



environment, forestry & fisheries

Department:
Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Environment House · 473 Steve Biko Road, Arcadia · PRETORIA

DEFF Reference: 14/12/16/3/3/1/2230

Enquiries: Mmamohale Kabasa

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Mrs Justine Wyngaardt
Eskom Holdings SOC Limited
PO Box 222
BRACKENFELL
7561

Telephone Number: (021) 980 3822
Email Address: WyngaaJO@eskom.co.za

PER EMAIL / MAIL

Dear Mrs Wyngaardt

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED: FOR THE CONSTRUCTION OF A 20MW BATTERY ENERGY STORAGE SYSTEM (BESS) AT THE ESKOM GRAAFWATER SUBSTATION ON PORTION 25 OF THE FARM BUEROSKRAAL 220 NEAR THE TOWN GRAAFWATER WITHIN THE CEDERBERG LOCAL MUNICIPALITY IN THE WESTERN CAPE PROVINCE

With reference to the above application, please be advised that the Department has decided to grant authorisation. The Environmental Authorisation (EA) and reasons for the decision are attached herewith.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended (the EIA Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the decision as well as the provisions regarding the submission of appeals that are contained in the Regulations.

In terms of the Promotion of Administrative Justice Act, Act No. 3 of 2000, you are entitled to the right to fair, lawful and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further your attention is drawn to the provisions of the Protection of Personal Information Act, Act No. 4 of 2013 which stipulates that the Department should conduct itself in a responsible manner when collecting, processing, storing and sharing an individual or another entity's personal information by holding the Department accountable should the Department abuses or compromises your personal information in any way.

Your attention is drawn to Chapter 2 of the National Environmental Management Act, Act No. 107 of 1998 National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribe the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

M.S.

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

The Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appeals@environment.gov.za;

By hand: Environment House
473 Steve Biko
Arcadia
Pretoria
0083; or

By post: Private Bag X447
Pretoria
0001

Please note that in terms of Section 43(7) of the National Environmental Management Act, Act No. 107 of 1998, as amended, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appeals@environment.gov.za.

Yours faithfully



Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environment, Forestry and Fisheries

Date: 08/03/2021

cc:	Ms Tebogo Mapinga	Zitholele Consulting (Pty) Ltd	Email: tebogom@zitholele.co.za
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environment, forestry & fisheries

Department:
Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 25 of the Environmental Impact Assessment Regulations, 2014, as amended.

The 20MW Battery Energy Storage System (BESS) at the Eskom Graafwater Substation on Portion 25 of the Farm Bueroskraal 220 near the town Graafwater within the Cederberg Local Municipality in the Western Cape Province

West Coast District Municipality

Authorisation register number:	14/12/16/3/3/1/2230
Last amended:	First issue
Holder of authorisation:	Eskom Holdings SOC Ltd
Location of activity:	Portion 25 of the Farm Bueroskraal 220 Cederberg Local Municipality West Coast District Municipality Western Cape Province.

This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

M.S

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this Environmental Authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this Environmental Authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, Act No. 107 of 1998, as amended and the EIA Regulations, 2014, as amended.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment Regulations, 2014, as amended, the Department hereby authorises –

ESKOM HOLDINGS SOC LTD

(hereafter referred to as the **holder of the authorisation**)

with the following contact details –

Mrs Justine Wyngaardt

PO Box 222

BRACKENFELL

7561

Telephone Number: (021) 980 3822

Cell: (082) 938 3479

Email Address: WyngaaJO@eskom.co.za

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1 of the EIA Regulations, 2014 as amended:

Activity number	Activity description
<p><u>Listing Notice 1 Item 14:</u></p> <p><i>"The development and related operations of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres."</i></p>	<p>The proposed development entails the storage and handling of dangerous goods where the storage contained will have a combined capacity of 80 cubic metres or more and not exceeding 500 cubic metres. The solid state (Lithium-Ion Batteries) utilizes both lithium and heavy metals (typically Cobalt or Manganese) in the reaction required to store energy. The chemical composition of these types of technologies is considered hazardous, containing toxic materials. All the batteries will be containerized and makes provision for secondary containment to accommodate any spill as a result of normal operation and maintenance.</p>

as described in the Basic Assessment Report (BAR) dated November 2020 at:

