PAGE 1 OF 2

Our Ref:

HM/CENTRAL KAROO / BEAUFORT WEST / REM EXTENT OF FARM 423

Case No.: Enquiries: 21091003SB0913E Stephanie Barnardt

Enquiries: E-mail:

stephanie.barnardt@westerncape.gov.za

Tel:

021 483 5959

Jenna Lavin

jenna.lavin@ctsheritage.com



RESPONSE TO NOTIFICATION OF INTENT TO DEVELOP: HIA REQUIRED

In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape
Provincial Gazette 6061, Notice 298 of 2003

NOTIFICATION OF INTENT TO DEVELOP: BULSKOP PV CLUSTER & GRID CONNECTION, REMAINING EXTENT OF FARM 423 BEAUFORT WEST, SUBMITTED IN TERMS OF SECTION 38(1) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)

### CASE NUMBER: 21091003SB0913E

The matter above has reference.

Heritage Western Cape is in receipt of your application for the above matter received. This matter was discussed at the Heritage Officers Meeting held on 27 September 2021.

You are hereby notified that, since there is reason to believe that the proposed Bulskop PV Cluster & Grid Connection, Remaining Extent of Farm 423 Beaufort West will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of Section 38(3) of the NHRA be submitted. Section 38(3) of the NHRA provides

- (3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:
  - (a) The identification and mapping of all heritage resources in the area affected;
  - (b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;
  - (c) an assessment of the impact of the development on such heritage resources;
  - (d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
  - (e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
  - (f) if heritage resources will be adversely affected by the proposed development, The consideration of alternatives; and
  - (g) plans for mitigation of any adverse effects during and after the completion of the proposed development.

(Our emphasis)

This HIA must in addition have specific reference to the following:

- Cultural landscape assessment including Visual impact assessment on Cultural landscape
- Archaeology impact assessment study
- Palaeontological impact assessment study

www.westerncape.gov.za/cas

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Our Ref

HM/CENTRAL KAROO / BEAUFORT WEST / REM EXTENT OF FARM 423 ILifa leMveli leNtshona Koloni

Case No.: **Enquiries:** 

21091003SB0913E Stephanie Barnardt

E-mail

stephanie.barnardt@westerncape.gov.za

Tel:

021 483 5959



Erfenis Wes-Kaap Heritage Western Cape

The HIA must have an overall assessment of the impacts to heritage resources which are not limited to the specific studies referenced above.

The required HIA must have an integrated set of recommendations.

The comments of relevant registered conservation bodies; all Interested and Affected parties; and the relevant Municipality must be requested and included in the HIA where provided. Proof of these requests must be supplied.

Please note, should you require the HIA to be submitted as a Phased HIA, a written request must be submitted to HWC prior to submission. HWC reserves the right to determine whether a phased HIA is acceptable on a case-bycase basis.

If applicable, applicants are strongly advised to review and adhere to the time limits contained the Standard Operational Procedure (SOP) between DEADP and HWC. The SOP can be found using the following link http://www.hwc.org.za/node/293

Kindly take note of the HWC meeting dates and associated agenda closure date in order to ensure that comments are provided within as Reasonable time and that these times are factored into the project timeframes.

HWC reserves the right to request additional information as required. Should you have any further queries, please contact the official above and quote the case number.

Waseefa Dhansay

**Acting Deputy Director** 

Heritage Western Cape Erfenis Wes-Kaap ILifa leMveli leNtshona Koloni

29 SEPT 2021

www.westerncape.gov.za/cas

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PAGE 1 OF 2

Our Ref:

HM/CENTRAL KAROO / BEAUFORT WEST / BULSKOP PV CLUSTER /

FARM 423, PORTION 4 OF FARM 169, PORTION 5 OF FARM 169,

PORTION 1 OF FARM168 AND PORTION 10 OF FARM 170

Case No.:

21091004SB0913E Stephanie Barnardt

Enquiries: Stept E-mail: stept

stephanie.barnardt@westerncape.gov.za

Tel:

021 483 5959

Jenna Lavin

jenna.lavin@ctsheritage.com

RESPONSE TO NOTIFICATION OF INTENT TO DEVELOP: HIA REQUIRED
In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape

Erfenis Wes-Kaap

Heritage Western Cape

Provincial Gazette 6061, Notice 298 of 2003

NOTIFICATION OF INTENT TO DEVELOP: PROPOSED BULSKOP PV CLUSTER FARM 423, "REMAINING EXTENT OF FARM 423, PORTION 4 OF FARM 169, PORTION 5 OF FARM 169, PORTION 1 OF FARM STEENROTSFOUNTAIN NO 168 AND PORTION 10 OF FARM WELTEVREDEN NO 170", BEAUFORT WEST, SUBMITTED IN TERMS OF SECTION 38(1) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)

#### CASE NUMBER: 21091004SB0913E

The matter above has reference.

Heritage Western Cape is in receipt of your application for the above matter received. This matter was discussed at the Heritage Officers Meeting held on 27 September 2021.

You are hereby notified that, since there is reason to believe that the proposed Bulskop PV Cluster Farm 423, "Remaining Extent of Farm 423, Portion 4 of Farm 169, Portion 5 of Farm 169, Portion 1 of Farm Steenrotsfountain No 168 and Portion 10 of Farm Weltevreden No 170", Beaufort West will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of Section 38(3) of the NHRA be submitted. Section 38(3) of the NHRA provides

- (3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:
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  - (c) an assessment of the impact of the development on such heritage resources;
  - (d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
  - (e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
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(Our emphasis)

This HIA must in addition have specific reference to the following:

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  - Archaeology impact assessment study
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Our Ref:

HM/CENTRAL KAROO / BEAUFORT WEST / BULSKOP PV CLUSTER /

FARM 423, PORTION 4 OF FARM 169, PORTION 5 OF FARM 169,

PORTION 1 OF FARM168 AND PORTION 10 OF FARM 170

Case No.:

21091004SB0913E

Enquiries: E-mail: Stephanie Barnardt stephanie.barnardt@westerncape.gov.za

Tel:

021 483 5959



The HIA must have an overall assessment of the impacts to heritage resources which are not limited to the specific studies referenced above.

The required HIA must have an integrated set of recommendations.

The comments of relevant registered conservation bodies; all Interested and Affected parties; and the relevant Municipality must be requested and included in the HIA where provided. Proof of these requests must be supplied.

Please note, should you require the HIA to be submitted as a Phased HIA, a written request must be submitted to HWC prior to submission. HWC reserves the right to determine whether a phased HIA is acceptable on a case-by-case basis.

If applicable, applicants are strongly advised to review and adhere to the time limits contained the Standard Operational Procedure (SOP) between DEADP and HWC. The SOP can be found using the following link http://www.hwc.org.za/node/293

Kindly take note of the HWC meeting dates and associated agenda closure date in order to ensure that comments are provided within as Reasonable time and that these times are factored into the project timeframes.

HWC reserves the right to request additional information as required. Should you have any further queries, please contact the official above and quote the case number.

Waseefa Dhansay

vauv

Acting Deputy Director

Heritage Western Cape
Erfenis Wes-Kaap
ILifa leMveli leNtshona Koloni

29 SEPT 2021

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# APPLICATION FORM NOTIFICATION OF INTENT TO DEVELOP (NID) SECTION 38 (1) AND SECTION 38 (8)

SECTION SO (1) AND SECTION SO (6)		
Heritage Western Cape Reference N		
To be completed by the applicant		

Completion of this form is required by Heritage Western Cape for the initiation of all impact assessment processes under Section 38 (1) & (8) of the National Heritage Resources Act (NHRA)

As per Section 38 (1) (e) of the NHRA, submission of the NID must be initiated at the earliest stage of development. Should the development trigger any other legislation, practitioners may submit the NID without formal submission to other statutory bodies in order to comply with the NHRA.

