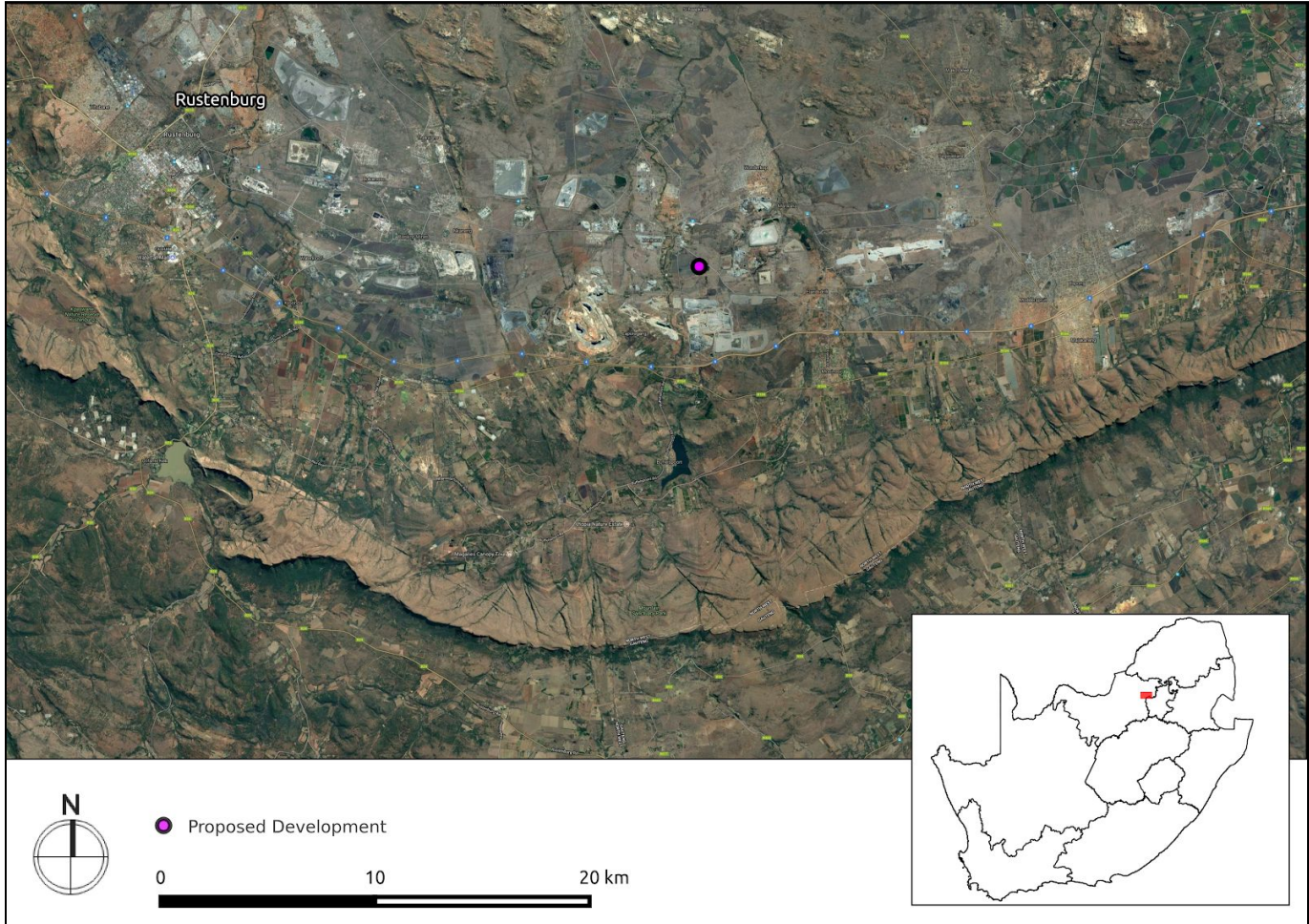
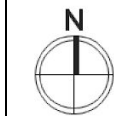


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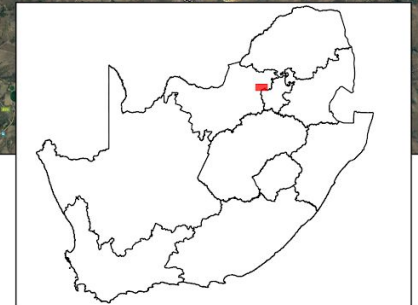
## HERITAGE SCREENER

