



CTS HERITAGE

HERITAGE SCREENER

CTS Reference Number:	CTS20_072
SAHRIS Reference:	15615
Client:	Savannah Environmental (Pty) Ltd
Date:	July 2020
Title:	HERITAGE SCREENING ASSESSMENT FOR BASIC ASSESSMENT PROCESS FOR THE GREAT KAROO BATTERY ENERGY STORAGE SYSTEM, NORTHERN CAPE PROVINCE

The figure is a satellite map of a rugged, mountainous region in the Northern Cape province of South Africa. A black outline delineates the boundary of Farm Kentucky 206. Within this farm boundary, a purple dot marks the location of the proposed BESS 500m Zone. The terrain is characterized by brown and tan hues, indicating arid conditions. A legend in the bottom left corner identifies the symbols for Provinces, Farm Kentucky 206, and the Proposed BESS 500m Zone. A scale bar at the bottom center shows distances up to 20 km. An inset map in the bottom right corner shows the outline of South Africa with the Northern Cape province highlighted in red.

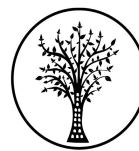
Figure 1a. Satellite map indicating the location of the proposed development in the Northern Cape

RECOMMENDATION
The heritage resources in the area proposed for development are sufficiently recorded - The surveys undertaken in the area adequately captured the heritage resources. There are no known sites which require mitigation or management plans. No further heritage work is recommended for the proposed development.

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1. Proposed Development Summary

Great Karoo Wind Farm would like to provide for the installation of a Battery Energy Storage System (BESS) at the authorised Great Karoo WEF (DEA Ref 12/12/20/2370/3) in the Northern Cape. The BESS is proposed to be located near to the facility substation, and will be approximately 3-4ha in total extent. Medium Voltage below ground or overhead cabling (33kV or less) will connect the BESS to the substation and an access road to the BESS will branch off the WEF roads. An area of ~500m around the boundary of the facility substation is to be assessed, to allow for the optimization of the placement of the BESS. The BESS is envisaged to become an integral component of the authorised WEF. The full extent of the 500m assessment zone has been assessed in this report.

2. Application References

Name of relevant heritage authority(s)	SAHRA
Name of decision making authority(s)	DEA

3. Property Information

Latitude / Longitude	32°49'3.32"S 20°43'22.85"E
Erf number / Farm number	Farm Kentucky 206
Local Municipality	Karoo Hoogland Local Municipality
District Municipality	Namakwa District Municipality
Previous Magisterial District	Sutherland
Province	Northern Cape
Current Use	Agriculture
Current Zoning	Agriculture

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4. Nature of the Proposed Development

Total Area	Approximately 4ha
Depth of excavation (m)	Max 2m
Height of development (m)	Max 15m if overhead lines are required

5. Category of Development

x	Triggers: Section 38(8) of the National Heritage Resources Act
	Triggers: Section 38(1) of the National Heritage Resources Act
	1. Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.
	2. Construction of a bridge or similar structure exceeding 50m in length.
	3. Any development or activity that will change the character of a site-
x	a) exceeding 5 000m ² in extent
	b) involving three or more existing erven or subdivisions thereof
	c) involving three or more erven or divisions thereof which have been consolidated within the past five years
	4. Rezoning of a site exceeding 10 000m ²
	5. Other (state):

6. Additional Infrastructure Required for this Development

1. Access road to the BESS (will branch off the WEF roads to the BESS)
2. Medium Voltage cabling (below ground or overhead) between the BESS and substation.
3. Fencing around the BESS.
4. Possible firebreak (i.e. vegetation trimmed low) or 4m wide road around the BESS, inside the fencing.
5. Laydown area (within the ~4ha footprint)

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7. Mapping (please see Appendix 3 and 4 for a full description of our methodology and map legends)

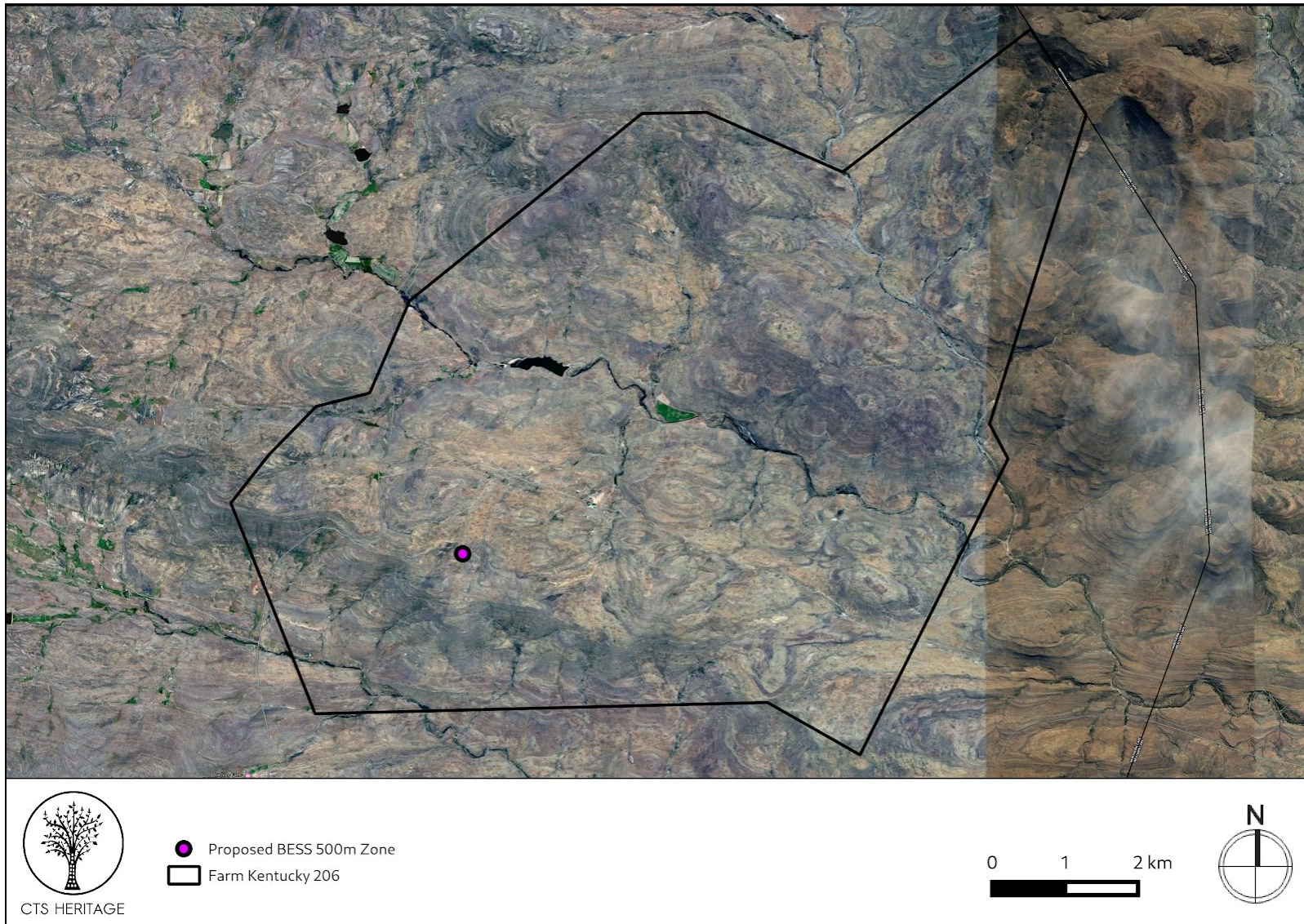


Figure 1b. Overview Map. Satellite image (2020) indicating the proposed development area relative to the Farm Kentucky 206