This form is to be read in conjunction with the HWC Notification of Intent to Develop, Heritage Impact Assessment, (Pre-Application) Basic Assessment Reports, Scoping Reports and Environmental Impact Assessments, Guidelines for Submission to HWC

Whilst it is not a requirement, it may expedite processes and in particular avoid calls for additional information if certain of the information required in this form is provided by a heritage specialist/s with the necessary qualifications, skills and experience. All sections of the form must be completed in order to deem the application to be complete.

Making an incorrect statement or providing incorrect information may result in all or part of the application having to be reconsidered by HWC in the future, or submission of a new application.

The following information is to be included upon submission to HWC:

- 1. Proof of payment with correct reference number
- 2. Completed and signed application form the application form must be completed in full in order to be considered
- 3. Power of Attorney
- 4. Locality Map
- 5. Images of the site and its context
- 6. Additional information pertaining to the heritage of the site

Application and associated documentation to be emailed to ceoheritage@westerncape.gov.za

# A. APPLICABILITY OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA)

Department of Environmental Affairs Development Planning (Western Cape); Department of Mineral	1
Resources (National); Department of Environmental Affairs (National);	
Reference Number (if applicable):	
	_

# Please tick the applicable section:

This application is made in terms of Section 38(8) of the NHRA and an application under NEMA has been made to the following authority:

This development will not require a NEMA application.					
B. BASIC DETAILS					
PROPERTY DETAILS:					
Name of property: Bulskop PV Cluster	Grid Co	nnection			
Street address or location (eg: off R44)	: Betwe	een the R61 an	d N12 ne	ear Beau	ufort West
Erf or farm number/s: Remaining Extent of Farm 423 Portion 4 of Farm 169 Portion 5 of Farm 169 Portion 1 of Farm Steenrotsfountain No Portion 10 of Farm Weltevreden No 170			E 22°3	4'3.23": 6'33.84 cal cent	
Town or District: Beaufort West			Municip	oality: E	Beaufort West
Extent of property: 15km			Curren	t use: G	rid Infrastructure
Predominant land use/s of surrounding	proper	ties: Agricultur	al		
REGISTERED OWNER OF PROPE	RTY:				
Name and Surname:					
Address					
Telephone		Cell			E-mail
APPLICANT/ AUTHORISED AGENT:		I			·
Name and Surname:					
Address:					
Telephone	Cell			E-mail	
By the submission of this form and all material submitted in support of this notification (ie: 'the material'), all applicant parties acknowledge that they are aware that the material and/or parts thereof will be put to the following uses and consent to such use being made: filing as a public record; presentations to committees, etc; inclusion in databases; inclusion on and downloading from websites; distribution to committee members and other stakeholders and any other use required in terms of powers, functions, duties and responsibilities allocated to Heritage Western Cape under the terms of the National Heritage Resources Act. Should restrictions on such use apply or if it is not possible to copy or lift information from any part of the digital version of the material, the material will be returned unprocessed. All sections of the form have been completed.					
Signature of Owner:			Date:		
Should the owner not be able to sign, t copy of power of attorney to this form.		icants/ agents	must atta	ach	

Date:

Signature of Applicant/ Authorised Agent:

Heritage Western Cape Section 38 Application Form \_ February 2021

REGISTERED OWNER OF PROPERTY:				
Name and Surname:				
Address				
Telephone	Cell	E-mail		
APPLICANT/ AUTHORISED AGENT:				
Name and Surname: Anthony De Grae	af (Bulskop Grid (Pty) Ltd Dire	ector)		
Address: PO Box 51060, Waterfront,	3002			
Telephone 021 418 2596	Cell	E-mail		
By the submission of this form and all material submitted in support of this notification (ie: 'the material'), all applicant parties acknowledge that they are aware that the material and/or parts thereof will be put to the following uses and consent to such use being made: filing as a public record; presentations to committees, etc; inclusion in databases; inclusion on and downloading from websites; distribution to committee members and other stakeholders and any other use required in terms of powers, functions, duties and responsibilities allocated to Heritage Western Cape under the terms of the National Heritage Resources Act. Should restrictions on such use apply or if it is not possible to copy or lift information from any part of the digital version of the material, the material will be returned unprocessed. All sections of the form have been completed.				
Signature of Owner:	Date:			
N/A - NEMA application for linear activing Should the owner not be able to sign, the attach copy of power of attorney to this	e applicants/ agents must			
Signature of Applicant/ Authorised Ager	nt: Date: 9 Seț	otember 2021		
Applicants/ agents must attach copy of	power of attorney to this form.			

Applicants/ agents must attach copy of power of attorney to this form.

# C. DEVELOPMENT DETAILS:

Please indicate belo	ow which of the following Sections of the N gered the need for notification of intent to	National Heritage Resources Act, or other develop.	
	S38(1)(a) Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.	S38(1)(c) Any development or activity that will change the character of a site -	
	S38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.	(i) exceeding 5 000m² in extent;	
	S38(1)(d) Rezoning of a site exceeding 10 000m <sup>2</sup> in extent.	(ii) involving three or more existing erven or subdivisions thereof;	
		(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years.	
		If you have checked any of the three boxes above, describe how the proposed development will change the character of the site:	
	Other triggers, eg: in terms of other legislation, (ie: National Environment Management Act, etc.) Please set out details:		
	NEMA		
If an impact assessment process has also been / will be initiated in terms of other legislation please provide the following information:			
Authority / government department (ie: consenting authority) to which information has been /will be submitted for final decision: Department Forestry Fisheries and the Environment (DFFE)			
Present phase at which the process with that authority stands:			
The project will require EA ito and a BA process is currently underway (in pre-application phase). The EA application will be submitted to the National DFFE.			

Provide a <u>full</u> description of the nature and extent of the proposed development or activity including its potential impacts:

Bulskop Grid (Pty) Ltd, proposes the construction and operation of grid connection infrastructure for the proposed Bulskop PV cluster located south-east of Beaufort West in the Western Cape Province. The grid connection corridor is located within the Beaufort West Renewable Energy Development Zone (REDZ) and the Central Strategic Transmission Corridor, areas earmarked for the development of large-scale renewable energy facilities and grid connection infrastructure and will traverse five (5) properties, namely:

- Remaining Extent of Farm 423
- Portion 4 of Farm 169
- Portion 5 of Farm 169
- Portion 1 of Farm Steenrotsfountain No 168
- Portion 10 of Farm Weltevreden No 170

The development of the Bulskop Grid Connection Infrastructure will include the following infrastructure components:

- A new Collector Substation/Switching Station of up to 1.25 ha in extent, including:
- Construction of a new platform with earth mat and civil works.
- New feeder bay/s and busbar/s (up to 132 kV) complete with protection equipment.
- A double-circuit 132 kV overhead power line approx. 17 km in length between the Bulskop Collector Substation/Switching Station and the existing Droerivier Main Transmission Substation (MTS), complete with structures, foundations, conductor, fibre layout, insulation, and assemblies;
- A jeep track (up to 4 m wide) to provide access to and along the power line servitude;
- Works within the Droerivier MTS HV yard:
- Establish new feeder bay/s (up to 132 kV), inclusive of line bays, busbars, bussection and protection equipment.
- Provision to install a new transformer (up to 500 MVA 400/132 kV), if required.