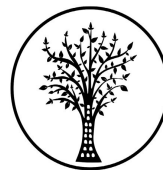
CTS Reference Number:	<b>CTS18_059</b>	 <p><b>Figure 1a.</b> Satellite map indicating the location of the proposed development in the North West Province</p>
SAHRIS Reference:	<b>12364</b>	
Client:	<b>Environet</b>	
Date:	<b>26 March 2018</b>	
Title:	<b>Proposed Housing Development on portions of Farm Rooikoppies, Marikana, North West Province</b>	
Recommendation by CTS Heritage Specialists	<p><b>RECOMMENDATION:</b> 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.</p> <p>See Section 8 for full recommendations.</p>	



Proposed Development

0 10 20 km





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## 1. Proposed Development Summary

The RLM is a process for land assembly of various portions of the farm Rooikopies, situated in the Marikana Area. The intention is to create a housing opportunity for the local people of Marikana as well as to deal with the housing needs and housing delivery in terms of the Housing Code and Municipal Human Settlements backlog. Reneilwe Consulting and Planners was appointed to conduct an environmental and geotechnical feasibility study for the proposed development of housing/human settlements on the identified farm portions of Rooikopies.

## 2. Application References

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

## 3. Property Information

Latitude / Longitude	25 42' 37.7107" S 27 29' 50.5612" E
Erf number / Farm number	Portions 16, 57, 58, 196 to 207 of the Farm Rooikoppies 297 – JQ
Local Municipality	Rustenburg Municipality
District Municipality	Bojanala District Municipality
Previous Magisterial District	Rustenburg Municipality
Province	North West Province
Current Use	The properties are undeveloped/ vacant and other portions thereof are developed with dwelling houses and ancillary uses
Current Zoning	The property is currently zoned Agricultural in terms of the Rustenburg Land Use Management Scheme, 2005
Total Extent	110ha

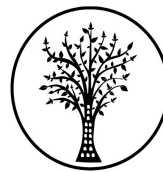
## 4. Nature of the Proposed Development

Total Surface Area	Unknown
Depth of excavation (m)	The current feasibility study is a desktop, therefore no excavations will take place at this stage.
Height of development (m)	At this stage, there is no indication of proposed height for the development.
Expected years of operation before decommission	NA

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## 5. Category of Development

<b>Triggers: Section 38(8) of the National Heritage Resources Act</b>	<b>X</b>
<b>Triggers: Section 38(1) of the National Heritage Resources Act</b>	
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 <sup>2</sup> in extent	<b>X</b>
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 <sup>2</sup>	
5. Other (state):	

## 6. Additional Infrastructure Required for this Development

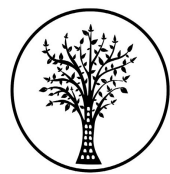
Due to the nature of the envisaged development, engineering services infrastructure as well as building infrastructure will be necessary once development takes place.
--

