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HERITAGE SCREENER

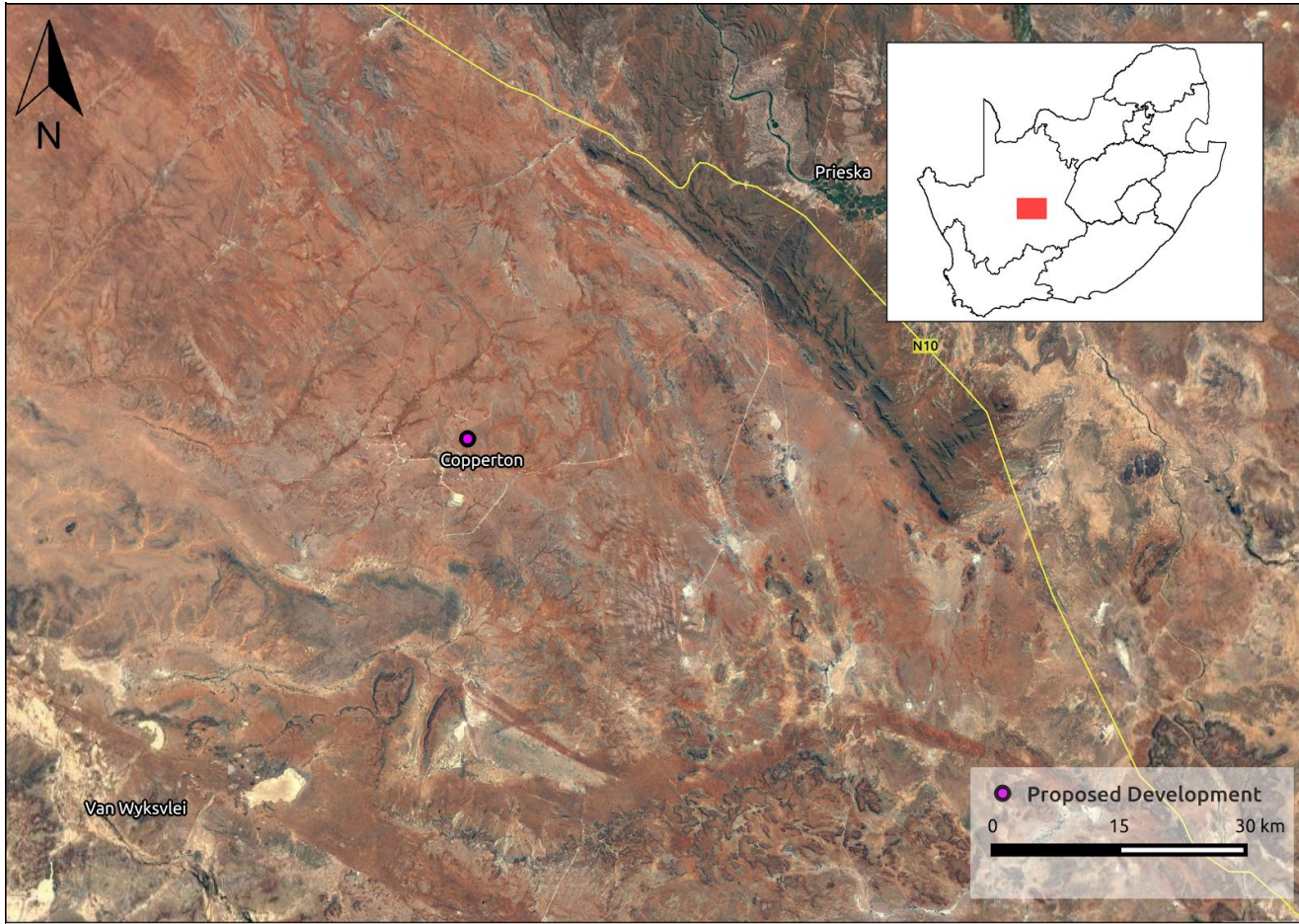
CTS Reference Number:	CTS16_056	
SAHRIS Case ID:	10453	
Client:	ACRM for Terramanzi	
Date:	29 November 2016	
Title:	Access Road to Wind Energy Facility, Copperton	
Recommendation by CTS Heritage Specialists: (Type 1)	RECOMMENDATION: The heritage resources in the area proposed for development have been sufficiently recorded - No further Heritage Assessments are recommended for this proposed development.	

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

1. Proposed Development Summary

Terramanzi Group has been contracted to undertake an Environmental Permitting Process for a “new” access route to the Copperton Wind Farm. The current proposed access route is not feasible as it runs through the town of Copperton. The revised preferred alternative is Option 3. Option 3 follows an existing farm road (gravel and currently overgrown with vegetation), which is approximately 4m wide and 4km in length.

