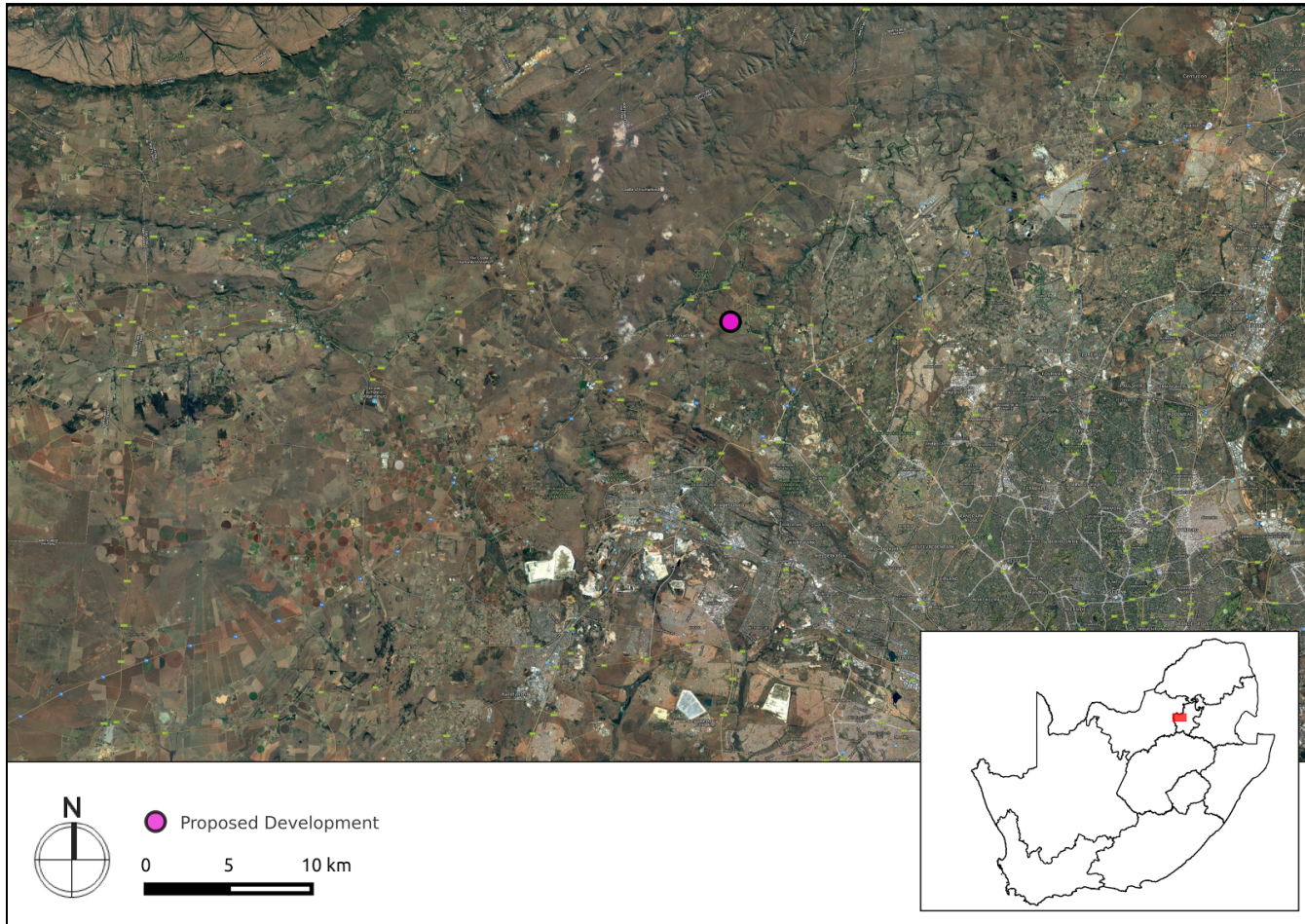


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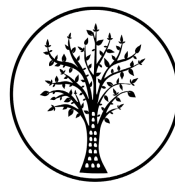
HERITAGE SCREENER

CTS Reference Number:	CTS17_102	 <p>Figure 1a. Satellite map indicating the location of the proposed development in the Gauteng Province</p>
SAHRIS Case ID	11646	
Client:	GKM Environmental Services	
Date:	25 August 2017	
Title:	Proposed Construction of Entertainment Area, Chalets, Camps, Cultural Huts, Septic Tank and Restaurant on Driefontein Farm No 179, Ptn 90, Muldersdrift, Gauteng	
Recommendation by CTS Heritage Specialists: (Type 2)	(2) The heritage resources and the area proposed for development are only partially recorded	

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1. Proposed Development Summary

VGKM Consulting PTY LTD was appointed by Wishington Farm PTY LTD to undertake Environmental Impact Assessment for the proposed construction of a restaurant, entertainment area, cultural huts, camps, chalets, septic tank and the establishment of a grazing area.