A 17 km long and 300 m wide grid connection corridor will be assessed to allow for the optimisation of the grid connection infrastructure and to accommodate the environmental sensitivities identified within the corridor. Thereafter, the final placement of the grid connection infrastructure will be confirmed when the proposed Bulskop solar PV facilities are awarded Preferred Bidder status by the Department of Mineral Resources and Energy (DMRE).

Estimated value cost of the project in South African Rands:

To be determined at detailed design stage

### D. ANTICIPATED IMPACTS ON HERITAGE RESOURCES

Section 3 of the National Heritage Resources Act sets out the following categories of heritage resource as forming part of the national estate. Please indicate the known presence of any of these by checking the box alongside and then providing a description of each occurrence, including nature, location, size, type

Failure to provide sufficient detail or to anticipate the likely presence of heritage resources on the site may lead to a request for more detailed specialist information.

Provide a short history of the site and its environs (Include sources where available):		
Please see attache	d desktop Heritage Screening Assessment	
	ich heritage resources exist on the site and in its environs, describe them ature of any impact upon them:	
	Places, buildings, structures and equipment of cultural significance	
	Description of resource:	
	Description of impact on heritage resource:	
	Places to which oral traditions are attached or which are associated with living heritage	
**************************************	Description of resource:	
	Description of impact on heritage resource:	
	Historical settlements and townscapes	
E3	Description of resource: Beaufort West	
	Description of impact on heritage resource: No impact anticipated	
	Landscapes and natural features of cultural significance	
	Description of resource: Karoo Landscapes	
	Description of impact on heritage resource: Change of character	
	Geological resources of scientific or cultural importance	
,	Description of resource:	
	Description of impact on heritage resource:	
	<b>Archaeological resources</b> (Including archaeological sites and material, rock art, battlefields & wrecks):	
	Description of resource: Significant archeological heritage is known from the area	
	Description of impact on heritage resource: Potential destruction of significant sites	
	Palaeontological resources (ie: fossils):	
	Description of resource: Significant palaeontological heritage known from the area	
	Description of impact on heritage resource: Potential destruction of significant sites	
	<b>Graves and burial grounds</b> (eg: ancestral graves, graves of victims of conflict, historical graves & cemeteries):	

	Description of Resource: Unmarked graves are known to exist in the broader area
	Description of Impact on Heritage Resource: Potential destruction of significant
	sites
	Other human remains:
	Description of resource:
	Description of impact on heritage resource:
	Sites of significance relating to the history of slavery in South Africa:
1	Description of resource:
	Description of impact on heritage resource:
	Other heritage resources:
	Description of resource:
	Description of impact on heritage resource:

Describe elements in the environs of the site that could be deemed to be heritage resources: See below

Description of impacts on heritage resources in the environs of the site:

The area proposed for the grid connection for the Bulskop PV Cluster is located approximately 6km south of Beaufort West, between the R61 and the N12, and within the identified Beaufort West REDZ (Figure 2b). Beaufort West was the first town to be established in the central Karoo.

### Cultural Landscape

The name 'Karoo' has its roots in the Khoisan word meaning 'place of great dryness'. It once supported large grassy flatlands and the San and Khoekhoen migrated across the region for hunting and gazing purposes. Less than two hundred years ago large herds of antelope still roamed the grass plains. With the occupation of the area by stock farmers the sheep gradually replaced the game and the grass receded along with changing grazing and weather patterns (Winter et al 2009; Winter & Oberholzer 2013). By the late 17th century, the Khoenhoen had moved from the region into the more water rich southern Karoo and the coastal plains. During the early colonial period, the harshness of the Karoo region formed an almost impenetrable barrier from the Cape to the interior for colonial explorers, hunters and travellers. The 18th century was characterized by a marked increase in the rate of expansion of the boundaries of the settlement at the Cape. This was associated with the emergence of the migrant stock farmer (trekboer) (Guelke 1982 In Winter et al 2009). Early routes into the interior largely followed the tracks initially used by migrating herds of game or the cattle herds and sheep flocks of the Khoekhoen on their seasonal route between coastal and inland grazing grounds. These routes were later reinforced by generations of trek farmers moving between the markets at the Cape and their farms (Winter et al 2009).

Permanent settlement of the region only really occurred in the 19th century with towns being established near permanent water sources. It was during this period that Beaufort West was established as a drostdy in 1818 on the farm Hooyvlakte. In the same year, a mission station was established at Kookfontein, just outside Beaufort West (Winter et al 2009). Beaufort West became the first municipality in South Africa on 3 February 1837 and had the country's first town hall. When the railroad reached the town in 1880 it became a marshalling yard and locomotive depot and today it is the largest town in the Karoo. A number of the significant heritage resources located in close proximity to the proposed development are located within Beaufort West and are associated with the early colonial history of the

town (Figure 3a and Appendix 1).

The proposed development is located only 10km to 15km from the N1 and almost immediately adjacent to the N12 which is identified as a secondary scenic route in the Western Cape PSDF (2014). Furthermore, the proposed development is located within a scenic corridor on the approach to Beaufort West from Cape Town within an area that has limited topography (Figure 5). It is therefore very likely that the proposed development will have a negative impact on the cultural and scenic value of the landscape.

### Archaeology

A number of heritage assessments have been completed within close proximity to the area proposed for development (Figure 2a). According to Nilssen (2014, SAHRIS NID 504763), "The Karoo houses a long and rich archaeological record dating from the earliest stages of Stone Age technology that are over a million years old, to the historic period that consists of the last few hundred years of human occupation (see Nilssen 2011 and references therein). Archaeological sites include caves and rock shelters, open air artefact scatters, rock engravings and historic structures with their associated cultural materials." According to ACO (2013, SAHRIS NID 503074), "Because of the scarcity of caves and shelters, more than 90% of Karoo archaeological sites are open sites of stone artefacts, ostrich eggshell fragments and occasionally, pottery. Bone remains are rarely preserved. Artefacts of both the Early and Middle Stone Age are widespread and may generally be described as an ancient litter that occurs at a low frequency across the landscape. Where definable scatters of Early and Middle Stone Age material occur, they are considered to be significant heritage sites. More intensive occupation of the Karoo started around 13 000 years ago during the Later Stone Age, which is essentially the heritage of Khoisan groups who lived throughout the region. The legacy of the San includes numerous open sites while traces of their presence can also be found in most large rock shelters, often in the form of rock art. They frequently settled a short distance from permanent water sources (springs or waterholes) and made use of natural shelters such as rock outcrops or large boulders or even large bushes. In the Great Karoo natural elevated features such as dolerite dykes and ridges played a significant role in San settlement patterns." It is likely that similar archaeological heritage exists within the areas proposed for development and as such, impact to these resources must be assessed.

# Palaeontology

According to the SAHRIS Palaeosensitivity Map (Figure 4a), the area proposed for development is underlain by sediments of very high paleontological sensitivity. According to the extract from the Council for GeoSciences Map 3222 for Beaufort West, the development area is underlain by the Abrahamskraal and Teekloof Formations, both of the Adelaide Subgroup of the Beaufort Group of sediments. According to the SAHRIS Fossil Heritage Browser and the Palaeotechnic Report for the Western Cape (Almond and Pether, 2008), the Beaufort Group sediments are known to preserve diverse terrestrial and freshwater tetrapods of *Tapinocephalus* to *Lystrosaurus* Biozones (amphibians, true reptiles, synapsids – especially therapsids), palaeoniscoid fish, freshwater bivalves, trace fossils (including tetrapod trackways) and sparse vascular plants (*Glossopteris* Flora, including petrified wood). According to a map included in Almond (2011, SAHRIS NID 503273), the area proposed for development is located within the Pristerognathus Assemblage Zone of the Beaufort Group and a number of significant fossils have been identified in the immediate context of the proposed development in the academic literature (Figure 4c, Appendix 2). Based on the known paleontological sensitivity of this area, it is very likely that activities associated with the development of the proposed grid connection will negatively impact on significant fossil heritage.

