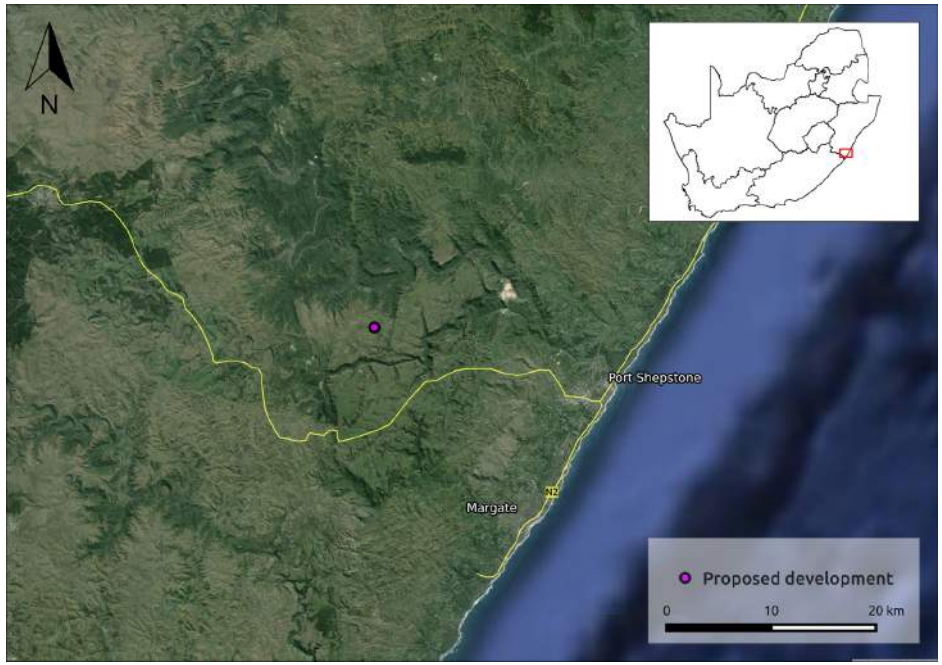
CEDAR TOWER SERVICES

HERITAGE SCREENER

CTS Reference Number:	**CTS15_005**	 **Figure 1a**. Satellite image with proposed development and study area location indicated.
Client:	**Environmental Solutions**	
Date:	**28 July 2015**	
Proposed development:	**M1562 Oribi Gorge Dams**	
Recommendation by CTS Heritage Specialists: (**TYPE 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.	

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1. Proposed Development Summary

Construction of two dams on the two adjacent properties of Fountain Hills 11085 and The Gums 11264. The dams are expected to store water for irrigation in the order of 235 000m³ each. The dam wall height is expected to be no more than 5m to 7m.

2. Application References

Name of relevant heritage authority(s)	Amafa / Heritage KwaZulu Natali
Name of decision making authority(s)	DARD - Department of Agriculture, Environmental Affairs and Rural Development (KwaZulu-Natal)

3. Property Information

Farm Name and Number	The Gums 11264 and Fountain Hill 11085
Local Municipality	Ezinqoleni Municipality
District Municipality	Ugu District Council
Previous Magisterial District	Port Shepstone
Province	KwaZulu-Natal
Current Use	Agricultural
Current Zoning	Agricultural
Extent of property	80 ha

4. Nature of the Proposed Development

Surface area to be affected/destroyed	60 ha
Depth of excavation (m)	Unknown
Height of development (m)	5-7m
Expected years of operation before decommission	NA

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	X
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

7. Mapping

Figure 1b. Overview Map. Satellite image with proposed development indicated.