2. Application References

Name of relevant heritage authority(s)	South African Heritage Resources Agency
Name of decision making authority(s)	Department of Environmental Affairs

3. Property Information

Latitude / Longitude	-25.997164190335543 S; 27.80867099761963 E
Erf number / Farm number	Driefontein Farm No 179 Portion 90
Local Municipality	Mogale
District Municipality	West Rand
Previous Magisterial District	Krugersdorp
Province	Gauteng
Current Use	Agriculture
Current Zoning	Agriculture
Total Extent	64ha

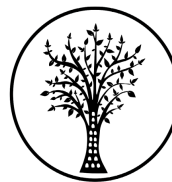
4. Nature of the Proposed Development

Total Surface Area	20ha
Depth of excavation (m)	Unknown
Height of development (m)	Unknown
Expected years of operation before decommission	Permanent

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5. Category of Development

Triggers: Section 38(8) of the National Heritage Resources Act	X
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-	
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):	

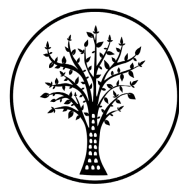
6. Additional Infrastructure Required for this Development

Restaurant, entertainment area, cultural huts, camps, chalets, septic tank and the establishment of a grazing area.

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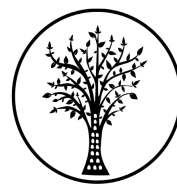


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7. Mapping (please see Appendix 3 and 4 for a full description of our methodology and map legends)



Figure 1b. Overview Map. Satellite image (2017) indicating the approximate proposed development area at close range.



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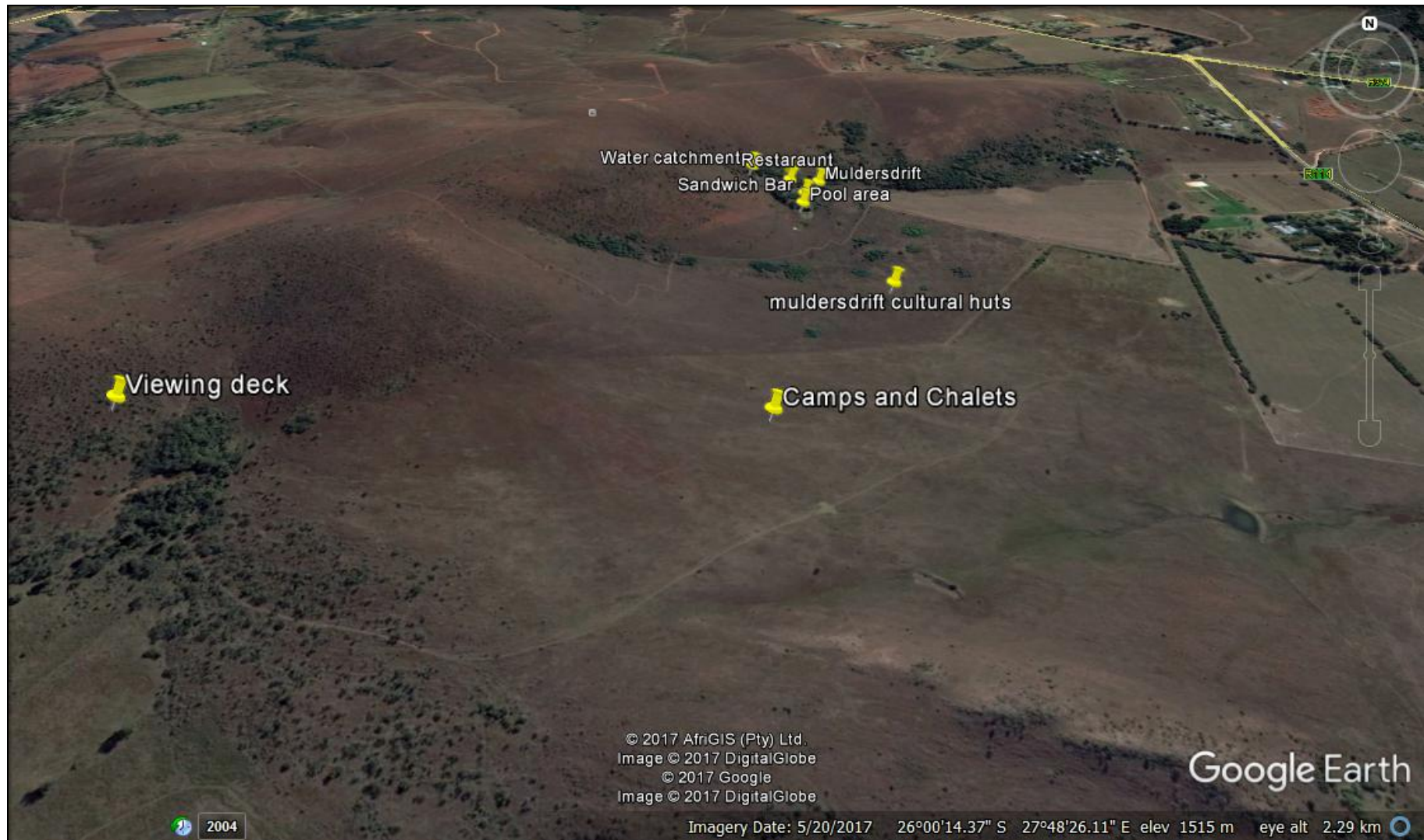
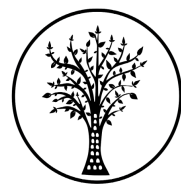


Figure 1c. Overview Map. Satellite image (2017) indicating the approximate layout of the proposed development.

