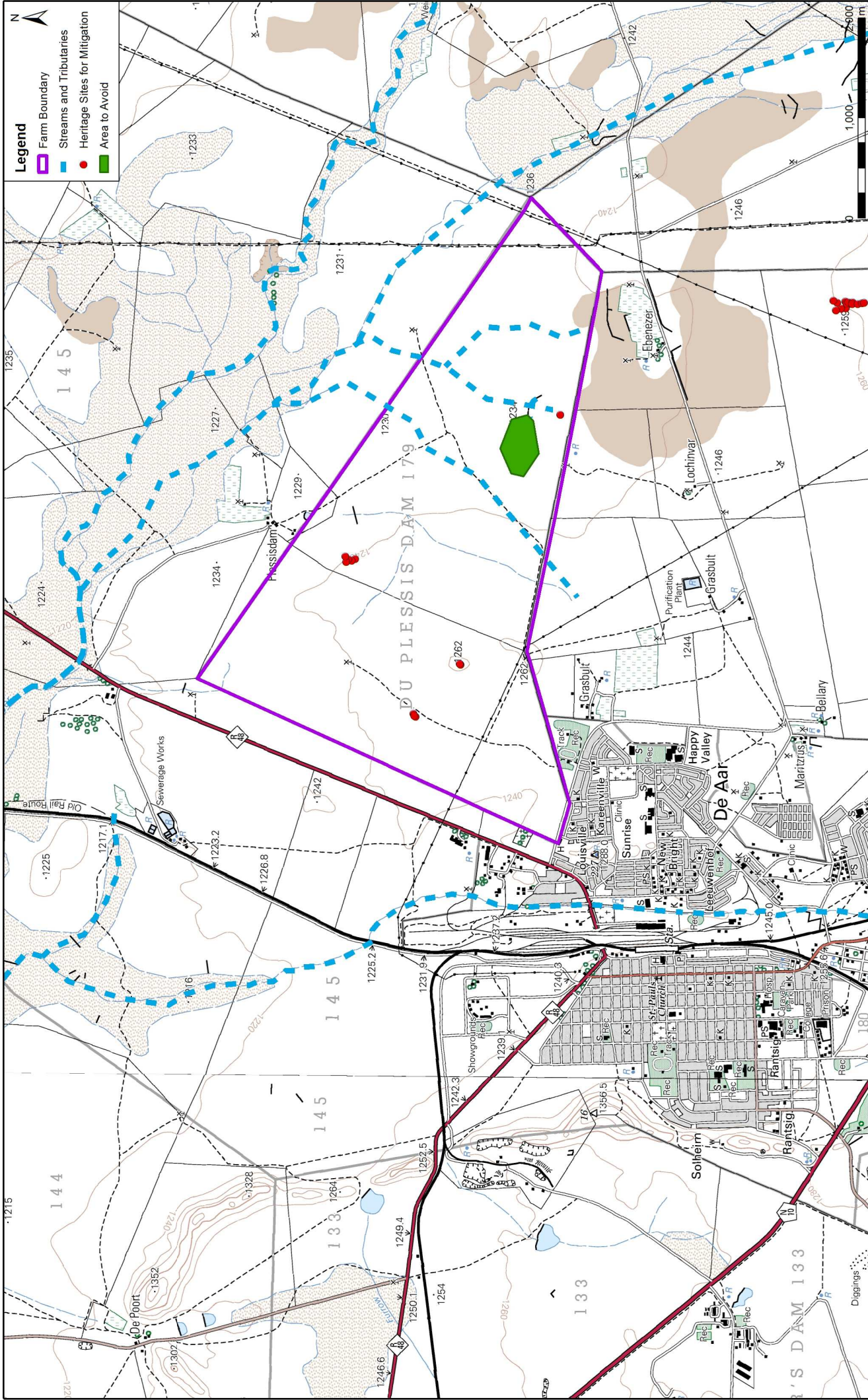
NOTE: THE PROPOSED ARRAY LAYOUT SHOWN IS DESIGNED TO FIT EXISTING CONDITIONS AS THEY ARE DESCRIBED ON THIS DRAWING. KWp AND MODULE QUANTITY, TYPE AND LAYOUT ARE SUBJECT TO CHANGE BASED ON SUNPOWER VERIFICATION OF ACTUAL SITE CONDITIONS, AS WELL AS ON MODULE AVAILABILITY AT THE DATE OF ORDER.



**Legend**

- Preferred PV site
- Badenhorst PV1 - 75MW (Authorised)
- Badenhorst PV2 - 75MW (Authorised)
- Du Plessis Farm Dam PV4 (Authorised)
- Solar 6 x 75MW
- Solar ACED 4 x 75MW
- Solar Capital 4 x 75MW
- Solar Mainstream 50MW & Mainstream 75MW
- Solar Muilio 10MW & Muilio 75MW





- Legend**
- Farm Boundary
  - Streams and Tributaries
  - Heritage Sites for Mitigation
  - Area to Avoid

1:50,000  
 1,000 m  
 2,000 m

Aurecon GIS FILE NAME  
 Document Name: EnviroSens\_nosite  
 DRAWING NUMBER  
 XXXXXXXXXXXXXXXX

DESIGNED	DRAWN	CHECKED	APPROVAL
1:50,000	PAPER		
	D Ogler		

**PROPOSED PV1 PHOTOVOLTAIC ENERGY FACILITY ON FARM DU PLESSIS NEAR DE AAR, NORTHERN CAPE**

**Environmental Sensitive Features**

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