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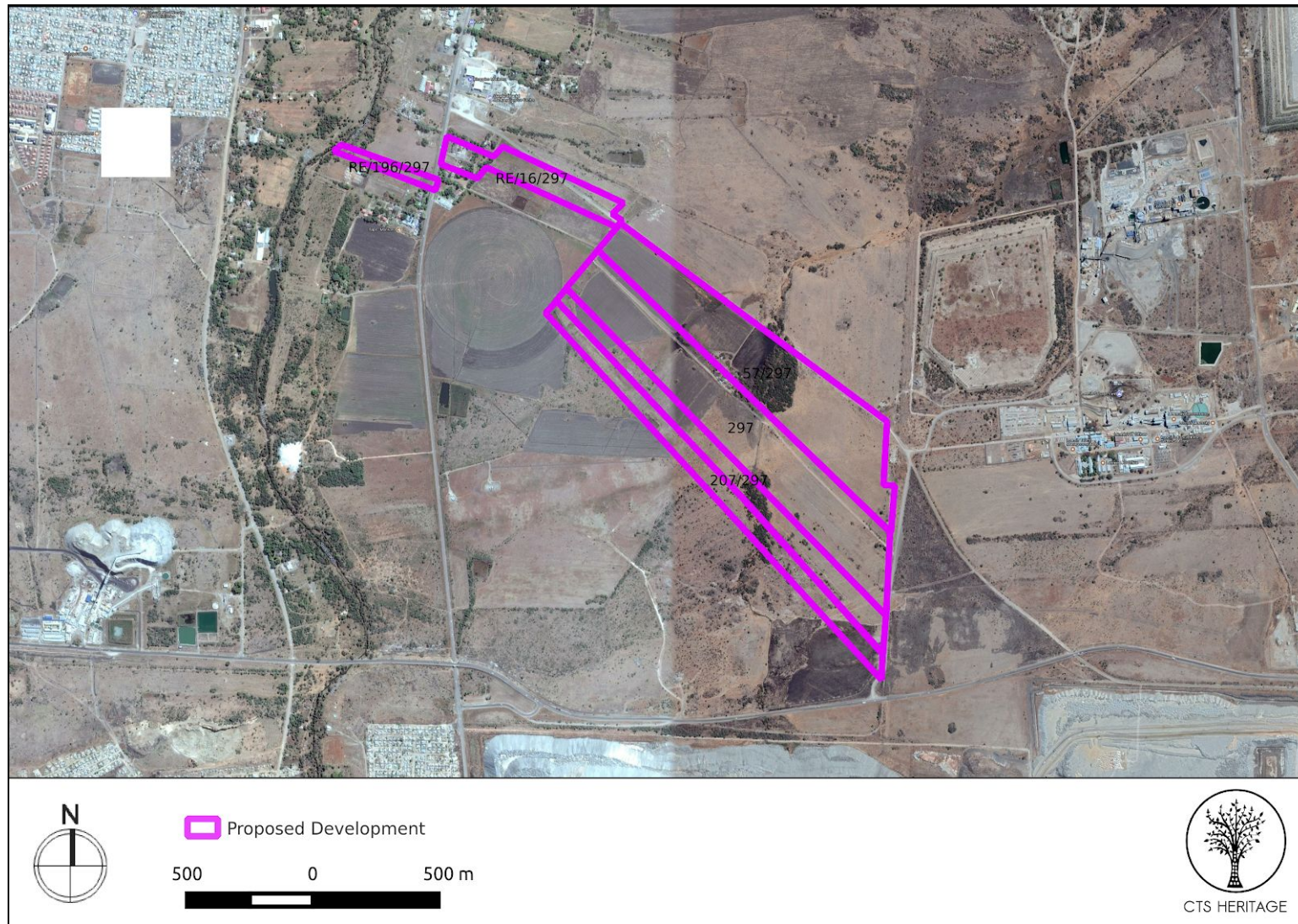
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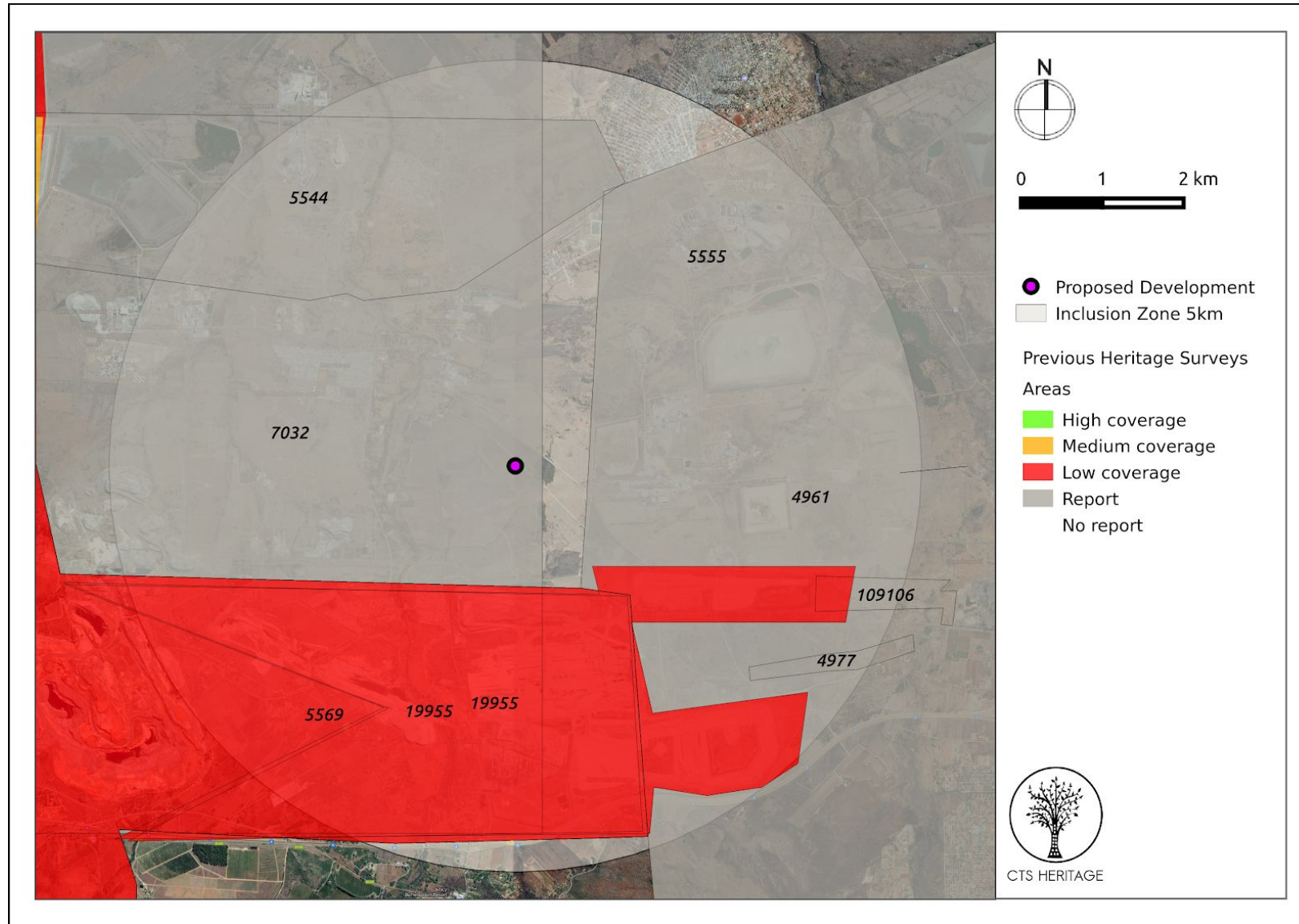