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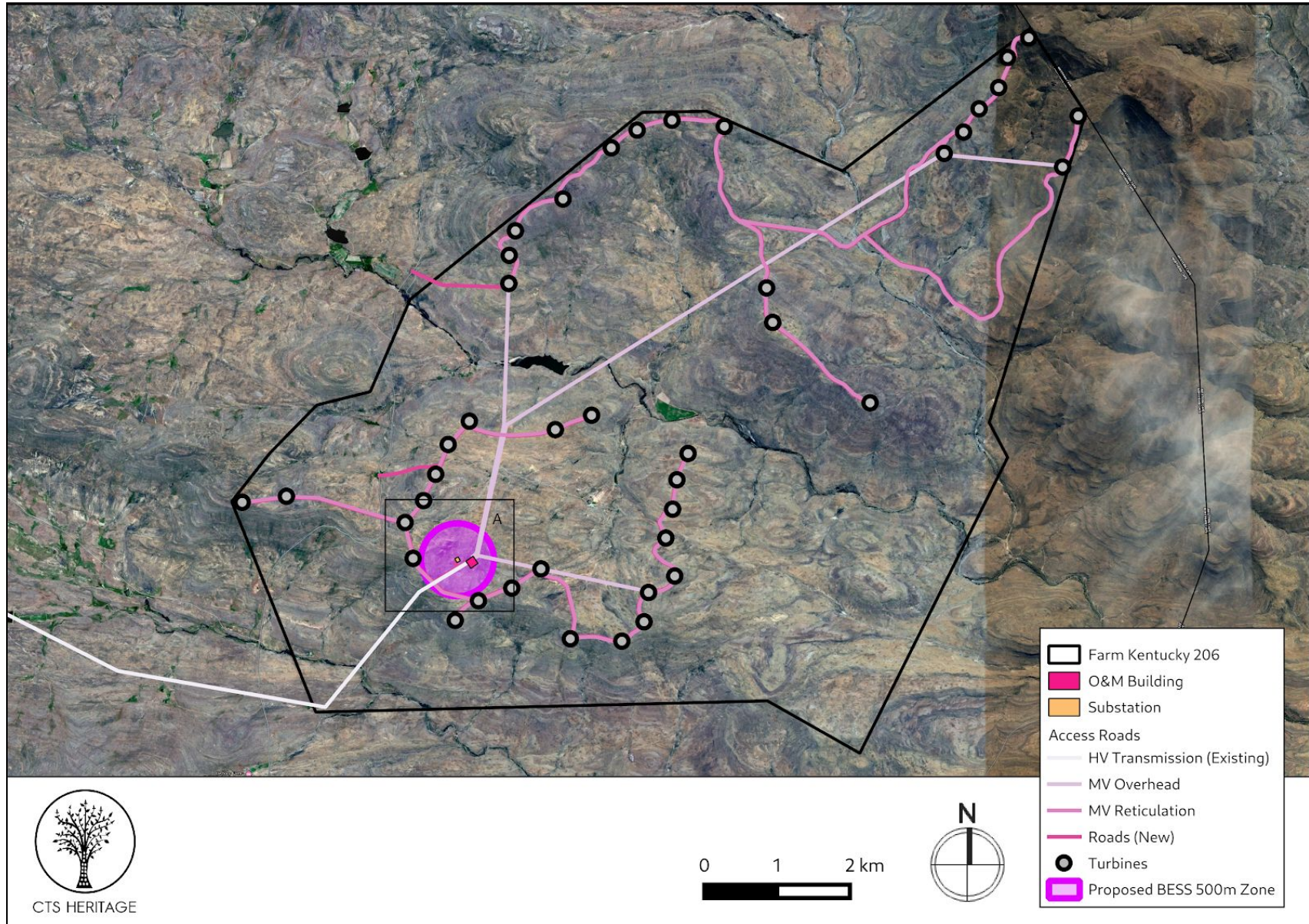


Figure 1c. Overview Map. Satellite image (2020) indicating the proposed development area relative to the previously approved development of the Great Karoo WEF



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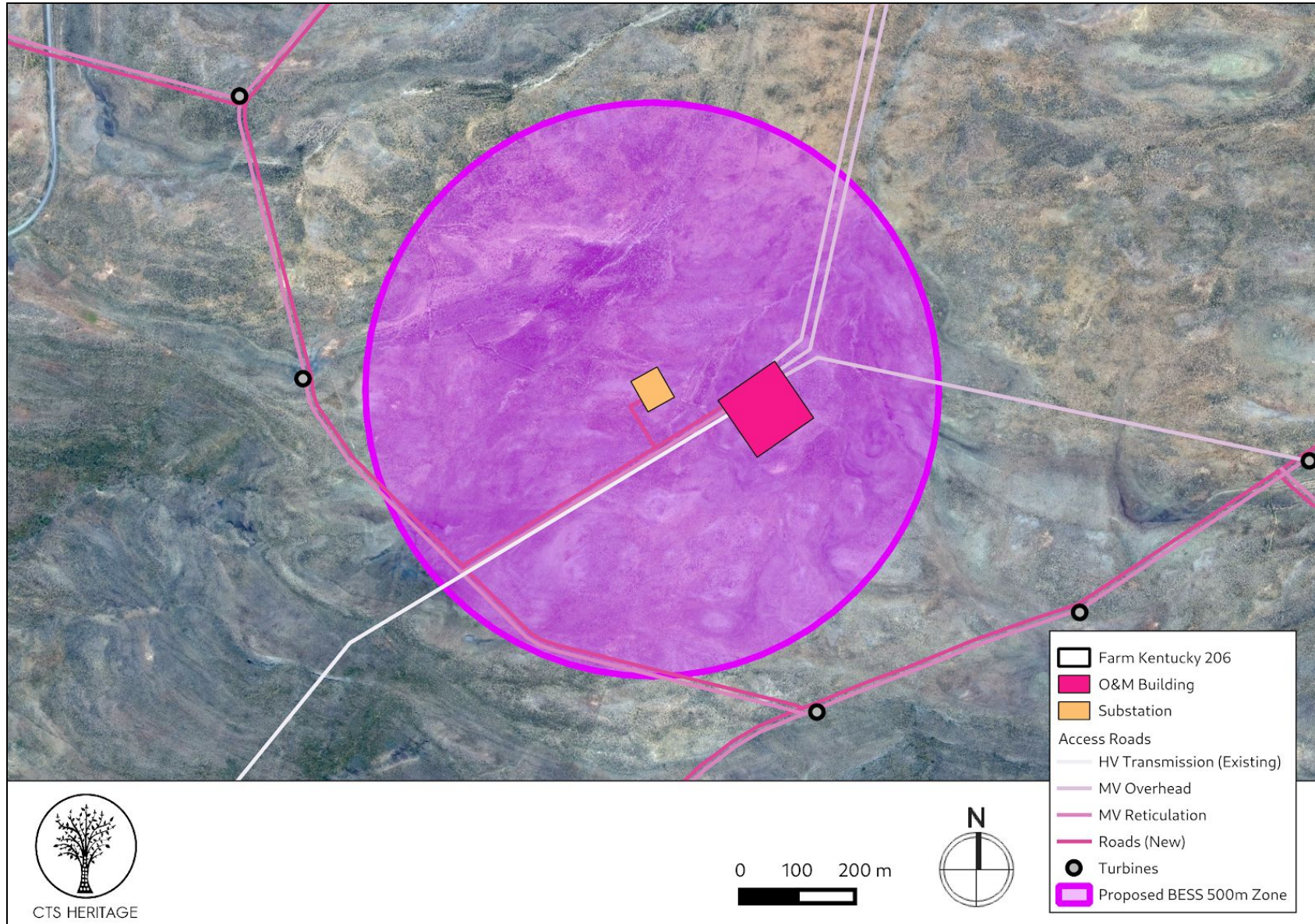


Figure 1d. Overview Map. Satellite image (2020) indicating the indicative development area for the proposed BESS