2. Application References

Name of relevant heritage authority(s)	South African Heritage Resources Agency (SAHRA)
Name of decision making authority(s)	Department of Environmental Affairs and Nature Conservation (DENC)

3. Property Information

Latitude / Longitude	-29.914188964 S ; 22.3393835646 E (northern end of road) -29.9458028268 S ; 22.3100474346 E (southern end of road)
Erf number / Farm number	Vogelstruisbult 104
Local Municipality	Siyathemba
District Municipality	Pixley ka Seme
Previous Magisterial District	Prieska
Province	Northern Cape
Current Use	Existing road
Current Zoning	Agriculture
Total Extent	4m wide, 4km long

4. Nature of the Proposed Development

Surface area to be affected/destroyed	4m width, 4km length
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Depth of excavation (m)	NA
Height of development (m)	NA
Expected years of operation before decommission	Indeterminate

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.	X
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

NA



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

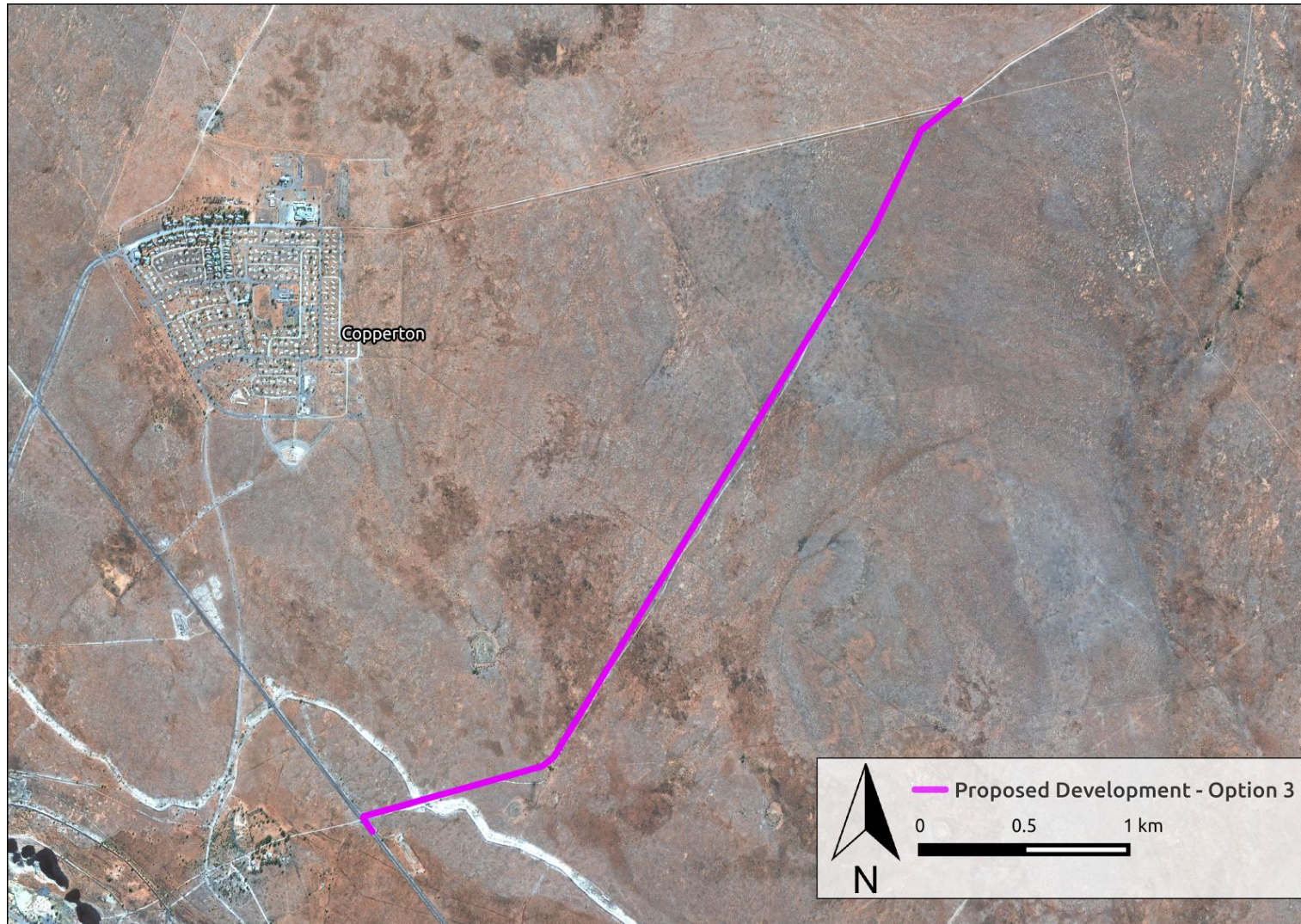


Figure 1b. Overview Map. Satellite image indicating the proposed access road at closer range.



