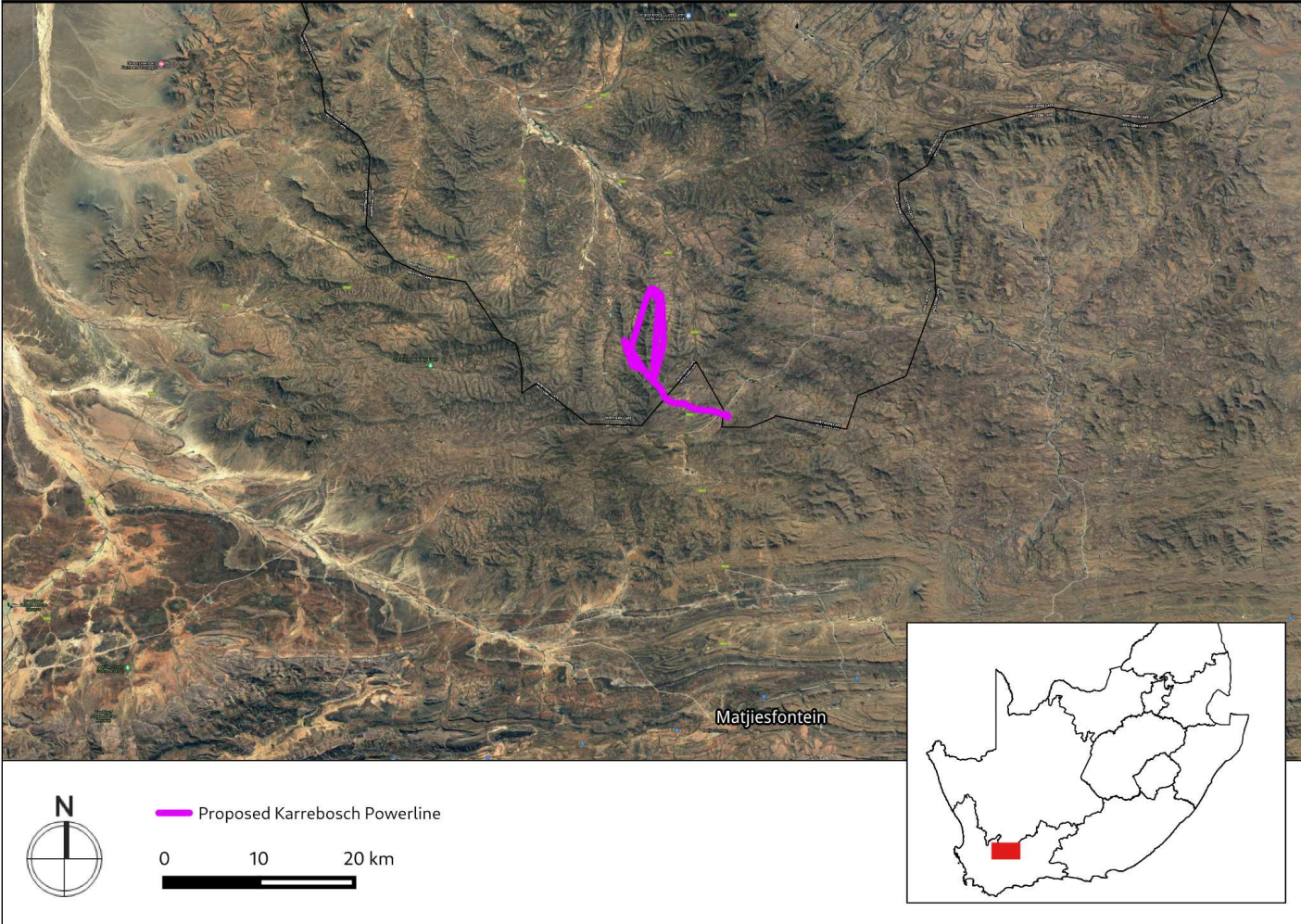




CTS HERITAGE

HERITAGE SCREENER

CTS Reference Number:	CTS21_108
HWC Ref No.	21102218
SAHRIS Case No.	17397
Client:	WSP
Date:	August 2021
Title:	Proposed establishment of 132kV powerline to evacuate power from the Karreebosch WEF to the National Grid in the Western and Northern Cape
	
Figure 1a. Satellite map indicating the location of the proposed development in the Western and Northern Cape	
CTS Heritage Recommendation	RECOMMENDATION Based on the information available, it is likely that the proposed grid connection corridor will impact on significant archaeological heritage and as such, it is recommended that a Heritage Impact Assessment is conducted that complies with section 38(3) of the NHRA for the proposed development with special focus on impacts to significant archaeological heritage.

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1. Proposed Development Summary

The development of a 132kV overhead power line to connect the Karreebosch Wind Energy Facility (WEF) Energy Facility to the national grid via the existing Eskom Komsberg substation. The powerline is approximately 20 km long. The project is situated north of the town of Matjiesfontein in the Karoo Hoogland Local Municipality and the Laingsburg Local Municipality in the Northern Cape Province and Western Cape Province. The 132kV grid connection crosses the following properties:

- Wilgebosch Rivier 188 Remainder
- Ekkraal (Nuwekraal) 199 Portion 2
- Klipbanksfontein 198 Portion 1 and Remainder
- Bon Espirange 73 Portion 1 and Remainder
- Rietfontein 197
- Ekkraal (Nuwekraal) 199 Portion 1 and Remainder
- Standvastigheid 210 Portion 2 (Komsberg Substation)

The OHL will be a 132kV steel single or double structure with kingbird conductor (between 15 and 20m in height – above ground level). Standard overhead line construction methodology will be employed – drill holes (typically 2 – 3m in depth), plant poles, string conductor. It is not envisage that any large excavations and stabilized backfill will be required however this will only be verified on site once the Geotech has been undertaken at each pole position (part of construction works).

2. Application References

Name of relevant heritage authority(s)	SAHRA and HWC
Name of decision making authority(s)	DFFE

3. Property Information

Latitude / Longitude	32°53'48.07"S 20°30'44.56"E
Erf number / Farm number	Wilgebosch Rivier 188 Remainder, Ekkraal (Nuwekraal) 199 Portion 2, Klipbanksfontein 198 Portion 1 and Remainder, Bon Espirange 73 Portion 1 and Remainder, Rietfontein 197, Ekkraal (Nuwekraal) 199 Portion 1 and Remainder and Standvastigheid 210 Portion 2 (Komsberg Substation)
Local Municipality	Laingsburg and Karoo Hoogland
District Municipality	Central Karoo and Namakwa District

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Province	Western Cape and Northern Cape
Current Zoning	Agriculture

4. Nature of the Proposed Development

Total Area	Approximately 14km in length
Depth of excavation (m)	Powerline pole structures - excavations are typically 2 - 3 m in depth - often drilled not dug (depending on terrain)
Height of development (m)	Max 32m in height

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
x	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-
	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

Substation - assume 100m ² (that should include construction space. Concrete slab, transformers , buss bars etc.. Similar height to towers.
--