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## 7. Mapping (please see Appendix 3 and 4 for a full description of our methodology and map legends)

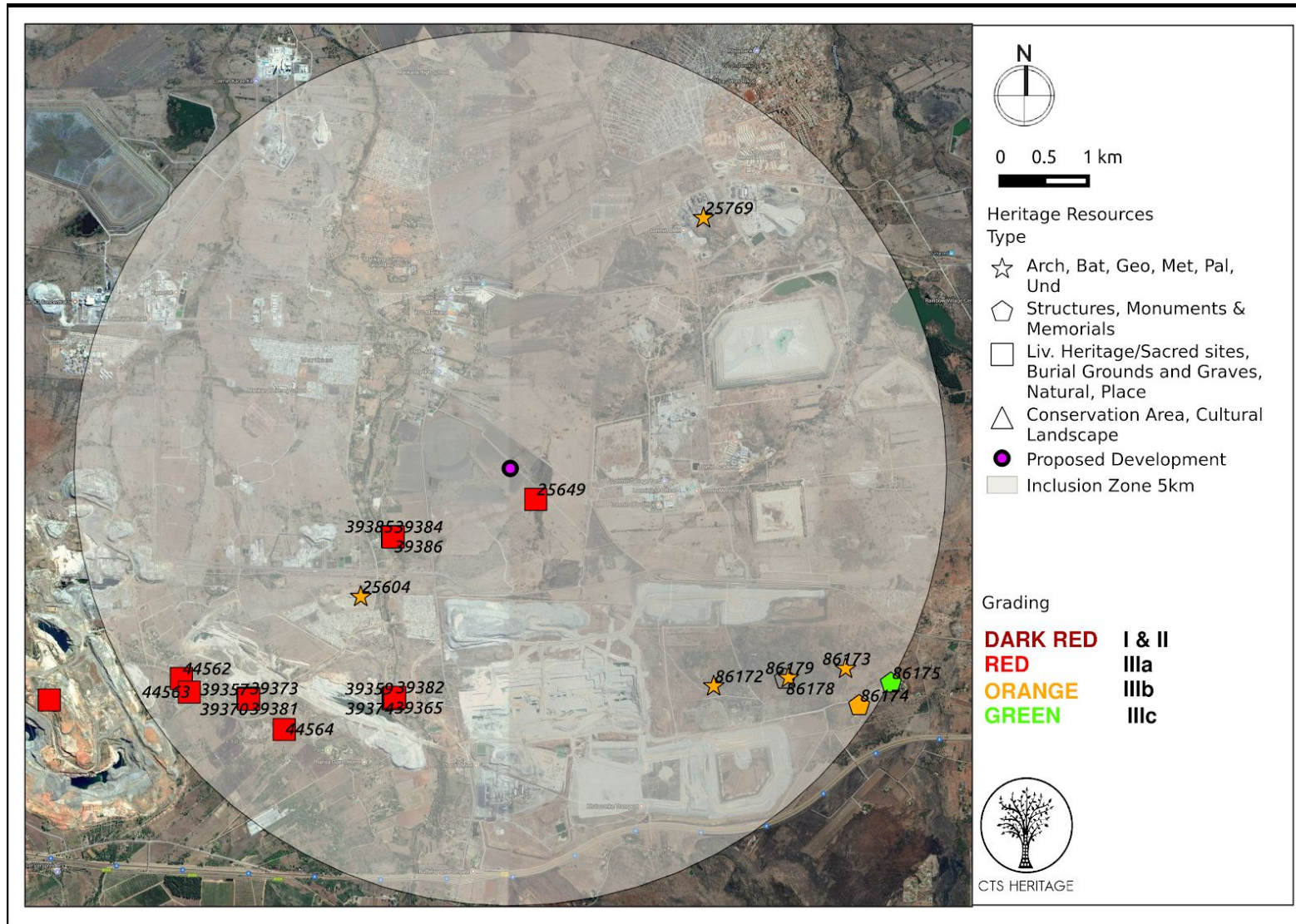


**Figure 1b. Overview Map.** Satellite image (2017) indicating the proposed development area at closer range.