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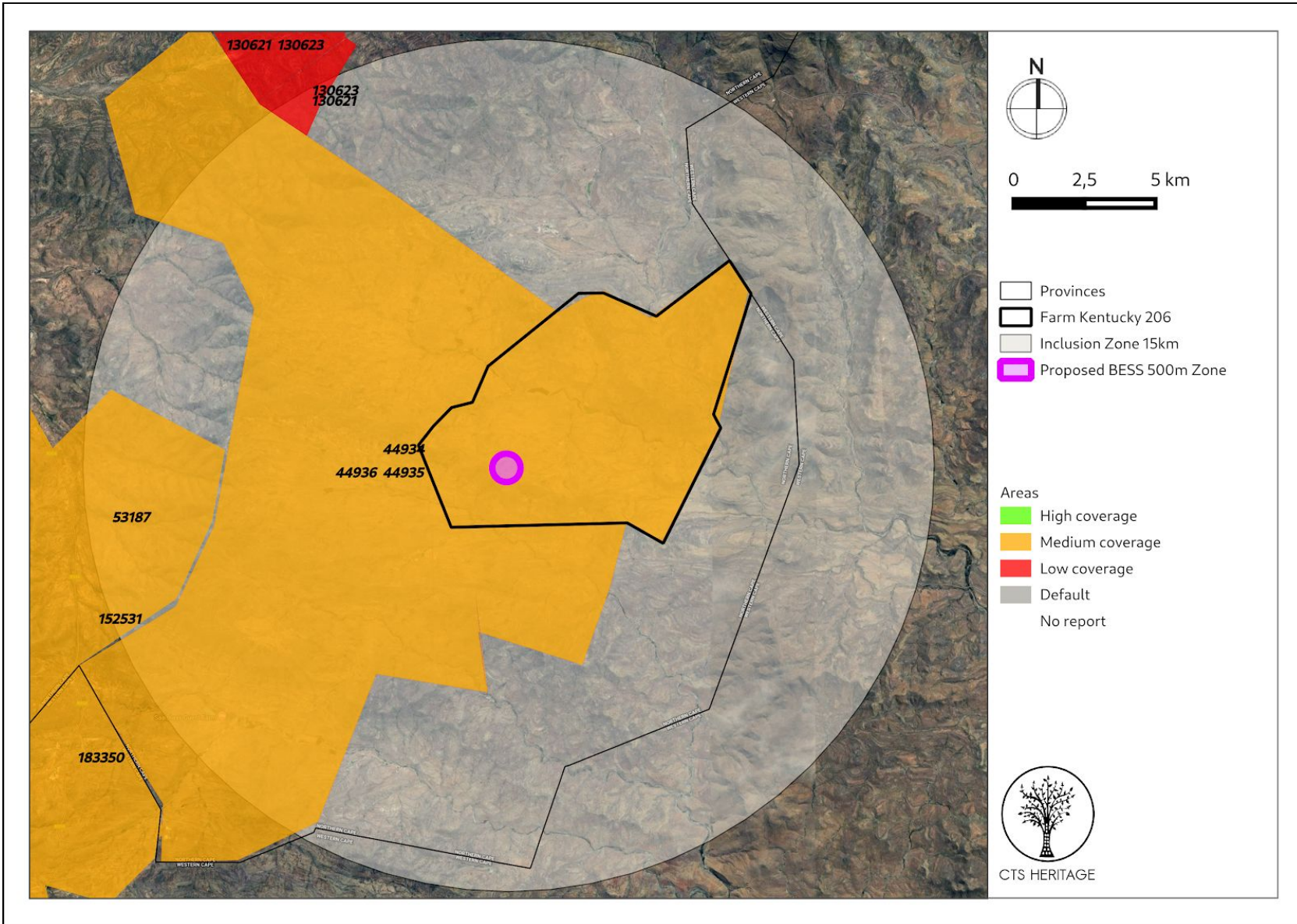


Figure 2. Previous HIAs Map. Previous Heritage Impact Assessments covering the proposed development area with SAHRIS NIDS indicated. Please see Appendix 2 for full reference list.

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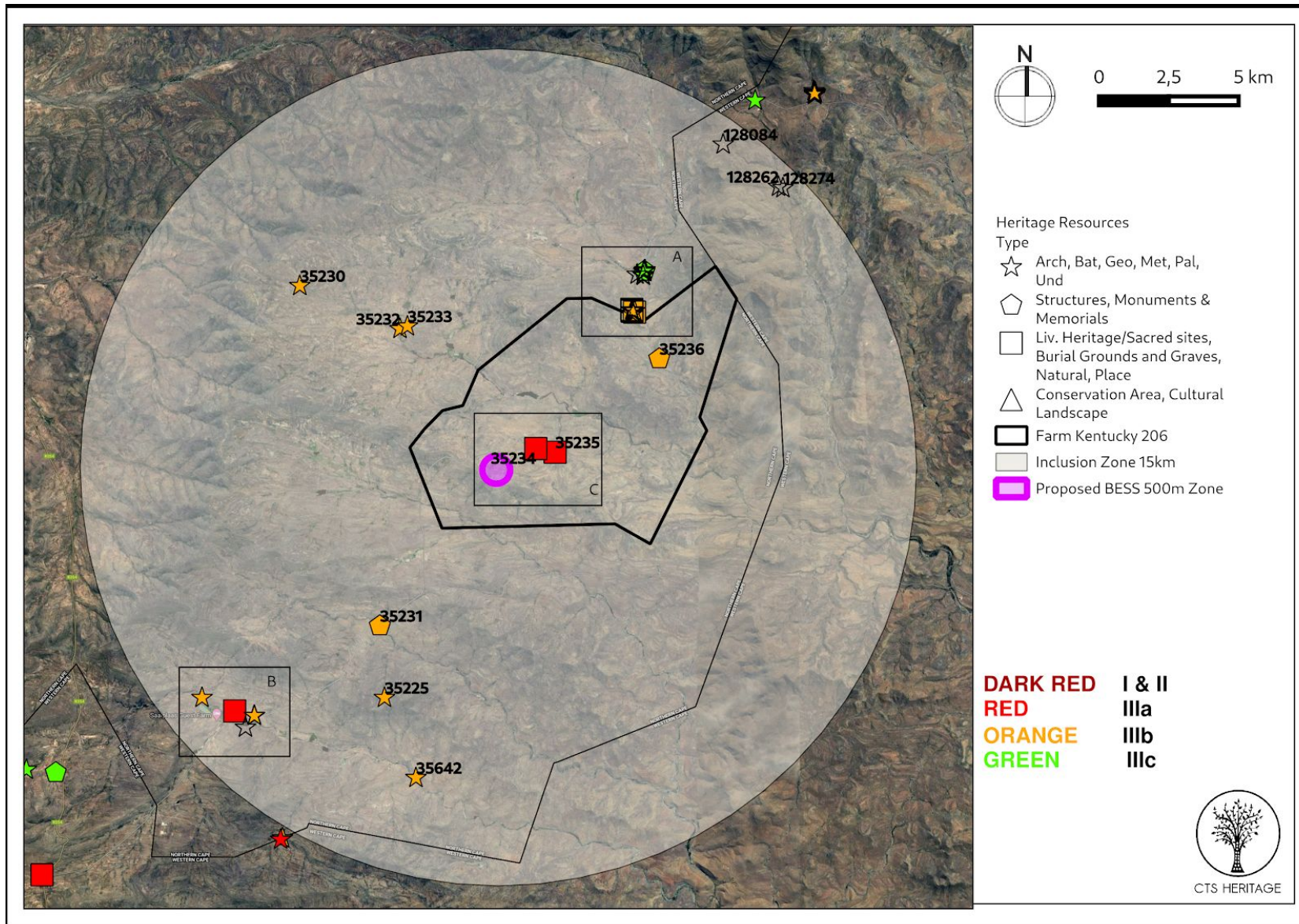


Figure 3. Heritage Resources Map. Heritage Resources previously identified within the study area, with SAHRIS Site IDs indicated in the insets below. Please See Appendix 4 for full description of heritage resource types.

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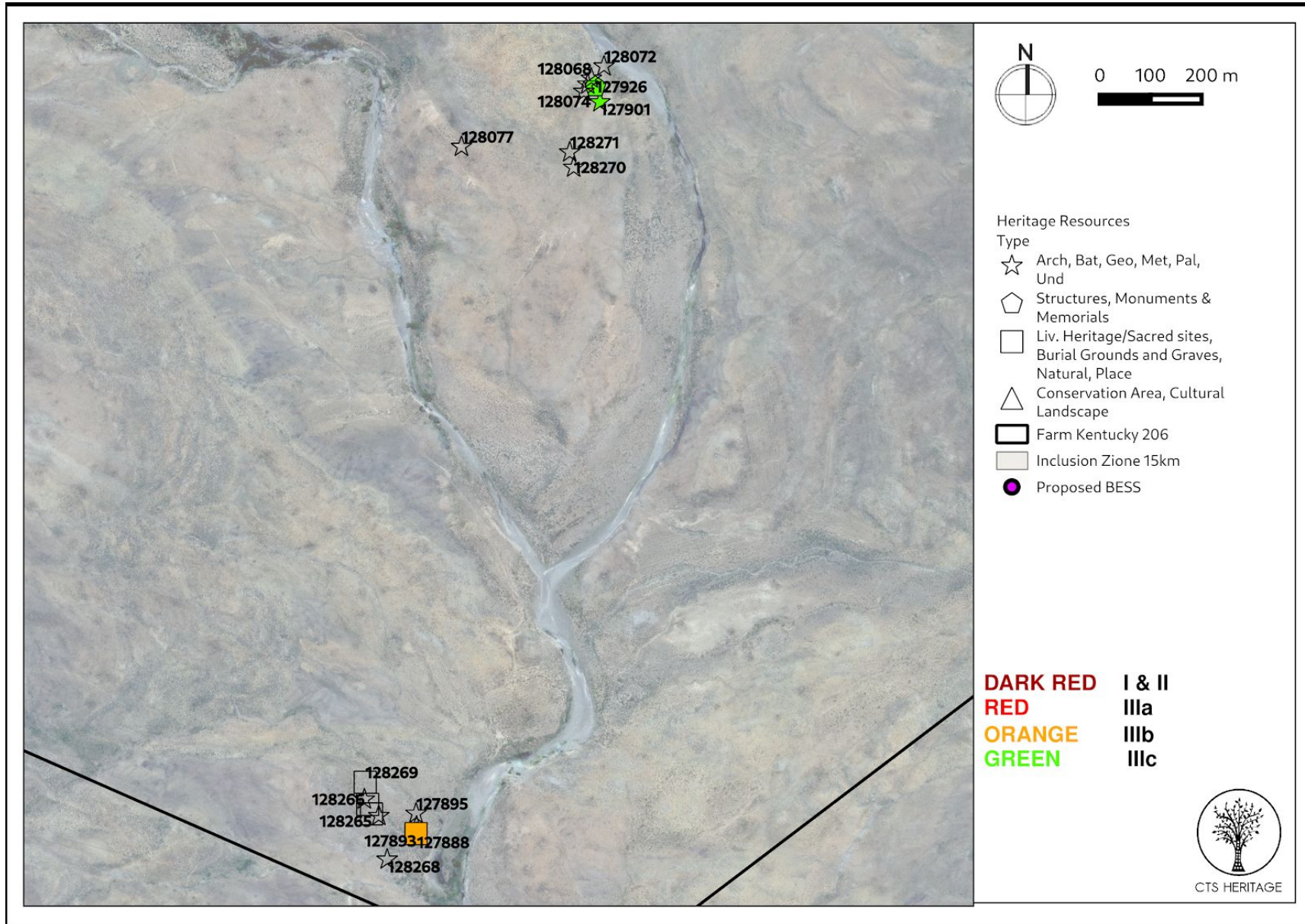


