



## GAUTENG PROVINCE

AGRICULTURE AND RURAL DEVELOPMENT  
REPUBLIC OF SOUTH AFRICA

Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2014 (Version 1)

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### Kindly note that:

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2014.
2. This application form is current as of 8 December 2014. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
3. **A draft Basic Assessment Report must be submitted, for purposes of comments within a period of thirty (30) days, to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken.**
4. **A draft Basic Assessment Report (1 hard copy and two CD's) must be submitted, for purposes of comments within a period of thirty (30) days, to a Competent Authority empowered in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended to consider and decide on the application.**
5. Five (5) copies (3 hard copies and 2 CDs-PDF) of the final report and attachments must be handed in at offices of the relevant competent authority, as detailed below.
6. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
7. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.
8. An incomplete report may lead to an application for environmental authorisation being refused.
9. **Any report that does not contain a titled and dated full colour large scale layout plan of the proposed activities including a coherent legend, overlain with the sensitivities found on site may lead to an application for environmental authorisation being refused.**
10. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the application for environmental authorisation being refused.
11. No faxed or e-mailed reports will be accepted. Only hand delivered or posted applications will be accepted.
12. Unless protected by law, and clearly indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/EAP must

provide any interested and affected party with the information contained in this application on request, during any stage of the application process.

13. Although pre-application meeting with the Competent Authority is optional, applicants are advised to have these meetings prior to submission of application to seek guidance from the Competent Authority.

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### **DEPARTMENTAL DETAILS**

Gauteng Department of Agriculture and Rural Development  
Attention: Administrative Unit of the of the Environmental Affairs Branch  
P.O. Box 8769  
Johannesburg  
2000

Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch  
Ground floor, Umnotho House, 56 Eloff Street, Johannesburg  
Email Address: bongani.shabangu@gauteng.gov.za

Administrative Unit telephone number: (011) 240 3377/3051  
Department central telephone number: (011) 240 2500

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(For official use only)

NEAS Reference Number:						
File Reference Number:						
Application Number:						
Date Received:						

If this BAR has not been submitted within 90 days of receipt of the application by the competent authority and permission was not requested to submit within 140 days, please indicate the reasons for not submitting within time frame.

N/A.

This is a Draft BAR distributed for the 30-day commenting period.

Is a closure plan applicable for this application and has it been included in this report?

No

if not, state reasons for not including the closure plan.

This is an application for development and/or construction only.

Has a draft report for this application been submitted to a competent authority and all State Departments administering a law relating to a matter likely to be affected as a result of this activity?

Yes

Is a list of the State Departments referred to above attached to this report including their full contact details and contact person?

No

If no, state reasons for not attaching the list.

A list of the State Departments' contact people and contact details referred to above will only be sent to the appointed Case Officer, as a compliance measure to the Protection of Personal Information Act, 2013 (POPIA)

Have State Departments including the competent authority commented?

No

If no, why?

This is a Draft Report to request comments, which will be received within 30days of receipt of this report.

SECTION A: ACTIVITY INFORMATION

**1. PROPOSAL OR DEVELOPMENT DESCRIPTION**

**Project title (must be the same name as per application form):**

Development of the Soventix Unilever 3.6MWp Solar Photo-Voltaic Plant, Boksburg, City of Ekurhuleni Metropolitan Municipality, East Rand, Gauteng Province

Select the appropriate box

The application is for an upgrade of an existing development

The application is for a new development

Other, specify

Does the activity also require any authorisation other than NEMA EIA authorisation?

YES  NO

If yes, describe the legislation and the Competent Authority administering such legislation

If yes, have you applied for the authorisation(s)?

YES	NO
YES	NO

If yes, have you received approval(s)? (attach in appropriate appendix)

**2. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES**

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations:

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
Alien and Invasive Species Regulations, 2014	National	1 August 2014
Amended EIA Regulations, 2014 published in Government Notice No. R. 324, R. 325, R. 327 and R. 328 in Government Gazette No. 40772 dated 07 April 2017;	National & Provincial	07 April 2017;
Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983)	National	27 April 1983
Constitution of the Republic of South Africa Act, 1996 (No. 108 of 1996), including section 24;	National & Provincial	04 December 1996
Convention on Biological Diversity (CBD, 1993)	International	
DEA (2010), Guideline on Need and Desirability, Integrated Management Guideline Series 9, Department of Environmental Affairs (DEA), Pretoria, South Africa.	National & Provincial	20 October 2014
DEA (2011), National list of ecosystems that are threatened and in need of protection. GN 1002, GG 34809, 9 December 2011.	National & Provincial	9 December 2011

DEA&DP (2010), Guideline on Alternatives, EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning (DEA&DP);	National & Provincial	18 June 2010
DEA&DP Visual and Aesthetic Guidelines.	National	15 April 2005
DWAS (2016), General Authorisation in GN No. 509 published in Government Gazette No. 40229 dated 26 August 2016;	National & Provincial	26 August 2016
Ekurhuleni Bioregional Plans	Local & Provincial	2015
Electricity Regulation Act, 2006 (Act No. 4 of 2006)	National & Provincial	27 June 2006
Environmental Conservation Act (Act No. 73 of 1989)	National	9 June 1989
Gauteng Department of Agriculture and Rural Development (GDARD): Checklist for Biodiversity Assessments	Provincial	June 2012
GDARD Mining and Environmental Impact Guide	Provincial	2008
GDARD Requirements for Biodiversity Assessments (Version 3, 2014a)	Provincial	March 2014
Guidelines for Landscape and Visual Impact Assessment (GLVIA), Second Edition.	International and National Good Practice	2003
IDP 2018 – 2021, City of Ekurhuleni	Provincial	2016, with Amendments in 2020
Integrated Resource Plan 2010 (2010)	National & Provincial	25 March 2011
Municipal Systems Act (Act No. 32 of 2000)	National	20 November 2000
National Biodiversity Framework (NBF, 2009)	National	3 August 2009
National Energy Act, 2008 (No. 34 of 2008)	National & Provincial	24 November 2008
National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended).	National & Provincial	27 November 1998
National Environmental Management Act, 1998 (No 107 of 1998) including EIA Regulations, 2014 published in Government Notice No. R. 982, R. 983, R. 984 and R. 985 in Government Gazette No. 38282 dated 04 December 2014;	National & Provincial	04 December 2014
National Environmental Management Air Quality Act (No. 39 of 2004)	National	24 February 2005
National Environmental Management: Air Quality Act, 2003 (No 57 of 2003) including the list of activities which result in atmospheric emissions published in GN No. 248 of Government Gazette No. 33064 dated 31 March 2010;	National & Provincial	31 March 2010
National Environmental Management: Biodiversity Act, 2004 (No 10 of 2004);	National & Provincial	07 June 2004
National Environmental Management: Waste Act, 2009 (Act No. 59 of 2009) (“NEM: WA”);	National & Provincial	10 March 2009
National Forest Act, 1998 (No 84 of 1998);	National & Provincial	30 October 1998
National Heritage Resources Act, 1999 (No 25 of 1999);	National	28 April 1999