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

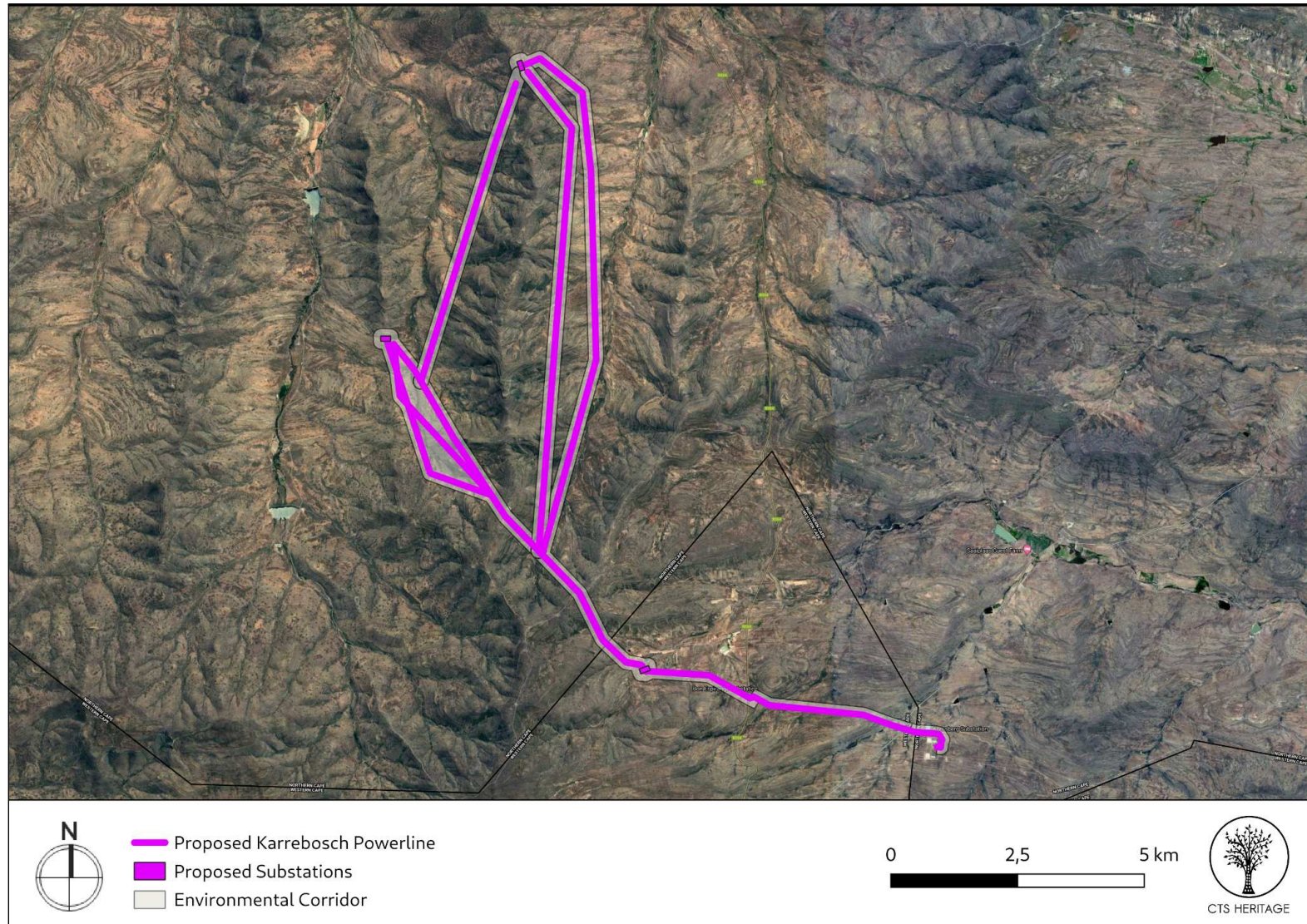


Figure 1b. Overview Map. Satellite image (2020) indicating the proposed development area

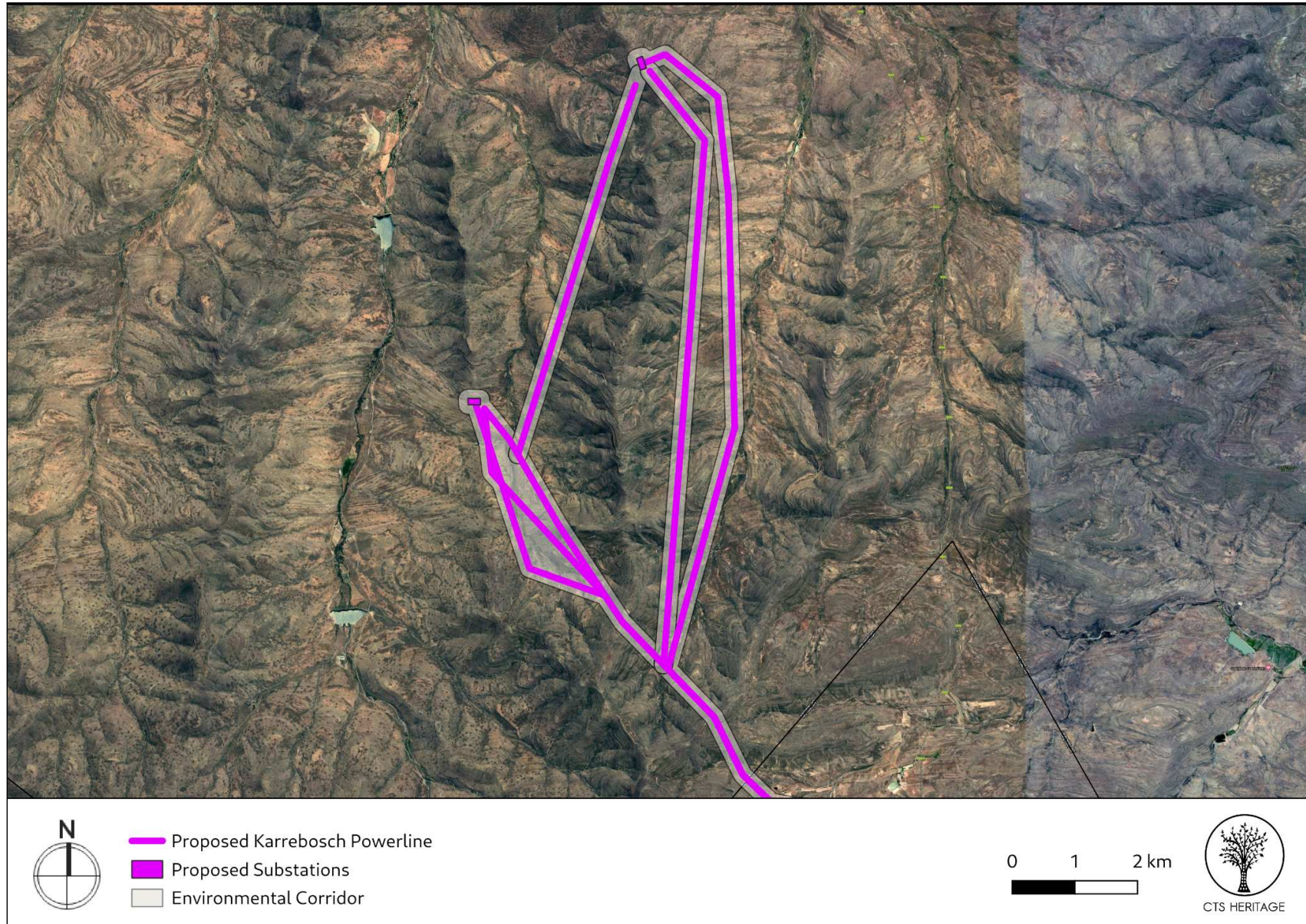


Figure 1c. Overview Map. Satellite image (2020) indicating the proposed development area in the Northern Cape