# Summary of anticipated impacts on heritage resources:

Based on the information available, it is very likely that the proposed development will negatively impact on significant archaeological, palaeontological and cultural landscape heritage resources and as such, it is recommended that a Heritage Impact Assessment is completed that satisfies section 38(3) of the NHRA and assesses these impacts.

### E. ILLUSTRATIVE MATERIAL:

Attach to this form a minimum A4 sized locality plan showing the boundaries of the area affected by the proposed development, its environs, property boundaries and a scale. The plan must be of a scale and size that is appropriate to creating a clear understanding of the development.

Attach also other relevant graphic material such as maps, site plans, satellite photographs and photographs of the site and the heritage resources on it and in its environs. These are essential to the processing of this notification.

Please provide all graphic material on paper of appropriate size and on CD/ USB in JPEG format. It is essential that graphic material be annotated via titles on the photographs, map names and numbers, names of files and/or provision of a numbered list describing what is visible in each image.

F. RECOMMENDATION		
In your opinion do you believe that a heritage impact assessment is required?	Yes	No
Recommendation made by:		
Name Jenna Lavin		
Capacity Heritage Assessment Practitioner		
<b>PLEASE NOTE:</b> No Heritage Impact Assessment should be submitted with this form or conducted until Heritage Western Cape has expressed its opinion on the need for such and the nature thereof.		

# G. INFORMATION TO BE PROVIDED AND STUDIES TO BE CONDUCTED AS PART OF THE HERITAGE IMPACT ASSESSMENT (HIA)

If it is recommended that an HIA is required, please complete this section of the form.

DETAILS OF STUDIES	TO BE CONDUCTED IN THE INTENDED HIM

In addition to	o the requirements set out in Section 38(3) of the NHRA, indicate envisaged studies:
	Heritage resource-related guidelines and policies.
	Local authority planning and other laws and policies.
	Details of parties, communities, etc. to be consulted.
M	Specialist studies, eg: archaeology, palaeontology, architecture, townscape, visual impact, etc. Provide details: Archaeology, palaeontology, cultural landscape
	Other. Provide details:

**PLEASE NOTE:** Any further studies which Heritage Western Cape requires should be submitted must be in the form of a single, consolidated report with a single set of recommendations. Specialist studies must be incorporated in full, either as chapters of the report, or as annexures thereto. Please refer to the *Guidelines for Heritage Impact Assessments required in terms of Section 38 of the* 

National Heritage Resources Act (Act 25 of 1999)



# APPLICATION FORM NOTIFICATION OF INTENT TO DEVELOP (NID) SECTION 38 (1) AND SECTION 38 (8)

SECTION 30 (1) AND SECTION 30 (0)		
Heritage Western Cape Reference N		
To be completed by the applicant		

Completion of this form is required by Heritage Western Cape for the initiation of all impact assessment processes under Section 38 (1) & (8) of the National Heritage Resources Act (NHRA)

As per Section 38 (1) (e) of the NHRA, submission of the NID must be initiated at the earliest stage of development. Should the development trigger any other legislation, practitioners may submit the NID without formal submission to other statutory bodies in order to comply with the NHRA.

This form is to be read in conjunction with the HWC Notification of Intent to Develop, Heritage Impact Assessment, (Pre-Application) Basic Assessment Reports, Scoping Reports and Environmental Impact Assessments, Guidelines for Submission to HWC

Whilst it is not a requirement, it may expedite processes and in particular avoid calls for additional information if certain of the information required in this form is provided by a heritage specialist/s with the necessary qualifications, skills and experience. All sections of the form must be completed in order to deem the application to be complete.

Making an incorrect statement or providing incorrect information may result in all or part of the application having to be reconsidered by HWC in the future, or submission of a new application.

The following information is to be included upon submission to HWC:

- 1. Proof of payment with correct reference number
- Completed and signed application form the application form must be completed in full in order to be considered
- 3. Power of Attorney
- 4. Locality Map
- 5. Images of the site and its context
- 6. Additional information pertaining to the heritage of the site

Application and associated documentation to be emailed to ceoheritage@westerncape.gov.za

## A. APPLICABILITY OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA)

Department of Environmental Affairs Development Planning (Western Cape); Department of Mineral Resources (National); Department of Environmental Affairs (National); Reference Number (if applicable):

### Please tick the applicable section:

This application is made in terms of Section 38(8) of the NHRA and an application under NEMA has been made to the following authority:

This development will not require a NEMA application.				
	***************************************			
B. BASIC DETAILS				
PROPERTY DETAILS:				
Name of property: Bulskop PV Cluster				
Street address or location (eg: off R44):	East	of the R61 near	Beaufor	t West, Western Cape
Erf or farm number/s: Remaining Extent of Farm 423		Coordinates: S 32°23'46.29"S E 22°42'5.39"E (A logical centre point. Format based on WGS84.)		
Town or District: Beaufort West			Munici	pality: Beaufort West
Extent of property: 2 651ha			Curren	t use: Agricultural
Predominant land use/s of surrounding p	roper	ties: Agricultur	al	
REGISTERED OWNER OF PROPER	TY:			
Name and Surname:				
Address				
Telephone	none Cell E-mail			
APPLICANT/ AUTHORISED AGENT:				
Name and Surname:				
Address:				
Telephone Cell E-mail			E-mail	
By the submission of this form and all material submitted in support of this notification (ie: 'the material'), all applicant parties acknowledge that they are aware that the material and/or parts thereof will be put to the following uses and consent to such use being made: filing as a public record; presentations to committees, etc; inclusion in databases; inclusion on and downloading from websites; distribution to committee members and other stakeholders and any other use required in terms of powers, functions, duties and responsibilities allocated to Heritage Western Cape under the terms of the National Heritage Resources Act. Should restrictions on such use apply or if it is not possible to copy or lift information from any part of the digital version of the material, the material will be returned unprocessed. All sections of the form have been completed.				
Signature of Owner: Date:				
Should the owner not be able to sign, the applicants/ agents must attach copy of power of attorney to this form.				
Signature of Applicant/ Authorised Agent	t:	С	ate:	

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1.9.2021
st .
9 September 2021

Applicants/ agents must attach copy of power of attorney to this form.

# C. DEVELOPMENT DETAILS:

	ndicate below which of the following Sections of the Non has triggered the need for notification of intent to				
	S38(1)(a) Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length. S38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.	S38(1)(c) Any development or activity that will change the character of a site -			
	S38(1)(d) Rezoning of a site exceeding 10 000m <sup>2</sup> in extent.	(ii) involving three or more existing erven or subdivisions thereof;			
2	Other triggers, eg: in terms of other legislation, (ie: National Environment Management Act, etc.) Please set out details: NEMA	(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years.  If you have checked any of the three boxes above, describe how the proposed development will change the character of the site:  Change of character from uncultivated agricultural land to semi-industrial through renewable energy development			
	If an impact assessment process has also been / will be initiated in terms of other legislation please provide the following information:				
Authority / government department (ie: consenting authority) to which information has been /will be submitted for final decision: Department Forestry Fisheries and the Environment (DFFE)					
Present phase at which the process with that authority stands: Pre-Application					
Provide a <u>full</u> description of the nature and extent of the proposed development or activity including its potential impacts:					
Bulskop PV (Pty) Ltd proposes to develop a solar photovoltaic (PV) cluster on the Remaining Extent					

(Portion 0) of Farm 423 near Beaufort West in the Western Cape Province. The boundary of the study area is approximately 2 600 ha in size. The cluster is expected to comprise five PV facilities (each  $\sim$ 250 ha in extent) with a potential generating output capacity of 100 MW per PV facility. The study area falls within the jurisdiction of the Beaufort West Municipality and the greater Central Karoo District Municipality, as well as the Beaufort West Renewable Energy Development Zone (REDZ).