National Protected Areas Expansion Strategy (NPAES)	National	2016
National Spatial Biodiversity Assessment (NSBA)	National	October 2004
National Veld and Forest Fire Act (101 of 1998)	National	27 November 1998
National Water Act, 1998 (Act No. 36 of 1998), Sections 27, 28,29,30,31 and 39 (Sections dealing with General Authorisations and Water Use Licenses);	National & Provincial	26 August 1998
Natural Scientific Professions Act (Act No. 27 of 2003)	National	28 November 2003
Renewable Energy Feed-in Tariff	National	26 March 2009
South Africa's National Biodiversity Strategy and Action Plan (NBSAP)	National	May 2005
Sustainable Utilisation of Agricultural Resources (Draft Legislation).	National	2003
The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES 1973)	International	1 July 1975
The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention, 1979)	International	1 November 1983
The Convention on Wetlands (RAMSAR Convention, 1971)	International	2 February 1971
The National Environmental Management Protected Areas Act (Act No. 57 of 2003)	National	18 February 2004
The National Environmental Management: Waste Act, 2008 (Act 59 of 2008);	National	1 July 2009
The United Nations Framework Convention on Climate Change (UNFCCC,1994)	International	21 March 1994
Transvaal Nature Conservation Ordinance (Nature Conservation Ordinance, No 12 of 1983)	Provincial	1 November 1983
White Paper on Biodiversity	National	28 July 1997
White Paper on Renewable Energy (2003)	National & Provincial	November 2003
White Paper on the Energy Policy of the Republic of South Africa (1998)	National & Provincial	02 December 1998
World Heritage Convention Act (Act No. 49 of 1999)	National	9 December 1999

Description of compliance with the relevant legislation, policy or guideline:

Legislation, policy or guideline	Description of compliance
Alien and Invasive Species Regulations, 2014	Used for the formulation of the EMPr and the Terrestrial compliance Statement.
Amended EIA Regulations, 2014 published in Government Notice No. R. 324, R. 325, R. 327 and R. 328 in Government Gazette No. 40772 dated 07 April 2017;	The project includes several listed activities, some of which require a Basic Assessment in terms of the GN No. R 983 & R 985, 2014.
Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983)	Used for the formulation of the EMPr and the Terrestrial compliance Statement.
Constitution of the Republic of South Africa Act, 1996 (No. 108 of 1996),	Allowing the environmental rights of all South African citizens to be upheld through the

including section 24;	implementation of all types of projects, including renewable energy projects.
Convention on Biological Diversity (CBD, 1993)	Used for the formulation of the Terrestrial Compliance Statement.
DEA (2010), Guideline on Need and Desirability, Integrated Management Guideline Series 9, Department of Environmental Affairs (DEA), Pretoria, South Africa.	Used for the formulation of the Need and Desirability section.
DEA (2011), National list of ecosystems that are threatened and in need of protection. GN 1002, GG 34809, 9 December 2011.	Used for the formulation of the EMPr and the Terrestrial Compliance Statement.
DEA&DP (2010), Guideline on Alternatives, EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning (DEA&DP);	Used for the formulation of the Need and Desirability section.
DEA&DP Visual and Aesthetic Guidelines.	Used for guidance for the Visual Impact Assessment.
DWAS (2016), General Authorisation in GN No. 509 published in Government Gazette No. 40229 dated 26 August 2016;	The project will trigger the requirement for water uses under section 21 and a General Authorisation (GA) is being applied for.
Ekurhuleni Bioregional Plans	Used as a guideline for the mapping for the project.
Electricity Regulation Act, 2006 (Act No. 4 of 2006)	The project will require a generation licence from NERSA.
Environmental Conservation Act (Act No. 73 of 1989)	Used for the formulation of the EMPr and the Terrestrial Compliance Statement.
Gauteng Department of Agriculture and Rural Development (GDARD): Checklist for Biodiversity Assessments	Used for the formulation of the Terrestrial Compliance Statement.
GDARD Mining and Environmental Impact Guide	Used for the formulation of the Terrestrial & Freshwater Ecology Compliance Statements.
GDARD Requirements for Biodiversity Assessments (Version 3, 2014a)	Used for the formulation of the Terrestrial Compliance Statement.
Guidelines for Landscape and Visual Impact Assessment (GLVIA), Second Edition.	Used for guidance for the Visual Impact Assessment.
IDP 2018 – 2021, City of Ekurhuleni	<p>The project will play a part in the Development Framework requirements to promote a greener economy within the province.</p> <p>This renewable energy project will work towards the IDP goals of reducing greenhouse gas emissions, climate change and improving the air quality within the District.</p>
Integrated Resource Plan 2010 (2010)	The project has the potential to help achieve the national renewable energy targets through the locals by starting small.
Municipal Systems Act (Act No. 32 of	Consulted for the Draft Report and some of the

2000)	specialist studies.
National Biodiversity Framework (NBF, 2009)	Used for the formulation of the EMPr and the Terrestrial Compliance Statement.
National Energy Act, 2008 (No. 34 of 2008)	The project is part of the increased generation of renewable energy and the Act identifies the need for implementing environmental management within the planning of such projects.
National Environmental Management Act, 1998 (No 107 of 1998) including EIA Regulations, 2014 published in Government Notice No. R. 982, R. 983, R. 984 and R. 985 in Government Gazette No. 38282 dated 04 December 2014;	The project includes several listed activities, some of which require a Basic Assessment in terms of the GN No. R 983 & R 985, 2014.
National Environmental Management Air Quality Act (No. 39 of 2004)	To check if the project triggers any activities that will require an Air Emissions Licence.
National Environmental Management: Air Quality Act, 2003 (No 57 of 2003) including the list of activities which result in atmospheric emissions published in GN No. 248 of Government Gazette No. 33064 dated 31 March 2010;	To check if the project triggers any activities that will require an Air Emissions Licence.
National Environmental Management: Biodiversity Act, 2004 (No 10 of 2004);	The BA process for the project will involve the identification, protection and management of species, ecosystems and areas of high biodiversity value.
National Environmental Management: Waste Act, 2009 (Act No. 59 of 2009) ("NEM: WA");	To check if the project triggers any activities that will require Waste Management Licence.
National Forest Act, 1998 (No 84 of 1998);	Used for the formulation of the EMPr.
National Heritage Resources Act, 1999 (No 25 of 1999);	A heritage impact assessment (HIA) has been completed as part of the Basic Assessment process and carried out by person/s approved by the authority.
National Protected Areas Expansion Strategy (NPAES)	Used for the formulation of the EMPr and the Terrestrial Compliance Statement.
National Spatial Biodiversity Assessment (NSBA)	Used for the formulation of the EMPr and the Terrestrial Compliance Statement.
National Veld and Forest Fire Act (101 of 1998)	Used for the formulation of the EMPr and the Terrestrial Compliance Statement.
National Water Act, 1998 (Act No. 36 of 1998), Sections 27, 28,29,30,31 and 39 (Sections dealing with General Authorisations and Water Use Licenses);	The project will trigger the requirement for water uses under section 21 and a General Authorisation (GA) is being applied for.
Natural Scientific Professions Act (Act No. 27 of 2003)	To govern the specialists and professionals that put this report together.
South Africa's National Biodiversity Strategy and Action Plan (NBSAP)	Used for the formulation of the Terrestrial Compliance Statement
Sustainable Utilisation of Agricultural Resources (Draft Legislation).	Used for the formulation of the EMPr and the Agricultural Compliance Statement
The Convention on International Trade in	Used for the formulation of the Terrestrial