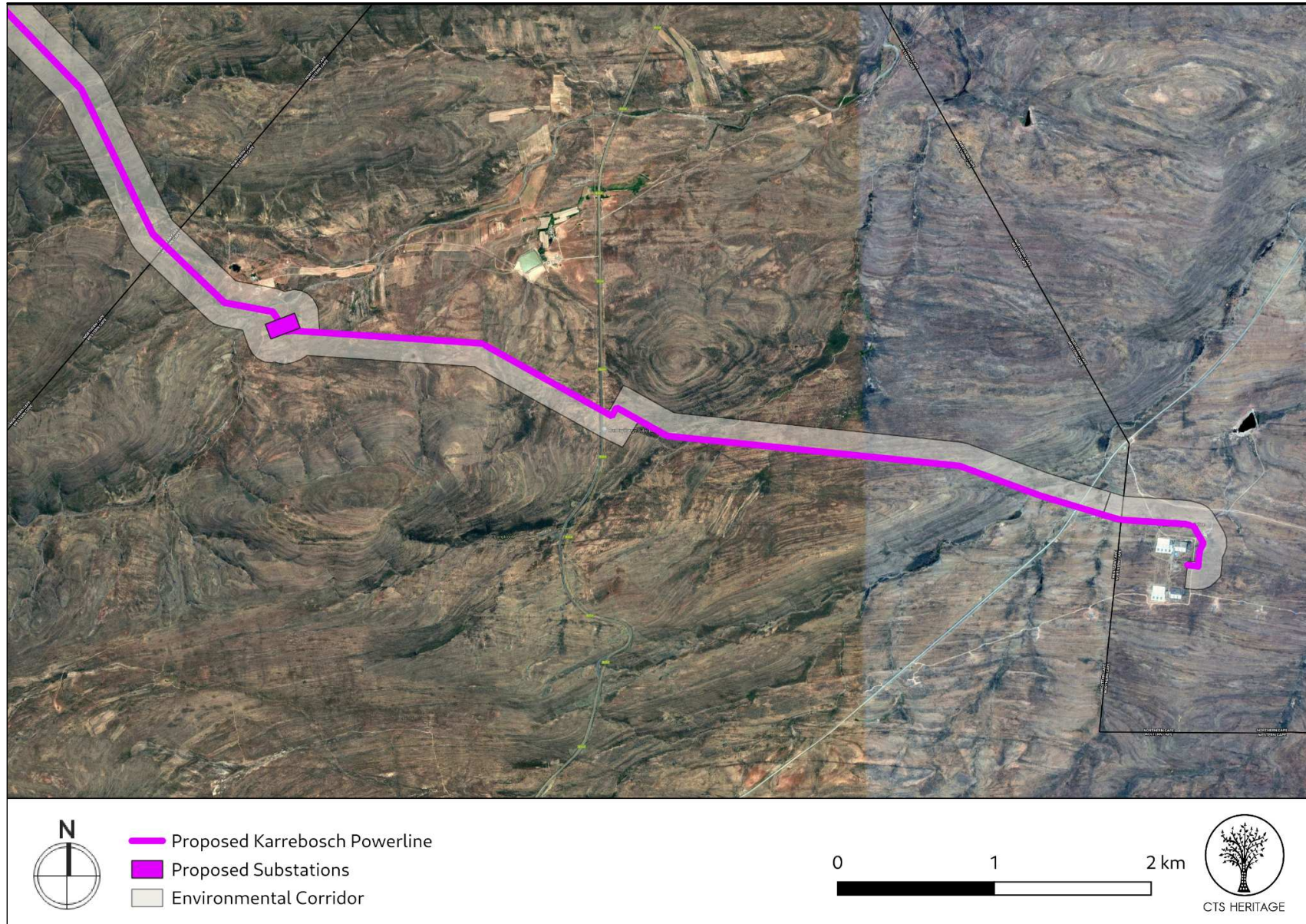


Figure 1d. Overview Map. Satellite image (2020) indicating the proposed development area in the Western and Northern Cape

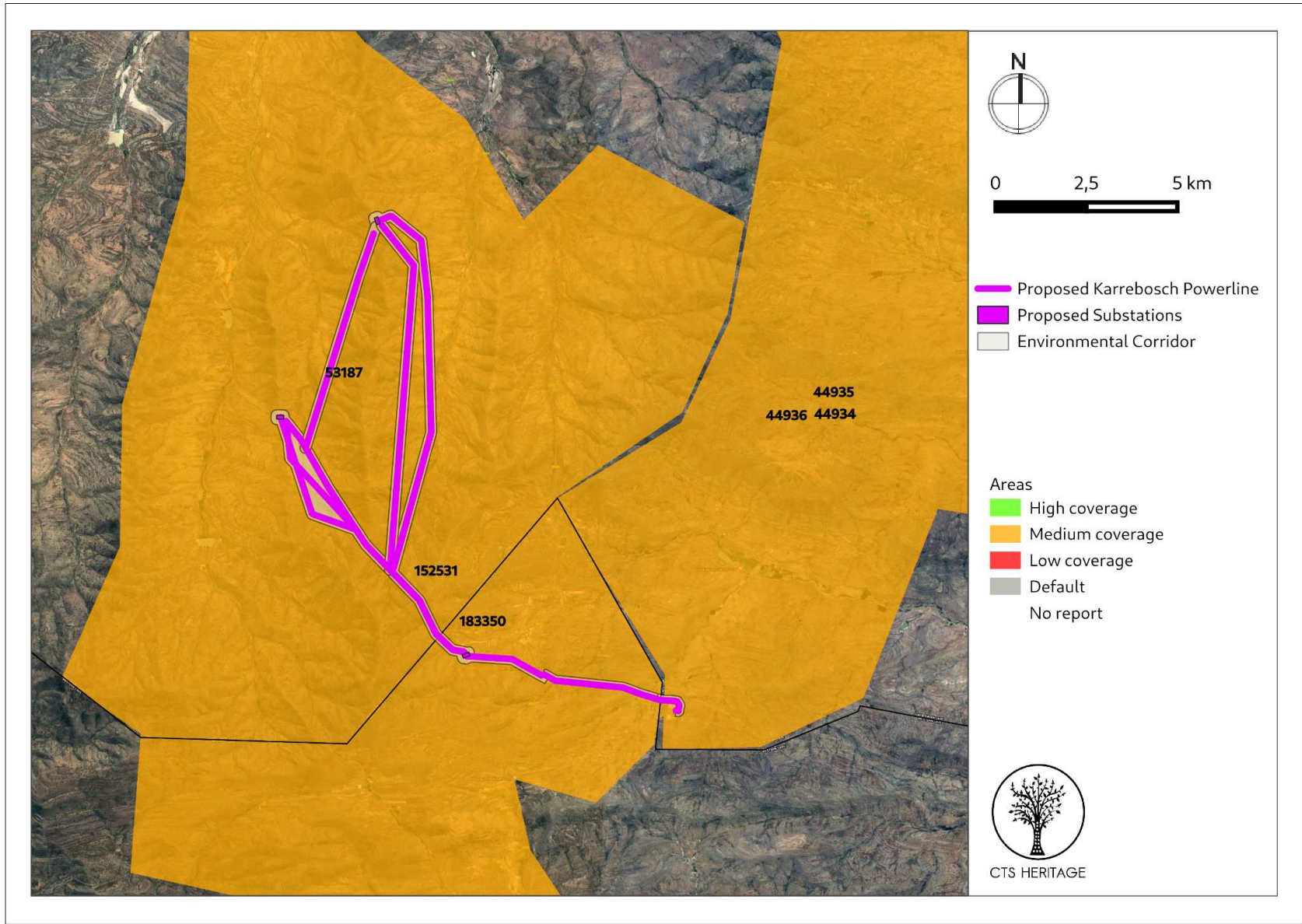


Figure 2a. Previous HIAs Map. Previous Heritage Impact Assessments covering the proposed development area with SAHRIS NIDS indicated. Please see Appendix 2 for a full reference list.

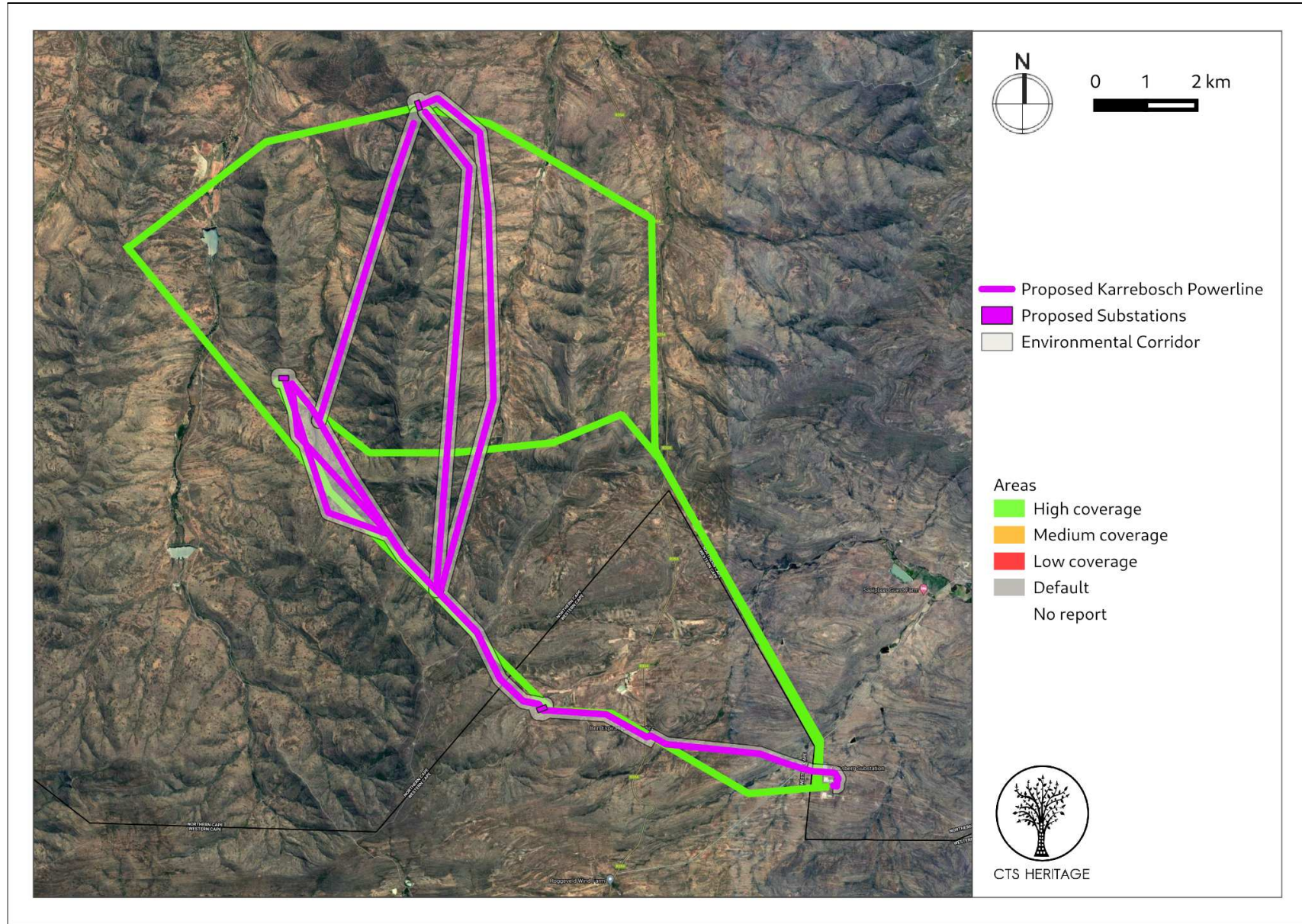


Figure 2b. Previous HIAs Map. HIA conducted by ACO including PIA by Dr Almond covered a powerline in the area proposed for development (SAHRIS Ref 183350).