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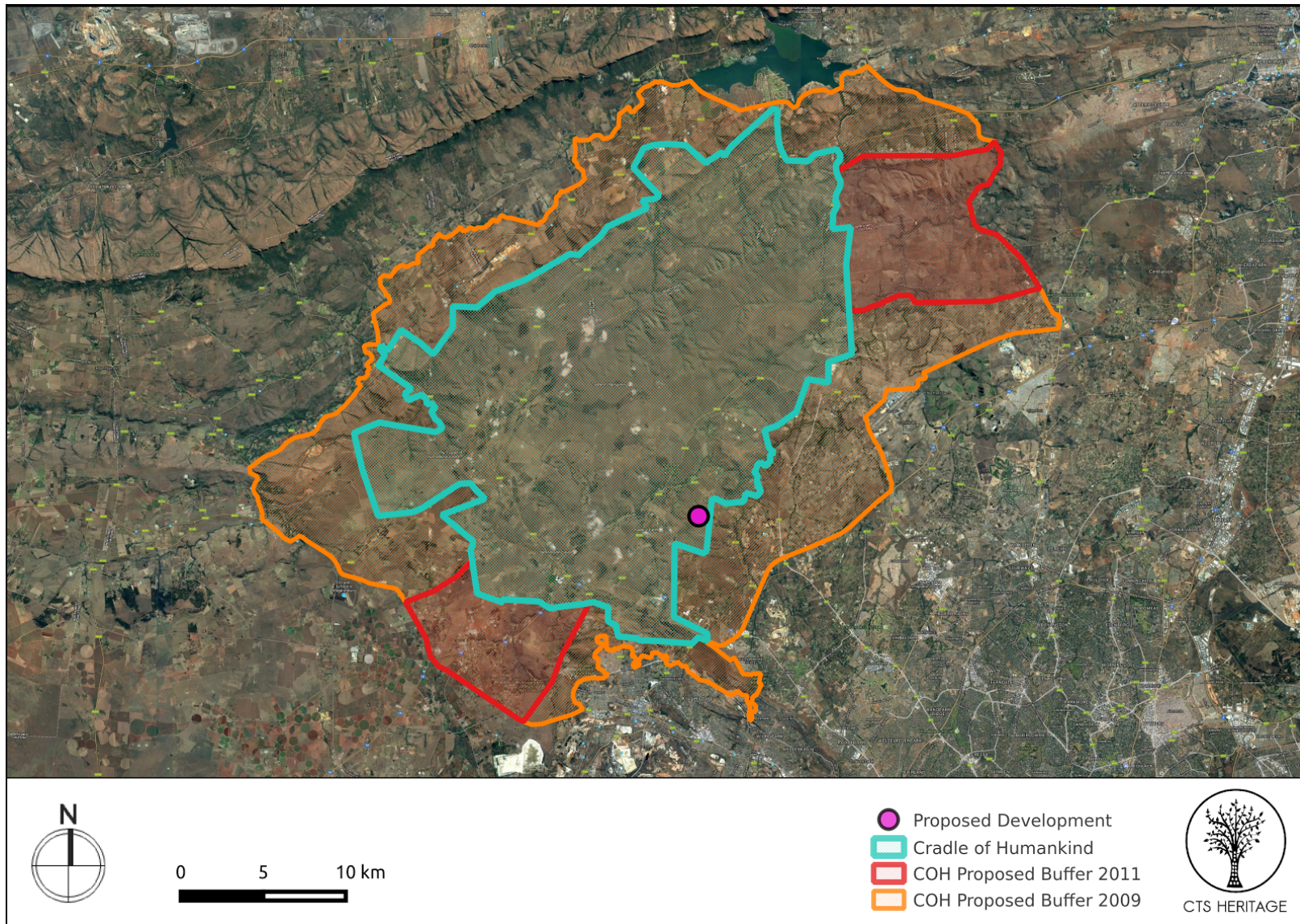
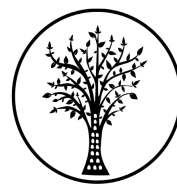


Figure 1c. Overview Map. Satellite image (2017) indicating the proposed development in relation to the Cradle of Humankind World Heritage Site and Proposed Buffer Zones