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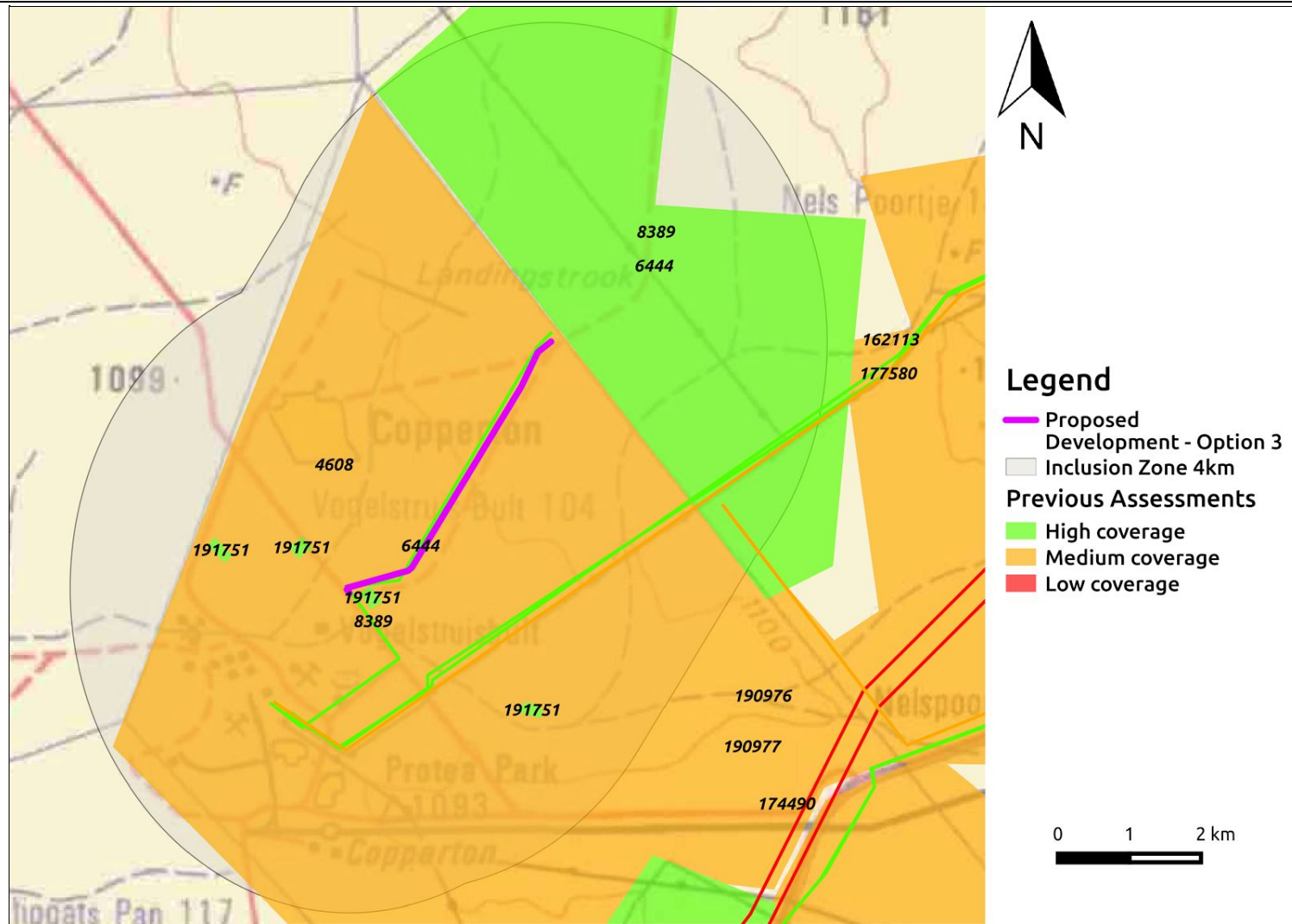


Figure 2a. Previous HIAs map. Previous Heritage Impact Assessments (excluding PIAs) surrounding the proposed development area within 4km, with SAHRIS NIDS indicated (please see Appendix 2 for full reference list).