Figure 3a. Heritage Resources Map Inset A

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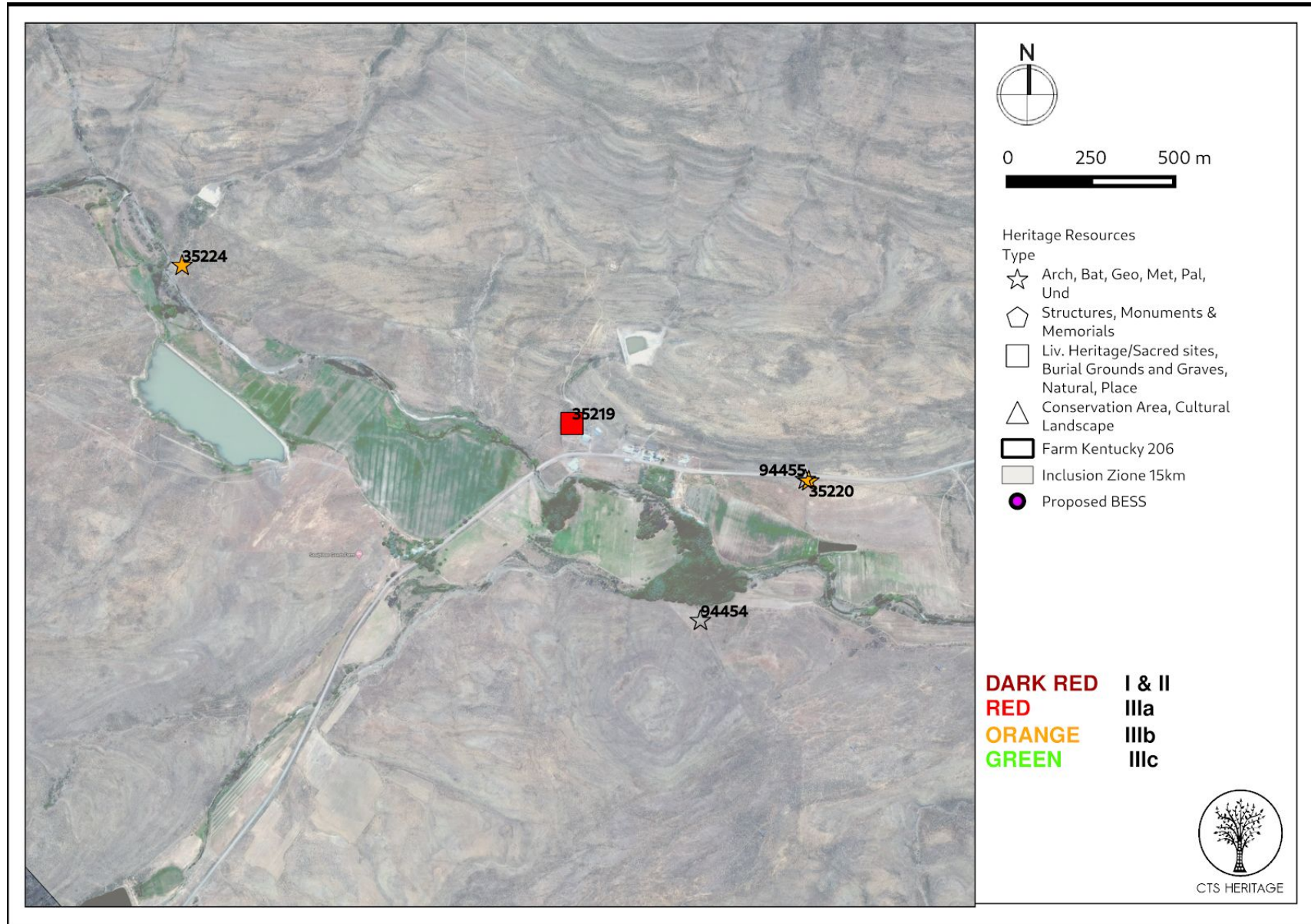


Figure 3b. Heritage Resources Map Inset B

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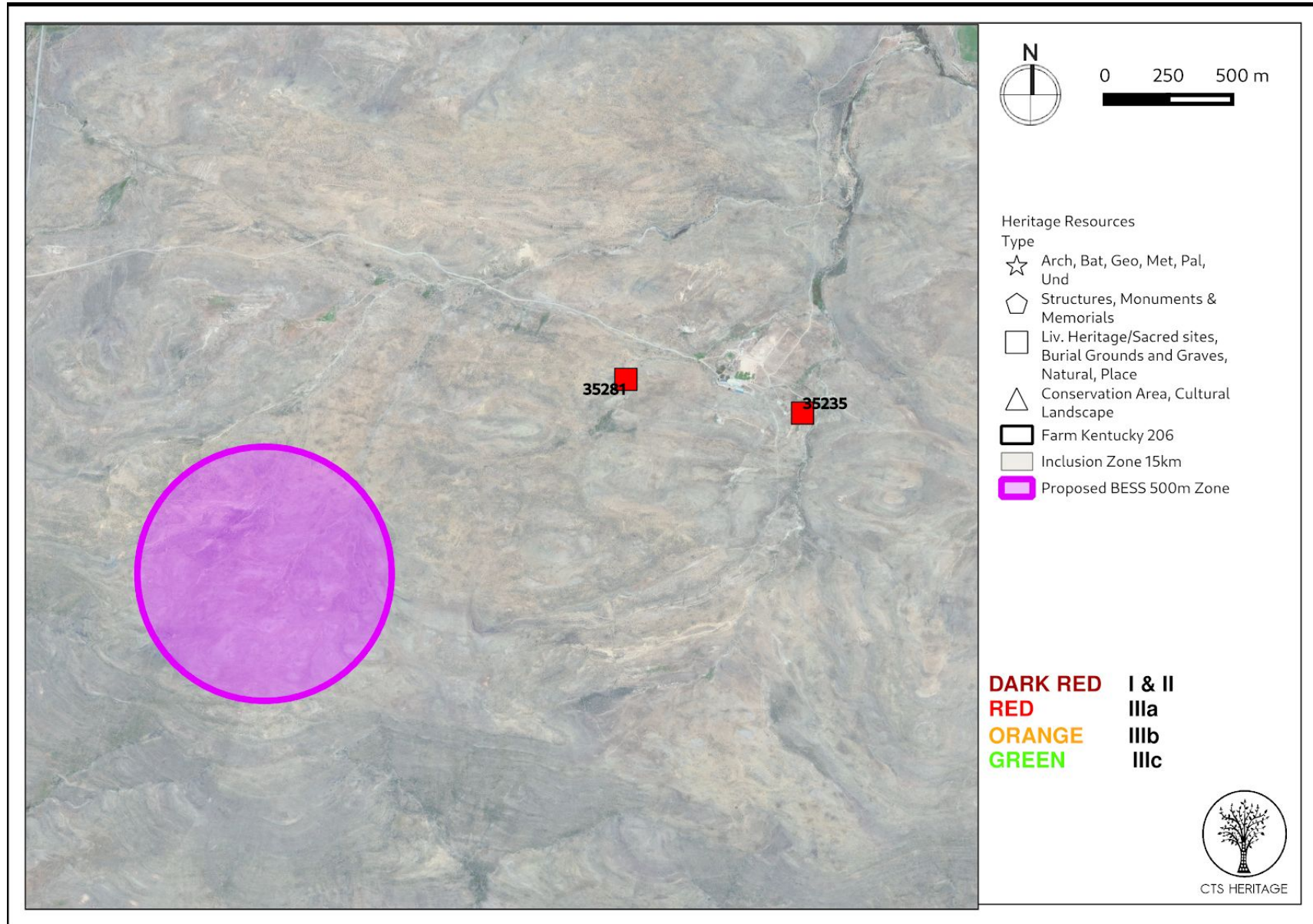