Endangered Species of Wild Fauna and Flora (CITES 1973)	Compliance Statement.
The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention, 1979)	Used for the formulation of the Terrestrial Compliance Statement.
The Convention on Wetlands (RAMSAR Convention, 1971)	Used for the formulation of the Freshwater Ecology Compliance Statement.
The National Environmental Management Protected Areas Act (Act No. 57 of 2003)	Used for the formulation of the EMPr and the Terrestrial Compliance Statement.
The United Nations Framework Convention on Climate Change (UNFCCC, 1994)	Used for the formulation of the Freshwater Ecology Compliance Statement.
Transvaal Nature Conservation Ordinance (Nature Conservation Ordinance, No 12 of 1983)	Used for the formulation of the Freshwater Ecology Compliance Statement.
White Paper on Biodiversity	Used for the formulation of the Freshwater Ecology Compliance Statement.
White Paper on Renewable Energy (2003)	The project will support the government's commitment to the introduction of greater levels of competition in electricity markets by promoting renewable energy which will contribute towards the diversification of electricity supply and energy security. Renewable energy that is produced from sustainable natural sources will contribute to sustainable development.
White Paper on the Energy Policy of the Republic of South Africa (1998)	The White Paper underlines the fact that the state must establish a national energy policy which will ensure that the national energy resources shall be adequately tapped and developed to cater for the needs of the nation. Energy should therefore be available to all citizens at an affordable cost. Energy production and distribution should not only be sustainable, but should also lead to improvement of the standard of living for all the country's citizens.
World Heritage Convention Act (Act No. 49 of 1999)	Used for the formulation of the Freshwater Ecology Compliance Statement.
Renewable Energy Feed-in Tariff	The REFIT provides incentives to renewable energy developers, making the developments economically feasible and it will support the achievement of national renewable energy targets.
Guidelines for Landscape and Visual Impact Assessment (GLVIA), Second Edition.	The principal aim of the guideline is to encourage high standards for the scope and context of landscape and visual impact assessments, based on the collegiate opinion and practice of the members of the Landscape Institute and the Institute of Environmental Management and Assessment. The guidelines also seek to establish certain principles and will help to achieve consistency, credibility and effectiveness in

	landscape and visual impact assessment, when carried out as part of an EIA
International Finance Corporation (IFC).	The IFC Environmental Health and Safety Guidelines for Electric Power Transmission and Distribution (IFC, 2007) specifically identifies the risks posed by power transmission and distribution projects to create visual impacts to residential communities. It recommends mitigation measures to be implemented to minimise visual impact. These should include the siting of powerlines and the design of substations with due consideration to landscape views and important environmental and community features. Prioritising the location of high-voltage transmission and distribution lines in less populated areas, where possible, is promoted.
Millennium Ecosystem Assessment (MEA).	Ecosystems are defined as being “essential for human well-being through their provisioning, regulating, cultural, and supporting services. Evidence in recent decades of escalating human impacts on ecological systems worldwide raises concerns about the consequences of ecosystem changes for human well-being”. (Millennium Ecosystem Assessment, 2005)
DEA&DP Visual and Aesthetic Guidelines.	Reference to the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) Guideline for involving visual and aesthetic specialists in Environmental Impact Assessment (EIA) processes is provided in terms of southern African best practice in Visual Impact Assessment.

### 3. ALTERNATIVES

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment.

The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. **Do not include the no go option into the alternative table below.**

**Note:** After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Please describe the process followed to reach (decide on) the list of alternatives below

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Provide a description of the alternatives considered

<b>No.</b>	<b>Alternative type</b> , either alternative: site on property, properties, activity, design, technology, energy, operational or other(provide details of "other")	<b>Description</b>
1	Proposal	
2	Alternative 1	
3	Alternative 2	
	Etc.	

In the event that no alternative(s) has/have been provided, a motivation must be included in the table below.

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Please see Section F – Appendix I (1) for the Full Alternatives Section.

#### 4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the total physical size (footprint) of the proposal as well as alternatives. Footprints are to include all new infrastructure (roads, services etc), impermeable surfaces and landscaped areas:

	<b>Size of the activity:</b>
Proposed activity ( <i>Total environmental (landscaping, parking, etc.) and the building footprint</i> )	
<b>Alternatives:</b>	
Alternative 1 (Preferred)	3,87ha
Alternative 2 (if any)	3,9ha
	Ha/ m <sup>2</sup>

or, for linear activities:

	<b>Length of the activity:</b>
Proposed activity	
<b>Alternatives:</b>	
Alternative 1 (if any)	
Alternative 2 (if any)	
	m/km

Indicate the size of the site(s) or servitudes (within which the above footprints will occur):

	<b>Size of the site/servitude:</b>
Proposed activity	
<b>Alternatives:</b>	
Alternative 1 (Preferred)	Erf 757 = 6.3531 ha Erf 758 = 7.069 ha
Alternative 2 (if any)	Erven 757 = 6.3531 ha
	Ha/m <sup>2</sup>

#### 5. SITE ACCESS

##### Proposal

Does ready access to the site exist, or is access directly from an existing road? 

<del>YES</del>	NO
m	

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

Include the position of the access road on the site plan (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

##### Alternative 1

Does ready access to the site exist, or is access directly from an existing road? 

<del>YES</del>	NO
m	

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

##### Alternative 2

Does ready access to the site exist, or is access directly from an existing road? 