Each facility will comprise of solar PV technology with fixed, single or double axis tracking mounting structures, with a net generation (contracted) capacity of 100 MW AC (MegaWatts), as well as associated infrastructure, which will include:

- On-site substation / collector switching station;
- Auxiliary buildings (gate-house and security, control centre, office, warehouse, canteen & visitors centre, staff lockers etc.);
- Inverter-stations, transformers and internal electrical reticulation (underground cabling);
- Battery Energy Storage System (BESS);
- Access and internal road network:
- Laydown area;
- Rainwater tanks: and
- Perimeter fencing and security infrastructure.

The cluster intends to connect to the National Grid via the Droerivier Main Transmission Substation (MTS) (approximately 17 km west of the facility), however, the grid connection infrastructure associated with this grid solution is being assessed as part of a separate application and falls outside of the scope of this NID.

Note to Assessor:

This NID application pertains to the development of a PV cluster which will comprise a number (~5) of individual PV facilities within the study area. The development footprint of the individual facilities is yet to be determined and will be refined following input received from a team of specialists (e.g. ecology, avifauna, heritage, etc.). Despite this, the intention is to compile individual integrated HIAs per facility once the footprints have been confirmed and the opinion expressed by HWC in response to this NID will be applied uniformly across each facility.

Estimated value cost of the project in South African Rands:

Estimated to be R10 million per MW

### D. ANTICIPATED IMPACTS ON HERITAGE RESOURCES

Section 3 of the National Heritage Resources Act sets out the following categories of heritage resource as forming part of the national estate. Please indicate the known presence of any of these by checking the box alongside and then providing a description of each occurrence, including nature, location, size, type

Failure to provide sufficient detail or to anticipate the likely presence of heritage resources on the site may lead to a request for more detailed specialist information.

Provide a short history of the site and its environs (Include sources where available):

Please see attached desktop Heritage Screening Assessment

Please indicate which heritage resources exist on the site and in its environs, describe them and indicate the nature of any impact upon them:

Places, buildings, structures and equipment of cultural significan	ce
Description of resource:	

	Description of impact on heritage resource:
	Places to which oral traditions are attached or which are associated with
	living heritage
	Description of resource:
	Description of impact on heritage resource:
	Historical settlements and townscapes
[24]	Description of resource: Beaufort West
S are most	
	Description of impact on heritage resource: No impact anticipated  Landscapes and natural features of cultural significance
	-
	Description of resource: Karoo Landscapes
·	Description of impact on heritage resource: Change of character
	Geological resources of scientific or cultural importance
	Description of resource:
	Description of impact on heritage resource:  Archaeological resources (Including archaeological sites and material, rock art,
	battlefields & wrecks):
	Description of resource: Significant archeological heritage is known from the area
<b>*</b>	
	Description of impact on heritage resource: Potential destruction of significant sites
	Palaeontological resources (ie: fossils):
ş	Description of resource: Significant palaeontological heritage known from the
	area
	Description of impact on heritage resource: Potential destruction of significant sites
	Graves and burial grounds (eg: ancestral graves, graves of victims of conflict,
	historical graves & cemeteries):
	Description of Resource: Unmarked graves are known to exist in the broader area
	Description of Impact on Heritage Resource: Potential destruction of significant sites
	Other human remains:
-	Description of resource:
	Description of impact on heritage resource:
	Sites of significance relating to the history of slavery in South Africa:

Description of resource:
Description of impact on heritage resource:
Other heritage resources:
Description of resource:
Description of impact on heritage resource:

Describe elements in the environs of the site that could be deemed to be heritage resources: See below

Description of impacts on heritage resources in the environs of the site:

The area proposed for the Bulskop PV cluster is located approximately 10km southeast of Beaufort West, east of the R61 and within the identified Beaufort West REDZ (Figure 2b). Beaufort West was the first town to be established in the central Karoo.

### **Cultural Landscape**

The name 'Karoo' has its roots in the Khoisan word meaning 'place of great dryness'. It once supported large grassy flatlands and the San and Khoekhoen migrated across the region for hunting and gazing purposes. Less than two hundred years ago large herds of antelope still roamed the grass plains. With the occupation of the area by stock farmers the sheep gradually replaced the game and the grass receded along with changing grazing and weather patterns (Winter et al 2009; Winter & Oberholzer 2013). By the late 17th century, the Khoenhoen had moved from the region into the more water rich southern Karoo and the coastal plains. During the early colonial period, the harshness of the Karoo region formed an almost impenetrable barrier from the Cape to the interior for colonial explorers, hunters and travellers. The 18th century was characterized by a marked increase in the rate of expansion of the boundaries of the settlement at the Cape. This was associated with the emergence of the migrant stock farmer (trekboer) (Guelke 1982 In Winter et al 2009). Early routes into the interior largely followed the tracks initially used by migrating herds of game or the cattle herds and sheep flocks of the Khoekhoen on their seasonal route between coastal and inland grazing grounds. These routes were later reinforced by generations of trek farmers moving between the markets at the Cape and their farms (Winter et al 2009).

Permanent settlement of the region only really occurred in the 19th century with towns being established near permanent water sources. It was during this period that Beaufort West was established as a drostdy in 1818 on the farm Hooyvlakte. In the same year, a mission station was established at Kookfontein, just outside Beaufort West (Winter et al 2009). Beaufort West became the first municipality in South Africa on 3 February 1837 and had the country's first town hall. When the railroad reached the town in 1880 it became a marshalling yard and locomotive depot and today it is the largest town in the Karoo. A number of the significant heritage resources located in close proximity to the proposed development are located within Beaufort West and are associated with the early colonial history of the town (Figure 3a and Appendix 1).

The proposed development is located only 10km to 15km from the N1 and almost immediately adjacent to the N12 which is identified as a secondary scenic route in the Western Cape PSDF (2014). Furthermore, the proposed development is located within a scenic corridor on the approach to Beaufort West from Cape Town within an area that has limited topography (Figure 5). It is therefore very likely that the proposed development will have a negative impact on the cultural and scenic value of the landscape.

### Archaeology

A number of heritage assessments have been completed within close proximity to the area proposed for development (Figure 2a). According to Nilssen (2014, SAHRIS NID 504763), "The Karoo houses a long and rich archaeological record dating from the earliest stages of Stone Age technology that are over a million years old, to the historic period that consists of the last few hundred years of human occupation (see Nilssen 2011 and references therein). Archaeological sites include caves and rock shelters, open air artefact scatters, rock engravings and historic structures with their associated cultural materials." According to ACO (2013, SAHRIS NID 503074), "Because of the scarcity of caves and shelters, more than 90% of Karoo archaeological sites are open sites of stone artefacts, ostrich eggshell fragments and occasionally, pottery. Bone remains are rarely preserved. Artefacts of both the Early and Middle Stone Age are widespread and may generally be described as an ancient litter that occurs at a low frequency across the landscape. Where definable scatters of Early and Middle Stone Age material occur, they are considered to be significant heritage sites. More intensive occupation of the Karoo started around 13 000 years ago during the Later Stone Age, which is essentially the heritage of Khoisan groups who lived throughout the region. The legacy of the San includes numerous open sites while traces of their presence can also be found in most large rock shelters, often in the form of rock art. They frequently settled a short distance from permanent water sources (springs or waterholes) and made use of natural shelters such as rock outcrops or large boulders or even large bushes. In the Great Karoo natural elevated features such as dolerite dykes and ridges played a significant role in San settlement patterns." It is likely that similar archaeological heritage exists within the areas proposed for development and as such, impact to these resources must be assessed.