Figure 3c. Heritage Resources Map Inset C indicating known sites in relation to the approved WEF layout and proposed BESS

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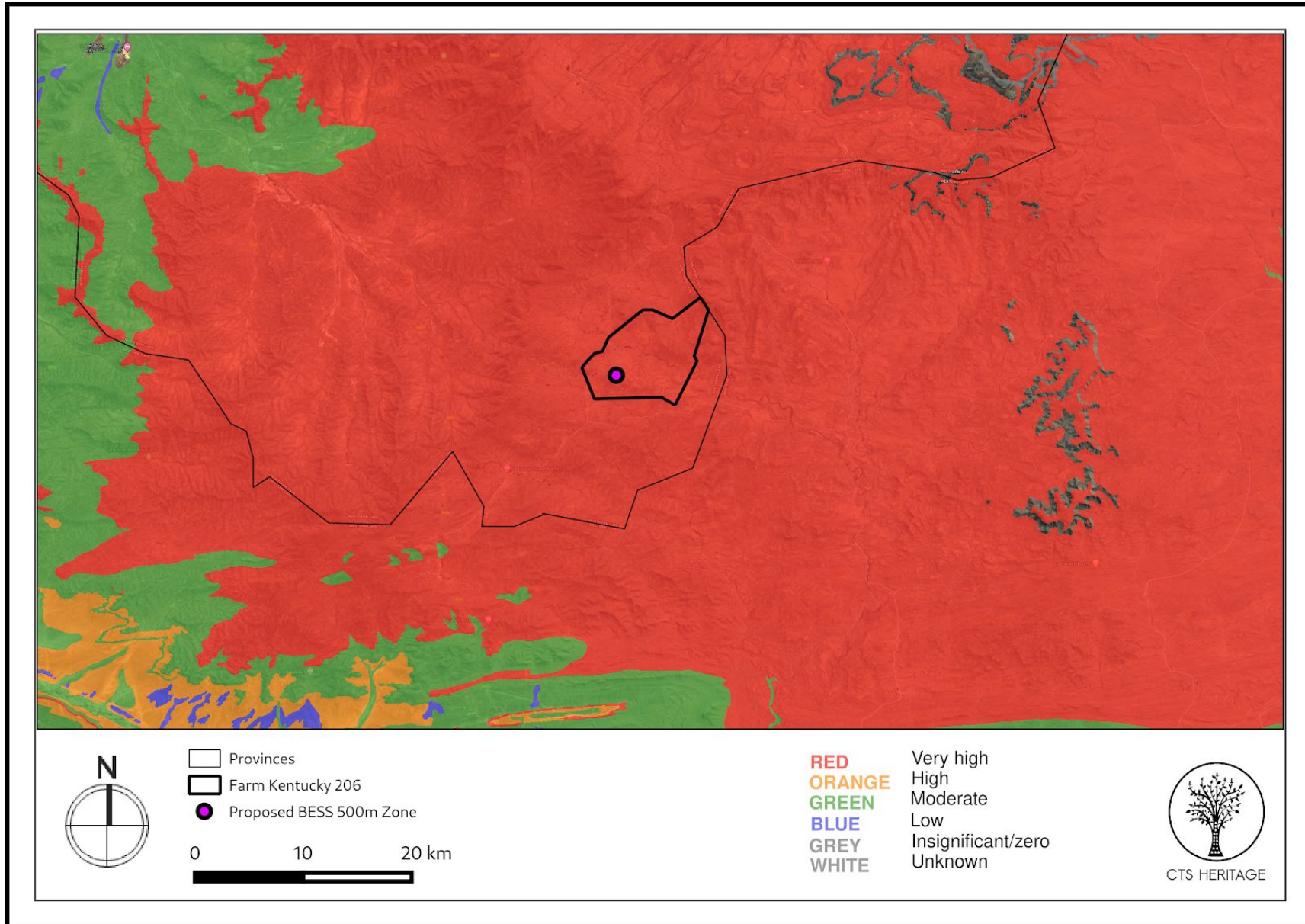


Figure 4a. Palaeosensitivity Map. Indicating fossil sensitivity underlying the study area. Please See Appendix 3 for a full guide to the legend.

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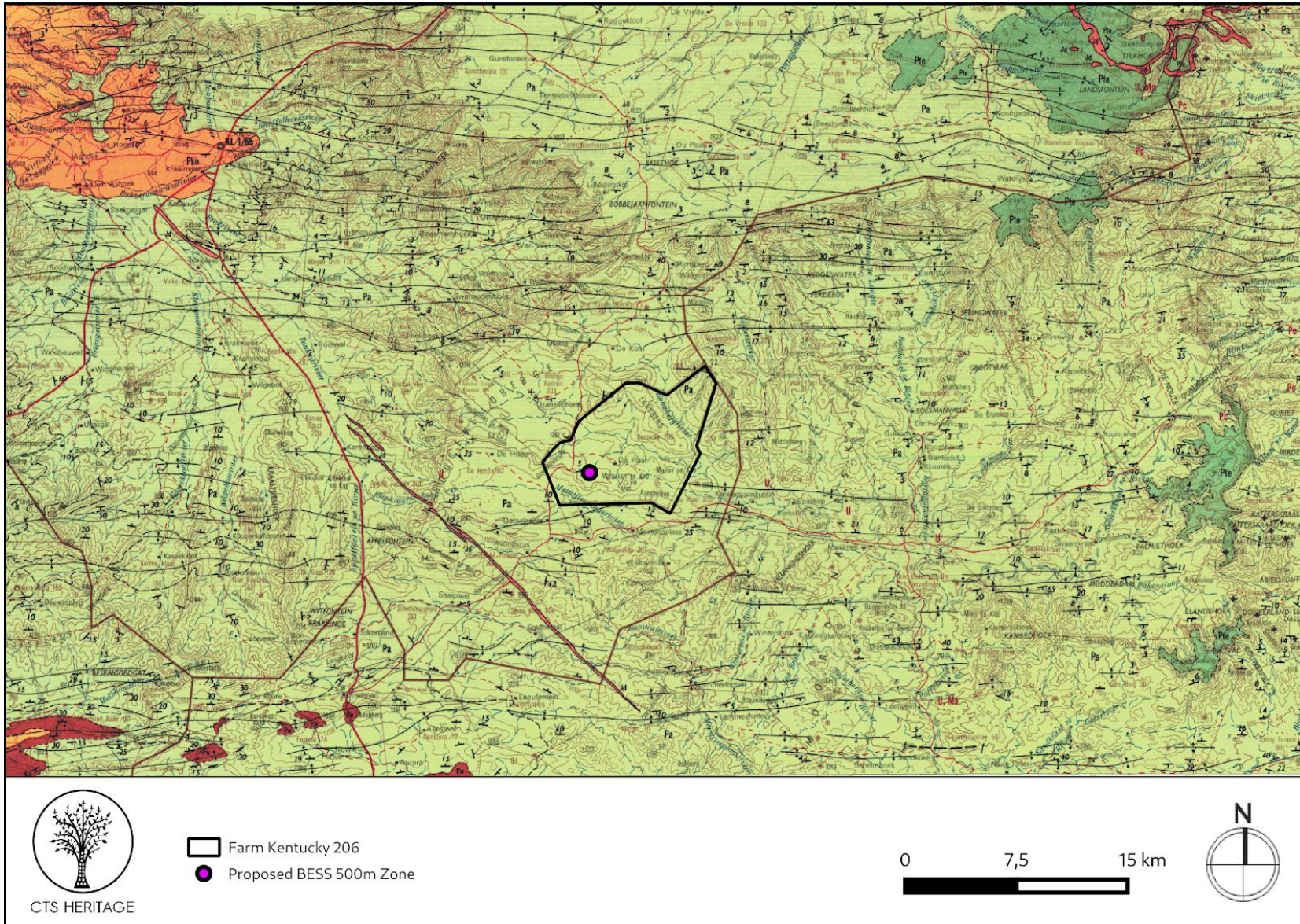


Figure 4b. Geology Map. Extract from the CGS 3220 Sutherland Map indicating that the development area is underlain by sediments of the Karoo Supergroup assigned to the Beaufort group, within the Abrahamskraal Formation of the Adelaide Subgroup (Pa).