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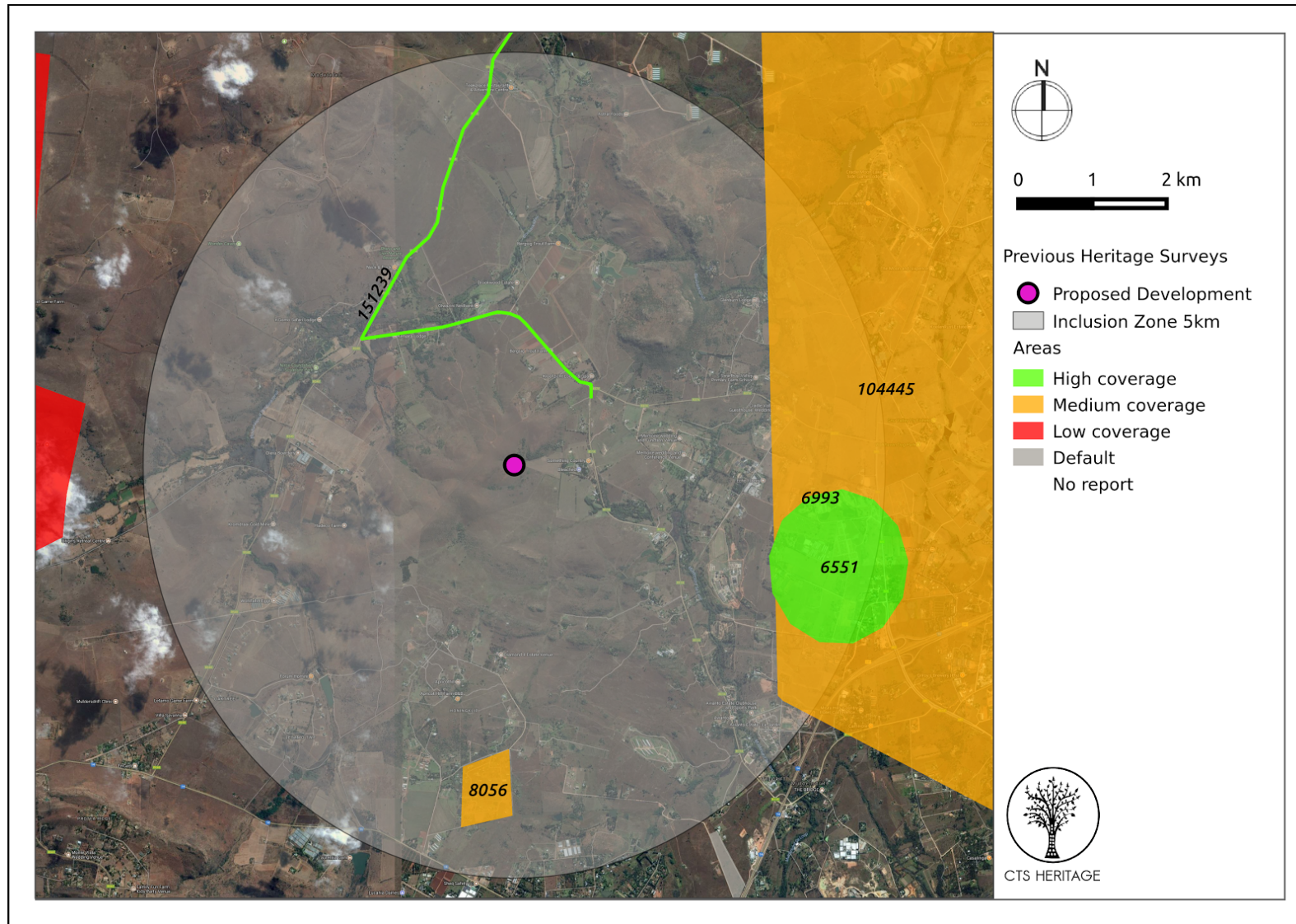
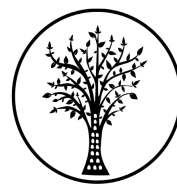


Figure 2. Previous heritage reports map. Previous Heritage Impact Assessments surrounding the proposed development area within 5kms, with SAHRIS NIDS indicated (please see Appendix 2 for full reference list).