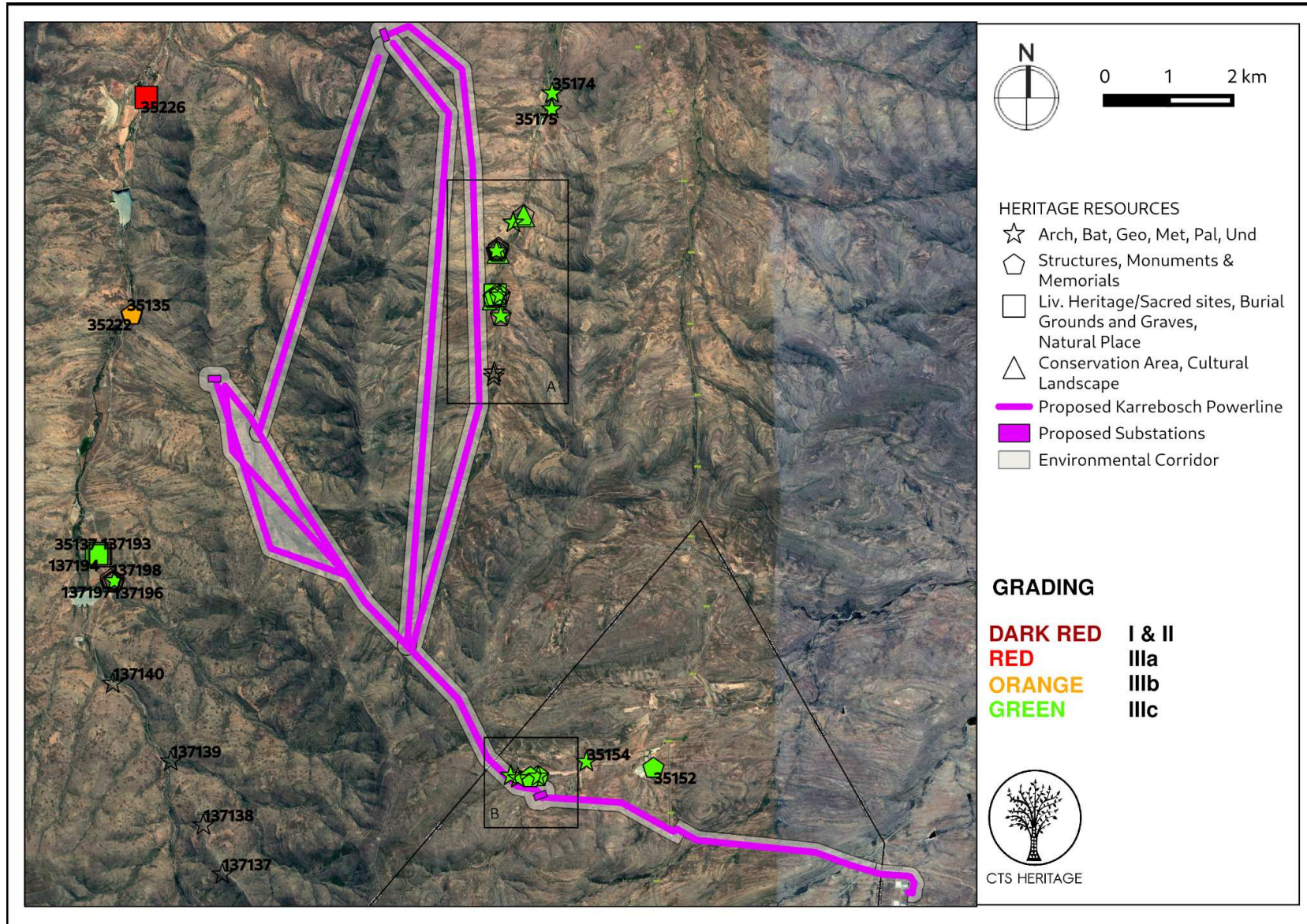
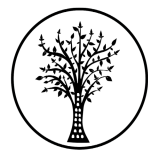


Figure 3. Heritage Resources Map. Heritage Resources previously identified within the study area, with SAHRIS Site IDs indicated in the insets below. Please See Appendix 4 for a full description of heritage resource types.



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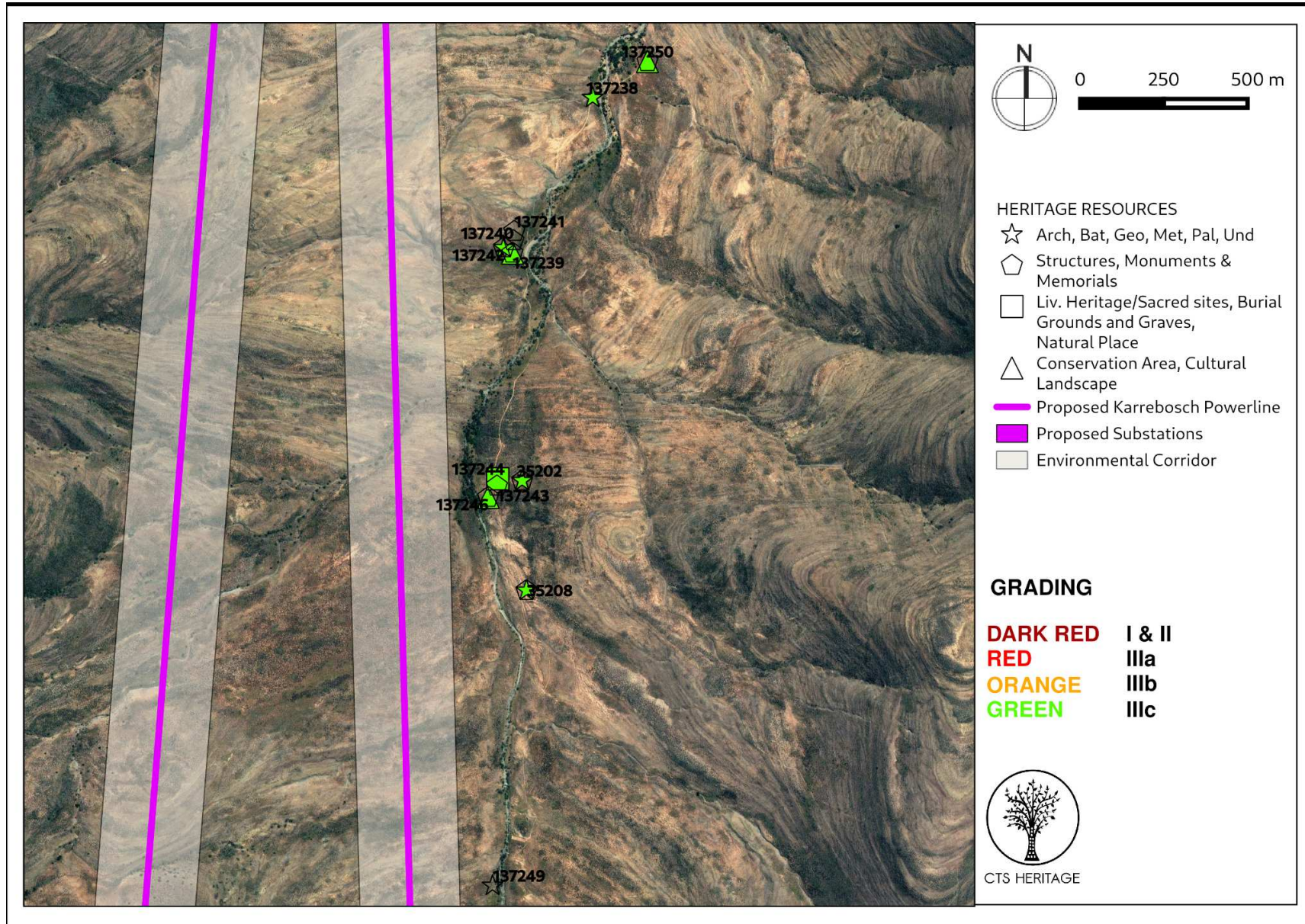
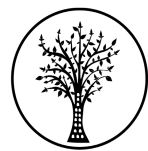