SG 21 Code

C	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	5
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Battery Storage area A	Latitude	Longitude
	32° 10' 56.01" S	18° 36' 02.08" E
	32° 10' 55.57" S	18° 36' 02.06" E
	32° 10' 55.62" S	18° 35' 59.99" E
	32° 10' 56.08" S	18° 36' 00.02" E
Batter Storage area A Central Co-ordinates	32° 10' 55.81" S	18° 36' 01.00" E
Battery Storage area B	32° 10' 56.68" S	18° 36' 02.11" E
	32° 10' 56.21" S	18° 36' 02.09" E

	32° 10' 56.29" S	18° 36' 00.03" E
	32° 10' 56.78" S	18° 36' 00.08" E
Batter Storage area B Central Co-ordinates	32° 10' 56.52" S	18° 36' 01.07" E
Battery Storage area C	32° 10' 57.82" S	18° 35' 58.98" E
	32° 10' 57.83" S	18° 35' 58.41" E
	32° 10' 56.84" S	18° 35' 58.37" E
	32° 10' 56.83" S	18° 35' 58.95" E
Batter Storage area C Central Co-ordinates	32° 10' 57.33" S	18° 35' 58.67" E
Battery Storage area D	32° 10' 57.54" S	18° 35' 57.97" E
	32° 10' 57.57" S	18° 35' 57.43" E
	32° 10' 56.20" S	18° 35' 57.34" E
	32° 10' 56.18" S	18° 35' 57.64" E
Batter Storage area D Central Co-ordinates	32° 10' 56.86" S	18° 35' 57.64" E
Temporary Laydown Area Co-ordinates	33° 38' 0.32" S	19° 28'32.84" E
	33° 38' 1.10" S	19° 28'34.47" E
	33° 38' 3.91" S	19° 28'29.91" E
	33° 38' 4.83" S	19° 28'31.59" E
Temporary Laydown Area Central Co-ordinates	33° 38' 2.60" S	19° 28'32.14" E

- for the 20MW Battery Energy Storage System (BESS) at the Eskom Graafwater Substation on Portion 25 of the Farm Bueroskraal 220 near the town Graafwater within the Cederberg Local Municipality in the Western Cape Province, hereafter referred to as "the property".

The facility will comprise the following:

- LV/MV Step-up Transformers: The BESS installation steps up the converters output from a possible 1 400V CA to 1kV via the BESS modules intermediate transformers. It must be noted that the preferred connection voltage is 11kV (or 22k or 33kV dependant on substation MV busbar voltage) but if this is not achievable, alternative voltage levels (e.g., 6.6kV) may be offered. The maximum possible transformer rating using the present methodologies of construction is a 5MVA for voltage ranges 400V/11k, 400/22k or 400/33Kv. Where possible, the BESS containers will be placed on the existing substation platform in front of the substation.
- Concrete foundation.
- Cabling between the battery modules.
- Air conditioners.
- Network integration equipment (e.g. power cables, control cables, isolators, circuit breakers, transformers, etc.) will be required to connect the new BESS to existing infrastructure at the substations.
- Additional fencing may be required, security equipment, lighting, and/or control room upgrades.
- A temporary laydown area and site camp will be required during construction.
- Underground cables connecting the BESS to the substation and feeder bay extensions.
- Storm-water management measures to be implemented on site.
- Lightning masts.

Technical details of the facility:

Component	Description/ Dimensions
Location of the site	Approximately 3.3km from the town of Graafwater and approximately 27.55km from the town of Clanwilliam
SG Codes	C0200000000022000025
Site access	The project site can be accessed off local road, off the R364, south of Graafwater.
Export capacity	Up to 20MW
Proposed technology	A lithium-ion (Li-ion) battery

Conditions of this Environmental Authorisation

Scope of authorisation

1. The 20MW Battery Energy Storage System (BESS) at the Eskom Graafwater Substation on Portion 25 of the Farm Bueroskraal 220 near the town Graafwater within the Cederberg Local Municipality in the Western Cape Province is approved as per the geographic coordinates and technical details cited in the tables above.
2. Authorisation of the activity is subject to the conditions contained in this Environmental Authorisation, which form part of the Environmental Authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this Environmental Authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this Environmental Authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further Environmental Authorisation in terms of the regulations.
6. The holder of an Environmental Authorisation must apply for an amendment of the Environmental Authorisation with the Competent Authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. This activity must commence within a period of ten (10) years from the date of issue of this Environmental Authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for Environmental Authorisation must be made in order for the activity to be undertaken.
8. Construction must be completed within five (05) years of the commencement of the activity on site.
9. Commencement with one activity listed in terms of this Environmental Authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

10. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this Environmental Authorisation, of the decision to authorise the activity.
11. The notification referred to must –
 - 11.1. specify the date on which the authorisation was issued.
 - 11.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 11.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 11.4. give the reasons of the Competent Authority for the decision.

