



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

Heritage Western Cape Reference No:

*To be completed by
applicant*

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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).

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.

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

DEADP/ DMR Reference Number:

<input checked="" type="checkbox"/>	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: DEADP
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<input type="checkbox"/>	This development will not require a NEMA application.
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NOTE:	Making an incorrect statement or providing incorrect information in this part of the form may result in all or part of the application having to be reconsidered by HWC in the future, or submission of a new application.
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B. BASIC DETAILS

PROPERTY DETAILS:

Name of property: Modderfontein WEF
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Street address or location (eg: off R44): Approximately 50km northwest of Murraysburg in the Western and Northern Cape

Erf or farm number/s: Phaisant Kraal 1 (Western Cape)	Coordinates: 31°44'14.59"S 23°14'48.90"E (A logical centre point. Format based on WGS84.)
Town or District: Central Karoo	Municipality: Central Karoo
Extent of property: 405,10262ha (Phaisant Kraal)	Current use: Agricultural
Predominant land use/s of surrounding properties: Agricultural	

REGISTERED OWNER OF PROPERTY:

Name and Surname:		
Address		
Telephone	Cell	E-mail

APPLICANT/ AUTHORISED AGENT:

Name and Surname: Jenna Lavin		
Address: 34 Harries Street, Plumstead		
Telephone 083 619 0854	Cell 083 619 0854	E-mail jenna.lavin@ctsheritage.com

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.

I confirm that I enclose with this form two hardcopies of all material submitted together with a CD/ USB containing digital versions of all of the same.

Signature of Owner: _____

Date: _____

Signature of Applicant/ Authorised Agent: _____
(Applicants/ agents must attach a copy of power of attorney to this form.)

Date: _____

C. DEVELOPMENT DETAILS:

Please indicate below which of the following Sections of the National Heritage Resources Act, or other legislation has triggered the need for notification of intent to develop.

<input checked="" type="checkbox"/>	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 -	
<input type="checkbox"/>	S38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.	<input checked="" type="checkbox"/>	(i) exceeding 5 000m ² in extent;
<input type="checkbox"/>	S38(1)(d) Rezoning of a site exceeding 10 000m ² in extent.	<input type="checkbox"/>	(ii) involving three or more existing erven or subdivisions thereof;
<input checked="" type="checkbox"/>	Other triggers, eg: in terms of other legislation, (ie: National Environment Management Act, etc.) Please set out details: EA Amendment process	<input type="checkbox"/>	(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: Approximately 25 wind turbines located within a predominantly agricultural area	

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: **DEADP**

Present phase at which the process with that authority stands:

Notice of Intent to Submit

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

The original Environmental Authorisation has authorised the up to 67 wind turbines with a total generating capacity of 201 MW using turbines with a generating capacity of up to 3 MW. The Applicant has proposed the following amendment to the existing Authorisation: Up to 25 wind turbines with a total generating capacity of 140 MW using turbines with a generating capacity of up to 5.6 MW. Please note the proposed development will be an approximately 67% reduction in turbine density which should at least maintain and possibly even reduce the impacts levels as previously authorised.

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.

(The assistance of relevant heritage professionals is particularly relevant in completing this section.)

Provide a short history of the site and its environs (Include sources where available): **See attached 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: **See attached Heritage Screening Assessment**

<input type="checkbox"/>	Places, buildings, structures and equipment of cultural significance Description of resource: Description of impact on heritage resource:
<input type="checkbox"/>	Places to which oral traditions are attached or which are associated with living heritage Description of resource: Description of impact on heritage resource:
<input type="checkbox"/>	Historical settlements and townscapes Description of resource: see attached screening assessment Description of impact on heritage resource:

<input type="checkbox"/>	<p>Landscapes and natural features of cultural significance</p> <p>Description of resource: see attached screening assessment</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Geological resources of scientific or cultural importance</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input checked="" type="checkbox"/>	<p>Archaeological resources (Including archaeological sites and material, rock art, battlefields & wrecks):</p> <p>Description of resource: see attached screening assessment</p> <p>Description of impact on heritage resource:</p>
<input checked="" type="checkbox"/>	<p>Palaeontological resources (ie: fossils):</p> <p>Description of resource: see attached screening assessment</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Graves and burial grounds (eg: ancestral graves, graves of victims of conflict, historical graves & cemeteries):</p> <p>Description of Resource:</p> <p>Description of Impact on Heritage Resource:</p>
<input type="checkbox"/>	<p>Other human remains:</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Sites of significance relating to the history of slavery in South Africa:</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>
<input type="checkbox"/>	<p>Other heritage resources:</p> <p>Description of resource:</p> <p>Description of impact on heritage resource:</p>