### Palaeontology

According to the SAHRIS Palaeosensitivity Map (Figure 4a), the area proposed for development is underlain by sediments of very high paleontological sensitivity. According to the extract from the Council for GeoSciences Map 3222 for Beaufort West, the development area is underlain by the Abrahamskraal and Teekloof Formations, both of the Adelaide Subgroup of the Beaufort Group of sediments. According to the SAHRIS Fossil Heritage Browser and the Palaeotechnic Report for the Western Cape (Almond and Pether, 2008), the Beaufort Group sediments are known to preserve diverse terrestrial and freshwater tetrapods of *Tapinocephalus* to *Lystrosaurus* Biozones (amphibians, true reptiles, synapsids – especially therapsids), palaeoniscoid fish, freshwater bivalves, trace fossils (including tetrapod trackways) and sparse vascular plants (*Glossopteris* Flora, including petrified wood). According to a map included in Almond (2011, SAHRIS NID 503273), the area proposed for development is located within the Pristerognathus Assemblage Zone of the Beaufort Group and a number of significant fossils have been identified in the immediate context of the proposed development in the academic literature (Figure 4c, Appendix 2). Based on the known paleontological sensitivity of this area, it is very likely that activities associated with the development of the proposed PV cluster will negatively impact on significant fossil heritage.

### Summary of anticipated impacts on heritage resources:

Based on the information available, it is very likely that the proposed development will negatively impact on significant archaeological, palaeontological and cultural landscape heritage resources and as such, it is recommended that a Heritage Impact Assessment is completed that satisfies section 38(3) of the NHRA and assesses these impacts.

### E. ILLUSTRATIVE MATERIAL:

Attach to this form a minimum A4 sized locality plan showing the boundaries of the area affected by the proposed development, its environs, property boundaries and a scale. The plan must be of a scale and size that is appropriate to creating a clear understanding of the development.					
photographs of the	Attach also other relevant graphic material such as maps, site plans, satellite photographs and photographs of the site and the heritage resources on it and in its environs. These are essential to the processing of this notification.				
Please provide all graphic material on paper of appropriate size and on CD/ USB in JPEG format. It is essential that graphic material be annotated via titles on the photographs, map names and numbers, names of files and/or provision of a numbered list describing what is visible in each image.					
F. RECOMMENDA	ATION				
In your opinion do yo	In your opinion do you believe that a heritage impact assessment is required?				
Recommendation ma	ade by:				
Name Jenna Lavin					
Capacity Heritage A	Assessment Practitioner				
<b>PLEASE NOTE:</b> No Heritage Impact Assessment should be submitted with this form or conducted until Heritage Western Cape has expressed its opinion on the need for such and the nature thereof.					
	N TO BE PROVIDED AND STUDIES TO BE CONDUCTED AS PART OF MPACT ASSESSMENT (HIA)				
If it is recommended that an HIA is required, please complete this section of the form.					
DETAILS OF STUDIES	TO BE CONDUCTED IN THE INTENDED HIA				
In addition to the requirements set out in Section 38(3) of the NHRA, indicate envisaged studies:					
	Heritage resource-related guidelines and policies.				
	Local authority planning and other laws and policies.				
	Details of parties, communities, etc. to be consulted.				
	Specialist studies, eg: archaeology, palaeontology, architecture, townscape, visual impact, etc. Provide details: Archaeology, palaeontology, cultural landscape				
	Other. Provide details:				
PLEASE NOTE: Any	further studies which Heritage Western Cape requires should be submitted must				

be in the form of a single, consolidated report with a single set of recommendations. Specialist studies

Please refer to the Guidelines for Heritage Impact Assessments required in terms of Section 38 of the

must be incorporated in full, either as chapters of the report, or as annexures thereto.

National Heritage Resources Act (Act 25 of 1999)





# APPLICATION FORM NOTIFICATION OF INTENT TO DEVELOP (NID) SECTION 38 (1) AND SECTION 38 (8)

	Bo (2) AND BECTION BO (6)
Heritage Western Cape Reference N	
To be completed by the applicant	

Completion of this form is required by Heritage Western Cape for the initiation of all impact assessment processes under Section 38 (1) & (8) of the National Heritage Resources Act (NHRA)

As per Section 38 (1) (e) of the NHRA, submission of the NID must be initiated at the earliest stage of development. Should the development trigger any other legislation, practitioners may submit the NID without formal submission to other statutory bodies in order to comply with the NHRA.

This form is to be read in conjunction with the HWC Notification of Intent to Develop, Heritage Impact Assessment, (Pre-Application) Basic Assessment Reports, Scoping Reports and Environmental Impact Assessments, Guidelines for Submission to HWC

Whilst it is not a requirement, it may expedite processes and in particular avoid calls for additional information if certain of the information required in this form is provided by a heritage specialist/s with the necessary qualifications, skills and experience. All sections of the form must be completed in order to deem the application to be complete.

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The following information is to be included upon submission to HWC:

- 1. Proof of payment with correct reference number
- Completed and signed application form the application form must be completed in full in order to be considered
- 3. Power of Attorney
- 4. Locality Map
- 5. Images of the site and its context
- 6. Additional information pertaining to the heritage of the site

Application and associated documentation to be emailed to ceoheritage@westerncape.gov.za

### A. APPLICABILITY OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA)

Department of Environmental Affairs Development Planning (Western Cape); Department of Mineral Resources (National); Department of Environmental Affairs (National); Reference Number (if applicable):

Please	tick	the	app	lical	ble	section

This application is made in terms of Section 38(8) of the NHRA and an application under NEMA has been made to the following authority:

This developmen	t will not require a NE	MA application.	
	·		
B. BASIC DETAILS			
PROPERTY DETAILS:			
Name of property: Bulskop PV Cluster			
Street address or location (eg: off R44)	: East of the R61 nea	Beaufort West, Weste	rn Cape
Erf or farm number/s: Remaining Extent of Farm 423		Coordinates: S 32°23'46.29"S E 22°42'5.39"E (A logical centre poir WGS84.)	nt. Format based on
Town or District: Beaufort West		Municipality: Beaufo	rt West
Extent of property: 2 651ha		Current use: Agricult	ural
Predominant land use/s of surrounding	properties: Agricultu	ral	
REGISTERED OWNER OF PROPE	RTY:		
Name and Surname:			
Address			
Telephone	Cell	E-ma	il
APPLICANT/ AUTHORISED AGENT:	 	l	
Name and Surname:			
Address:			
Telephone	Cell	E-mail	
By the submission of this form and all material submitted in support of this notification (ie: 'the material'), all applicant parties acknowledge that they are aware that the material and/or parts thereof will be put to the following uses and consent to such use being made: filing as a public record; presentations to committees, etc; inclusion in databases; inclusion on and downloading from websites; distribution to committee members and other stakeholders and any other use required in terms of powers, functions, duties and responsibilities allocated to Heritage Western Cape under the terms of the National Heritage Resources Act. Should restrictions on such use apply or if it is not possible to copy or lift information from any part of the digital version of the material, the material will be returned unprocessed. All sections of the form have been completed.			
Signature of Owner:		Date:	
Should the owner not be able to sign, t copy of power of attorney to this form.		must attach	

Date:

Signature of Applicant/ Authorised Agent:

REGISTERED OWNER OF PROPERTY:		angan ang mananan ang mana		March V - The costs of Bernardson
Name and Surname: , Moré	ven der	Menue		and the second s
Address Alat 9	Puradise La	be flat	2 Madiests	, Sedgefild
Telephone	Ven der Puradise La Cell 0834	129 FKKK	E-mail Hime sandern	rance a Waha
APPLICANT/ AUTHORISED AGENT:		<i>71.1.2.</i> 99	174.01.	
Name and Surname: Anthony De G	Graaf (Bulskop	PV (Pty) Ltd	Director)	
Address: PO Box 51060		o manda paran a mini apang panahana at Mara a sakara		
Telephone 021 418 2596	Cell		E-mail	•
By the submission of this form and all mapplicant parties acknowledge that the following uses and consent to such use etc: inclusion in databases; inclusion and other stakeholders and any other allocated to Heritage Western Cape we restrictions on such use apply or if it is reversion of the material, the material was completed.	ney are aware that be being made: filing in and downloading use required in ter under the terms of the not possible to cop	the material of as a public right of the material of grown website ms of powers, fithe National Help or lift information coessed. All se	and/or parts thereof wecord; presentations to ecord; presentations to communctions, duties and reritage Resources Actition from any part of the ctions of the form have	ill be put to the committees, mittee members esponsibilities . Should the digital
Signature of Owner:		Date: /	· 9·2021	
Should the owner not be able to sign. attach copy of power of attorney to t	the applicants/ ag his form.	gents must		
Signature of Applicant/ Authorised Ag	gent:	Date: 9 Se	eptember 2021	
Applicants/ agents must attach copy	of power of attorn	ney to this form		

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	ndicate below which of the following Sections of the N on has triggered the need for notification of intent to			
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A100 1711	S38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.	(i) exceeding 5 000m² in extent;		
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(Portion 0) of Farm 423 near Beaufort West in the Western Cape Province. The boundary of the study area is approximately 2 600 ha in size. The cluster is expected to comprise five PV facilities (each  $\sim$ 250 ha in extent) with a potential generating output capacity of 100 MW per PV facility. The study area falls within the jurisdiction of the Beaufort West Municipality and the greater Central Karoo District Municipality, as well as the Beaufort West Renewable Energy Development Zone (REDZ).

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Places, buildings, structures and equipment of cultural significance

Description of resource:

	Description of impact on heritage resource:
	Places to which oral traditions are attached or which are associated with
	living heritage
	Description of resource
	Description of resource:
	Description of impact on heritage resource:
	Historical settlements and townscapes
	Description of resource: Beaufort West
	Description of impact on heritage resource: No impact anticipated
	Landscapes and natural features of cultural significance
	Description of resource: Karoo Landscapes
	Description of resource. Ratoo Lanuscapes
	Description of impact on heritage resource: Change of character
	Geological resources of scientific or cultural importance
	Description of resource:
\$ 1. UF	
***************************************	Description of impact on heritage resource:
	<b>Archaeological resources</b> (Including archaeological sites and material, rock art, battlefields & wrecks):
	Description of resource: Significant archeological heritage is known from the area
	Description of impact on heritage resource: Potential destruction of significant
	sites
	Palaeontological resources (ie: fossils):
<u> </u>	Description of resource: Significant palaeontological heritage known from the
	area
	Description of impact on heritage resource: Potential destruction of significant sites
	Graves and burial grounds (eg: ancestral graves, graves of victims of conflict,
	historical graves & cemeteries):
	Description of Resource: Unmarked graves are known to exist in the broader area
	Description of Impact on Heritage Resource: Potential destruction of significant
	sites Other human remains:
err m	
- 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description of resource:
	Description of impact on heritage resource:
	Sites of significance relating to the history of slavery in South Africa:

Description of resource:
Description of impact on heritage resource:
Other heritage resources:
Description of resource:
Description of impact on heritage resource:

Describe elements in the environs of the site that could be deemed to be heritage resources: See below
Description of impacts on heritage resources in the environs of the site:

The area proposed for the Bulskop PV cluster is located approximately 10km southeast of Beaufort West, east of the R61 and within the identified Beaufort West REDZ (Figure 2b). Beaufort West was the first town to be established in the central Karoo.

### **Cultural Landscape**

The name 'Karoo' has its roots in the Khoisan word meaning 'place of great dryness'. It once supported large grassy flatlands and the San and Khoekhoen migrated across the region for hunting and gazing purposes. Less than two hundred years ago large herds of antelope still roamed the grass plains. With the occupation of the area by stock farmers the sheep gradually replaced the game and the grass receded along with changing grazing and weather patterns (Winter et al 2009; Winter & Oberholzer 2013). By the late 17th century, the Khoenhoen had moved from the region into the more water rich southern Karoo and the coastal plains. During the early colonial period, the harshness of the Karoo region formed an almost impenetrable barrier from the Cape to the interior for colonial explorers, hunters and travellers. The 18th century was characterized by a marked increase in the rate of expansion of the boundaries of the settlement at the Cape. This was associated with the emergence of the migrant stock farmer (trekboer) (Guelke 1982 In Winter et al 2009). Early routes into the interior largely followed the tracks initially used by migrating herds of game or the cattle herds and sheep flocks of the Khoekhoen on their seasonal route between coastal and inland grazing grounds. These routes were later reinforced by generations of trek farmers moving between the markets at the Cape and their farms (Winter et al 2009).

Permanent settlement of the region only really occurred in the 19th century with towns being established near permanent water sources. It was during this period that Beaufort West was established as a drostdy in 1818 on the farm Hooyvlakte. In the same year, a mission station was established at Kookfontein, just outside Beaufort West (Winter et al 2009). Beaufort West became the first municipality in South Africa on 3 February 1837 and had the country's first town hall. When the railroad reached the town in 1880 it became a marshalling yard and locomotive depot and today it is the largest town in the Karoo. A number of the significant heritage resources located in close proximity to the proposed development are located within Beaufort West and are associated with the early colonial history of the town (Figure 3a and Appendix 1).

The proposed development is located only 10km to 15km from the N1 and almost immediately adjacent to the N12 which is identified as a secondary scenic route in the Western Cape PSDF (2014). Furthermore, the proposed development is located within a scenic corridor on the approach to Beaufort West from Cape Town within an area that has limited topography (Figure 5). It is therefore very likely that the proposed development will have a negative impact on the cultural and scenic value of the landscape.

### Archaeology

A number of heritage assessments have been completed within close proximity to the area proposed for development (Figure 2a). According to Nilssen (2014, SAHRIS NID 504763), "The Karoo houses a long and rich archaeological record dating from the earliest stages of Stone Age technology that are over a million years old, to the historic period that consists of the last few hundred years of human occupation (see Nilssen 2011 and references therein). Archaeological sites include caves and rock shelters, open air artefact scatters, rock engravings and historic structures with their associated cultural materials." According to ACO (2013, SAHRIS NID 503074), "Because of the scarcity of caves and shelters, more than 90% of Karoo archaeological sites are open sites of stone artefacts, ostrich eggshell fragments and occasionally, pottery. Bone remains are rarely preserved. Artefacts of both the Early and Middle Stone Age are widespread and may generally be described as an ancient litter that occurs at a low frequency across the landscape. Where definable scatters of Early and Middle Stone Age material occur, they are considered to be significant heritage sites. More intensive occupation of the Karoo started around 13 000 years ago during the Later Stone Age, which is essentially the heritage of Khoisan groups who lived throughout the region. The legacy of the San includes numerous open sites while traces of their presence can also be found in most large rock shelters, often in the form of rock art. They frequently settled a short distance from permanent water sources (springs or waterholes) and made use of natural shelters such as rock outcrops or large boulders or even large bushes. In the Great Karoo natural elevated features such as dolerite dykes and ridges played a significant role in San settlement patterns." It is likely that similar archaeological heritage exists within the areas proposed for development and as such, impact to these resources must be assessed.