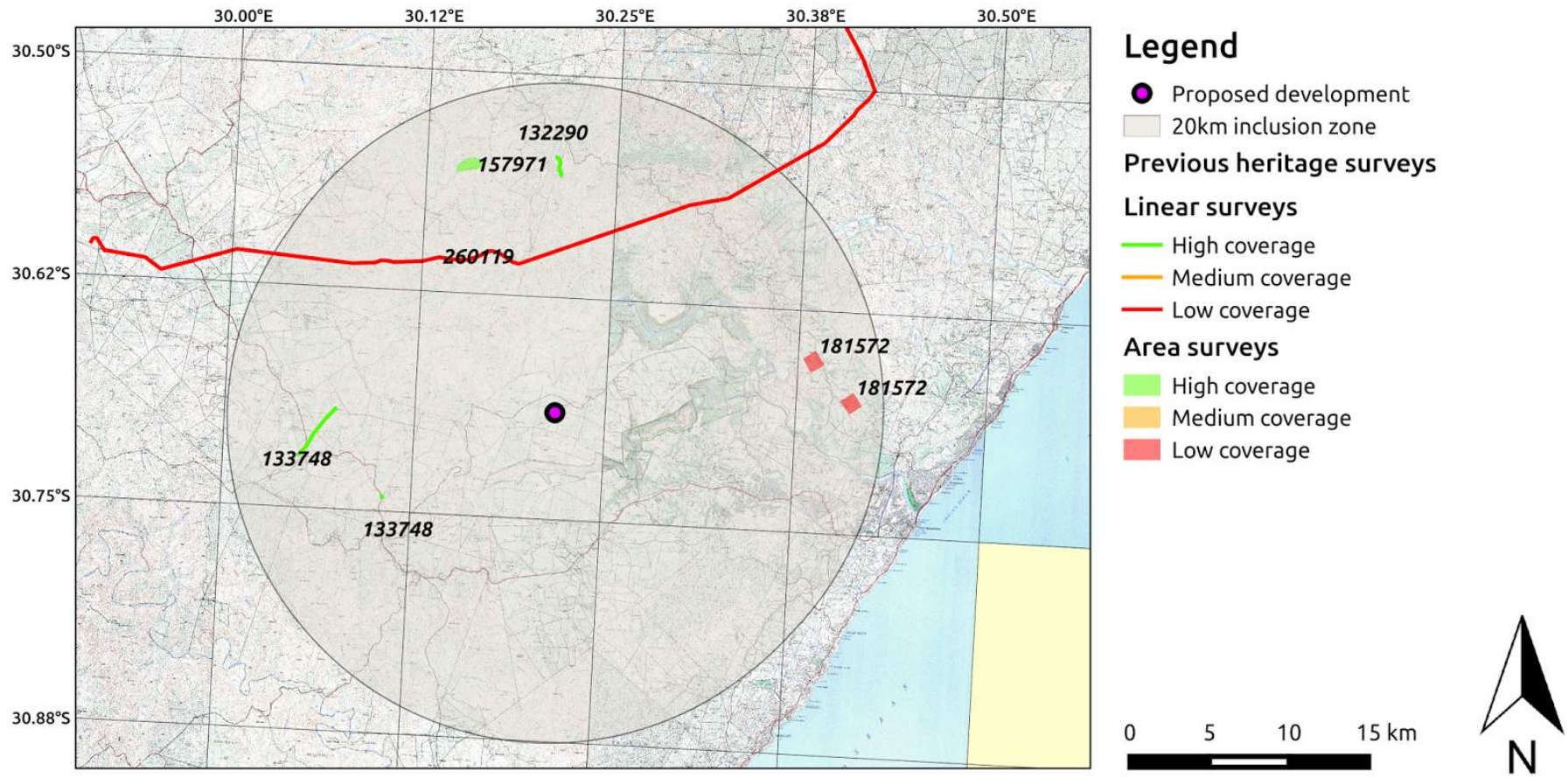

Figure 2. HIAs Map. Previous studies done in and near the proposed development, with SAHRIS NID labels indicated.