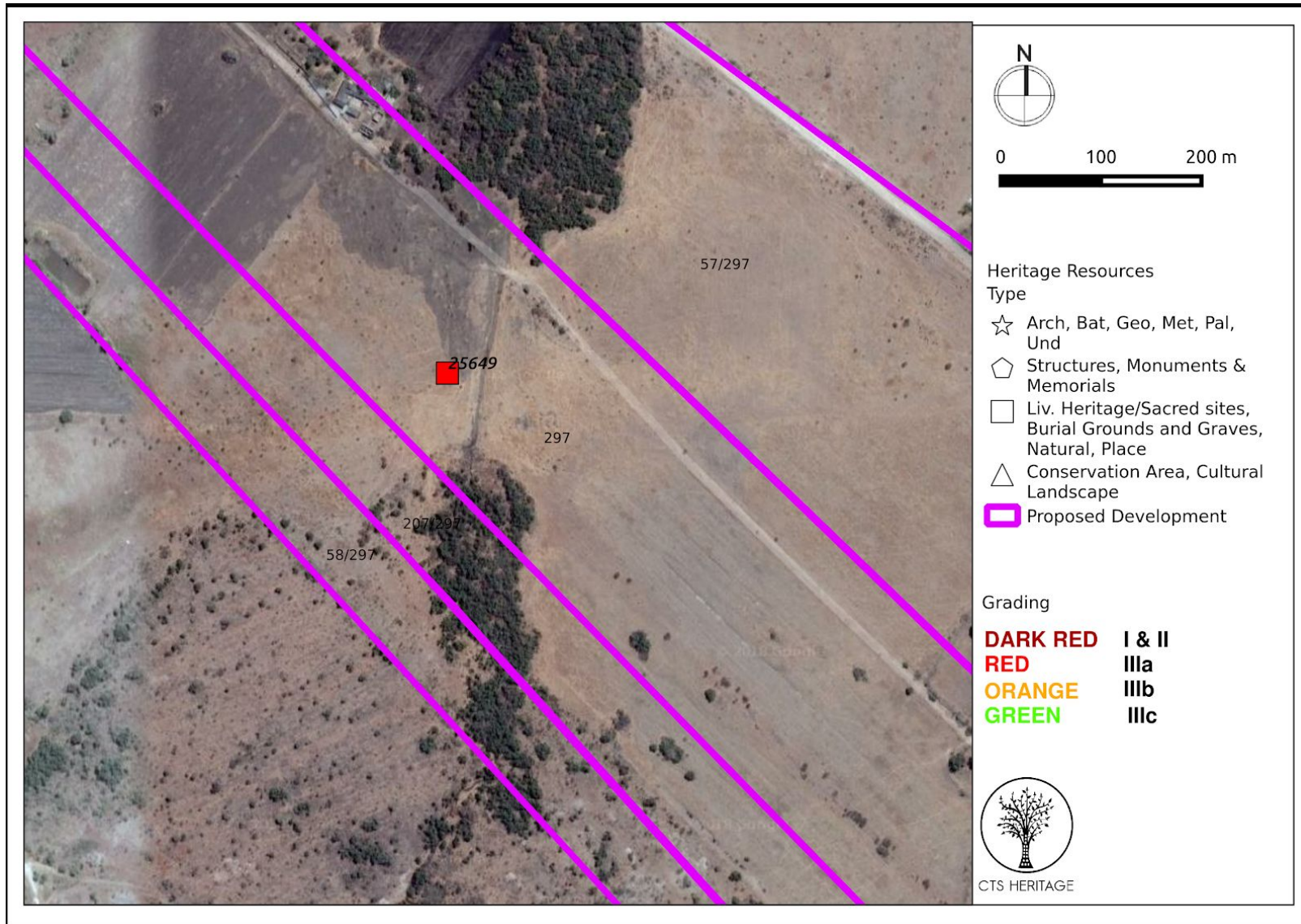
**Figure 2a. Previous HIAs Map.** Previous Heritage Impact Assessments surrounding the proposed development area within 10km, with SAHRIS NIDS indicated. Please see Appendix 2 for full reference list.