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

The area proposed for development is located approximately 35km south southeast of Victoria West in the Central Karoo region of the Northern Cape. Victoria West was established by the Dutch Reformed Church in 1843 along the banks of the Brakrivier watercourse. In 1859, the town became a municipality. According to the Desktop Assessment completed by Booth et al. (2010, SAHRIS ID 7036), the records of early colonial travellers through the area and from Victoria West note interactions with San people who inhabited the area up until the late 19th century. In the mid-1920s, archaeologists identified a stone tool technological industry from the area and along the Vaal River known as the Victoria West Industry. Further evidence of San persistence in this landscape comes from the Later Stone Age archaeology and the rock engravings found throughout the Karoo, and on this farm.

In March 2011, Binneman et al. (SAHRIS ID 7035) completed an archaeological impact assessment that includes the area assessed in this report. Binneman et al. (2011) describe the farm as consisting of a varied landscape, including “flat, open floodplains, ridges, rocky outcrops and hillocks or koppies... The farm also consists of natural springs and dams. Disturbances owing to the construction of farm roads, fences, powerlines, telephone lines, windmills and dams, as well as domestic stock grazing and other farming activities occur throughout the area.” Binneman et al (2011) identified surface scatters of Middle Stone Age (MSA) artefacts throughout the farm, primarily located in flat floodplains at the base of rocky outcrops. Binneman et al (2011) also identified a possible purple mudstone quarry next to a river and small rocky outcrop. According to Binneman et al (2011) this quarry may have been the source for some of the MSA artefacts identified on the property. Later Stone Age (LSA) scatters were also identified on the property, however these are not as prevalent as the MSA artefacts. SAHRIS Site ID 34718 (MOD31) represents one of the more dense LSA sites on the property, including *in situ* bone. A stone kraal (Site ID 34719, MOD32) is located in close proximity to the LSA site and may even overlap it. Binneman et al (2011) also identified two areas of rock engravings (SAHRIS Site ID 34631, MOD10), some in close proximity to MSA artefacts, as well as a rock gong (SAHRIS Site ID 34632, MOD11). Binneman et al (2011) also identified several stone wall structures on the property including a large stone wall complex consisting of three large kraals and a small pen and occupation area at SAHRIS Site ID 34720 (MOD33). It must be noted that it is unclear from the report by Binneman et al (2011) whether the whole of the farm was surveyed for archaeology, or if only the area proposed for turbines was assessed as no track paths are included in the assessment. Booth (2012) completed a walkdown assessment of the neighbouring farms in order to ground-truth the proposed WEF turbine locations, however no such walkdown has taken place on the farms included in this assessment as yet.

According to Binneman et al (2011), “It is highly likely that the surface scatters of Middle Stone Age stone artefacts encountered occur in a disturbed context owing to water runoff, wash and erosion along the floodplains as well as being washed down the slopes of rocky outcrops and ridges”. Similarly the occurrence of Later Stone Age stone artefacts may have been disturbed by erosion as well as natural and animal disturbances. Documented areas containing rock engravings on boulders should be avoided and further investigation into the areas containing boulders surrounding the points of the proposed turbines should be investigated for further possible occurrences of rock engravings. The stone wall structures must be avoided during the construction phase of the proposed development.” Based on the location of known archaeological heritage located within the proposed development area, the amended layout will not impact on any known heritage resources and all proposed turbines are located more than

100m from any known resources. There is no objection to the proposed amended layout on condition that the recommendations included in the assessment completed by Binneman (2011) are adhered to. These are -

1. The exposed human remains must be reported to the South African Heritage Resources Agency (SAHRA) so that they may appoint the relevant archaeologist/s to remove the exposed human remains.
2. No construction activities may take place within 100m of the documented rock shelters containing rock paintings and boulders containing rock engravings.
3. The ridges and rocky outcrops surrounding the locations of the turbines and solar panels must be investigated prior to construction to establish whether undocumented rock shelters contain rock paintings and rocky outcrops contain boulders with rock engravings. If any are encountered the recommendations in point 2 will be implemented.
4. No construction activities may take place within 100m of the documented stone-wall structures.
5. If it is inevitable that construction activities must take place within 100m of any documented and undocumented rock shelters containing paintings, rocky outcrops with boulders containing rock engravings and stone-wall structures a perimeter fence must be erected to protect the sensitive area from any possible negative impact.
6. It is possible that in situ archaeological sites/remains, and human remains may be uncovered during construction. Therefore, a professional archaeologist should be appointed during the vegetation removal and construction phases of the development.