Commencement of the activity

12. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014, and no appeal has been lodged against the decision. In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, Act No. 107 of 1998, as amended will suspend the Environmental Authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

Management of the activity

13. The layout plan confirmed by the EAP in an email dated 12 January 2021 and with an attachment titled Appendix D – Facility Illustration- Optimised and appended to this Environmental Authorisation (Appendix 1) is approved.
14. The Environmental Management Programme (EMPr) submitted as Appendix G of the BAR dated November 2020 and titled *FINAL ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT Proposed Installation of Battery Energy Storage System (BESS) at the Graafwater Substation near Graafwater, Western Cape* is approved.
15. The EMPr must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.

16. Changes to the approved EMPr must be submitted in accordance to the EIA Regulations applicable at the time.
17. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the BAR be discovered.

Frequency and process of updating the EMPr

18. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 25 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
19. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
20. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of the EIA Regulations, 2014 as amended. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
21. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of the EIA Regulations, 2014 as amended. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
22. The holder of the authorisation must apply for an amendment of an EMPr, if such amendment is required before an audit is required. The amendment process is prescribed in Regulation 37 of the EIA Regulations, 2014, as amended. The holder of the authorisation must request comments on the proposed amendments to the impact management outcomes of the EMPr or amendments to the closure objectives of the closure plan from potentially interested and affected parties, including the competent authority, by using any of the methods provided for in the Act for a period of at least 30 days.

Monitoring

23. The holder of the authorisation must appoint an experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the

mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.

- 23.1. The ECO must be appointed before commencement of any authorised activities.
- 23.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
- 23.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
- 23.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Recording and reporting to the Department

24. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department.
25. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.
26. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of the EIA Regulations, 2014 as amended.
27. The holder of the authorisation must, in addition, submit environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
28. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 as amended and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
29. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Notification to authorities

30. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

Operation of the activity

31. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

Site closure and decommissioning

32. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and Competent Authority at that time.

Specific conditions

33. The holder of the EA must decide on the preferred technology or technology mixture and inform this Department prior to commencement of construction.
34. Vegetation clearing must be limited to the required footprint for actual construction works and operational activities. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.
35. No exotic plants may be used for rehabilitation purposes. Only indigenous plants occurring within a ten (10) kilometre radius of the development site must be utilised.
36. Should any archaeological sites, artefacts, paleontological fossils or graves be exposed during construction, work in the immediate vicinity of the find must be stopped, SAHRA must be informed and the services of an accredited heritage professional obtained for an assessment of the heritage resources to be made.
37. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate.

38. Any solid waste, which will not be recycled, must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008). No waste material may be left on site after construction.
39. The recommendations of the EAP in the final BAR dated November 2020 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.

General

40. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
 - 40.1. at the site of the authorised activity;
 - 40.2. to anyone on request; and
 - 40.3. where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
41. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of Environmental Authorisation: 08/03/2021



Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations
Department of Environment, Forestry and Fisheries

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The listed activities as applied for in the application form received on 10 October 2018.
- b) The information contained in the BAR dated November 2020.
- c) The comments received from the Western Cape Department of Environmental Affairs and Development Planning, Heritage Western Cape and interested and affected parties as included in the BAR dated November 2020.
- d) Mitigation measures as proposed in the BAR and the EMPr.
- e) The information contained in the specialist studies contained within the appendices of the BAR dated November 2020 and as appears below:

Title	Prepared by	Date
Ecological Impact Assessment	Dr Mathew Ross of EnviRoss CC	May 2020
Heritage Impact Statement	Jaco van der Walt of HCAC	May 2020
Risk Assessment-Battery Technologies	T Jacobs of Eskom	July 2019

2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The need for the proposed project stems from the provision of electricity to the national grid.
- c) The BAR dated November 2020 identified all legislation and guidelines that have been considered in the preparation of the BAR.
- d) The location of the proposed BESS.
- e) The methodology used in assessing the potential impacts identified in the BAR dated November 2020 and the specialist studies have been adequately indicated.
- f) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 as amended for public involvement.