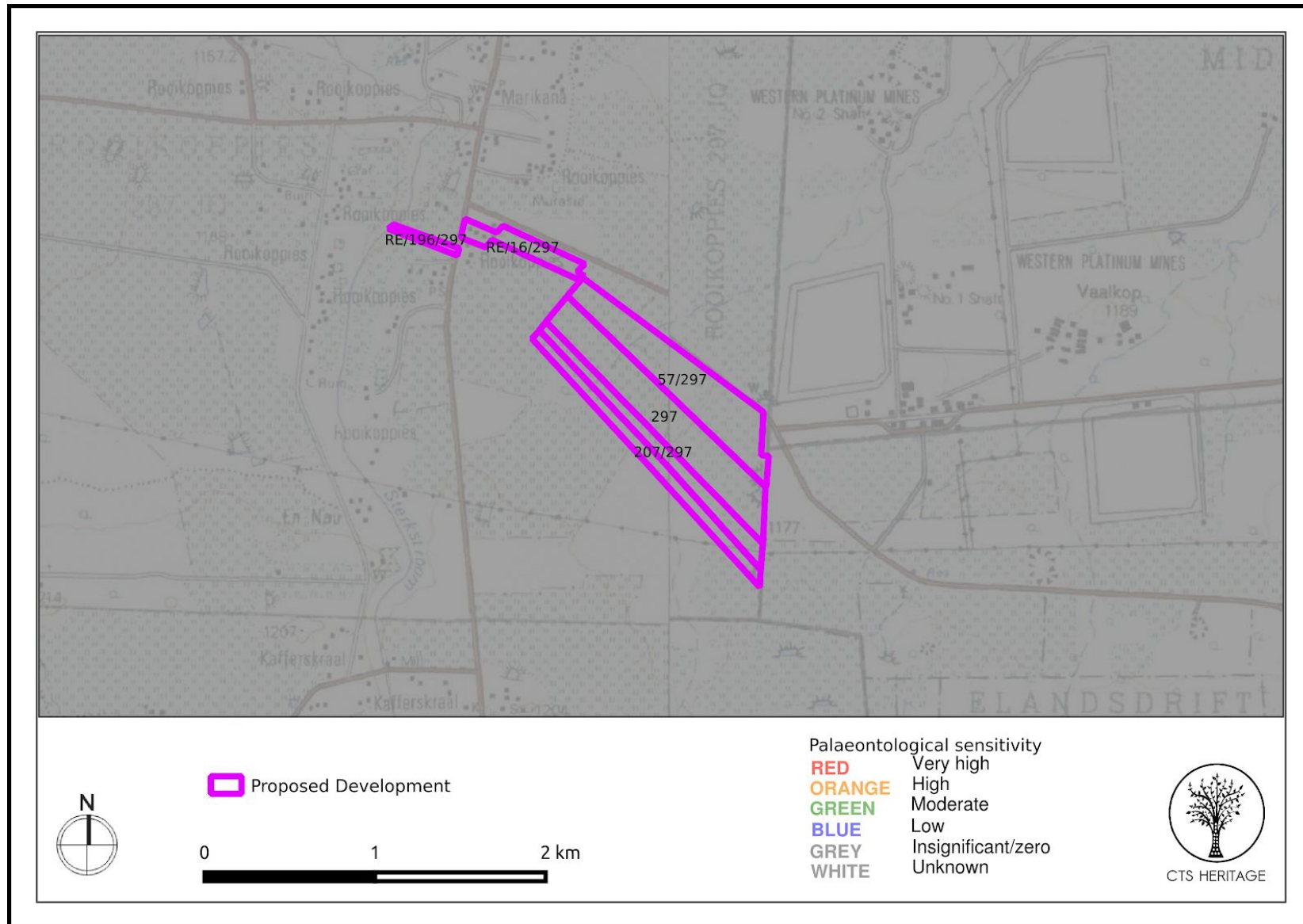
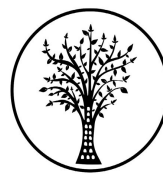


**Figure 3a. Heritage Resources Map.** Heritage Resources previously identified in and near the study area, with SAHRIS Site IDs indicated. Please See Appendix 4 for full description of heritage resource types.



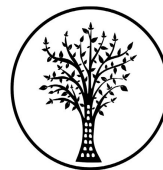


**Figure 3b. Heritage Resources Map close up.** Heritage Resources previously identified within the study area, with SAHRIS Site IDs indicated. Please See Appendix 4 for full description of heritage resource types.



**Figure 4. Palaeosensitivity Map.** Indicating insignificant (grey) fossil sensitivity underlying the study area. Please See Appendix 3 for full guide to the legend.





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## 8. Heritage statement and character of the area

The RLM is a process for land assembly of various portions of the farm Rooikoppies situated in Marikana Area. The intention is to create a housing opportunity for the local people of Marikana as well as to deal with the housing needs and housing delivery in terms of the Housing Code and Municipal Human Settlements backlog.