YES	NO
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If NO, what is the distance over which a new access road will be built

m

Describe the type of access road planned:

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

**PLEASE NOTE: Points 6 to 8 of Section A must be duplicated where relevant for alternatives**

Section A 6-8 has been duplicated  Number of times

(only complete when applicable)

## 6. LAYOUT OR ROUTE PLAN

A detailed site or route (for linear activities) plan(s) must be prepared for each alternative site or alternative activity. It must be attached to this document. The site or route plans must indicate the following:

- the layout plan is printed in colour and is overlaid with a sensitivity map (if applicable);
- layout plan is of acceptable paper size and scale, e.g.
  - A4 size for activities with development footprint of 10sqm to 5 hectares;
  - A3 size for activities with development footprint of > 5 hectares to 20 hectares;
  - A2 size for activities with development footprint of >20 hectares to 50 hectares);
  - A1 size for activities with development footprint of >50 hectares);
- The following should serve as a guide for scale issues on the layout plan:
  - A0 = 1: 500
  - A1 = 1: 1000
  - A2 = 1: 2000
  - A3 = 1: 4000
  - A4 = 1: 8000 (±10 000)
- shapefiles of the activity must be included in the electronic submission on the CD's;
- the property boundaries and Surveyor General numbers of all the properties within 50m of the site;
- the exact position of each element of the activity as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, sewage pipelines, septic tanks, storm water infrastructure;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites (including the relevant buffers as prescribed by the competent authority) including (but not limited thereto):
  - Rivers and wetlands;
  - the 1:100 and 1:50 year flood line;
  - ridges;
  - cultural and historical features;
  - areas with indigenous vegetation (even if it is degraded or infested with alien species);
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the position of the relevant buffer from the bank to be clearly indicated)

## **FOR LOCALITY MAP (NOTE THIS IS ALSO INCLUDED IN THE APPLICATION FORM REQUIREMENTS)**

- the scale of locality map must be at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map;
- the locality map and all other maps must be in colour;
- locality map must show property boundaries and numbers within 100m of the site, and for poultry and/or piggery, locality map must show properties within 500m and prevailing or predominant wind direction;
- for gentle slopes the 1m contour intervals must be indicated on the map and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the map;
- areas with indigenous vegetation (even if it is degraded or infested with alien species);
- locality map must show exact position of development site or sites;
- locality map showing and identifying (if possible) public and access roads; and
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites.

Please see Section F – Appendix A for the Site Plans.

### **7. SITE PHOTOGRAPHS**

Colour photographs from the center of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under the appropriate Appendix. It should be supplemented with additional photographs of relevant features on the site, where applicable.

Please see Section F – Appendix B for the Photographs.

### **8. FACILITY ILLUSTRATION**

A detailed illustration of the activity must be provided at a scale of 1:200 for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity to be attached in the appropriate Appendix.

Please see Section F – Appendix C for the Facility Illustration.

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT (PREFERRED SITE – ALTERNATIVE 1)

**Note:** Complete Section B for the proposal and alternative(s) (if necessary)

**Instructions for completion of Section B for linear activities**

- 1) For linear activities (pipelines etc) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
- 2) Indicate on a plan(s) the different environments identified
- 3) Complete Section B for each of the above areas identified
- 4) Attach to this form in a chronological order
- 5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section B has been duplicated for sections of the route  times

**Instructions for completion of Section B for location/route alternatives**

- 1) For each location/route alternative identified the entire Section B needs to be completed
- 2) Each alternative location/route needs to be clearly indicated at the top of the next page
- 3) Attach the above documents in a chronological order

Section B has been duplicated for location/route alternatives  times (complete only when appropriate)

**Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application**

Section B is to be completed and attachments order in the following way

- All significantly different environments identified for Alternative 1 is to be completed and attached in a chronological order; then
- All significantly different environments identified for Alternative 2 is to be completed and attached chronological order, etc.

Section B - Section of Route  (complete only when appropriate for above)

Section B – Location/route Alternative No.  (complete only when appropriate for above)

**1. PROPERTY DESCRIPTION**

**Property description:**  
(Including Physical Address and Farm name, portion etc.)

Alternative Site 1 (Preferred Site):  
Erven 757 & 758 of Boksburg East.

**2. ACTIVITY POSITION**

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

<b>Alternative:</b> Preferred Site – Alternative 1	<b>Latitude (S):</b> 26° 13' 3,10"	<b>Longitude (E):</b> 28° 15' 15,17"
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**In the case of linear activities:**

<b>Alternative:</b>	<b>Latitude (S):</b>	<b>Longitude (E):</b>
<input type="checkbox"/> Starting point of the activity	o	o
<input type="checkbox"/> Middle point of the activity	o	o
<input type="checkbox"/> End point of the activity	o	o

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Appendix

Addendum of route alternatives attached N/A

The 21 digit Surveyor General code of each cadastral land parcel

PROPOSAL																				
<b>ALT. 1</b>	<b>T</b>	<b>0</b>	<b>I</b>	<b>R</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>5</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
and	<b>T</b>	<b>0</b>	<b>I</b>	<b>R</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>5</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>etc.</b>																				

**3. GRADIENT OF THE SITE**

Indicate the general gradient of the site.

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
------	-------------	-------------	-------------	--------------	-------------	------------------

**4. LOCATION IN LANDSCAPE**

Indicate the landform(s) that best describes the site.

Ridgeline	Plateau	Side slope of hill/ridge	Valley	Plain	<del>Undulating plain/low hills</del>	River front
-----------	---------	--------------------------	--------	-------	---------------------------------------	-------------

**5. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE**

a) Is the site located on any of the following?

Shallow water table (less than 1.5m deep)  
Dolomite, sinkhole or doline areas

YES	<del>NO</del>
YES	<del>NO</del>



- Seasonally wet soils (often close to water bodies)
- Unstable rocky slopes or steep slopes with loose soil
- Dispersive soils (soils that dissolve in water)
- Soils with high clay content (clay fraction more than 40%)
- Any other unstable soil or geological feature
- An area sensitive to erosion

YES	<del>NO</del>
YES	<del>NO</del>
YES	<del>NO</del>
YES	<del>NO</del>
YES	<del>NO</del>
YES	<del>NO</del>

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

b) are any caves located on the site(s)

YES	<del>NO</del>
-----	---------------

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

**Latitude (S):**

**Longitude (E):**

o	o
---	---

c) are any caves located within a 300m radius of the site(s)

YES	<del>NO</del>
-----	---------------

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

**Latitude (S):**

**Longitude (E):**

o	o
---	---

d) are any sinkholes located within a 300m radius of the site(s)

YES	<del>NO</del>
-----	---------------

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

**Latitude (S):**

**Longitude (E):**

o	o
---	---

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department

## 6. AGRICULTURE

Does the site have high potential agriculture as contemplated in the Gauteng Agricultural Potential Atlas (GAPA 4)?

YES	<del>NO</del>
-----	---------------

**Please note:** The Department may request specialist input/studies in respect of the above.

## 7. GROUNDCOVER

To be noted that the location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Indicate the types of groundcover present on the site and include the estimated percentage found on site

Natural veld - good condition % = 35	Natural veld with scattered aliens % = 35	Natural veld with heavy alien infestation % = 10	Veld dominated by alien species % = 0	Landscaped (vegetation) % = 0
---	--	---	--	----------------------------------

Sport field % = 0	Cultivated land % = 0	Paved surface (hard landscaping) % = 0	Building or other structure % = 5	Bare soil % = 15
----------------------	--------------------------	--	---	---------------------

**Please note:** The Department may request specialist input/studies depending on the nature of the groundcover and potential impact(s) of the proposed activity/ies.