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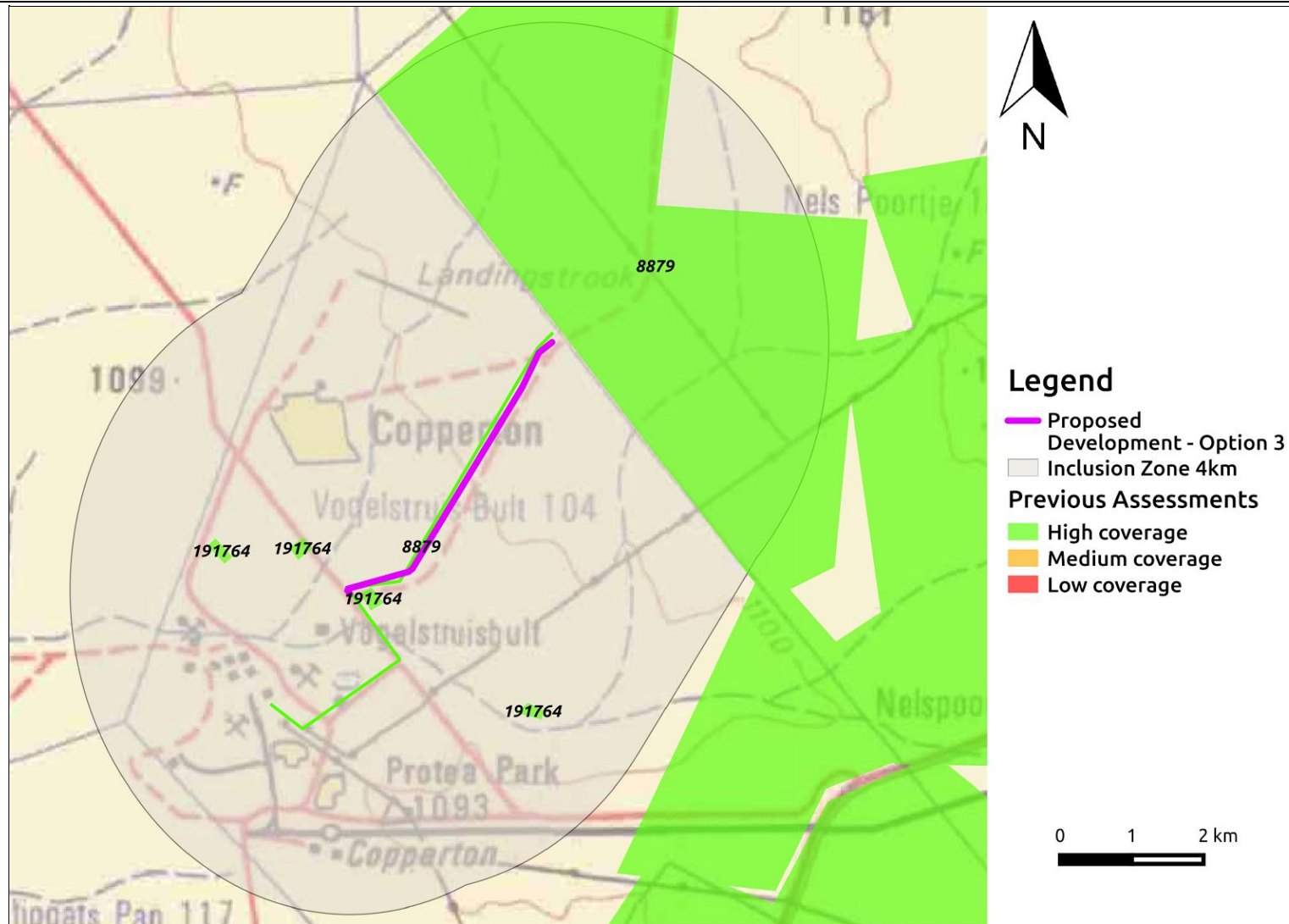


Figure 2b. Previous PIAs map. Previous Paleontological Impact Assessments surrounding the proposed development area within 4km, with SAHRIS NIDS indicated (please see Appendix 2 for full reference list).