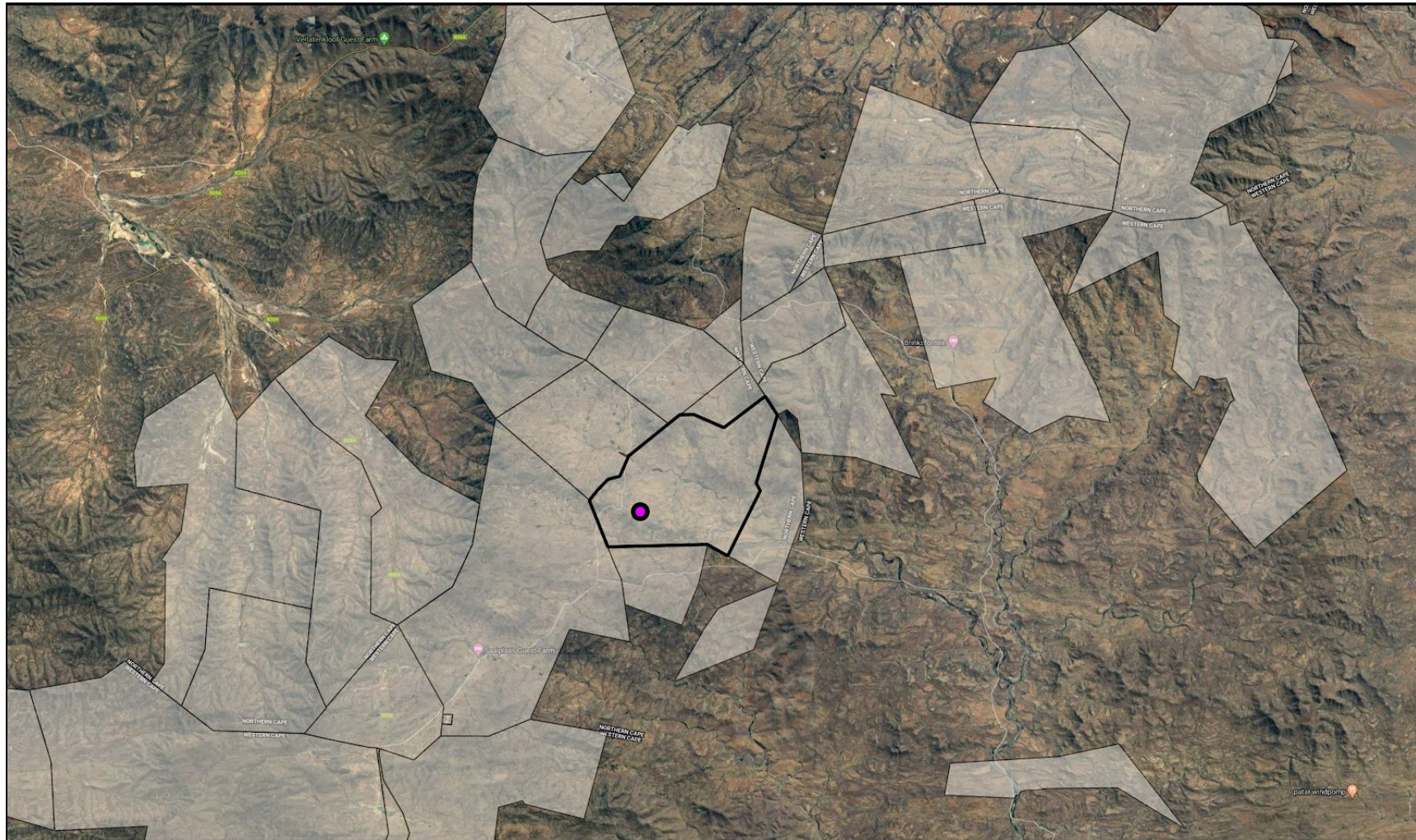
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


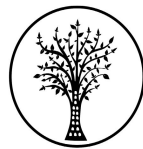
-  Farm Kentucky 206
-  Proposed BESS 500m Zone
-  Renewable Energy Environmental Authorisations



Figure 5. Cumulative Impact Map. Indicating other Renewable Energy Facilities that have been granted Environmental Authorisation (EA).



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8. Heritage Assessment

Background

Environmental Authorisation for the proposed development of the Great Karoo Wind Farm to be located on Farm Kentucky 206 and Portion 1 of Farm Wolvenkop 207, Northern Cape was issued on 12 August 2014. Great Karoo Wind Farm (Pty) Ltd would like to provide for the installation of a Battery Energy Storage System (BESS) at the authorised Great Karoo WEF (DEA Ref 12/12/20/2370/3) in the Northern Cape. The BESS is proposed to be located near to the facility substation, and will be approximately 3-4ha in total extent. Medium Voltage below ground or overhead cabling (33kV or less) will connect the BESS to the substation. An area of ~500m around the boundary of the facility substation is to be assessed, to allow for the optimization of the placement of the BESS. During the EIA process for the approved WEF, both archaeological and palaeontological assessments were completed for the area proposed for the BESS. These assessments are reviewed below in order to determine the likely impact of the proposed BESS on heritage resources.

Archaeology and built environment heritage

Booth (SAHRIS NID 44935) conducted a field assessment of the area proposed for development in 2012. Booth (2012) noted that “No archaeological heritage remains were documented within the areas proposed for the development of the wind turbines.” Furthermore, the proposed BESS is to be located in an area within a 500m assessment area around the substation for the Great Karoo WEF, an area that has been previously assessed for impacts to archaeological resources by Booth (2012). Booth (2012) identified no heritage resources in this area. However, Booth (2012) did identify a family graveyard (Site ID 35235) and an informal labourers’ graveyard (Site ID 35281) situated near to the current farmstead complex (approximately 1.5 to 2km from the Great Karoo WEF Substation), the remnants of a stone-walled kraal to the north of the current farmstead complex (not mapped) and the ruins of a stone walled, large farmstead complex were documented within one of the valleys (Site ID 35236). These identified sites have been mapped in relation to the proposed development (Figures 3a - 3c). None of the archaeological or built environment heritage resources identified by Booth (2012) are located near to the proposed development and as such, it is very unlikely that the proposed BESS will negatively impact on significant archaeological or built environment heritage resources.

Palaeontology

The area proposed for development of the BESS is underlain by sediments that have very high palaeontological sensitivity according to the SAHRIS Fossil Sensitivity Map (Figure 4). The geology map of the area (Council of GeoScience Map 3220 Sutherland, Figure 5) indicates that the area is underlain by sediments of the Karoo Supergroup assigned to the Beaufort group, within the Abrahamskraal Formation of the Adelaide Subgroup. This was confirmed by Rossouw (2012, SAHRIS ID 44936) in the Desktop Palaeontological Impact Assessment conducted for the proposed Hidden Valley WEF which includes the area proposed for development.

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Rossouw (2012) recommended that a palaeontological field assessment be conducted of the turbine footings, access roads, offices and substation and underground cable routes prior to the commencement of development activities associated with the Great Karoo WEF. In addition, Rossouw (2012) recommended that palaeontological monitoring take place during the construction phase of the Great Karoo WEF development. In their Final Comment for the Great Karoo WEF dated 25 August 2016, SAHRA recommended that a walk-down of the amended layout is required prior to construction. This must be conducted by a qualified palaeontologist to ensure that no heritage resources are to be impacted by the new locations of the turbines. If heritage resources are identified at or near any proposed infrastructure, an assessment of the significance of the heritage resources and the impact to the identified heritage resource must be completed. A report detailing the results of the survey must be submitted to SAHRA before construction of the Great Karoo WEF commences.

In a subsequent letter from SAHRA dated 21 October 2016, SAHRA “There will be no need for further palaeontological field assessment, as the Desktop Study is sufficient. A map of the identified palaeontological resources relative to the layout of the proposed development must be emailed to the case officer and the ECO must monitor all excavations in the Great Karoo WEF.” No such map is yet available and as such, it is recommended that this recommendation also apply to the proposed development of the BESS.

Cumulative Impacts

The proposed BESS development will form part of the infrastructure required for the Great Karoo WEF and is located immediately adjacent to the substation and operations and maintenance facilities associated with the Great Karoo WEF. Furthermore, the proposed BESS is located within an already approved WEF which is also located within a belt of approved renewable energy facilities (Figure 5). In terms of impacts to heritage resources, it is preferred that this kind of infrastructure development is concentrated in one location and is not sprawled across an otherwise culturally significant landscape. The construction of the proposed BESS is therefore unlikely to result in unacceptable risk or loss, nor will the proposed BESS development result in a complete change to the sense of place of the area or result in an unacceptable increase in impact.

Conclusion

Based on the information available from heritage assessments previously conducted in the area proposed for development, the proposed development of the BESS within the Great Karoo WEF is unlikely to negatively impact significant archaeological, built environment and palaeontological heritage as long as the recommendations contained in Booth (2012) and Rossouw (2012), and repeated below, are implemented. From a heritage perspective, the proposed BESS can be located anywhere within the 500m area assessed in this screening assessment.