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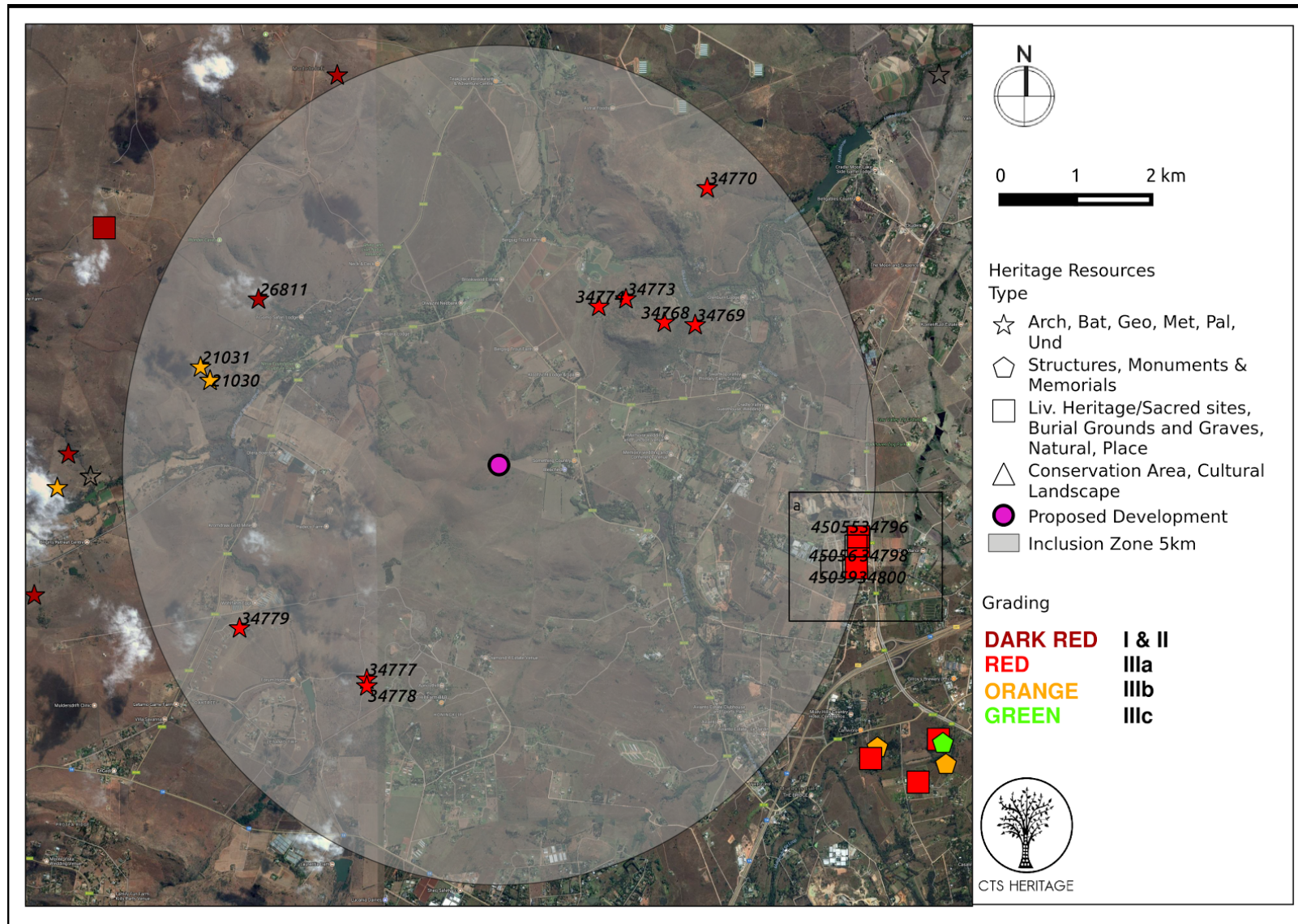
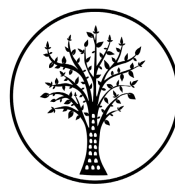


Figure 3. Heritage Resources Map. Heritage resources previously identified in and near the study area, with SAHRIS Site IDs indicated (see Figure 3a for inset). See Appendix 4 for full description of heritage resource types.