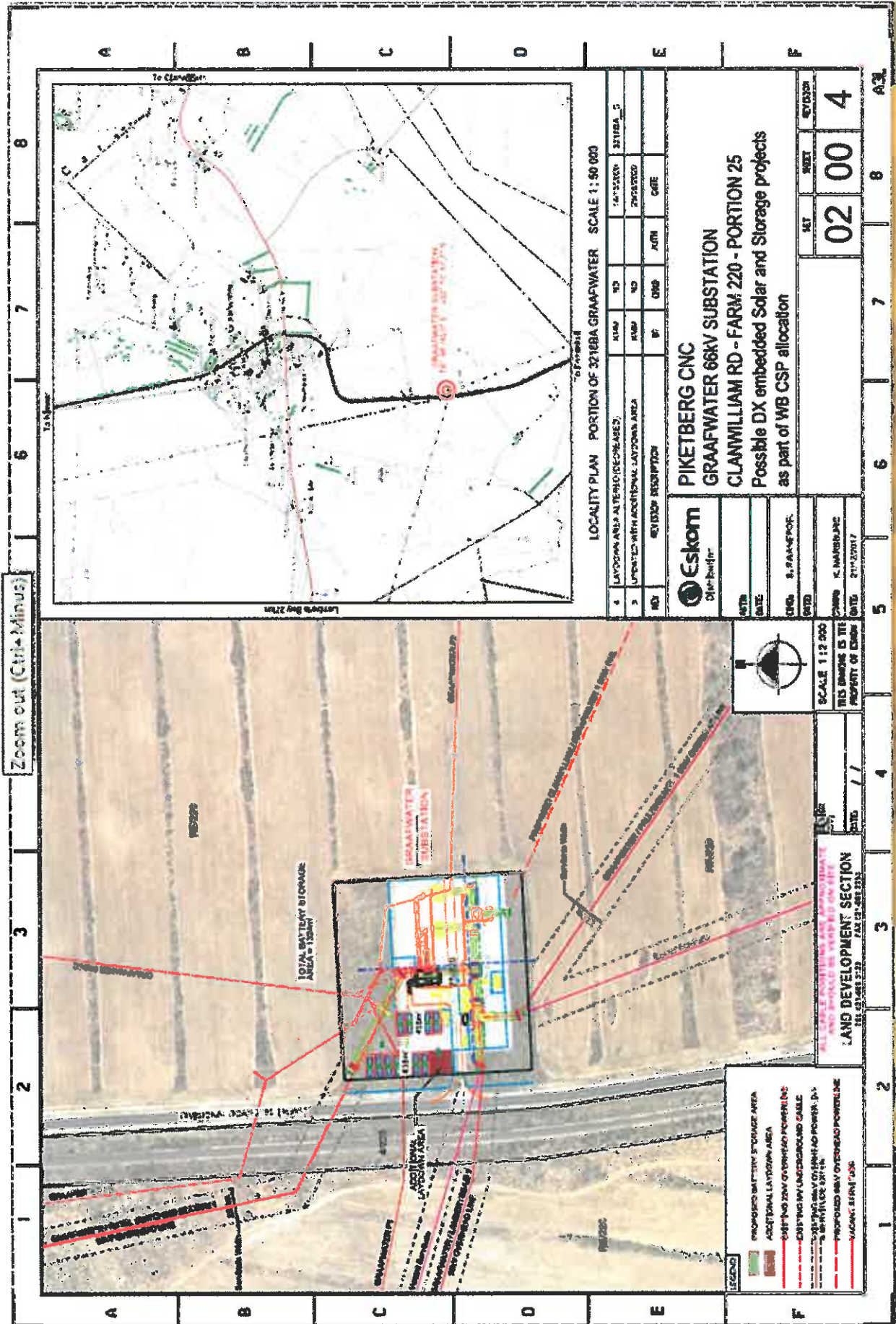
3. Findings

After consideration of the information and factors listed above, the Department made the following findings -

- a) The identification and assessment of impacts are detailed in the BAR dated November 2020 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The information contained in the BAR dated November 2020 is deemed to be accurate and credible.
- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.

Appendix 1: Locality Plan



M.S