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Recommendations:

- A walk-down of the proposed BESS area is required prior to construction. This must be conducted by a qualified archaeologist to ensure that no heritage resources are to be impacted by the development. If heritage resources are identified at or near any proposed infrastructure, an assessment of the significance of the heritage resources and the impact to the identified heritage resource must be completed. A report detailing the results of the survey must be submitted to SAHRA before construction commences.
- If concentrations of archaeological heritage material and human remains are uncovered during construction, all work must cease immediately and be reported to the Albany Museum (046 622 2312) and/or the South African Heritage Resources Agency (SAHRA) (021 642 4502) so that systematic and professional investigation/ excavation can be undertaken.
- Construction managers/foremen should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.
- A map of the identified palaeontological resources relative to the layout of the proposed development must be emailed to the case officer and the ECO must monitor all excavations associated with the BESS.

RECOMMENDATION

The heritage resources in the area proposed for development are sufficiently recorded - The surveys undertaken in the area adequately captured the heritage resources. There are no known sites which require mitigation or management plans. No further heritage work is recommended for the proposed development.

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Table 2: Impact Assessment Table

NATURE: Significant archaeological, built environment and palaeontological heritage resources may be impacted by the construction phase of the proposed development								
		Archaeology without Mitigation		Archaeology with Mitigation		Palaeontology without Mitigation		Palaeontology with Mitigation
MAGNITUDE	L (1)	No significant archaeological resources have been identified in proximity to the proposed BESS.	L (1)	No significant archaeological resources have been identified in proximity to the proposed BESS.	M (6)	The sediments underlying the proposed development have very high palaeontological sensitivity.	L(1)	The sediments underlying the proposed development have very high palaeontological sensitivity.
DURATION	H (5)	Where manifest, the impact will be permanent.	H (5)	Where manifest, the impact will be permanent.	H (5)	Where manifest, the impact will be permanent.	H (5)	Where manifest, the impact will be permanent.
EXTENT	L (1)	Localised within the site boundary	L (1)	Localised within the site boundary	L (1)	Localised within the site boundary.	L (1)	Localised within the site boundary.
PROBABILITY	L (1)	Probability is low	L (1)	Probability is low	L (1)	It is improbable that fossils Abrahamskraal formation would be impacted	L (1)	It is improbable that fossils Abrahamskraal formation would be impacted
SIGNIFICANCE	L	(1+5+1)x1=7	L	(1+5+1)x1=7	L	(6+5+1)x1=12	L	(1+5+1)x1=7
STATUS		Neutral		Neutral		Neutral		Neutral
REVERSIBILITY	L	Any impacts to heritage resources that do occur are irreversible	L	Any impacts to heritage resources that do occur are irreversible	L	Any impacts to heritage resources that do occur are irreversible	L	Any impacts to heritage resources that do occur are irreversible
IRREPLACEABLE LOSS OF RESOURCES?	L	Possible	L	Possible	L	Possible	L	Possible
CAN IMPACTS BE MITIGATED		Yes		Yes		Yes		Yes
MITIGATION:								
<ul style="list-style-type: none"> A walk-down of the proposed BESS area is required prior to construction. This must be conducted by a qualified archaeologist to ensure that no heritage resources are to be impacted by the development. If heritage resources are identified at or near any proposed infrastructure, an assessment of the significance of the heritage resources and the impact to the identified heritage resource must be completed. A report detailing the results of the survey must be submitted to SAHRA before construction commences. Construction managers/foremen should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites. A map of the identified palaeontological resources relative to the layout of the proposed development must be emailed to the case officer and the ECO must monitor all excavations associated with the BESS. 								
RESIDUAL RISK:								
<ul style="list-style-type: none"> There will not be residual impacts as a walkthrough would have been conducted prior to site establishment. However, if any impacts occur they are irreversible so even the slightest disturbance will be residual (assuming all mitigation was applied). If concentrations of archaeological heritage material and human remains are uncovered during construction, all work must cease immediately and be reported to the Albany Museum (046 622 2312) and/or the South African Heritage Resources Agency (SAHRA) (021 642 4502) so that systematic and professional investigation/ excavation can be undertaken. 								



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APPENDIX 1

List of heritage resources within 15km of the development area

Site ID	Site no	Full Site Name	Site Type	Grading
128072	3220DB/MEWEF/2017/L049	Maralla East Wind Energy Facility Site L049	Stone walling	Ungraded
127926	3220DB/MEWEF/2017/L014	Maralla East Wind Energy Facility Site L014	Structures	Grade IIIc
128067	3220DB/MEWEF/2017/L047	Maralla East Wind Energy Facility Site L047	Settlement	Ungraded
128084	3220DB/MEWEF/2017/L052	Maralla East Wind Energy Facility Site L052	Artefacts	Ungraded
128262	3220DB/MEWEF/2017/L059	Maralla East Wind Energy Facility L059	Stone walling	Ungraded
128074	3220DB/MEWEF/2017/L050	Maralla East Wind Energy Facility Site L050	Stone walling	Ungraded
128077	3220DB/MEWEF/2017/L051	Maralla East Wind Energy Facility Site L051	Stone walling	Ungraded
128266	3220DB/MEWEF/2017/D047	Maralla East Wind Energy Facility Site D047	Deposit	Ungraded
128267	3220DB/MEWEF/2017/D048	Maralla East Wind Energy Facility Site D048	Burial Grounds & Graves	Ungraded
128264	3220DB/MEWEF/2017/D013	Maralla East Wind Energy Facility Site D013	Archaeological	Ungraded
128265	3220DB/MEWEF/2017/D014	Maralla East Wind Energy Facility Site D014	Burial Grounds & Graves	Ungraded
128270	3220DB/MEWEF/2017/D051	Maralla East Wind Energy Facility Site D051	Artefacts	Ungraded
128271	3220DB/MEWEF/2017/D052	Maralla East Wind Energy Facility Site D052	Stone walling	Ungraded
128268	3220DB/MEWEF/2017/D049	Maralla East Wind Energy Facility Site D049	Stone walling	Ungraded
128269	3220DB/MEWEF/2017/D050	Maralla East Wind Energy Facility Site D050	Burial Grounds & Graves	Ungraded
35220	HDV002	Hidden Valley 02	Stone walling	Grade IIIb
35224	HDV003	Hidden Valley 03	Stone walling	Grade IIIb
128274	3220DB/MEWEF/2017/D055	Maralla East Wind Energy Facility Site D055	Stone walling	Ungraded
94454	KSW2	KSW2	Archaeological, Stone walling	
94455	KSW3	KSW3	Archaeological, Stone walling	
35230	HDV005	Hidden Valley 05	Stone walling	Grade IIIb
35231	HDV006	Hidden Valley 06	Building	Grade IIIb

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35642	GK119	Gamma Kappa 119	Stone walling	Grade IIIb
35225	HDV004	Hidden Valley 04	Stone walling	Grade IIIb
35236	HDV011	Hidden Valley 011	Building	Grade IIIb
35234	HDV009	Hidden Valley 09	Burial Grounds & Graves	Grade IIIa
35232	HDV007	Hidden Valley 07	Stone walling	Grade IIIb
35233	HDV008	Hidden Valley 08	Stone walling	Grade IIIb
35281	HDV009	Hidden Valley 009	Burial Grounds & Graves	Grade IIIa
127884	3220DB/MEWEF/2017/L009	Maralla East Wind Energy Facility Site L009	Archaeological	Ungraded
35219	HDV001	Hidden Valley 01	Burial Grounds & Graves	Grade IIIa
35235	HDV010	Hidden Valley 010	Burial Grounds & Graves	Grade IIIa
127895	3220DB/MEWEF/2017/L012	Maralla East Wind Energy Facility Site L012	Archaeological	Ungraded
127901	3220DB/MEWEF/2017/L013	Maralla East Wind Energy Facility Site L013	Artefacts	Grade IIIc
127888	3220DB/MEWEF/2017/L010	Maralla East Wind Energy Facility Site L010	Artefacts	Ungraded
127893	3220DB/MEWEF/2017/L011	Maralla East Wind Energy Facility Site L011	Burial Grounds & Graves	Grade IIIb
128068	3220DB/MEWEF/2017/L048	Maralla East Wind Energy Facility Site L048	Settlement	Ungraded