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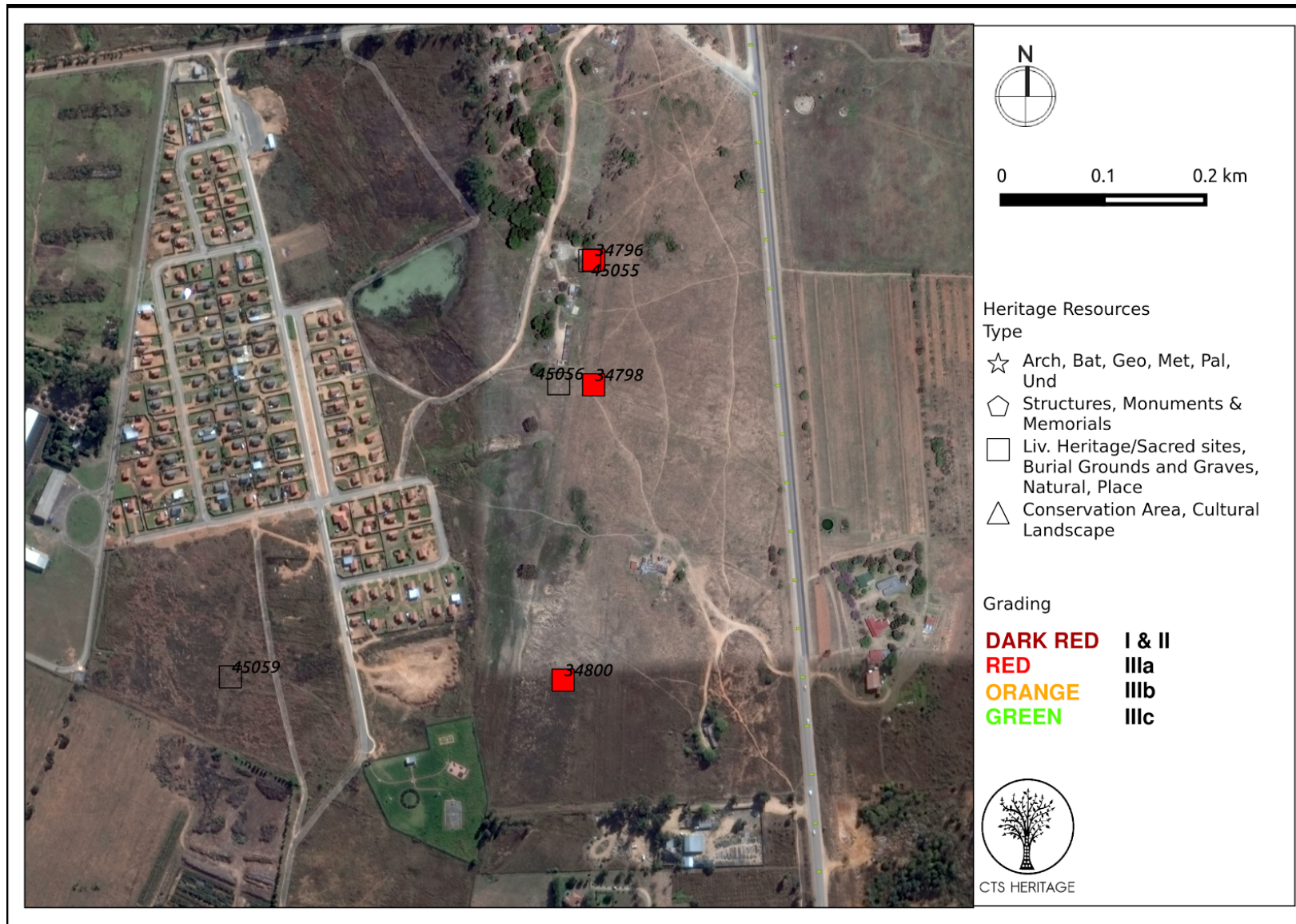
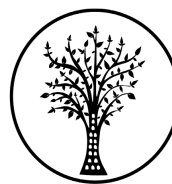


Figure 3a. Inset map.

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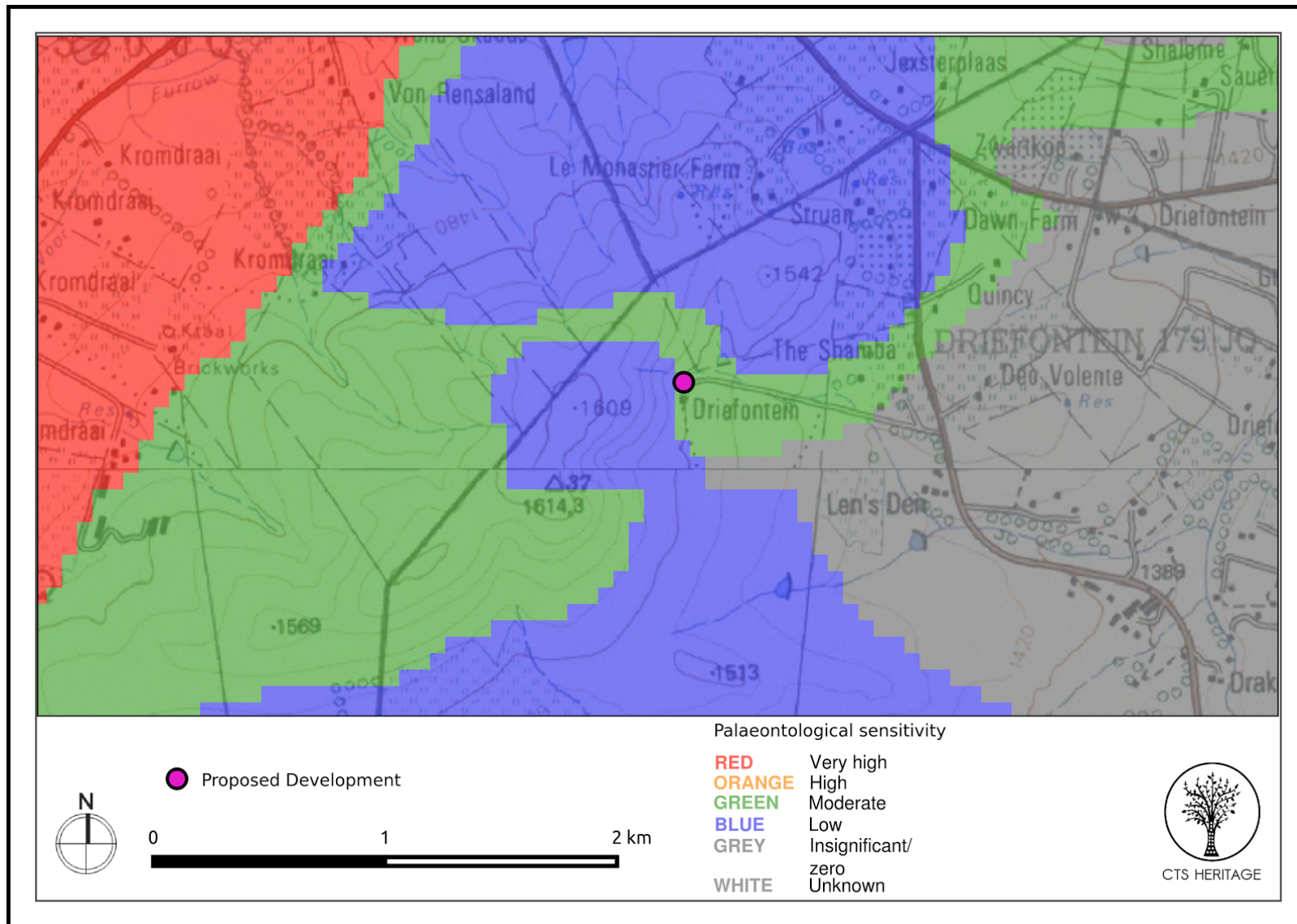
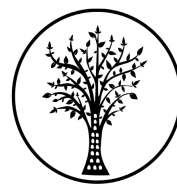