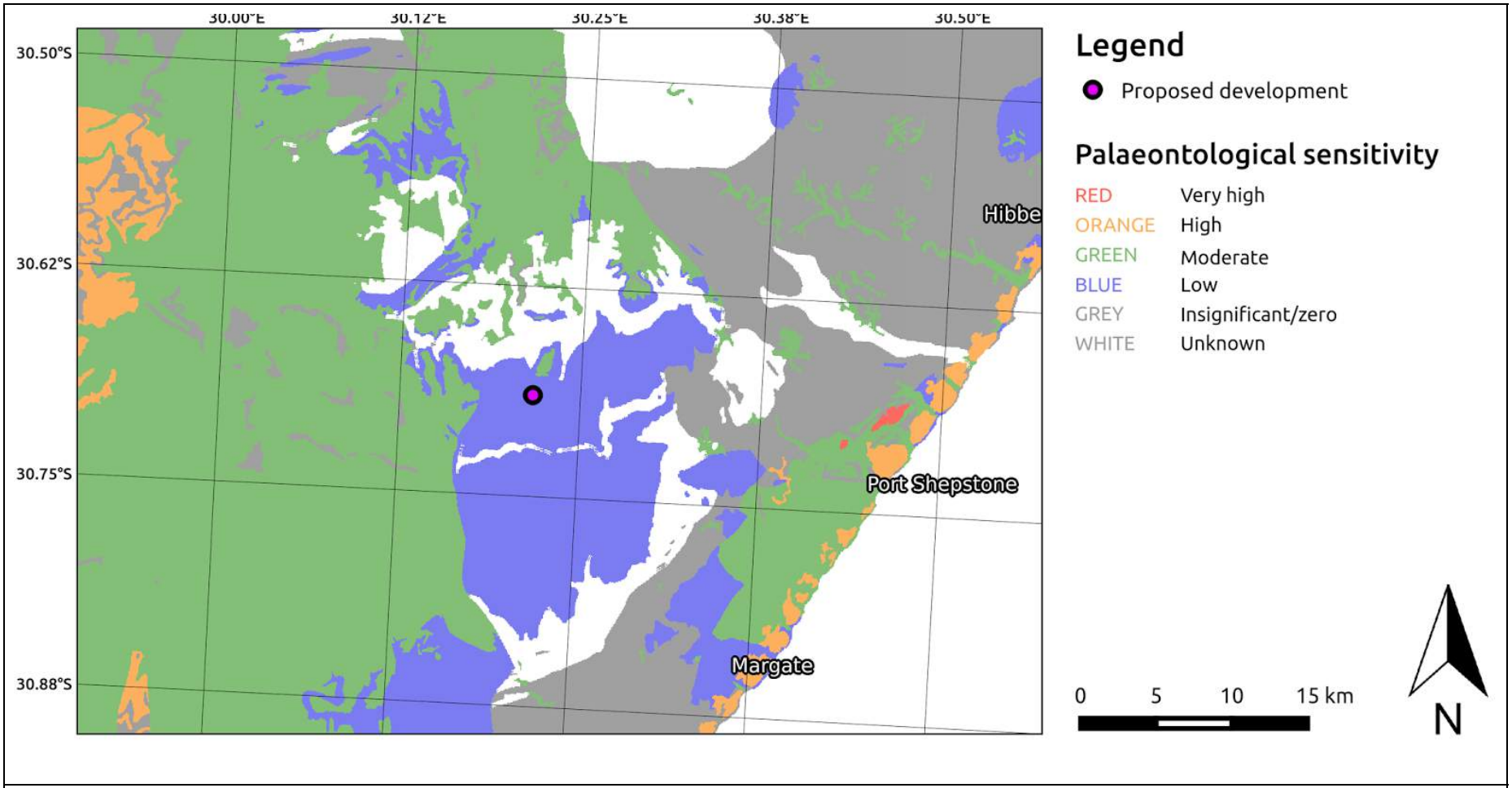

Figure 3. Palaeo Map. Palaeosensitivity of the study area. See Appendix 3 for full guide to the legend.