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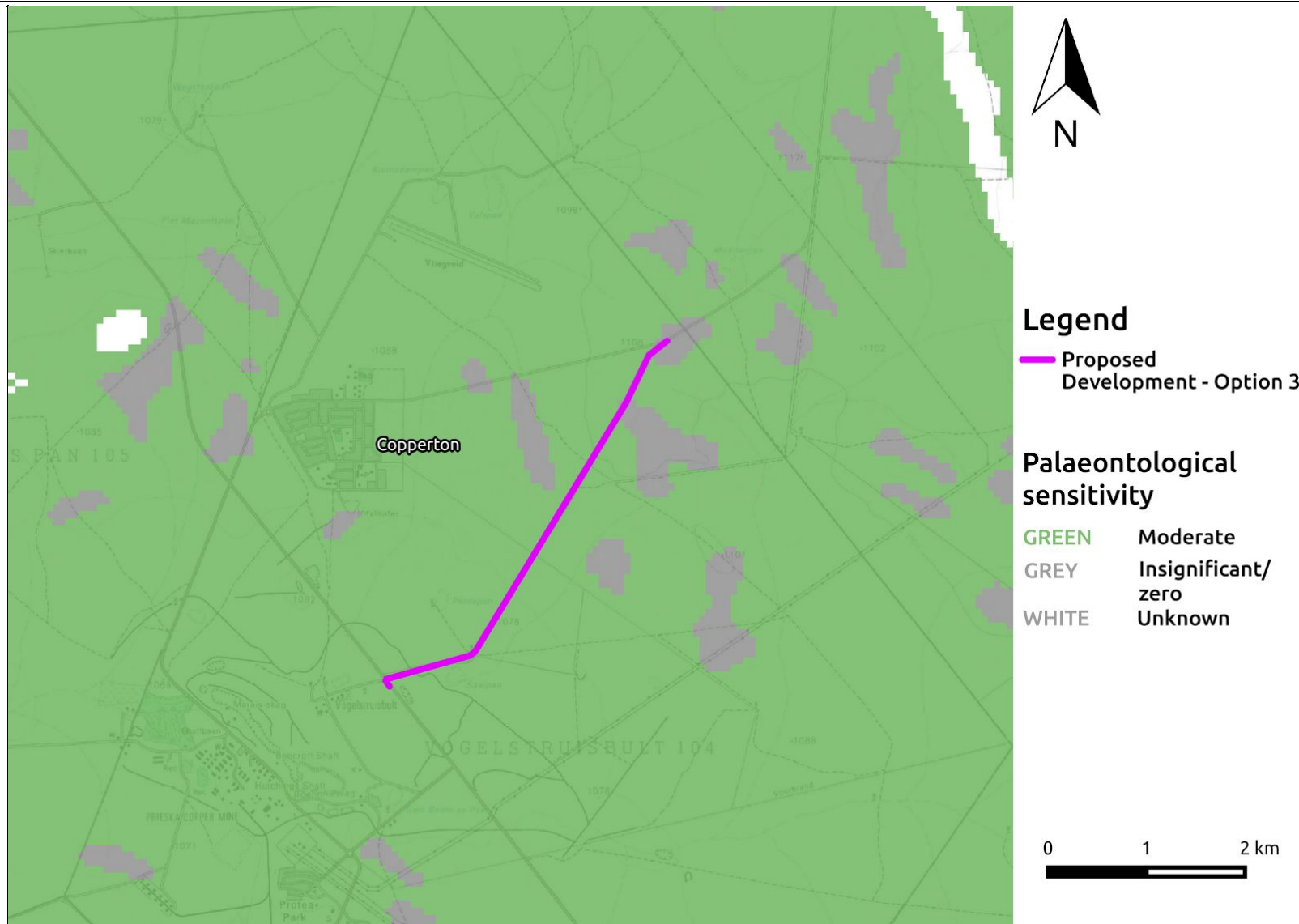


Figure 3a. Palaeosensitivity Map. Fossil sensitivity of the study area. See Appendix 3 for full guide to the legend.