Figure 4. Palaeosensitivity Map, indicating moderate fossil sensitivity underlying the study area. See Appendix 3 for full guide to the legend.

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8. Heritage statement and character of the area

The applicant has proposed the construction of an entertainment area, chalets, camps, cultural huts, septic tank and restaurant on Driefontein Farm No 179 Portion 90, Muldersdrift in the Gauteng Province. The proposed study area falls on a 64 hectare piece of land, proposed activities however, will only take place within an area less than 20 hectares in size, hence the application for a Basic Assessment Report. This region is characterised by Highland Grassveld, with cultivated fields, as well as eco tourism in the surrounding region. The area proposed for development has previously been used for the cultivation of fodder. The proposed study area lies within the Cradle of Humankind (COH) World Heritage Site (Figure 1c) and as such, is subject to the provisions of the World Heritage Convention Act, the Protected Areas Act and the approved Management Plan for the Cradle of Humankind.

According to the Cradle of Humankind website, *"The listing of the Cradle of Humankind World Heritage Site in terms of the World Heritage Convention resulted in several duties and obligations being imposed on the South African government, which is required to give effect to its international obligations to protect and conserve the site. In practice, this obligation falls primarily with the management authority in line with powers and duties as identified in the World Heritage Convention Act, 1999 (Act No. 49 of 1999) as well as in provisions of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) and the associated regulations for the proper administration of special nature reserves, national parks and World Heritage Sites."*

In terms of the above provisions, which are applicable to the proclaimed "property", the management authority has a responsibility and duty to manage the property, which includes the review and a decision on applications for development, including a host of activities and events as defined by the above legislation. In order to facilitate the application and authorisation process as defined by legislation, the management authority requires the submission of completed application forms prior to the commencement of construction or the undertaking of an event or activity that requires authorisation.

Application forms to be completed and duly submitted to the management authority are provided for both development activities as well as events taking place within the defined property. It is important to note that the declared World Heritage Site is a "protected area" and hence, in addition to approvals required for development from local authorities and other provincial authorities, authorisation from the management authority is required for numerous development activities as well as events as defined by legislation."

While the proposed development falls within the Cradle of Humankind World Heritage Site, it is not located in close proximity to any of the known declared National Heritage Sites, with the nearest National Heritage Site located approximately 4km away (Plovers Lake NHS, Site ID 26811). Six archaeological or heritage specialist reports have been conducted within 5km of the proposed development. Very few archaeological sites have been identified in these studies, with Huffman (2007) noting that "No sites of archaeological interest were noted. African cemeteries were the only places of importance."

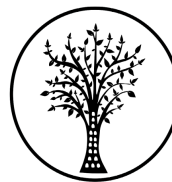
The site proposed for development falls within the Rietgat Formation which, according to the SAHRIS Palaeosensitivity Map is of moderate sensitivity for impacts to palaeontology. According to the SAHRIS Fossil Layer Browser, the Rietgat Formation forms part of the Ventersdorp Supergroup and is known for lacustrine stromatolites reported in carbonates of the Rietgat Formation (Platberg Group) and possible organic-walled microfossils in found in cherts. In close proximity to the proposed development is the Oaktree Formation of very high palaeontological sensitivity. This is the geological formation associated with the location of the fossil hominid sites of the Cradle of Humankind, and is known for its Late Cenozoic fossiliferous cave breccias. However, based on the available information, the proposed development will not be impacting the significant Oaktree Formation and as such, it is unlikely that the proposed development will impact on significant palaeontological resources.