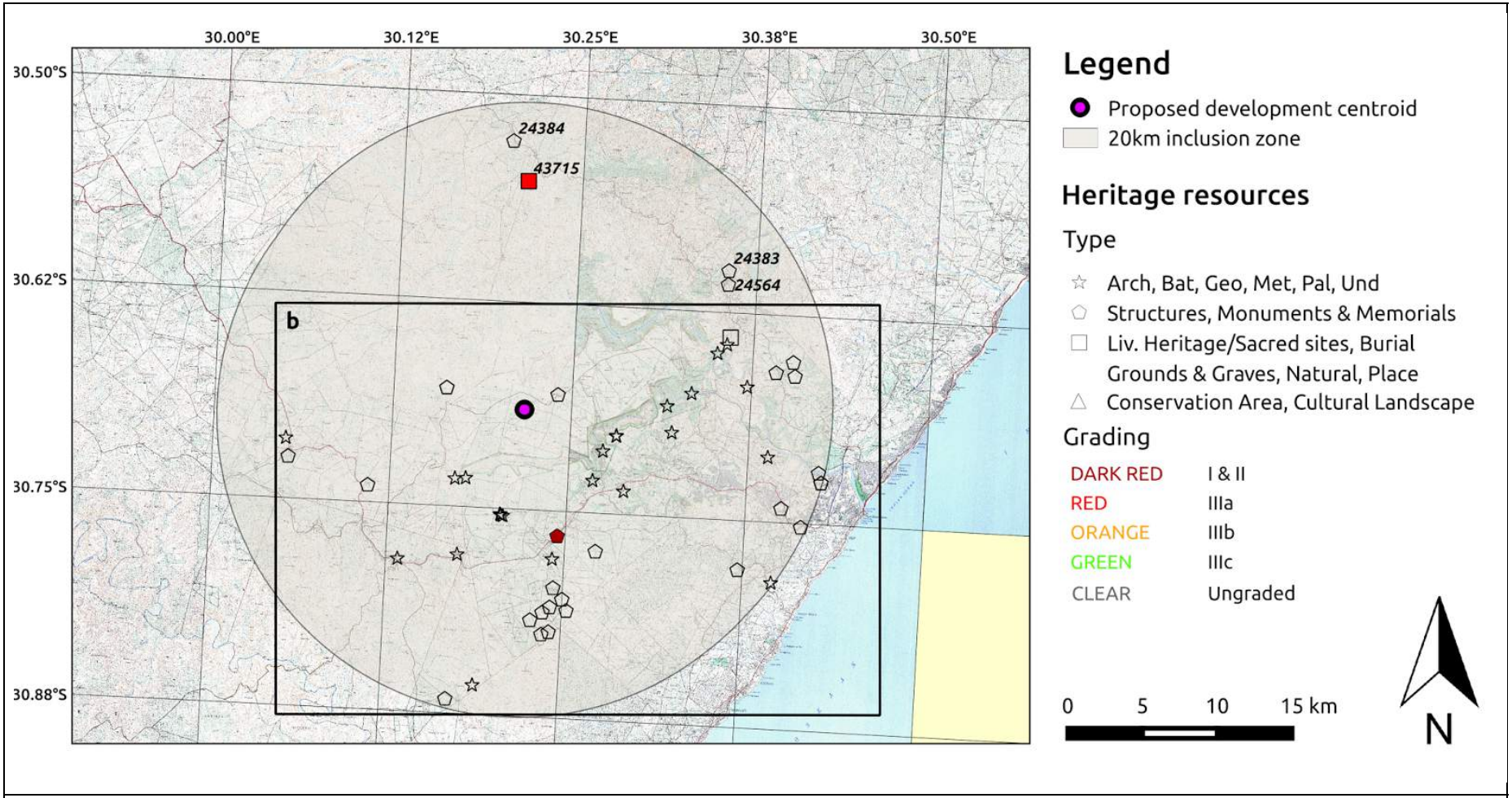

Figure 4a. Heritage Sites Map. Heritage resources previously identified in and near the study area, with SAHRIS Site ID labels indicated.