### Palaeontology

According to the SAHRIS Palaeosensitivity Map (Figure 4a), the area proposed for development is underlain by sediments of very high paleontological sensitivity. According to the extract from the Council for GeoSciences Map 3222 for Beaufort West, the development area is underlain by the Abrahamskraal and Teekloof Formations, both of the Adelaide Subgroup of the Beaufort Group of sediments. According to the SAHRIS Fossil Heritage Browser and the Palaeotechnic Report for the Western Cape (Almond and Pether, 2008), the Beaufort Group sediments are known to preserve diverse terrestrial and freshwater tetrapods of *Tapinocephalus* to *Lystrosaurus* Biozones (amphibians, true reptiles, synapsids – especially therapsids), palaeoniscoid fish, freshwater bivalves, trace fossils (including tetrapod trackways) and sparse vascular plants (*Glossopteris* Flora, including petrified wood). According to a map included in Almond (2011, SAHRIS NID 503273), the area proposed for development is located within the Pristerognathus Assemblage Zone of the Beaufort Group and a number of significant fossils have been identified in the immediate context of the proposed development in the academic literature (Figure 4c, Appendix 2). Based on the known paleontological sensitivity of this area, it is very likely that activities associated with the development of the proposed PV cluster will negatively impact on significant fossil heritage.

### Summary of anticipated impacts on heritage resources:

Based on the information available, it is very likely that the proposed development will negatively impact on significant archaeological, palaeontological and cultural landscape heritage resources and as such, it is recommended that a Heritage Impact Assessment is completed that satisfies section 38(3) of the NHRA and assesses these impacts.

### E. ILLUSTRATIVE MATERIAL:

Attach to this form a minimum A4 sized locality plan showing the boundaries of the area affected by the proposed development, its environs, property boundaries and a scale. The plan must be of a scale and size that is appropriate to creating a clear understanding of the development. Attach also other relevant graphic material such as maps, site plans, satellite photographs and photographs of the site and the heritage resources on it and in its environs. These are essential to the processing of this notification. Please provide all graphic material on paper of appropriate size and on CD/ USB in IPEG format. It is essential that graphic material be annotated via titles on the photographs, map names and numbers, names of files and/or provision of a numbered list describing what is visible in each image. F. RECOMMENDATION In your opinion do you believe that a heritage impact assessment is required? Yes No Recommendation made by: Name Jenna Lavin Capacity Heritage Assessment Practitioner PLEASE NOTE: No Heritage Impact Assessment should be submitted with this form or conducted until Heritage Western Cape has expressed its opinion on the need for such and the nature thereof. G. INFORMATION TO BE PROVIDED AND STUDIES TO BE CONDUCTED AS PART OF THE HERITAGE IMPACT ASSESSMENT (HIA) If it is recommended that an HIA is required, please complete this section of the form. DETAILS OF STUDIES TO BE CONDUCTED IN THE INTENDED HIA In addition to the requirements set out in Section 38(3) of the NHRA, indicate envisaged studies: Heritage resource-related guidelines and policies. Local authority planning and other laws and policies. Details of parties, communities, etc. to be consulted. Specialist studies, eg: archaeology, palaeontology, architecture, townscape, visual impact, etc. Provide details: Archaeology, palaeontology, cultural landscape

**PLEASE NOTE:** Any further studies which Heritage Western Cape requires should be submitted must be in the form of a single, consolidated report with a single set of recommendations. Specialist studies

Please refer to the Guidelines for Heritage Impact Assessments required in terms of Section 38 of the

must be incorporated in full, either as chapters of the report, or as annexures thereto.

Other. Provide details:

National Heritage Resources Act (Act 25 of 1999)

# Dale Holder

From: Jenna Lavin < jenna.lavin@ctsheritage.com>

Sent: Tuesday, 08 March 2022 11:25

To: Ceoheritage

Cc: Stephanie Barnardt; Amy Hill

Subject: Bulskop PV Facilities HIA (email 1 of 2)

Attachments: CTS21 190 AtlanticRenewable Hardeveld PV HIA.pdf.pdf; CTS21 190

\_AtlanticRenewable\_Bulskop PV\_HIA\_Updated.pdf.pdf; CTS21\_190

\_AtlanticRenewable\_Gamka PV\_HIA.pdf.pdf; CTS21\_190\_AtlanticRenewable\_Hoodia

PV\_HIA2.pdf; 21091004.pdf

# Dear HWC and Stephanie,

Please find attached the following documents submitted for the Proposed Development of the Bulskop PV Cluster and Associated Infrastructure on Remaining Extent (Portion 0) of Farm 423 near Beaufort West, Western Cape

- Proof of payment

- Compressed HIAs without Appendices (4 of 6)

- Link to WeTransfer with fill reports and separate appendices (the same appendices apply to each HIA): https://we.tl/t-TWsQAt63qB

Please confirm receipt and advise if any further information is required?

# Kind regards

### Jenna



Jenna Lavin Director CTS Heritage

16 Edison Way, Century City Tel: +27 (0)87 073 5739, Cell: +27 (0)83 619 0854 info@ctsheritage.com \* www.ctsheritage.com

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From: Jenna Lavin < jenna.lavin@ctsheritage.com>

Sent: Tuesday, 08 March 2022 11:25

To: Ceoheritage

Cc: Stephanie Barnardt; Amy Hill

Subject: Bulskop PV Facilities HIA (email 2 of 2)

Attachments: CTS21\_190\_AtlanticRenewable\_Rosenia PV\_HIA2.pdf; CTS21\_190

AtlanticRenewable Salsola PV HIA.pdf.pdf; 21091004.pdf

# Dear HWC and Stephanie,

Please find attached the following documents submitted for the Proposed Development of the Bulskop PV Cluster and Associated Infrastructure on Remaining Extent (Portion 0) of Farm 423 near Beaufort West, Western Cape

- Proof of payment

- Compressed HIAs without Appendices (2 of 6)

- Link to WeTransfer with fill reports and separate appendices (the same appendices apply to each HIA): https://we.tl/t-TWsQAt63qB

Please confirm receipt and advise if any further information is required?

# Kind regards

### Jenna



Jenna Lavin Director CTS Heritage

16 Edison Way, Century City Tel: +27 (0)87 073 5739, Cell: +27 (0)83 619 0854 info@ctsheritage.com \* www.ctsheritage.com

### Dale Holder

From:

Jenna Lavin < ienna.lavin@ctsheritage.com>

Sent:

Tuesday, 08 March 2022 11:17

To:

Ceoheritage

Cc:

Stephanie Barnardt; Amy Hill

Subject:

Bulskop PV Facility Grid Connection

Attachments:

21091003.pdf; CTS21\_190\_AtlanticRenewable\_Bulskop PV Grid\_HIA\_Final.pdf-

compressed.pdf

Dear HWC and Stephanie,

Please find attached the following documents submitted for the **Proposed Development of Grid Connection Infrastructure for the Bulskop PV Cluster near Beaufort West, Western Cape** 

- Proof of payment
- Compressed HIA with Appendices
- Link to WeTransfer with fill report and separate appendices: https://we.tl/t-T1d7wi2pX2

Please confirm receipt and advise if any further information is required?

Kind regards

Jenna



Jenna Lavin Director

CTS Heritage

16 Edison Way, Century City

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