Are there any rare or endangered flora or fauna species (including red list species) present on the site

YES	<del>NO</del>
-----	---------------

If YES, specify and explain:

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban area as defined in the Regulations) or within 600m (if outside the urban area as defined in the Regulations) radius of the site.

YES	<del>NO</del>
-----	---------------

If YES, specify and explain:

Are there any special or sensitive habitats or other natural features present on the site?

YES	<del>NO</del>
-----	---------------

If YES, specify and explain:

Was a specialist consulted to assist with completing this section

<del>YES</del>	NO
----------------	----

If yes complete specialist details

Name of the specialist:

Andrew Husted

Qualification(s) of the specialist:

- MSc (University of Johannesburg) – Aquatic Health.
- BSc Honours (Rand Afrikaans University) – Aquatic Health
- BSc Natural Science
- Pr Sci Nat (400213/11)
- Certificate of Competence: Mondi Wetland Assessments
- Certificate of Competence: Wetland WET-Management
- SASS 5 (Expired) – Department of Water Affairs and Forestry for the River Health Programme
- EcoStatus application for rivers and streams

Postal address:

Postal code:

Telephone:

E-mail:

<input type="text"/>	Cell: +27 81 319 1225
<i>andrew@thebiodiversitycompany.com</i>	Fax: <input type="text"/>

Cell: +27 81 319 1225

Fax:

Are any further specialist studies recommended by the specialist?

YES	<del>NO</del>
-----	---------------

If YES, specify:

If YES, is such a report(s) attached?

YES	NO
-----	----

If YES list the specialist reports attached below

Signature of specialist:

Date:

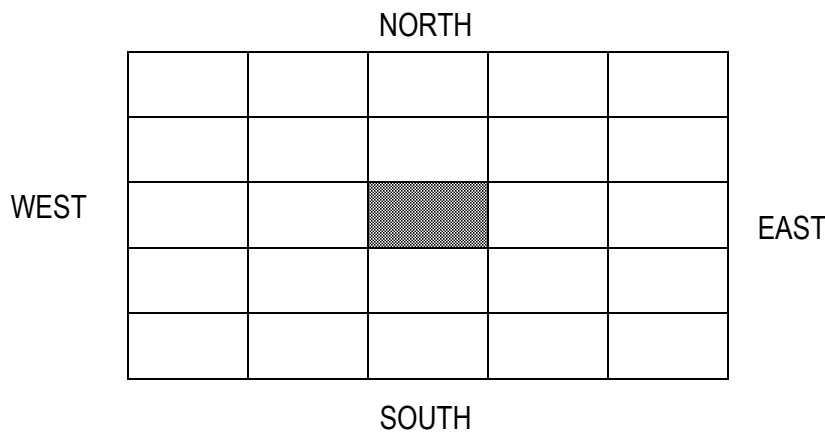
**Please note;** If more than one specialist was consulted to assist with the filling in of this section then this table must be appropriately duplicated

### 8. LAND USE CHARACTER OF SURROUNDING AREA

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

<del>1. Vacant land</del>	<del>2. River, stream, wetland</del>	3. Nature conservation area	4. Public open space	5. Koppie or ridge
6. Dam or reservoir	7. Agriculture	8. Low density residential	9. Medium to high density residential	10. Informal residential
11. Old age home	12. Retail	<del>13. Offices</del>	14. Commercial & warehousing	<del>15. Light industrial</del>
16. Heavy industrial <sup>AN</sup>	17. Hospitality facility	18. Church	<del>19. Education facilities</del>	20. Sport facilities
21. Golf course/polo fields	22. Airport <sup>N</sup>	23. Train station or shunting yard <sup>N</sup>	<del>24. Railway line<sup>N</sup></del>	25. Major road (4 lanes or more) <sup>N</sup>
26. Sewage treatment plant <sup>A</sup>	27. Landfill or waste treatment site <sup>A</sup>	28. Historical building	29. Graveyard	30. Archeological site
31. Open cast mine	32. Underground mine	33. Spoil heap or slimes dam <sup>A</sup>	34. Small Holdings	
Other land uses (describe):				

**NOTE: Each block represents an area of 250m X 250m, if your proposed development is larger than this please use the appropriate number and orientation of hashed blocks**



**Note:** More than one (1) Land-use may be indicated in a block

**Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an “A” and with an “N” respectively.

Have specialist reports been attached  
If yes indicate the type of reports below

<input type="checkbox"/> YES	<input type="checkbox"/> NO
------------------------------	-----------------------------

Terrestrial Ecology Compliance Statement
Freshwater Ecology Compliance Statement
Agricultural Compliance Statement
Visual Impact Assessment Report
Heritage Impact Assessment Report
Paleontological Impact Assessment Report
Social Impact Assessment Compliance Report

## 9. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the area and the community condition as baseline information to assess the potential social, economic and community impacts.

Refer to Section 3.2 of the Social Impact Statement prepared by Equispectives Research Consulting Services in October 2021 (Section F Appendix G – Annexure G)
--

## 10. CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposal or alternatives, then you are requested to furnish this Department with written comment from the South African Heritage Resource Agency (SAHRA) – Attach comment in appropriate annexure

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of a site-
  - (i) exceeding 5 000 m<sup>2</sup> in extent; or
  - (ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m<sup>2</sup> in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Are there any signs of culturally (aesthetic, social, spiritual, environmental) or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?

YES	NO
-----	----

If YES, explain:

Alternative 2 Site consists of a refuse midden/ash dump with late 19th to mid-20th century cultural material.

If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

---

Background research indicated that there are some cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area fall. Only 1 site was identified and recorded during the field assessment in the study area. This site is fairly extensive and consists of a refuse midden/ash dump with late 19th to mid-20th century cultural material. It is located in the so-called Alternative 2 development footprint portion. No other sites, features or material of archaeological and/or historical origin or significance were found in the study area (Alternatives 1 & 3 footprints). Informal dumping of building rubble and other household residential refuse occurs throughout the area and many of the remains identified here were brought into the area from other locations. According to Mr. Louis de Kok of Unilever the illegal/informal dumping of material has occurred here for some time and that no other historical sites or structures are known to be present in the area. This includes graves.

The ash/refuse dump site is fairly extensive and consists of burnt coal and slag dumped over a large area, containing metal, glass, porcelain and plastic artifacts, as well as bone (faunal remains) in between this material. The porcelain and glass pieces can be dated to between the late 19th to mid-20th centuries and these are similar to material found by the author of this report on similar sites in Gauteng.

Although it is not known if this site and the material found here is in a primary context or if the material was dumped here recently from another location, the site is still fairly significant in terms of its size and the fact that a fair amount of identifiable and dateable cultural material is present here. It is therefore, from an historical-archaeological perspective recommended that if the site can be avoided by the proposed development that this should be considered. Alternatively the site should be investigated through Phase 2 Archaeological mitigation that would include excavations to recover cultural material from the site.