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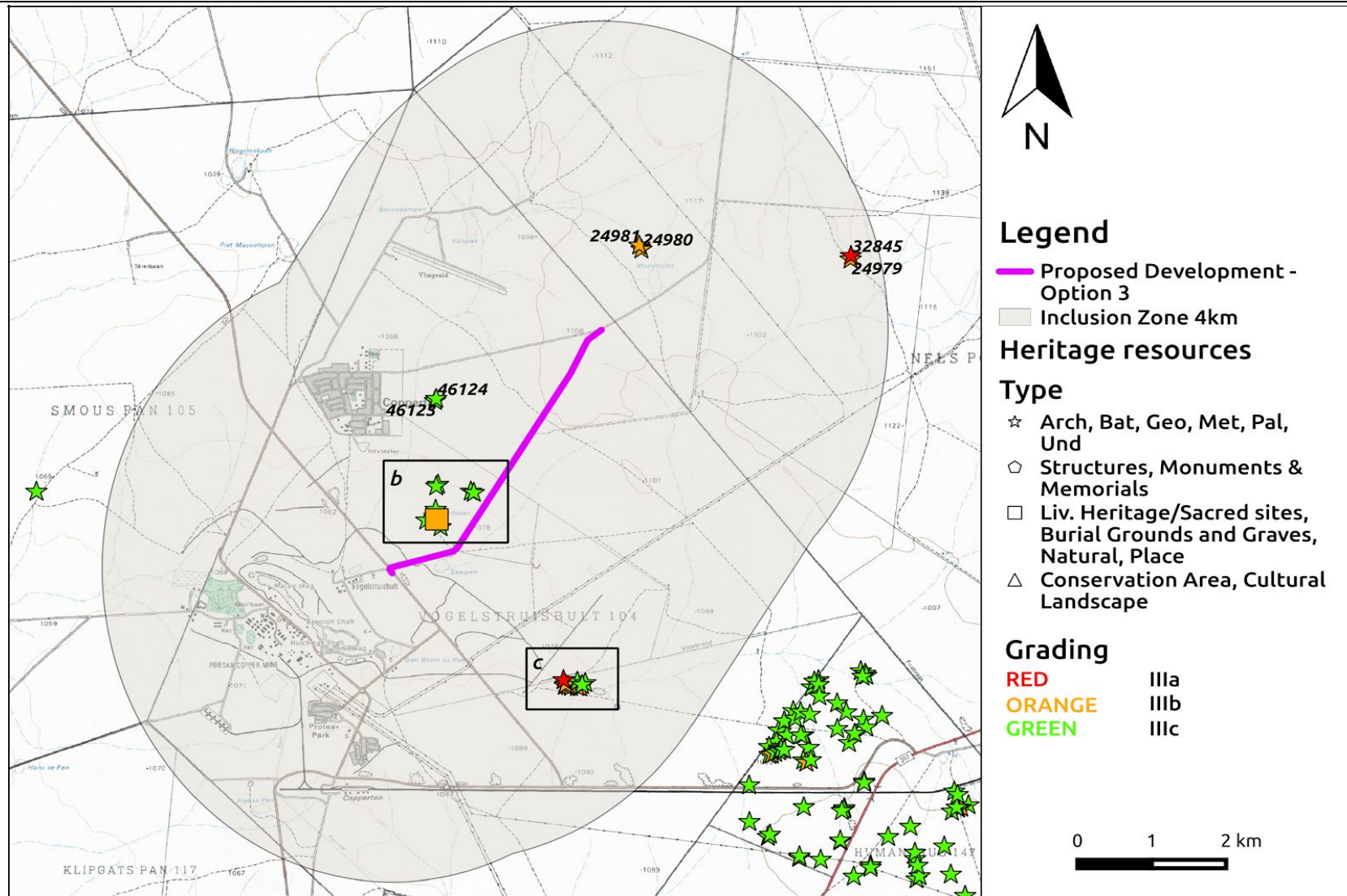


Figure 4a. Heritage Resources Map. Heritage resources previously identified in and near the study area, with SAHRIS Site IDs indicated (see Figures 4b - 4c for insets). See Appendix 4 for full description of heritage resource types.