Figure 3a. Heritage Resources Map Inset A

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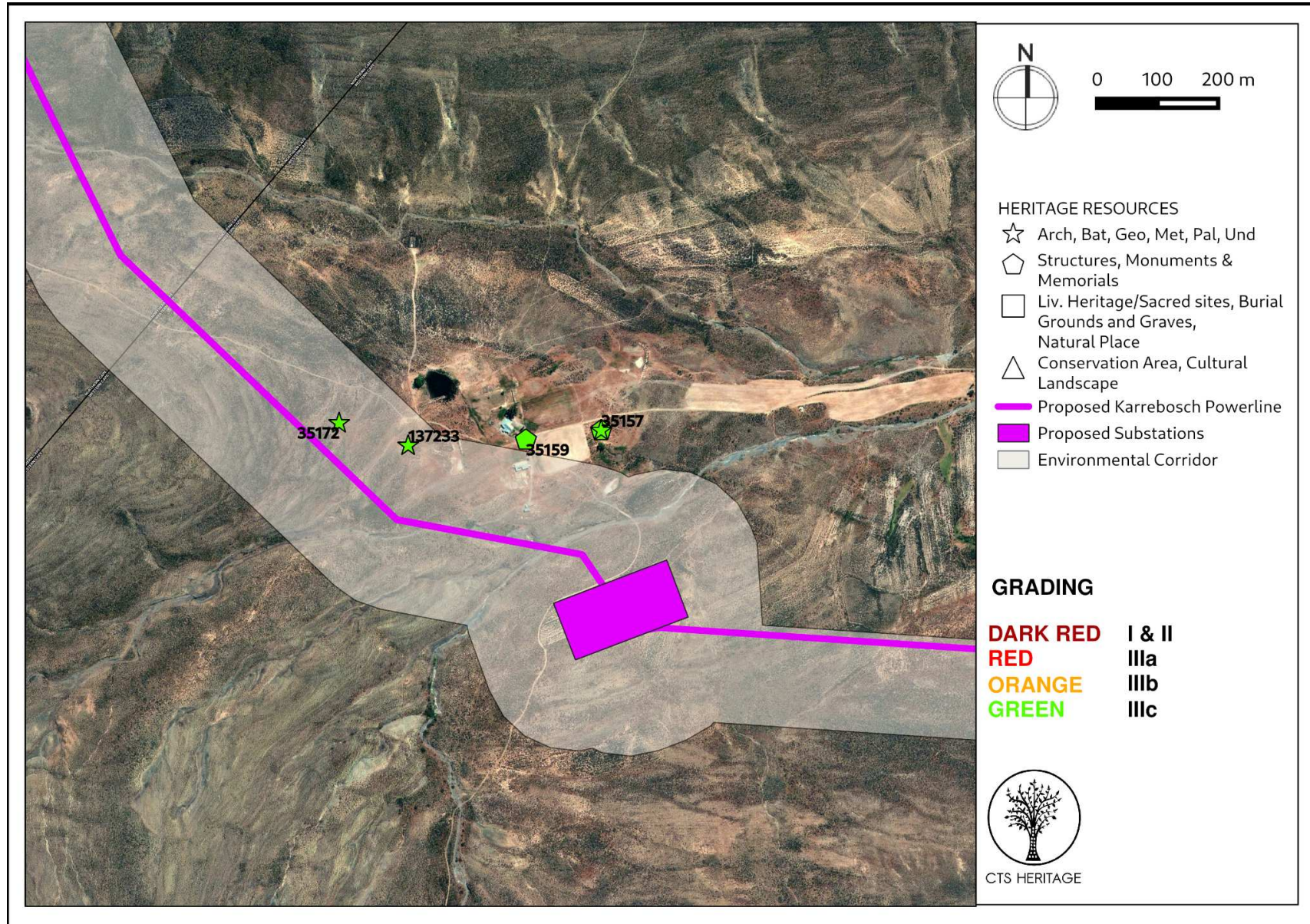
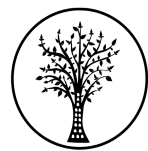


Figure 3b. Heritage Resources Map Inset B

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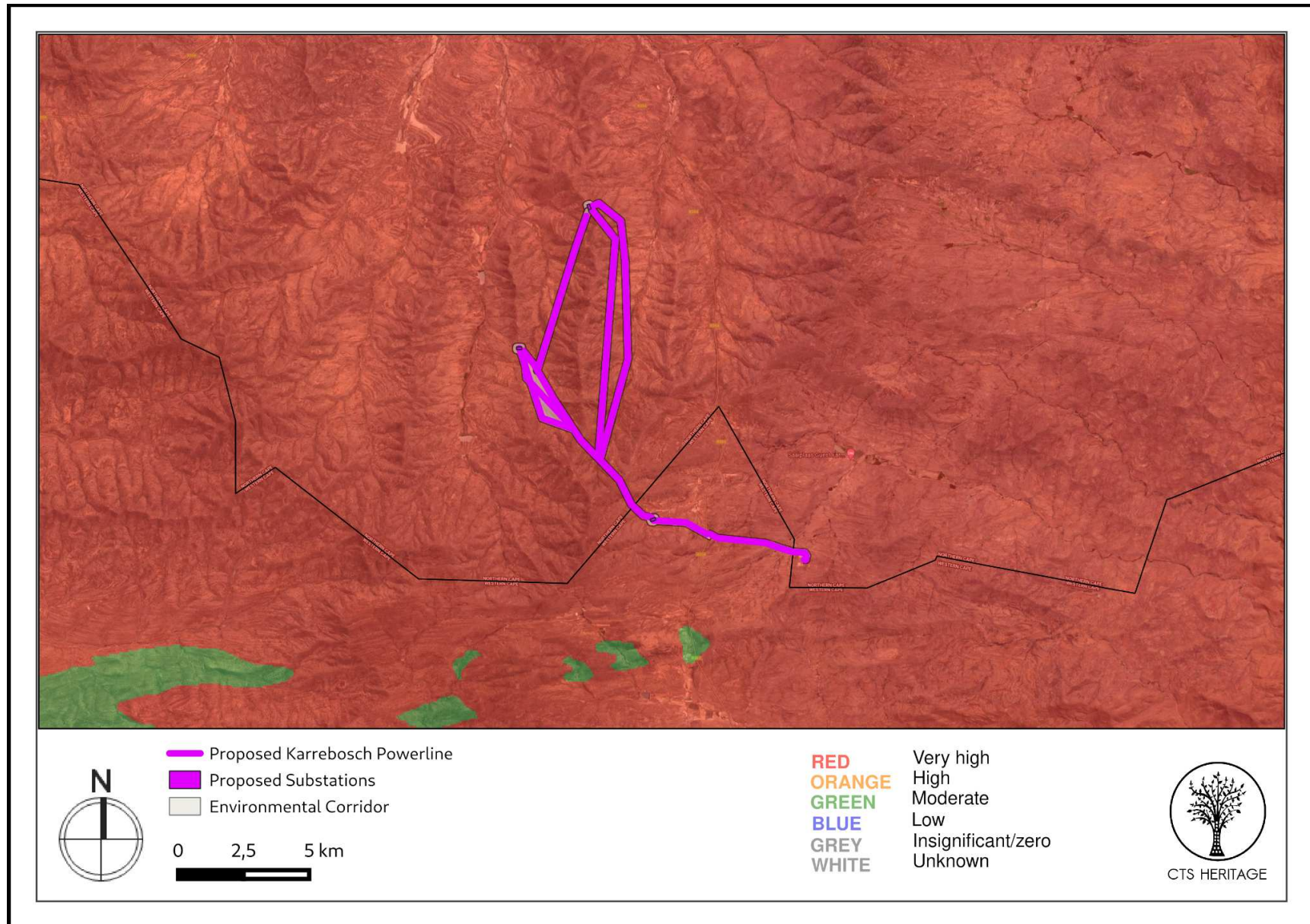


Figure 4a. Palaeosensitivity Map. Indicating fossil sensitivity underlying the study area. Please See Appendix 3 for a full guide to the legend.