It also needs to be noted that although all efforts are made to locate, identify and record all possible cultural heritage sites and features (including archaeological remains) there is always a possibility that some might have been missed as a result of grass cover and other factors. The subterranean nature of these resources (including low stone-packed or unmarked graves) should also be taken into consideration. Should any previously unknown or invisible sites, features or material be uncovered during any development actions then an expert should be contacted to investigate and provide recommendations on the way forward.

It is therefore recommended that based on this Basic Heritage Assessment that the development of the Unilever Solar PV facility on their Boksburg East property be allowed to continue. The location of a possible in situ historical ash/refuse dump on the Alternative 2 portion does however make this the least viable location for the development and if possible Alternatives 1 & 3 should be considered from a Cultural Heritage (archaeological and/or historical) perspective.

Refer to Appendix G – Annexure E for the full report

Will any building or structure older than 60 years be affected in any way?  
 Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?  
 If yes, please attached the comments from SAHRA in the appropriate Appendix

YES	<del>NO</del>
YES	<del>NO</del>

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT (ALTERNATIVE 2)

**Note:** Complete Section B for the proposal and alternative(s) (if necessary)

**Instructions for completion of Section B for linear activities**

- 1) For linear activities (pipelines etc) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
- 2) Indicate on a plan(s) the different environments identified
- 3) Complete Section B for each of the above areas identified
- 4) Attach to this form in a chronological order
- 5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section B has been duplicated for sections of the route  times

**Instructions for completion of Section B for location/route alternatives**

- 1) For each location/route alternative identified the entire Section B needs to be completed
- 2) Each alternative location/route needs to be clearly indicated at the top of the next page
- 3) Attach the above documents in a chronological order

Section B has been duplicated for location/route alternatives  times (complete only when appropriate)

**Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application**

Section B is to be completed and attachments order in the following way

- ▣ All significantly different environments identified for Alternative 1 is to be completed and attached in a chronological order; then
- ▣ All significantly different environments identified for Alternative 2 is to be completed and attached chronological order, etc.

Section B - Section of Route  (complete only when appropriate for above)

Section B – Location/route Alternative No.  (complete only when appropriate for above)

**1. PROPERTY DESCRIPTION**

**Property description:**  
(Including Physical Address and Farm name, portion etc.)

Alternative Site 2:  
Erven 757 of Boksburg East.

**2. ACTIVITY POSITION**

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.





Any other unstable soil or geological feature  
An area sensitive to erosion

YES	<del>NO</del>
YES	<del>NO</del>

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

b) are any caves located on the site(s)

YES	<del>NO</del>
-----	---------------

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

**Latitude (S):** **Longitude (E):**

°	°
---	---

c) are any caves located within a 300m radius of the site(s)

YES	<del>NO</del>
-----	---------------

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

**Latitude (S):** **Longitude (E):**

°	°
---	---

d) are any sinkholes located within a 300m radius of the site(s)

YES	<del>NO</del>
-----	---------------

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

**Latitude (S):** **Longitude (E):**

°	°
---	---

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department

## 6. AGRICULTURE

Does the site have high potential agriculture as contemplated in the Gauteng Agricultural Potential Atlas (GAPA 4)?

YES	<del>NO</del>
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Are there any rare or endangered flora or fauna species (including red list species) present on the site

YES	<del>NO</del>
-----	---------------

If YES, specify and explain:

--

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban area as defined in the Regulations) or within 600m (if outside the urban area as defined in the Regulations) radius of the site.

YES	<del>NO</del>
-----	---------------

If YES, specify and explain:

--

Are there any special or sensitive habitats or other natural features present on the site?

YES	<del>NO</del>
-----	---------------

If YES, specify and explain:

--

Was a specialist consulted to assist with completing this section

<del>YES</del>	NO
----------------	----

If yes complete specialist details

Name of the specialist:

Andrew Husted

Qualification(s) of the specialist:

- MSc (University of Johannesburg) – Aquatic Health.
- BSc Honours (Rand Afrikaans University) – Aquatic Health
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- EcoStatus application for rivers and streams

Postal address:

Postal code:

Telephone:

E-mail:

*andrew@thebiodiversitycompany.com*

Cell: +27 81 319 1225

Fax:

Are any further specialist studies recommended by the specialist?

YES	<del>NO</del>
-----	---------------

If YES, specify:

--

If YES, is such a report(s) attached?

YES	NO
-----	----

If YES list the specialist reports attached below

--

Signature of specialist:

\_\_\_\_\_

Date:

--

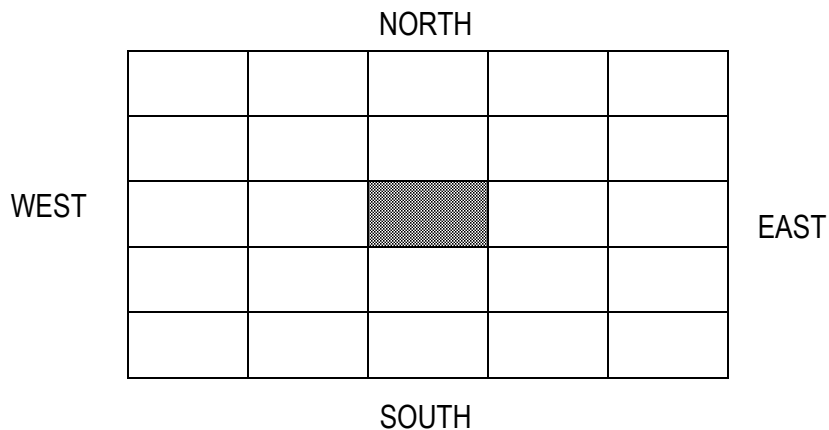
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Have specialist reports been attached  
If yes indicate the type of reports below

YES	NO
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YES	NO
-----	----

If YES, explain:

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Refer to Section F Appendix G – Annexure E for the full report

Will any building or structure older than 60 years be affected in any way?  
 Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?  
 If yes, please attached the comments from SAHRA in the appropriate Appendix

YES	<del>NO</del>
YES	<del>NO</del>

SECTION C: PUBLIC PARTICIPATION (SECTION 41)

1. The Environmental Assessment Practitioner must conduct public participation process in accordance with the requirement of the EIA Regulations, 2014.

## 2. LOCAL AUTHORITY PARTICIPATION

**Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least thirty (30) calendar days before the submission of the application to the competent authority.**

Was the draft report submitted to the local authority for comment?

<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
---	-----------------------------

If yes, has any comments been received from the local authority?

<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
------------------------------	--

If "YES", briefly describe the comment below (also attach any correspondence to and from the local authority to this application):

--

If "NO" briefly explain why no comments have been received or why the report was not submitted if that is the case.