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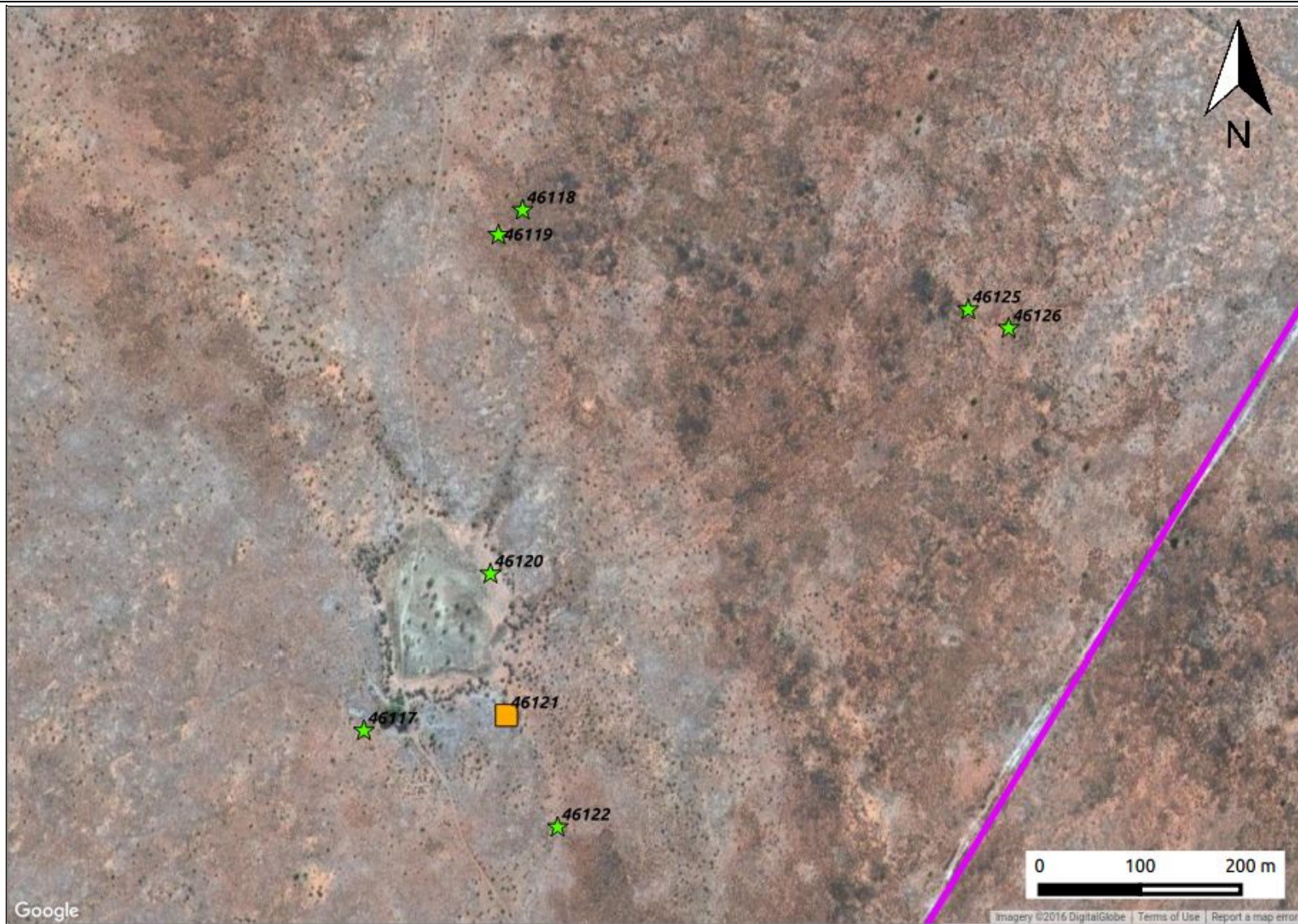


Figure 4b. Inset map.



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Figure 4c. Inset map.

8. Heritage statement and character of the area

Terramanzi Group has been contracted to undertake an Environmental Permitting Process for a “new” access route to the Copperton Wind Farm. The current proposed access route is not feasible as it runs through the town of Copperton. The revised preferred alternative is Option 3. Option 3 follows an existing farm road (gravel and currently overgrown with vegetation), which is approximately 4m wide and 4km in length.

Option 3 is located immediately south-east of the town of Copperton, and is entirely disturbed as the proposed route aligns precisely with an existing farm road, which is not expected to be widened.

Option 3 has been thoroughly assessed in previous surveys, including assessments by van Ryneveld (2006), Kaplan (2011), and Orton (2015) which covered the area proposed in the current assessment (see Figure 2a and 2b). Findings included Stone Age artefact sites of low to medium local significance, burial grounds and graves and a stone walling site of high local significance. None of these will be impacted by the proposed access road, and based on previous assessments, no additional heritage resources are located along this road (Figures 4a, 4b and 4c).

According to the SAHRIS Palaeosensitivity Map, the area is underlain by formations of low to zero palaeontological significance (Figure 3a), including the Gordonia Formation (Low) consisting of aeolian cover sands, the Mbizane Formation (Low), consisting of sandstone, siltstone and mudrock, and the Spioenkop Formation (Zero), with fine-grained quartzite and quartz. The Palaeontological Impact Assessments done by Almond (2011, 2015) found no significant fossil finds and recommended that no further palaeontological assessments need to be conducted.

No built environment resources are evident along the proposed new access road and as such, no built environment heritage resources are likely to be impacted by the proposed development (Figure 1b).

It is therefore unlikely that the proposed road development will impact significant heritage resources as the area has been thoroughly assessed, and has been previously disturbed. As such, it is recommended that no further heritage studies are required.

RECOMMENDATION:

The heritage resources in the area proposed for development have been sufficiently recorded
- No further Heritage Assessments are recommended for this development.