However, given the likelihood of there being possible unidentified graves in this area, as well as the prevalence of significant archaeological sites in the vicinity, it is recommended that a field assessment be undertaken by a qualified archaeologist to identify any sensitive heritage resources, and recommend appropriate measures to mitigate impacts to them.

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RECOMMENDATION: (2) The heritage resources and the area proposed for development are only partially recorded - It is recommended that an HIA be drafted for this proposed development, including an Archaeological Impact Assessment.

APPENDIX 1

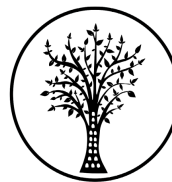
List of heritage resources within the 5km Inclusion Zone

Site ID	Site no	Full Site Name	Site Type	Grading
34768	ROOD001	Roodepoort 001	Stone walling	Grade IIIa
34769	ROOD002	Roodepoort 002	Stone walling	Grade IIIa
34770	ROOD003	Roodepoort 003	Stone walling	Grade IIIa
34773	ROOD005	Roodepoort 005	Stone walling	Grade IIIa
34774	ROOD006	Roodepoort 006	Stone walling	Grade IIIa
34777	ROOD007	Roodepoort 007	Stone walling	Grade IIIa
34778	ROOD008	Roodepoort 008	Stone walling	Grade IIIa
34779	ROOD009	Roodepoort 009	Artefacts	Grade IIIa
34796	ROOD017	Roodepoort 017	Burial Grounds & Graves	
34798	ROOD018	Roodepoort 018	Burial Grounds & Graves	
34800	ROOD019	Roodepoort 019	Burial Grounds & Graves	
45059	DRFNT03	Driefontein 03	Burial Grounds & Graves	
45056	DRFNT02	Driefontein 02	Burial Grounds & Graves	
45055	DRFNT01	Driefontein 01	Burial Grounds & Graves	
26811	9/2/233/0035	Plover's Lake, Kromdraai 520 JQ, Gauteng	Archaeological, Palaeontological	Grade I
21030	Kromdraai 520 JQ A	Kromdraai 520 JQ	Deposit	
21031	Kromdraai 520 JQ B	Kromdraai 520 JQ B	Deposit	

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APPENDIX 2

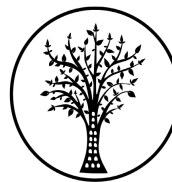
Reference List

Heritage Impact Assessments				
Nid	Report Type	Author/s	Date	Title
6551	AIA	Thomas Huffman	01/10/2007	Driefontein: Heritage Impact Assessment
6993	AIA	Johnny Van Schalkwyk	01/07/2008	Heritage Impact Survey Report for Janho Quarry, Driefontein 179 IQ, Krugersdorp Magisterial District, Gauteng Province
8056	HIA	Polke Birkholtz	23/06/2008	Heritage Scoping: Proposed Second Dwelling, Thorny Valley Estate 240 (Portion 240 a Portion of 264) of the Farm Honingklip 178 IQ, Mogale City, Gauteng Province
104445	AIA	Shahzaadee Karodia Khan, Natasha Higgitt, Justin du Piesanie	31/08/2012	HERITAGE STATEMENT FOR ESKOM TRANSMISSION DIVISION - ROODEPOORT STRENGTHENING PROJECT IN SUPPORT OF THE BASIC ASSESSMENT REPORT (BAR)
157198	HIA	Natasha Higgitt, Johan Nel	20/02/2014	HERITAGE IMPACT ASSESSMENT FOR THE ROODEPOORT STRENGTHENING PROJECT, 2527DD, ROODEPOORT, GAUTENG
151239	AIA	Dominic Stratford	26/11/2013	MTB Trail Cradle of Humankind

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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
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)
DEDEA	Department Of economic Development, Tourism And Environmental Affairs (free State)
Denc	Department Of Environment And Nature Conservation (northern Cape)
DMR	Department of Mineral Resources
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

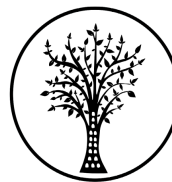
Full guide to Palaeosensitivity Map legend

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 PALAEONTOLOGICAL SENSITIVITY

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

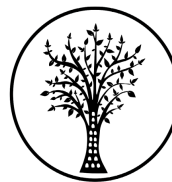
- reviewing the fossil sensitivity maps available on the South African Heritage Resources Information System (SAHRIS)
- considering the nature of the proposed development
- when available, taking information provided by the applicant related to the geological background of the area into account

DETERMINATION OF THE COVERAGE RATING ASCRIBED TO A REPORT POLYGON

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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.

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

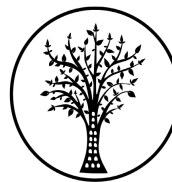
(2) The heritage resources and the area proposed for development are only partially recorded - The surveys undertaken in the area have not adequately captured the heritage resources and/or there are sites which require mitigation or management plans. Further specific heritage work is recommended for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

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- 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
- 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.

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