This is the Draft Report submission to the local authority requesting comments.
---

## 3. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the activity, site or property, such as servitude holders and service providers, should be informed of the application at least **thirty (30) calendar days** before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
---	-----------------------------

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

Pending receipt of the Background Information Document (BID), a Department of Water and Sanitation (DWS) Official, sent comments acknowledging receipt of the document and said that they will not be able to comment until they received a full report with further details.
---

See Section C – Appendix 4 – Copies of Comments Received.
---

If "NO" briefly explain why no comments have been received

--

## 4. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation process is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees and ratepayers associations. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was flawed.

The EAP must record all comments and respond to each comment of the public / interested and affected party before the application report is submitted. The comments and responses must be captured in a Comments and Responses Report as prescribed in the regulations and be attached to this application.

Please refer to Section F - Appendix E (1) for the approved Public Participation Process (PPP) Plan and Section C – Appendix 6 for the Comments and Response Report.

## 5. APPENDICES FOR PUBLIC PARTICIPATION

All public participation information is to be attached in the appropriate Appendix. The information in this Appendix is to be ordered as detailed below

Appendix 1 – Proof of site notice

Appendix 2 – Written notices issued as required in terms of the regulations

Appendix 3 – Proof of newspaper advertisements

Appendix 4 – Communications to and from interested and affected parties

Appendix 5 – Minutes of any public and/or stakeholder meetings

Appendix 6 - Comments and Responses Report

Appendix 7 –Comments from I&APs on Basic Assessment (BA) Report

Appendix 8 –Comments from I&APs on amendments to the BA Report

Appendix 9 – Copy of the register of I&APs

### SECTION D: RESOURCE USE AND PROCESS DETAILS

**Note:** Section D is to be completed for the proposal and alternative(s) (if necessary)

#### Instructions for completion of Section D for alternatives

- 1) For each alternative under investigation, where such alternatives will have different resource and process details (e.g. technology alternative), the entire Section D needs to be completed
- 4) Each alternative needs to be clearly indicated in the box below
- 5) Attach the above documents in a chronological order

Section D has been duplicated for alternatives

**"insert No. of duplicates"**

times

(complete only)

when appropriate)

Section D Alternative No.

Both Alternatives

(complete only when appropriate for above)

## 1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

### Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES	NO
-----	----



If yes, what estimated quantity will be produced per month?

0.08m<sup>3</sup>

How will the construction solid waste be disposed of (describe)?

An integrated waste management approach will be implemented that is based on waste minimisation and will incorporate reduction, recycling, re-use and disposal where appropriate. The solid waste, which will not be recycled, will be disposed of at a landfill licensed in terms of section 20 (b) of the National Environmental Management Waste Act, 2008 (Act No. 59 of 2008).

Where will the construction solid waste be disposed of (describe)?

At the municipal landfill site.

Will the activity produce solid waste during its operational phase?

YES	<del>NO</del>
m <sup>3</sup>	

If yes, what estimated quantity will be produced per month?

How will the solid waste be disposed of (describe)?

Has the municipality or relevant service provider confirmed that sufficient air space exists for treating/disposing of the solid waste to be generated by this activity?

YES	<del>NO</del>
-----	---------------

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

Communication has been made to Ekurhuleni Officials to enquire about the space and/or accommodation of the development's waste at the Municipal's Disposal Facilities.

Please refer to Section F - Appendix E (2) for the communication with the officials.

**Note:** If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?

YES	<del>NO</del>
-----	---------------

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?

YES	<del>NO</del>
-----	---------------

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Describe the measures, if any, that will be taken to ensure the optimal reuse or recycling of materials:

Not applicable.

### Liquid effluent (other than domestic sewage)

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

YES	<del>NO</del>
-----	---------------

If yes, what estimated quantity will be produced per month?

m<sup>3</sup>

If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)?

YES	NO
-----	----

Will the activity produce any effluent that will be treated and/or disposed of on site?

Yes	<del>NO</del>
-----	---------------

If yes, what estimated quantity will be produced per month?

m <sup>3</sup>	
----------------	--

If yes describe the nature of the effluent and how it will be disposed.

--

Note that if effluent is to be treated or disposed on site the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA

Will the activity produce effluent that will be treated and/or disposed of at another facility?

YES	<del>NO</del>
-----	---------------

If yes, provide the particulars of the facility:

Facility name:			
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

N/A .
Waste water will not be reused or recycled.

### Liquid effluent (domestic sewage)

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?

YES	<del>NO</del>
-----	---------------

If yes, what estimated quantity will be produced per month?

m <sup>3</sup>	
----------------	--

If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the domestic effluent to be generated by this activity(ies)?

YES	NO
-----	----

Will the activity produce any effluent that will be treated and/or disposed of on site?

YES	<del>NO</del>
-----	---------------

If yes describe how it will be treated and disposed off.

--

### Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

YES	<del>NO</del>
YES	NO

If yes, is it controlled by any legislation of any sphere of government?

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

The emissions will be that of the exhaust fumes from the construction vehicles bringing in material and equipment to the site. The concentrations are unknown at this time.
---

## 2. WATER USE

Indicate the source(s) of water that will be used for the activity

<del>municipal</del>	Directly from water board	groundwater	river, stream, dam or lake	other	the activity will not use water
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If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate

the volume that will be extracted per month:

liters

If Yes, please attach proof of assurance of water supply, e.g. yield of borehole, in the appropriate Appendix

Does the activity require a water use permit from the Department of Water Affairs?

YES	NO
-----	----

If yes, list the permits required

If yes, have you applied for the water use permit(s)?

YES	NO
-----	----

If yes, have you received approval(s)? (attached in appropriate appendix)

YES	NO
-----	----

## 3. POWER SUPPLY

Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

Eskom

If power supply is not available, where will power be sourced from?

Power supply is available.

## 4. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

N/A.

The aim of the project is to ensure energy efficiency and that the applicant has back up in times of loadshedding.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

N/A.

## SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts as well as the impacts of not implementing the activity (Section 24(4)(b)(i)).

### 1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

None at this stage of the application.

Summary of response from the practitioner to the issues raised by the interested and affected parties (including the manner in which the public comments are incorporated or why they were not included) (A full response must be provided in the Comments and Response Report that must be attached to this report):

N/A.

### 2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

#### Proposal

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented

#### Alternative 1

(REPEAT THIS TABLE FOR EACH ALTERNATIVE)

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented


**No Go**

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

Terrestrial Ecology Compliance Statement
Freshwater Ecology Compliance Statement
Agricultural Compliance Statement
Visual Impact Assessment Report
Heritage Impact Assessment Report
Paleontological Impact Assessment Report
Social Impact Assessment Compliance Report

Describe any gaps in knowledge or assumptions made in the assessment of the environment and the impacts associated with the proposed development.

Take directly form the IA.
----------------------------

**3. IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING AND CLOSURE PHASE**

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

**Proposal**

Potential impacts:	Significance rating of impacts(positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented


**Alternative 1**

Potential impacts:	Significance rating of impacts(positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented

**Alternative 2**

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

N/A

Where applicable indicate the detailed financial provisions for rehabilitation, closure and ongoing post decommissioning management for the negative environmental impacts.