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APPENDIX 1

List of heritage resources within 4km inclusion zone

Site ID	Site no	Full Site Name	Site Type	Grading
32847	VGSTR4	Modderpan	Artefacts	Grade IIIa
32845	NPRT4	Nels Poortje 4	Stone walling	Grade IIIa
39957	Vogelstruisbult Red Sand Quarry	Vogelstruisbult Red Sand Quarry	Archaeological, Artefacts	Grade IIIb
89710	COP001	Copperton 001	Artefacts	Grade IIIb
89712	COP003	Copperton 003	Artefacts	Grade IIIb
89713	COP004	Copperton 004	Artefacts	Grade IIIb
89714	COP005	Copperton 005	Artefacts	Grade IIIb
89715	COP006	Copperton 006	Artefacts	Grade IIIb
89711	COP002	Copperton 002	Artefacts	Grade IIIb
46121	VS2011/005	Vogelstruisbult 005	Burial Grounds & Graves, Artefacts	Grade IIIb
24979	NPRT3	Nelspoortje 3	Artefacts	Grade IIIb
24980	VGSTR5	Vogelstruisbult 5	Artefacts	Grade IIIb
24981	VGSTR6	Vogelstruisbult 6	Artefacts	Grade IIIb
89718	COP007	Copperton 007	Artefacts	Grade IIIc
89720	COP009	Copperton 009	Artefacts	Grade IIIc
89719	COP008	Copperton 008	Artefacts	Grade IIIc
46126	VS2011/010	Vogelstruisbult 010	Artefacts	Grade IIIc
46120	VS2011/004	Vogelstruisbult 004	Artefacts	Grade IIIc
46122	VS2011/006	Vogelstruisbult 006	Artefacts	Grade IIIc
46117	VS2011/001	Vogelstruisbult 001	Artefacts	Grade IIIc
46118	VS2011/002	Vogelstruisbult 002	Artefacts	Grade IIIc
46119	VS2011/003	Vogelstruisbult 003	Artefacts	Grade IIIc
46125	VS2011/009	Vogelstruisbult 009	Artefacts	Grade IIIc



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46123	VSB2011/007	Vogelstruisbult 007	Artefacts	Grade IIIc
46124	VSB2011/008	Vogelstruisbult 008	Artefacts	Grade IIIc

APPENDIX 2

Reference List

Impact Assessment References				
Nid	Report Type	Author/s	Date	Title
4608	AIA	Karen Van Ryneveld	12/6/2006	Phase 1 Archaeological Impact Assessment: Vogelstruisbult 104, Prieska District, Northern Cape, South Africa
8389	HIA	Melanie Attwell	30/03/2011	Heritage Assessment Proposed Wind Energy Facility And Related Infrastructure, Struisbult: (Farm 103, Portions 4 And 7), Copperton, Prieska
6444	AIA	Jonathan Kaplan, Nicholas Wiltshire	30/10/2011	Archaeological Impact Assessment Of A Proposed Wind Energy Facility, Power Line And Landing Strip In Copperton, Siyathemba Municipality, Northern Cape
162113	AIA	Jaco van der Walt	20/12/2013	Archaeological Impact Assessment for the Proposed Bosjesmanberg Solar Facility and associated powerline options, located close to Copperton in the northern Cape.
190976	HIA	Stefan de Kock	30/11/2014	Integrated Heritage Impact Assessment in terms of Section 38(8) of the National Heritage Resources Act, 1999 (ACT 25 of 1999): Proposed Development of Humansrus Solar PV Energy Facility 1 (previously named RE Capital 13 Solar Development) on a portion of
190977	AIA	Lita Webley	30/11/2014	Archaeological Impact Assessment: Proposed Construction of Humansrus Solar PV Energy Facility 1 (previously named RE Capital 13 Solar Development) on the Remainder of the Farm Humansrus 147 near Copperton, Northern Cape (Assessment conducted under Sectio
177580	AIA	Jaco van der Walt	19/05/2014	Archaeological Impact Assessment for the Proposed Cuprum to Burchell and Burchell to Mooidraai 132 KV Lines, Prieska, Northern Cape Province
174490	HIA	Lita Webley	20/08/2014	Scoping Assessment: Proposed Construction of Humansrus PV Energy Facility 1 (previously named RE Capital 13 Solar Development) on the Remainder of the Farm Humansrus 147 near Copperton, Northern Cape
191751	AIA	Jayson Orton	2/2/2015	Heritage Impact Assessment For Four Proposed Borrow Pits On Remainder Of Farm Vogelstruisbult 104/1, Prieska Magisterial District, Northern Cape
8879	PIA	John E Almond	30/08/2011	PIA Desktop study: Proposed Plan 8 wind energy facility near Copperton, Northern Cape Province.



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191764	PIA	John E Almond	20/01/2015	Recommended Exemption From Further Palaeontological Studies: Proposed Development Of Two Quarries And Two Borrow Pits On Portion 1 Of Farm Vogelstruisbult 104 Near Copperton, Siyathemba Municipality, Northern Cape
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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)
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
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



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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.

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

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:

- 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.**