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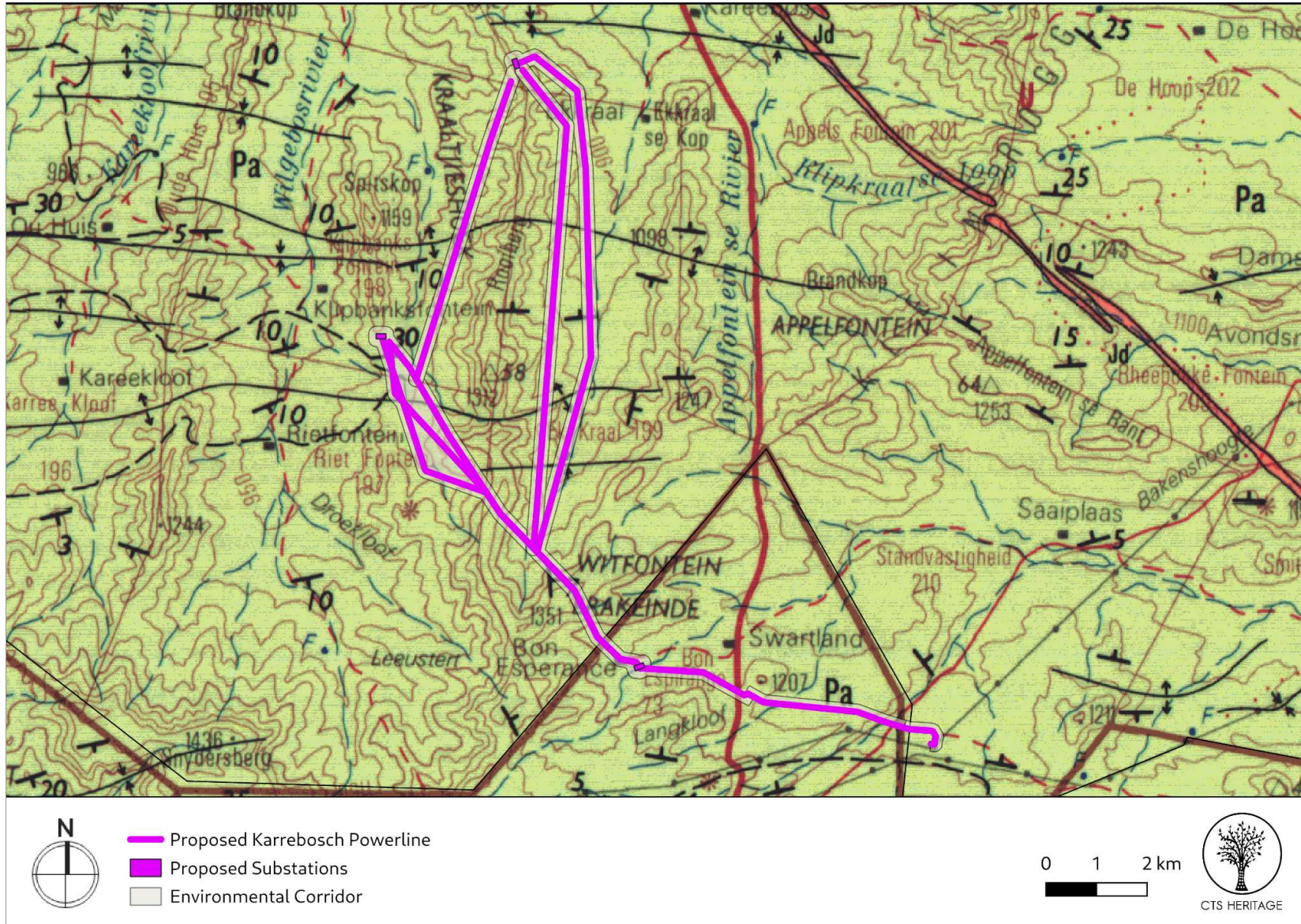
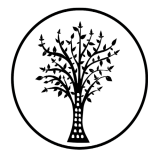


Figure 4b. Geology Map. Extract from the CGS 3220 Sutherland Map indicating that the development area for the proposed Karrebosch Powerline is underlain by the Pa: Abrahamskraal Formation of the Beaufort Group



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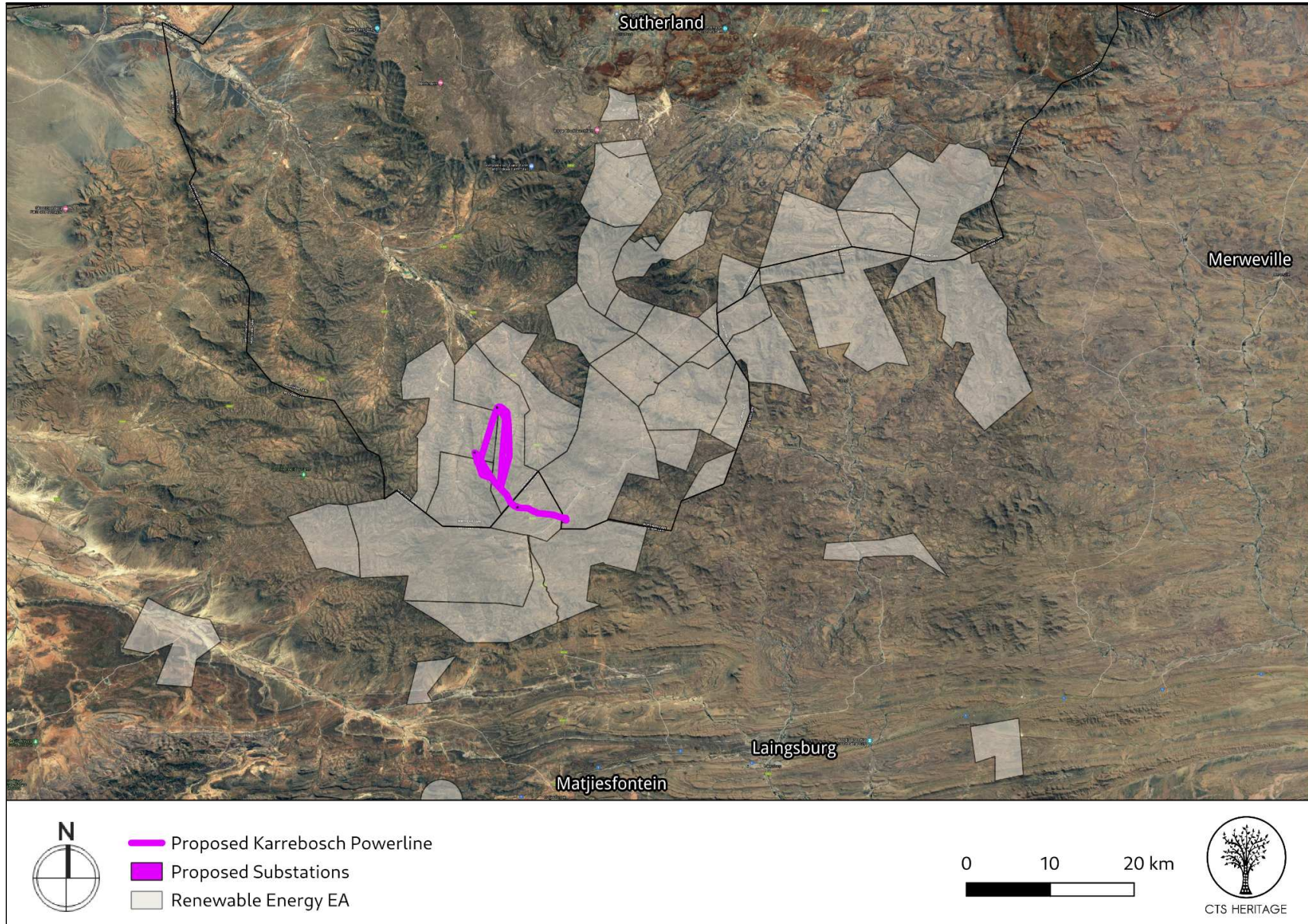
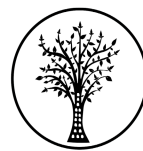


Figure 5. Cumulative Impact Map. Indicating other Renewable Energy Facilities that have been granted Environmental Authorisation (EA).