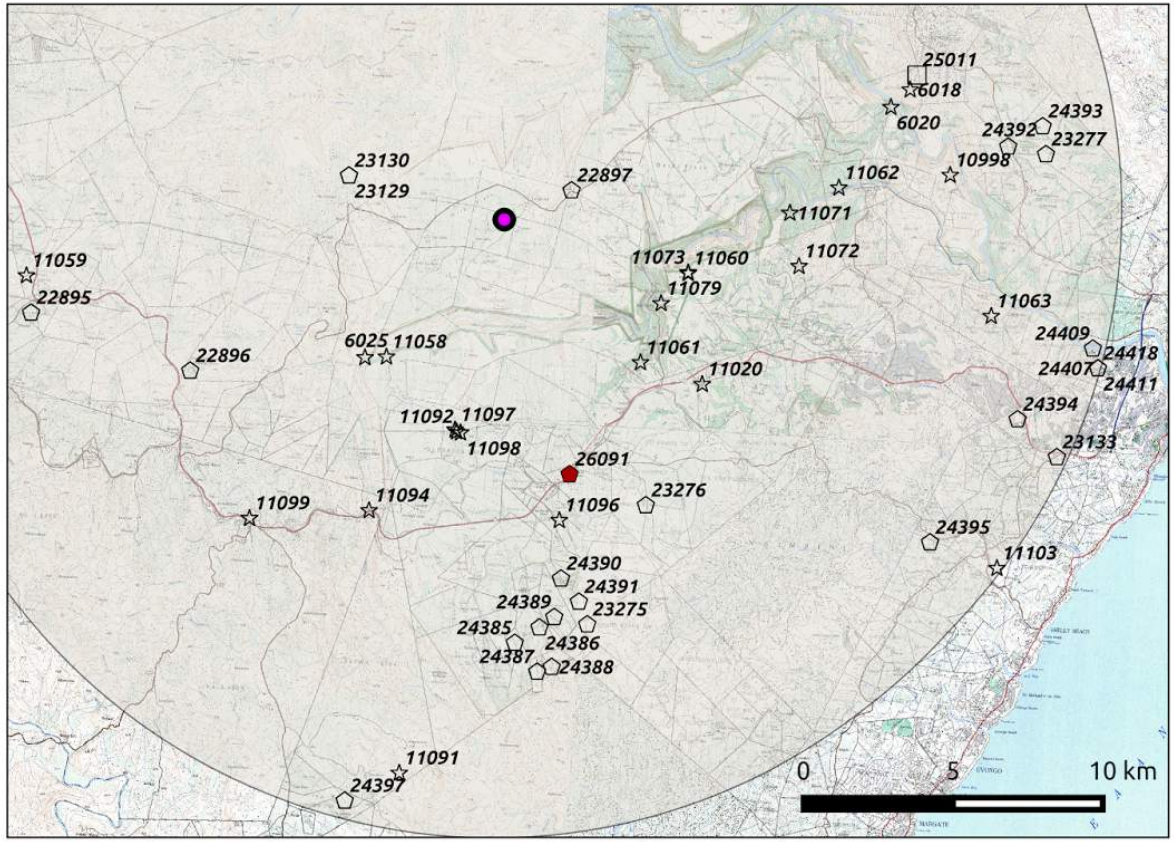

Figure 4b. Heritage Sites Map. Heritage resources previously identified in the inset of Figure 4a, with SAHRIS Site ID labels indicated.

8. Heritage statement and character of the area

Environmental Solutions is undertaking the environmental impact assessment process for the construction of two dams on two adjacent properties, Fountain Hills 11085 and The Gums 11264. The dams are expected to store water for irrigation in the order of 235 000m³ each. The dam wall height is expected to be no more than 5 to 7m.