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APPENDIX 2

Reference List with relevant AIAs and PIAs

Heritage Impact Assessments				
Nid	Report Type	Author/s	Date	Title
130621	Heritage Scoping	Jaco van der Walt	28/06/2013	Achaeological Scoping Report for the Proposed Gunstfontein Renewable Energy Project: Wind and Solar Energy Facilities and The Associated Grid Connection Infrastructure, Northern Cape
130623	PIA Desktop	Barry Millstead	10/07/2013	Desktop Palaeontological Heritage Impact Assessment Report on the Site of Proposed Solar and Wind Energy Generation Facilities (Gunsfontein Project) to be Located on Various Farms Near Sutherland, Northern Cape Province
152531	HIA Phase 1	Timothy Hart, Lita Webley	20/12/2013	Heritage Impact Assessment Report for the Phase 1 Roggeveld Wind Farm
44934	AIA Desktop	Celeste Booth	01/08/2011	An archaeological desktop study for the propsoed establishment of the Hidden Valley wind energy facility and associated infrastructure ona a site south of Sutherland, Northern Cape Province
53187	HIA Phase 1	Timothy Hart, Lita Webley	01/03/2011	HERITAGE IMPACT ASSESSMENT PROPOSED WIND ENERGY FACILITY
44935	AIA Phase 1	Celeste Booth	01/02/2012	A Phase 1 AIA for the proposed Hlidden Valley Wind Energy Facility, near Sutherland, Northern cape Province
183350	HIA Phase 1	Natalie Kendrick	27/10/2014	Heritage Impact Assessment for the Karreebosch Wind Farm (Phase 2 Roggevelt Wind Farm)
44936	PIA Desktop	Lloyd Rossouw	01/03/2012	Palaeontological desktop assessment of the proposed Hidden Valley Wind Energy Facility near Sutherland, Northern Cape Province

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APPENDIX 3 - Keys/Guides

Key/Guide to Acronyms

AIA	Archaeological Impact Assessment
DARD	Department of Agriculture and Rural Development (KwaZulu-Natal)
DEA	Department of Environmental Affairs (National)
DEADP	Department of Environmental Affairs and Development Planning (Western Cape)
DEDEAT	Department of Economic Development, Environmental Affairs and Tourism (Eastern Cape)
DEDECT	Department of Economic Development, Environment, Conservation and Tourism (North West)
DEDT	Department of Economic Development and Tourism (Mpumalanga)
DEDTEA	Department of economic Development, Tourism and Environmental Affairs (Free State)
DENC	Department of Environment and Nature Conservation (Northern Cape)
DMR	Department of Mineral Resources (National)
GDARD	Gauteng Department of Agriculture and Rural Development (Gauteng)
HIA	Heritage Impact Assessment
LEDET	Department of Economic Development, Environment and Tourism (Limpopo)
MPRDA	Mineral and Petroleum Resources Development Act, no 28 of 2002
NEMA	National Environmental Management Act, no 107 of 1998
NHRA	National Heritage Resources Act, no 25 of 1999
PIA	Palaeontological Impact Assessment
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
VIA	Visual Impact Assessment

Full guide to Palaeosensitivity Map legend

	RED:	VERY HIGH - field assessment and protocol for finds is required
	ORANGE/YELLOW:	HIGH - desktop study is required and based on the outcome of the desktop study, a field assessment is likely
	GREEN:	MODERATE - desktop study is required
	BLUE/PURPLE:	LOW - no palaeontological studies are required however a protocol for chance finds is required
	GREY:	INSIGNIFICANT/ZERO - no palaeontological studies are required
	WHITE/CLEAR:	UNKNOWN - these areas will require a minimum of a desktop study.

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APPENDIX 4 - Methodology

The Heritage Screener summarises the heritage impact assessments and studies previously undertaken within the area of the proposed development and its surroundings. Heritage resources identified in these reports are assessed by our team during the screening process.

The heritage resources will be described both in terms of **type**:

- Group 1: Archaeological, Underwater, Palaeontological and Geological sites, Meteorites, and Battlefields
- Group 2: Structures, Monuments and Memorials
- Group 3: Burial Grounds and Graves, Living Heritage, Sacred and Natural sites
- Group 4: Cultural Landscapes, Conservation Areas and Scenic routes

and **significance** (Grade I, II, IIIa, b or c, ungraded), as determined by the author of the original heritage impact assessment report or by formal grading and/or protection by the heritage authorities.

Sites identified and mapped during research projects will also be considered.

DETERMINATION OF THE EXTENT OF THE INCLUSION ZONE TO BE TAKEN INTO CONSIDERATION

The extent of the inclusion zone to be considered for the Heritage Screener will be determined by CTS based on:

- the size of the development,
- the number and outcome of previous surveys existing in the area
- the potential cumulative impact of the application.

The inclusion zone will be considered as the region within a maximum distance of 50 km from the boundary of the proposed development.

DETERMINATION OF THE PALAEOLOGICAL SENSITIVITY

The possible impact of the proposed development on palaeontological resources is gauged by:

- reviewing the fossil sensitivity maps available on the South African Heritage Resources Information System (SAHRIS)
- considering the nature of the proposed development
- when available, taking information provided by the applicant related to the geological background of the area into account

DETERMINATION OF THE COVERAGE RATING ASCRIBED TO A REPORT POLYGON

Each report assessed for the compilation of the Heritage Screener is colour-coded according to the level of coverage accomplished. The extent of the surveyed coverage is labeled in three categories, namely low, medium and high. In most instances the extent of the map corresponds to the extent of the development for which the specific report was undertaken.

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Low coverage will be used for:

- desktop studies where no field assessment of the area was undertaken;
- reports where the sites are listed and described but no GPS coordinates were provided.
- older reports with GPS coordinates with low accuracy ratings;
- reports where the entire property was mapped, but only a small/limited area was surveyed.
- uploads on the National Inventory which are not properly mapped.

Medium coverage will be used for

- reports for which a field survey was undertaken but the area was not extensively covered. This may apply to instances where some impediments did not allow for full coverage such as thick vegetation, etc.
- reports for which the entire property was mapped, but only a specific area was surveyed thoroughly. This is differentiated from low ratings listed above when these surveys cover up to around 50% of the property.

High coverage will be used for

- reports where the area highlighted in the map was extensively surveyed as shown by the GPS track coordinates. This category will also apply to permit reports.

RECOMMENDATION GUIDE

The Heritage Screener includes a set of recommendations to the applicant based on whether an impact on heritage resources is anticipated. One of three possible recommendations is formulated:

(1) The heritage resources in the area proposed for development are sufficiently recorded - The surveys undertaken in the area adequately captured the heritage resources. There are no known sites which require mitigation or management plans. No further heritage work is recommended for the proposed development.

This recommendation is made when:

- enough work has been undertaken in the area
- it is the professional opinion of CTS that the area has already been assessed adequately from a heritage perspective for the type of development proposed

(2) 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.

This recommendation is made in instances in which there are already some studies undertaken in the area and/or in the adjacent area for the proposed development. Further studies in a limited HIA may include:

- improvement on some components of the heritage assessments already undertaken, for instance with a renewed field survey and/or with a specific specialist for the type of heritage resources expected in the area
- compilation of a report for a component of a heritage impact assessment not already undertaken in the area

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- undertaking mitigation measures requested in previous assessments/records of decision.

(3) The heritage resources within the area proposed for the development have not been adequately surveyed yet - Few or no surveys have been undertaken in the area proposed for development. A full Heritage Impact Assessment with a detailed field component is recommended for the proposed development.

Note:

The responsibility for generating a response detailing the requirements for the development lies with the heritage authority. However, since the methodology utilised for the compilation of the Heritage Screeners is thorough and consistent, contradictory outcomes to the recommendations made by CTS should rarely occur. Should a discrepancy arise, CTS will immediately take up the matter with the heritage authority to clarify the dispute.

APPENDIX 5 -Summary of Specialist Expertise

Jenna Lavin, an archaeologist with an MSc in Archaeology and Palaeoenvironments, and currently completing an MPhil in Conservation Management, heads up the heritage division of the organisation, and has a wealth of experience in the heritage management sector. Jenna's previous position as the Assistant Director for Policy, Research and Planning at Heritage Western Cape has provided her with an in-depth understanding of national and international heritage legislation. Her 8 years of experience at various heritage authorities in South Africa means that she has dealt extensively with permitting, policy formulation, compliance and heritage management at national and provincial level and has also been heavily involved in rolling out training on SAHRIS to the Provincial Heritage Resources Authorities and local authorities.

Jenna is on the Executive Committee of the Association of Professional Heritage Practitioners (APHP), and is also an active member of the International Committee on Monuments and Sites (ICOMOS) as well as the International Committee on Archaeological Heritage Management (ICAHM). In addition, Jenna has been a member of the Association of Southern African Professional Archaeologists (ASAPA) since 2009. Recently, Jenna has been responsible for conducting training in how to write Wikipedia articles for the Africa Centre's WikiAfrica project.

Since 2016, Jenna has drafted over 50 Heritage Impact Assessments throughout South Africa.

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