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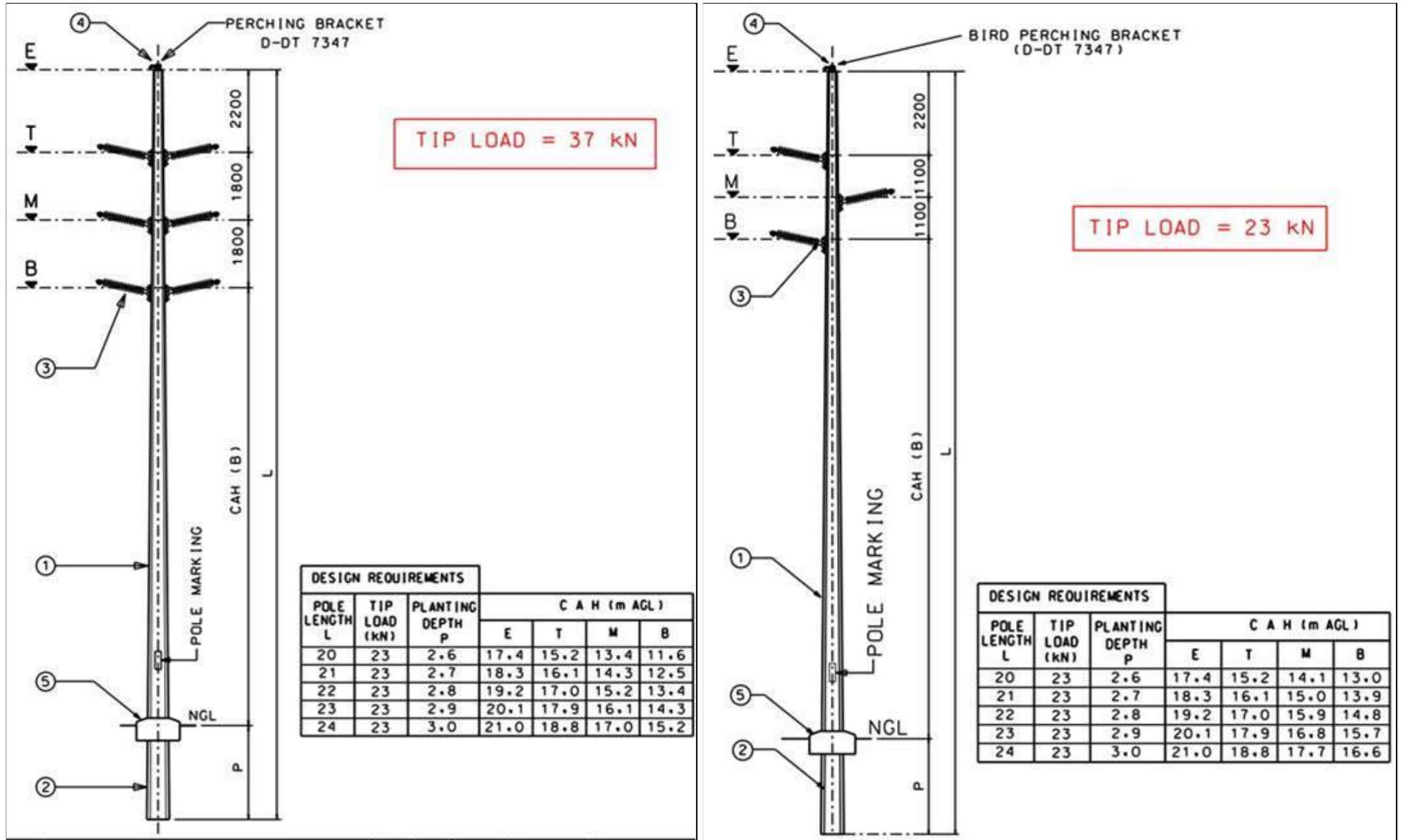


Figure 6. Typical Infrastructure. Eskom



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8. Heritage Assessment

This application is for a proposed powerline associated with the Karrebosch Wind Energy Facility located in both the Western and Northern Cape. The Karrebosch WEF was previously referred to as Phase 2 of the Roggeveld WEF. SAHRA has made numerous comments on both the Roggeveld WEF and the Karrebosch WEF from 2013 with the last comment issued on 26 September 2018 (attached). EA was granted for the Karrebosch WEF on 29 January 2016. In the EA, various requirements were stipulated in terms of impacts to Historical, Cultural and Palaeontological sites. Much of the area proposed for the development of the powerline was assessed as part of the HIA completed for the Karrebosch WEF (Figure 2a and 2b) drafted by the ACO (Kendrick, 2015, SAHRIS Ref 183350). The remaining sections of the proposed powerline were assessed in the Heritage Assessments completed for the Roggeveld WEF (Hart and Webley, 2013, SAHRIS Ref 152531). The heritage information identified in these reports have been extracted and are mapped in Figure 3, 3a and 3b. These reports are also referred to below in order to provide a contextual analysis of the heritage sensitivity of the area proposed for development.

The area proposed for development has been previously assessed, more than once. In addition, the proposed powerline routes lie immediately adjacent to existing grid infrastructure. The original fieldwork conducted for the Roggeveld WEF HIA (2013) which covered the area proposed for development was comprehensive and remains relevant, similarly the fieldwork conducted for the Karrebosch WEF (2015). The Karrebosch HIA (2015) “revealed that the study area is relatively austere in terms of pre-colonial heritage, however valley bottoms contain evidence of early trekboer cultural landscapes – ruins, graves and occasional middens. These consist of collections of ruined stone and mud buildings, threshing floors and kraals located exclusively in the valley areas between the high longitudinal ridges that characterise the study area. There are a number of existing farm houses that contain 19th century fabric, however very few of these have anything more than moderate heritage significance. Parts of the study area enjoy very high aesthetic qualities with the area known by locals as “Gods Window” having grade II aesthetic qualities, hence the significance of the study area lies mainly with its undeveloped wilderness qualities. Interestingly, pre-colonial or stone age heritage and archaeology is extremely scarce in the areas that were searched. Very few archaeological sites of these kinds were recorded despite the fact that overall 9 experienced archaeologists were involved in scouring the landscape.” The HIA for the Karrebosch WEF notes that “The most important colonial archaeological sites in the study area are associated with Ekkraal Valley, the Rietfontein-Wilgebosch River valley and the Krans Kraal-Karrekraal valley. The valley bottoms are archaeologically sensitive...”. Similar findings were made by ACO in their report (2010, SAHRIS Ref: 53187) over the development area (Figure 3, 3a and 3b). As the proposed powerline alternatives traverse the valley areas which have been determined to be archaeologically sensitive, it is likely that significant archaeological heritage resources may be impacted by the proposed development. Further specialist archaeological assessment is therefore recommended.

According to the SAHRIS Palaeosensitivity Map (Figure 4), the area proposed for the powerline development is underlain by sediments of very high palaeontological sensitivity belonging to the Abrahamskraal Formation of the Beaufort Group. A Palaeontological Assessment was conducted by Almond (2015) for the Karrebosch WEF which covers a larger portion of the area proposed for the powerline development, and covered the proposed powerline alternatives specifically (Figure 2b, Appendix to the ACO Report 2015, SAHRIS Ref 183350). According to Almond (2015), “The fluvial Abrahamskraal Formation (Lower Beaufort Group, Karoo Supergroup) that underlies almost the entire wind farm study area is known for its diverse fauna of Permian fossil vertebrates - notably various small- to large-bodied therapsids and reptiles - as well as fossil plants of the *Glossopteris* Flora and low diversity trace fossil assemblages. However, desktop analysis of known fossil distribution within the Main Karoo Basin shows a marked paucity of fossil localities in the study region between Matjiesfontein and Sutherland where sediments belonging only to the lower part of the thick Abrahamskraal Formation succession are represented. Bedrock exposure levels in the Karrebosch Wind Farm study area are generally very poor due to the pervasive cover by superficial sediments (colluvium, alluvium, soils, calcrete) and vegetation. Nevertheless, a sufficiently large outcrop area of Abrahamskraal Formation sediments, exposed in stream and riverbanks, borrow pits, erosion gullies as well as road cuttings along the R354, has been examined during the present fieldwork to infer that macroscopic fossil remains of any sort are very rare indeed here. Exceptions include common trace fossil assemblages (invertebrate burrows) and occasional fragmentary plant remains (horsetail ferns). Levels of tectonic deformation of the bedrocks are generally low and baking by dolerite intrusions (Early Jurassic Karoo Dolerite Suite) is very minor. It is concluded that the Lower Beaufort Group bedrocks in the study area are generally of low palaeontological sensitivity and this also applies to the overlying Late Cenozoic superficial sediments (colluvium, alluvium, calcrete, soils etc).”