The current land use for the area is agricultural and the area impacted for the proposed dam has been extensively farmed. It is expected that no archaeological material will be found *in situ*.

An inclusion zone of 20km was assessed around the two farms where the development is proposed. A few projects are already proposed in this area, but heritage impact assessments have not yet been undertaken for all of them. The off channel storage dam in one of the tributaries to the Mzimkhulu River is still awaiting assessment whereas the Kwandwalane Phase 2 Rural Housing Development and the Mdlazi Bridge, in the Hibiscus Coast Local Municipality, have received exemptions from further heritage studies. Another three projects in the area are for long linear developments (power lines and fiber optic cable trenching) such as the Proposed Ariadne-Eros 400/132 kV Multi-Circuit Transmission Power Line, the FibreCo Repeater Sites (Routes 3 and 4), and the St Faith's substations and power lines.

Despite the relative scarcity of previous impact assessments done in the area, 54 heritage sites have been identified during research projects. The Edwardian building of the Paddock Station was declared a National Monument in 1982 and therefore it is considered, under the most recent heritage legislation, a Provincial Heritage Site. Another 22 structures older than 60 years, mostly ungraded, are also on record for this area, along with four mission stations (Elim, Marburg, the Norwegian Settler Church and Umzumbe); twelve rock art sites, mostly located within the Oribi Gorge Natural Reserve; ten Stone Age artefact scatters; one Late Iron Age site with a midden; one graveyard with three graves and the Ndongeni Ka Xoki's Grave on Farm Ndagoni, which is possibly of provincial significance.

More rock art sites are likely to be located within the Oribi Gorge and adjacent gorges. Informal burial grounds and Iron Age sites are also expected to be frequent in the landscape.

Palaeontology

According to the palaeo-sensitivity map on SAHRIS, the area is underlain by formations of the Natal Group of low palaeontological sensitivity as no fossils have yet to be recorded in this group. Therefore, no further palaeontological studies are necessary.

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APPENDIX 1 - Site List

Site ID	Site no	Full Site Name	Site Type	Grading
10998	3030BC 006	Selborne Park	Artefacts	Ungraded
11060	3030CB 001	Borcher's Shelter Annexe	Artefacts	Ungraded
11062	3030CB 005	Cement Works	Artefacts	Ungraded
11063	3030CB 007	The Sugarbush Cutting - Siqalabeni	Artefacts	Ungraded
11071	3030CB 017	Lynn Valley	Artefacts	Ungraded
11072	3030CB 018	Silver Streams	Artefacts	Ungraded
11099	3030CC 011	Izingolweni	Artefacts	Ungraded
11103	3030CD 002	Izotcha Redhills.	Artefacts	Ungraded
6020	3030CB 004		Artefacts	Ungraded
6018	3030CB 008		Artefacts	Ungraded
24383	AMAFA3267	The Heights	Building	Ungraded
24384	AMAFA3268	Sunside	Building	Ungraded
24385	AMAFA3269	Fredheim	Building	Ungraded
24386	AMAFA3270	Steinberg	Building	Ungraded
24387	AMAFA3271	ELIM Mission	Building	Ungraded
24388	AMAFA3272	Marburg Mission Station	Building	Ungraded
24389	AMAFA3273	Kwatyona	Building	Ungraded
24390	AMAFA3274	Altenburg	Building	Ungraded
24391	AMAFA3275	Nestau	Building	Ungraded
24392	AMAFA3276	Bavaria (Area 104)	Building	Ungraded
24393	AMAFA3277	Bavaria	Building	Ungraded