The area proposed for development is currently zoned for agricultural use and is undeveloped or vacant. Other portions are developed with dwelling houses and ancillary uses. A previous Heritage Impact Assessment conducted in close proximity to the proposed development area (Pistorius 2009, SAHRIS NID 19955) identified a number of significant heritage resources including stone walled settlements which date from the Late Iron Age, historical structures such as farm houses with outbuildings, agricultural infrastructure as well as a number of burial grounds and graves. It is likely that similar heritage resources exist within this proposed development footprint.

The burial grounds and graves site known as Rooikoppies (SAHRIS SID 25649) falls directly within the proposed development footprint (Figure 3b). As such, it is likely that the proposed development will impact on significant heritage resources.

According to the SAHRIS Palaeosensitivity Map, the area proposed for development is underlain by geology that has no palaeontological sensitivity and as such, it is very unlikely that the proposed development will impact on significant palaeontological resources. According to Almond (2015, NID 322960) in a report completed for a project within the 5km inclusion zone; "The overall palaeontological sensitivity of the igneous and metasedimentary bedrocks in the Transet railway development study area near Marikana is assessed as VERY LOW. Significant impacts on local fossil heritage resources are therefore not anticipated". It is understood that these recommendations also apply to this proposed development area.

Based on the available information, it is recommended that a detailed Heritage Impact Assessment be conducted that will establish the exact boundary of the Rooikoppies burial ground site, as well as the location of any other significant heritage resources that may be impacted by the proposed development. Opportunities to discuss exclusion zones and/or other mitigation measures necessary to conserve these sites will be handled in the HIA report.

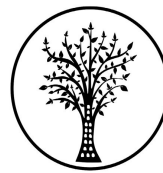
### RECOMMENDATION:

**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.

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## APPENDIX 1

### List of heritage resources within the 10km Inclusion Zone

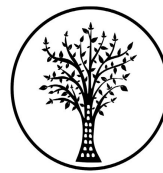
Site ID	Site no	Full Site Name	Site Type	Grading
25649	Rooikoppies	erf 297JQ, Rooikoppies	Burial Grounds & Graves	
39357	KAFF002	Kafferskraal 002	Stone walling	Grade IIIa
39359	KAFF004	Kafferskraal 004	Building	Grade IIIa
39358	KAFF003	Kafferskraal 003	Stone walling	Grade IIIa
39360	KAFF005	Kafferskraal 005	Building	Grade IIIa
39363	KAFF007	Kafferskraal 007	Building	Grade IIIa
39362	KAFF006	Kafferskraal 006	Building	Grade IIIa
39365	KAFF009	Kafferskraal 009	Building	Grade IIIa
39364	KAFF008	Kafferskraal 008	Structures	Grade IIIa
39366	KAFF010	Kafferskraal 010	Building	Grade IIIa
39367	KAFF011	Kafferskraal 011	Structures	Grade IIIa
39368	KAFF012	Kafferskraal 012	Structures	Grade IIIa
39369	KAFF013	Kafferskraal 013	Structures	Grade IIIa
39370	KAFF014	Kafferskraal 014	Structures	Grade IIIa
39373	KAFF016	Kafferskraal 016	Building	Grade IIIa
39374	KAFF015	Kafferskraal 015	Building	Grade IIIa
39375	KAFF017	Kafferskraal 017	Building	Grade IIIa
44562	SPRUI-KAF06	Spruitfontein to Kafferskraal 06	Burial Grounds & Graves	Grade IIIa
44563	SPRUI-KAF07	Spruitfontein to Kafferskraal 07	Burial Grounds & Graves	Grade IIIa
44564	SPRUI-KAF08	Spruitfontein to Kafferskraal 08	Burial Grounds & Graves	Grade IIIa

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39376	KAFF018	Kafferskraal 018	Burial Grounds & Graves	Grade IIIa
39378	KAFF020	Kafferskraal 020	Burial Grounds & Graves	Grade IIIa
39379	KAFF021	Kafferskraal 021	Burial Grounds & Graves	Grade IIIa
39381	KAFF022	Kafferskraal 022	Burial Grounds & Graves	Grade IIIa
39382	KAFF023	Kafferskraal 023	Burial Grounds & Graves	Grade IIIa
39384	KAFF024	Kafferskraal 024	Burial Grounds & Graves	Grade IIIa
39385	KAFF025	Kafferskraal 025	Burial Grounds & Graves	Grade IIIa
39386	KAFF026	Kafferskraal 026	Burial Grounds & Graves	Grade IIIa
86172	ELANDS003	ELANDSDRIFT OPENCAST 003	Stone walling	Grade IIIb
86173	ELANDS004	ELANDSDRIFT OPENCAST 004	Stone walling	Grade IIIb
86174	ELANDS005	ELANDSDRIFT OPENCAST 005	Structures	Grade IIIb
86175	ELANDS006	ELANDSDRIFT OPENCAST 006	Building	Grade IIIc
86178	ELANDS009	ELANDSDRIFT OPENCAST 009	Structures	Ungraded
86179	ELANDS010	ELANDSDRIFT OPENCAST 010	Stone walling	Grade IIIb
25604	Lonmin	Lonmin	Settlement	
25769	LPSP-01	Lonmin Platinum Smelter Plant	Ruin > 100 years	
25649	Rooikoppies	erf 297JQ, Rooikoppies	Burial Grounds & Graves	