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Dr Almond goes on to note that “No areas or sites of exceptional fossil heritage sensitivity or significance have been identified within the Karreebosch Wind Farm study area. The majority of fossil sites recorded in the study region lie outside the anticipated development footprint. The common trace fossil assemblages identified in this study are of widespread occurrence within the Abrahamskraal Formation (*i.e.* not unique to the study area). Construction of the Karreebosch Wind Farm and associated infrastructure is therefore unlikely to entail significant impacts on local fossil heritage resources; *i.e.* the impact significance of the wind farm project is assessed as MINOR. The impact significance of both transmission line route options to Komsberg Substation (Figure 2b) is likewise assessed as MINOR and there is no marked preference for either route option on palaeontological grounds. Irreplaceable loss of fossil heritage is not anticipated, although it should be highlighted that any new vertebrate fossil finds made during construction (*e.g.* exposed in new bedrock excavations) would be of considerable scientific interest, given their rarity.” According to the HIA for the Karreebosch WEF (ACO, 2015), “While the geology of the study area is potentially palaeontologically sensitive, very few fossils were found by either Dr Duncan Miller or Dr John Almond in the study area. No further work in this respect is recommended, other than reporting of any finds during construction to the heritage authorities.” Due to the overlap in assessment areas (Figure 2b), these findings can be extrapolated to the current proposed powerline development. As such, it is recommended that little new information is likely to be gained by further palaeontological fieldwork. Potential impacts to palaeontological heritage can be mitigated through the inspection of final pylon footings by a palaeontologist prior to construction.

According to the ACO reports (2011, 2013 and 2015), parts of the study area enjoy very high aesthetic qualities hence the significance of the study area lies mainly with its undeveloped wilderness qualities which may be negatively impacted by the development of the proposed powerline. However, it must be noted that the proposed powerline is located within a Renewable Energy Development Zone which has been identified for this kind of development. In REDZ areas, there is a reasonable expectation that the cultural landscape of an area will be changed to be dominated, or at least heavily altered, by renewable energy development and its associated infrastructure. In fact, this is the intention of the REDZ areas. Furthermore, the proposed powerline is located within a suite of authorised renewable energy facilities (Figure 5) and as such, the impact of this proposed powerline on the cultural landscape is likely to be negligible. No further specialist cultural landscape assessment is therefore recommended.

RECOMMENDATION

Based on the information available, it is likely that the proposed grid connection corridor will impact on significant archaeological heritage and as such, it is recommended that a Heritage Impact Assessment is conducted that complies with section 38(3) of the NHRA for the proposed development with special focus on impacts to significant archaeological heritage.

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APPENDIX 1

List of heritage resources within the development area

Site ID	Site no	Full Site Name	Site Type	Grading
35222	ROG037	Roggeveld 037	Building	Grade IIIb
35135	ROG005	Roggeveld 005	Building	Grade IIIc
35138	ROG008	Roggeveld 008	Stone walling	Grade IIIc
35152	ROG012	Roggeveld 012	Building	Grade IIIc
35154	ROG013	Roggeveld 013	Stone walling	Grade IIIc
35157	ROG014	Roggeveld 014	Transport infrastructure	Grade IIIc
35159	ROG015	Roggeveld 015	Building	Grade IIIc
35171	ROG016	Roggeveld 016	Stone walling	Grade IIIc
35172	ROG017	Roggeveld 017	Stone walling	Grade IIIc
35174	ROG019	Roggeveld 019	Stone walling	Grade IIIc
35175	ROG020	Roggeveld 020	Stone walling	Grade IIIc
35177	ROG021	Roggeveld 021	Stone walling	Grade IIIc
35178	ROG022	Roggeveld 022	Conservation Area	Grade IIIc
35191	ROG025	Roggeveld 025	Ruin> 100 years, Artefacts	Grade IIIc
35202	ROG028	Roggeveld 028	Artefacts	Grade IIIc
35204	ROG029	Roggeveld 029	Cultural Landscape	Grade IIIc
35208	ROG030	Roggeveld 030	Stone walling	Grade IIIc

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35215	ROG033	Roggeveld 033	Cultural Landscape	Grade IIIc
35137	ROG007	Roggeveld 007	Burial Grounds & Graves	Grade IIIc
35201	ROG027	Roggeveld 027	Burial Grounds & Graves	Grade IIIc
35226	ROG038	Roggeveld 038	Burial Grounds & Graves	Grade IIIa
137190	KWF-005	KAREEBOSCH WIND FARM	Building	
137192	KWF-007	KAREEBOSCH WIND FARM	Burial Grounds & Graves	
137193	KWF-008	KAREEBOSCH WIND FARM	Burial Grounds & Graves	
137194	KWF-009	KAREEBOSCH WIND FARM	Burial Grounds & Graves	
137195	KWF-010	KAREEBOSCH WIND FARM	Structures	
137196	KWF-011	KAREEBOSCH WIND FARM	Structures	
137197	KWF-012	KAREEBOSCH WIND FARM	Structures	
137198	KWF-013	KAREEBOSCH WIND FARM	Structures	
137202	KWF-017	KAREEBOSCH WIND FARM	Building	
137203	KWF-018	KAREEBOSCH WIND FARM	Stone walling	
137204	KWF-019	KAREEBOSCH WIND FARM	Archaeological	
137205	KWF-020	KAREEBOSCH WIND FARM	Building	
137233	KWF-021	KAREEBOSCH WIND FARM	Stone walling	
137234	KWF-022	KAREEBOSCH WIND FARM	Stone walling	
137236	KWF-024	KAREEBOSCH WIND FARM	Stone walling	
137237	KWF-025	KAREEBOSCH WIND FARM	Stone walling	

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137238	KWF-026	KAREEBOSCH WIND FARM	Stone walling	
137239	KWF-027	KAREEBOSCH WIND FARM	Structures	
137240	KWF-028	KAREEBOSCH WIND FARM	Structures	
137241	KWF-029	KAREEBOSCH WIND FARM	Structures	
137242	KWF-030	KAREEBOSCH WIND FARM	Structures	
137243	KWF-031	KAREEBOSCH WIND FARM	Structures	
137244	KWF-032	KAREEBOSCH WIND FARM	Burial Grounds & Graves	
137245	KWF-033	KAREEBOSCH WIND FARM	Structures, Artefacts	
137246	KWF-034	KAREEBOSCH WIND FARM	Structures	
137247	KWF-035	KAREEBOSCH WIND FARM	Structures	
137248	KWF-036	KAREEBOSCH WIND FARM	Stone walling	
137249	KWF-037	KAREEBOSCH WIND FARM	Stone walling	
137250	KWF-038	KAREEBOSCH WIND FARM	Structures	
137259	KWF-046	KAREEBOSCH WIND FARM	Structures	Ungraded
137260	KWF-047	KAREEBOSCH WIND FARM	Burial Grounds & Graves	
137137	BWE-048	Brandvalley Wind Energy	Deposit	
137138	BWE-049	Brandvalley Wind Energy	Deposit	
137139	BWE-050	Brandvalley Wind Energy	Deposit	
137140	BWE-051	Brandvalley Wind Energy	Deposit	

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APPENDIX 2

Reference List with relevant AIAs and PIAs

Heritage Impact Assessments				
Nid	Report Type	Author/s	Date	Title
44934	AIA Desktop	Celeste Booth	01/08/2011	An archaeological desktop study for the proposed establishment of the Hidden Valley wind energy facility and associated infrastructure on a site south of Sutherland, Northern Cape Province
44935	AIA Phase 1	Celeste Booth	01/02/2012	A Phase 1 AIA for the proposed Hidden Valley Wind Energy Facility, near Sutherland, Northern Cape Province
44936	PIA Desktop	Lloyd Rossouw	01/03/2012	Palaeontological desktop assessment of the proposed Hidden Valley Wind Energy Facility near Sutherland, Northern Cape Province
53187	HIA Phase 1	Timothy Hart, Lita Webley	01/03/2011	HERITAGE IMPACT ASSESSMENT PROPOSED WIND ENERGY FACILITY
152531	HIA Phase 1	Timothy Hart, Lita Webley	20/12/2013	Heritage Impact Assessment Report for the Phase 1 Roggeveld Wind Farm
183350	HIA Phase 1	Natalie Kendrick	27/10/2014	Heritage Impact Assessment for the Karreebosch Wind Farm (Phase 2 Roggeveld Wind Farm)
353483	AIA Phase 1	Jonathan Kaplan	1/12/2015	ARCHAEOLOGICAL IMPACT ASSESSMENT Proposed borrow pit (Karusa R354) on the Farm Karreebosch 200/1 near Sutherland, Northern Cape Assessment conducted under Section 38 (3) of the National Heritage Resource Act (No. 25 of 1999)

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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)
DEFF	Department of Environmental, Forestry and Fisheries (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

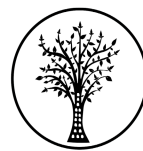
Full guide to Palaeosensitivity Map legend

	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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