24394	AMAFA3278	Bavaria (178.201)	Building	Ungraded
24395	AMAFA3279	LOT 35	Building	Ungraded
24397	AMAFA3281	Jericho No2	Building	Ungraded
24409	AMAFA3293	King's Wall	Building	Ungraded
24407	AMAFA3291	Milton Hotel	Building	Ungraded
24411	AMAFA3295	Ammunition Magazine	Building	Ungraded
22895	AMAFA1779	Lot FM	Building	Ungraded
22896	AMAFA1780	Lot LL	Building	Ungraded
22897	AMAFA1781	Monguntia No2	Building	Ungraded
23129	AMAFA2013	Magistrate Residence	Building	Ungraded
23130	AMAFA2014	Magistrate Court	Building	Ungraded
23133	AMAFA2017	Norwegian Settler Church	Building	Ungraded
23275	AMAFA2159	Tiger's Hole	Building	Ungraded
23276	AMAFA2160	Krans Kloof	Building	Ungraded
23277	AMAFA2161	Zummat	Building	Ungraded
24564	AMAFA3448	Umzumbe Mission Station	Building	Ungraded
24418	AMAFA3302	Skye	Building	Ungraded
26091	9/2/439/0001	Paddock Station, Paddock, Port Shepstone District	Building	Grade II
25011	Ndongeni Farm	Ndongeni Burial site	Burial Grounds & Graves	Ungraded
43715	MQA-01	MQANGQALA 01	Burial Grounds & Graves	Grade IIIa
11058	3030CA 003	Andalusia	Rock Art	Ungraded
11059	3030CA 004	Pengaan	Rock Art	Ungraded
11061	3030CB 002	Penrith - Oribi Gorge Nature Reserve	Rock Art	Ungraded
11073	3030CB 019	Borcher's Shelter	Rock Art	Ungraded

11079	3030CB 026		Rock Art	Ungraded
11091	3030CC 001	TwaGwa or Manzimhlope	Rock Art	Ungraded
11092	3030CC 002	Waterfall	Rock Art	Ungraded
11094	3030CC 005	Below Wilson's Cutting	Rock Art	Ungraded
11096	3030CC 007	Falls	Rock Art	Ungraded
11097	3030CC 009	Waterfall	Rock Art	Ungraded
11098	3030CC 010	Waterfall	Rock Art	Ungraded
6025	3030CA 001		Rock Art	Ungraded
11020	3030BC 040	Mpambanyoni (Hill 252)	Shell Midden	Ungraded

APPENDIX 2 - Reference List

NID	Author/s	Date	Report Type	Title
260119	Nkosinathi Godfrey Tomose	01/04/2015	HIA	Heritage Impact Assessment Study for the Proposed Ariadne-Eros 400/132 kV Multi-Circuit Transmission Power Line from Ariadne Sub-Station to Eros Sub-Station and the Expansion and Upgrade of the Ariadne Sub-Station and the Eros Sub-Station, Kwazulu-Natal
181572	Elizabeth Wahl	14/03/2014	HIA	Phase 1 Heritage Impact Assessment Report: St Faiths Substations and Powerlines
132290	Frans Prins	18/09/2013	HIA	Heritage Impact Assessment Of The Proposed Mqangqala Access Road, Umzumbe Municipality
157971	Gavin Whitelaw	08/08/2013	HIA	The proposed Eucalyptus forestry projects by M.C. Dzanibe (197ha), occurring in Mvubukadzi 10ES farm UMzimkhulu local Municipality within Sisonke District of Kwazulu Natal Province
133748	Frans Prins	21/06/2013	HIA	Heritage Impact Assessment Of The Proposed Nqabeni/eros/oribi 132kv Loop-in-loop-out Powerline, Ugu District Municipality
269397	Celeste Booth	02/03/2015	HIA	FibreCo Repeater Sites Routes 3 and 4

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APPENDIX 3 - Keys/Guides

Key/Guide to Acronyms

AIA	Archaeological Impact Assessment
DARD	Department of Agriculture, Environmental Affairs and Rural Development (Kwa-Zulu 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

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.**