N/A

**4. CUMULATIVE IMPACTS**

Describe potential impacts that, on their own may not be significant, but is significant when added to the impact of other activities or existing impacts in the environment. Substantiate response:

Refer to Section ??? of the Impact Assessment on Section F – Appendix I(2).

## 5. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposal and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

### Proposal

#### Agricultural Potential

One soil form was identified within the assessment corridor, namely the Glencoe soil form. The land capability sensitivities (DAFF, 2017) indicate land capabilities with "Moderate" sensitivities, which correlates with the findings from the baseline assessment.

The regulated area is not associated with any arable soils, predominantly due to the climate, which in itself limits crop production significantly. It is the specialist's opinion that the proposed developments will have no impacts on the agricultural production ability of the land. Therefore, the proposed development may be favourably considered. It is worth noting that all three of the considered alternatives are equal in regard to agricultural sensitivity. Therefore, development may proceed on any of these sites.

#### Aquatic Biodiversity

Proposed activities will disturb the artificial watercourse areas through direct impacts during construction activities during the installation of the panels and access road(s) and additional infrastructure. However, the impacts are rated as low and considered localised. Based on survey findings the specialist agrees with the "Low" aquatic sensitivity as per the National Web based Environmental Screening Tool due to the unnatural drainage systems, and low and localised impacts associated with the project. Provided prescribed mitigation measures and recommendations are implemented, it is the opinion of the specialist that there are no fatal flaws for the proposed activities.

#### Palaeontology

The development footprint is situated on the Vryheid Formation (Pv) of the Ecca Group, Karoo Supergroup with a Very High palaeontological sensitivity. The nature of the impact is the destruction of Fossil Heritage. Loss of fossil heritage will have a negative impact. The extent of the impact only extends in the region of the development activity footprint and may include transport routes. The expected duration of the impact is assessed as potentially permanent. The intensity/magnitude of the impact is high as it is destructive. The probability of the impact occurring will be definite and will occur regardless of preventative measures.

In the absence of mitigation procedures (should fossil material be present within the affected area) the damage or destruction of any palaeontological materials will be irreversible. With Mitigation the impact will be moderate and the cumulative impact is low. Impacts on palaeontological heritage during the construction and preconstruction phase could potentially occur and is regarded as having a high possibility.

#### Socio-economic

The site for proposed PV facility is in an urban area. Very few impacts from a social nature are

expected resulting from the construction and operation of a solar facility on the site. The following measures should be considered:

- Managing the visual nuisance impact (glare) through erecting visual barriers such as trees. This should be done in consultation with the potentially affected parties.
- Implement a grievance mechanism for the development;
- Compile a strategy for road safety that avoid construction traffic during peak traffic and emphasises safe and responsible road use.
- Compile a strategy for community safety during construction, especially taking into consideration the girls' school opposite the road.
- Implement security measures on site to protect construction material and limit access to property.

Given the positive impact the development will have in the sense that it will use renewable energy, avoiding manufacturing delays through the supply of electricity and the reducing dependency on coal, from a social perspective it is recommended that the project proceeds. From a social perspective there is not much differentiation between the sites, although Alternative 2 might be the best option from a visual nuisance and safety perspective. Any of the other sites will also be acceptable should they be indicated as more preferable based on the majority of specialist studies.

#### Terrestrial Biodiversity including Plant & Animal Species

The high terrestrial / biodiversity theme species sensitivity is disputed. Although the development will impact on areas classified as ESAs, CBAs and a VU ecosystem, the value of the site is not considered exceptional and the location and context of the site, suggest that these impacts are likely to be acceptable and would not significantly restrict future conservation expansion in the Gauteng.

Although the Gauteng C-Plan indicates that alternative 2 and alternative 3 areas overlap with CBA: Important, the field assessment suggests that these areas are not likely to be of high significance for broad-scale ecological processes and as the site is relatively small and already almost surrounded by other approved developments, it is not likely to be viewed as a current priority for formal conservation expansion or any other form of conservation.

It is the opinion of the ecologist that either alternative 1 or alternative 2 can be considered for infrastructure placement due to being the most degraded, whereas alternative 3 is the most natural and hosts a SSC. However, although alternative 1 is the most transformed and degraded, from an avifaunal perspective it presents some issues regarding the (closest) proximity to the seepage wetland. Collisions are thought to arise when birds (particularly waterbirds) mistake the panels for waterbodies, known as the "lake effect", or when migrating or dispersing birds become disorientated by the polarised light reflected by the panels. This "lake-effect" hypothesis has not been substantiated or refuted to date. Thus alternative 2 may be considered more favourable.

#### **Alternative 1**

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**Alternative 2**

**No-go (compulsory)**

Refer to Section ??? of the Impact Assessment on Section F – Appendix I(2).

**6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE**

For proposal:

For alternative:

Having assessed the significance of impacts of the proposal and alternative(s), please provide an overall summary and reasons for selecting the proposal or preferred alternative.


**7. SPATIAL DEVELOPMENT TOOLS**

Indicate the application of any spatial development tool protocols on the proposed development and the outcome thereof.

The GIS specialist used spatial development tools to create the layout and sensitivity maps.

**8. RECOMMENDATION OF THE PRACTITIONER**

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the Environmental Assessment Practitioner as bound by professional ethical standards and the code of conduct of EAPASA).

<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
---	-----------------------------

If "NO", indicate the aspects that require further assessment before a decision can be made (list the aspects that require further assessment):


If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

Refer to the Environmental Management Programme on Section F – Appendix H

**9. THE NEEDS AND DESIREBILITY OF THE PROPOSED DEVELOPMENT** (as per notice 792 of 2012, or the updated version of this guideline)

Refer to Section F – Appendix I(3) for the full development Need and Desirability Section.
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**10. THE PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED**  
*(CONSIDER WHEN THE ACITIVTY IS EXPECTED TO BE CONCLUDED)*

Two years from date of authorization.
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**11. ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr)** (must include post construction monitoring requirements and when these will be concluded.)

If the EAP answers "Yes" to Point 7 above then an EMP is to be attached to this report as an Appendix

EMPr attached

Yes
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## SECTION F: APPENDIXES

The following appendixes must be attached as appropriate (this list is inclusive, but not exhaustive):

It is required that if more than one item is enclosed that a table of contents is included in the appendix

Appendix A: Site plan(s) – *(must include a scaled layout plan of the proposed activities overlain on the site sensitivities indicating areas to be avoided including buffers)*

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Route position information

Appendix E: Public participation information

Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information

Appendix G: Specialist reports

Appendix H: EMPr

Appendix I: Other information

## CHECKLIST

To ensure that all information that the Department needs to be able to process this application, please check that:

- Where requested, supporting documentation has been attached;
- All relevant sections of the form have been completed.