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## APPENDIX 2

### Reference List

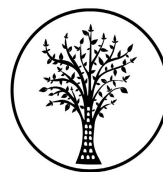
Heritage Impact Assessments				
Nid	Report Type	Author/s	Date	Title
4961	AIA Phase 1	Julius CC Pistorius	01/11/2002	A Heritage Impact Assessment for Eskom's New Proposed 88 kV Powerline From the Middelkraal Substation to the Big Horn/Wonderkoppies Power Stations on the Farm Elandsdrif 467 JQ and Middelkraal 466 JQ Near Marikana and Mooinooi in the North West Province
4977	AIA Phase 1	Anton van Vollenhoven, Anton Pelser	01/08/2008	A Report on a Cultural Heritage Impact Assessment for the Proposed Elandsdrift EMPR, near Mooinooi, Northwest Province
5544	AIA Phase 1	Julius CC Pistorius	01/09/2002	A Heritage Impact Assessment for Eskom's Power Supply for the Anglo Platinum Western Limb Tailings Retreatment Project Between the Bighorn Power Station and the Turf Shaft Substation in the Rustenburg District of the North West
5555	AIA Phase 1	Frans Roodt	22/09/2006	Re: Application to Demolish / Damage a Site Containing archaeological Remains at a Previously Area Disturbed Atlonmin Platinum Smelter Plant: Marikana, North West Province
5569	AIA Phase 1	Johnny Van Schalkwyk, Anton Pelser	01/12/1999	A Survey of Cultural Resources on the Farms Spruitfontein 341 JQ and Kafferskraal 342 JQ, Rustenberg District
7032	AIA Phase 1	Thomas Huffman	01/09/2000	Archaeological Assessment of the Karee Township, Marikana, Northwest Province
19955	HIA Phase 1	Julius CC Pistorius	01/09/2009	A PHASE I HERITAGE IMPACT ASSESSMENT STUDY FOR THE PROPOSED NEW THARISA MINE ON THE FARMS KAFFERSKRAAL 342 AND ELANDSDRIFT 467 NEAR MARIKANA IN THE NORTH-WEST PROVINCE OF SOUTH AFRICA
109106	Archaeological Specialist Reports	Anton Pelser	01/03/2012	A report on an Archaeological Impact Assessment for the proposed Mooinooi Development on Portion 34 and the Remaining Extent of Portion 1 of the farm Elandsdrift 467-JQ, near Mooinooi, North West

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## APPENDIX 3 - Keys/Guides

### Key/Guide to Acronyms

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

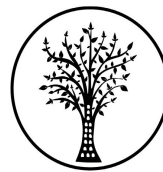
### Full guide to Palaeosensitivity Map legend

	<b>RED:</b>	VERY HIGH - field assessment and protocol for finds is required
	<b>ORANGE/YELLOW:</b>	HIGH - desktop study is required and based on the outcome of the desktop study, a field assessment is likely
	<b>GREEN:</b>	MODERATE - desktop study is required
	<b>BLUE/PURPLE:</b>	LOW - no palaeontological studies are required however a protocol for chance finds is required
	<b>GREY:</b>	INSIGNIFICANT/ZERO - no palaeontological studies are required
	<b>WHITE/CLEAR:</b>	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 PALAEOONTOLOGICAL 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

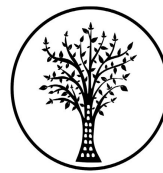
Each report assessed for the compilation of the Heritage Screener is colour-coded according to the level of coverage accomplished. The extent of the surveyed coverage is labeled in

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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

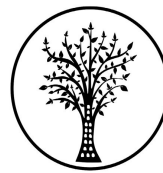
**(2) The heritage resources and the area proposed for development are only partially recorded** - The surveys undertaken in the area have not adequately captured the heritage resources and/or there are sites which require mitigation or management plans. Further specific heritage work is recommended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

The compilation of the Heritage Screener will not include any field assessment. The Heritage Screener will be submitted to the applicant within 24 hours from receipt of full payment. **If the 24-hour deadline is not met by CTS, the applicant will be refunded in full.**

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