According to the SAHRIS Palaeosensitivity Map, the area under assessment is underlain by sediments of very high palaeontological sensitivity. The sediments underlying the development area include sediments of the Karoo Supergroup assigned to the Beaufort group, within the Poortjie Member of the Teekloof Formation of the Adelaide Subgroup (Council of GeoScience Map 3122, Victoria West). Rossouw (2011) conducted a desktop Palaeontological Assessment for an area that includes the area assessed in this report (SAHRIS ID 8943). According to Rossouw, the Teekloof Formation bedrock sediments located in this area have high palaeontological significance for the potential to impact on terrestrial tetrapods. Plants, silicified wood and trace fossils. Rossouw (2011) further notes that Quaternary alluvial deposits in the area, especially near water courses and drainage lines, are of medium palaeontological sensitivity and have the potential to yield microfossils and fossil mammal remains as well as Early Stone Age artefacts.

Furthermore according to the PalaeoBio Database (a non-governmental, non-profit public resource for palaeontological data), a palaeontological collection is known from this farm (Figure 4a). Reference to this collection is made by Broom (1903) and it is likely that this collection is housed with the Karoo Vertebrate Palaeontology collection at the University of the Witwatersrand, however this will require confirmation. The Modderfontein Fossil Collection speaks to the high palaeontological sensitivity of this farm. Due to this high sensitivity, Rossouw (2011) recommends that a palaeontological field assessment be undertaken to mitigate impacts to palaeontological heritage. SAHRA agreed with this recommendation in their comment dated 4 June 2013 indicating that a palaeontological field assessment is required (attached correspondence). This recommendation remains applicable as no palaeontological field assessment of the area has yet been undertaken.

According to the Environmental Authorisation granted for the original layout of the Modderfontein WEF, "If there are any changes to the layout of the turbines from the approved plan, the additional survey work will be required in order to ensure that no sites are directly impacted and/or to identify the need for an excavation permit". Furthermore, as a portion of the

Modderfontein WEF project falls within the Western Cape, Heritage Western Cape (HWC) who is the heritage authority that oversees the heritage in the Western Cape was also consulted in the original application. HWC replied that they are “satisfied with the reports being referenced and that Section 38 comments and decisions whether under a NID or HIA phase still stands therefore the requirements of 2011 stated in the NID (if one was done) still stands. However an integrated HIA (including integrated recommendation) which fulfils the requirement of Section 38(3) of the NHRA still needs to be submitted attached with the AIA, EA and other associated reports.”

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

The heritage resources and the area proposed for development are only partially recorded.

The surveys undertaken in the area have not adequately captured the heritage resources and/or there are sites which require mitigation or management plans. Further specific heritage work is recommended for the proposed development.

It is recommended that any new proposed layout avoids impact to the identified heritage resources in Figure 3 and adheres to the recommendations by Binneman (2011).

Once the layout has been established, it is recommended that an archaeological and palaeontological field assessment be undertaken to ensure that significant heritage resources are not impacted by the proposed development. As EA has already been granted for the proposed WEF, it is recommended that these field assessments be integrated into a report that satisfies section 38(3) of the NHRA and is submitted to HWC and SAHRA for noting purposes only.

Summary of anticipated impacts on heritage resources:

The heritage resources and the area proposed for development are only partially recorded.

The surveys undertaken in the area have not adequately captured the heritage resources and/or there are sites which require mitigation or management plans. Further specific heritage work is recommended for the proposed development.

It is recommended that any new proposed layout avoids impact to the identified heritage resources in Figure 3 and adheres to the recommendations by Binneman (2011).

Once the layout has been established, it is recommended that an archaeological and palaeontological field assessment be undertaken to ensure that significant heritage resources are not impacted by the proposed development. As EA has already been granted for the proposed WEF, it is recommended that these field assessments be integrated into a report that satisfies section 38(3) of the NHRA and is submitted to HWC and SAHRA for noting purposes only.

E. ILLUSTRATIVE MATERIAL (This form will not be processed unless the following are included):

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: **Jenna Lavin**

Name **Jenna Lavin**

Capacity **Heritage 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:

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Heritage resource-related guidelines and policies. |
| <input type="checkbox"/> | Local authority planning and other laws and policies. |
| <input type="checkbox"/> | Details of parties, communities, etc. to be consulted. |
| <input type="checkbox"/> | Specialist studies, eg: archaeology, palaeontology, architecture, townscape, visual impact, etc.
Provide details: |
| <input type="checkbox"/> | Other. Provide details: |

PLEASE NOTE: Any further studies which Heritage Western Cape may resolve 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.