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HERITAGE SCREENER

CTS Reference Number:	CTS15_042
Client:	Aurecon
Date:	24 November 2015
Title:	Pump Station Humewood, Port Elizabeth
 <p>Figure 1a. Satellite image with proposed development area indicated in the greater Port Elizabeth area.</p>	
Recommendation by CTS Heritage Specialists: (Type 1)	(1) The heritage resources in the area proposed for development are sufficiently recorded - The surveys undertaken in the area adequately captured the heritage resources. A palaeo chance finds procedure must be included in the EMP for the project.

1. Proposed Development Summary

The proposed development is a pump station, a sump and associated pipeline.

2. Application References

Name of relevant heritage authority(s)	Eastern Cape Provincial Heritage Resources Authority (ECPHRA)
Name of decision making authority(s)	Department of Economic Development, Environmental Affairs and Tourism (DEDEAT)

3. Property Information

Erf number	1256
Local Municipality	Nelson Mandela Bay Metropolitan Municipality
District Municipality	Nelson Mandela Bay Metropolitan Municipality
Previous Magisterial District	Port Elizabeth
Province	Eastern Cape
Current Use	Vacant
Current Zoning	Vacant
Total Extent	17.6ha

4. Nature of the Proposed Development

Surface area to be affected/destroyed	0.2ha and less than 500m pipeline
Depth of excavation (m)	7m



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Height of development (m)	n/a
Expected years of operation before decommission	n/a

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):	

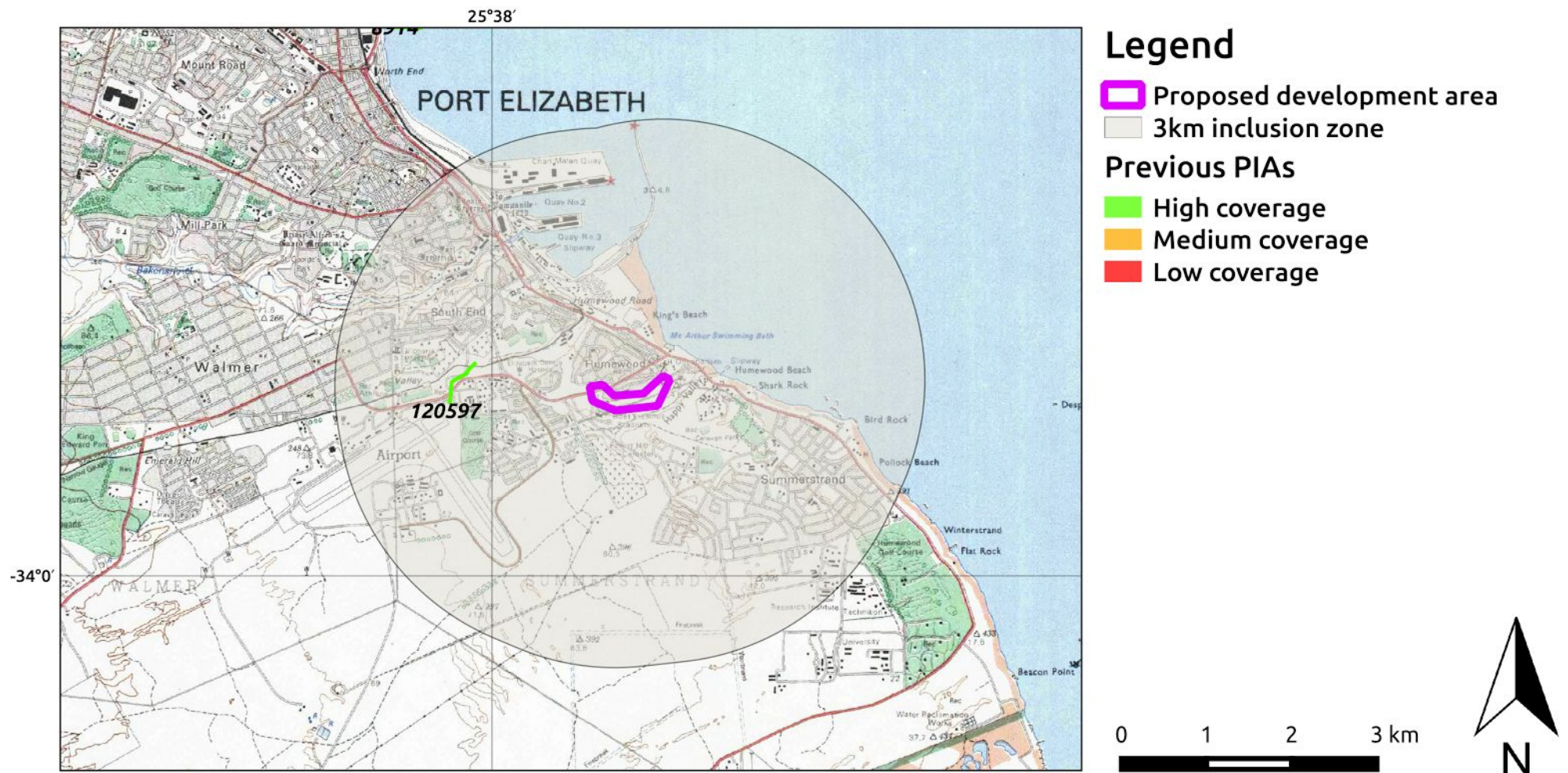
6. Additional Infrastructure Required for this Development

N/A

7. Mapping

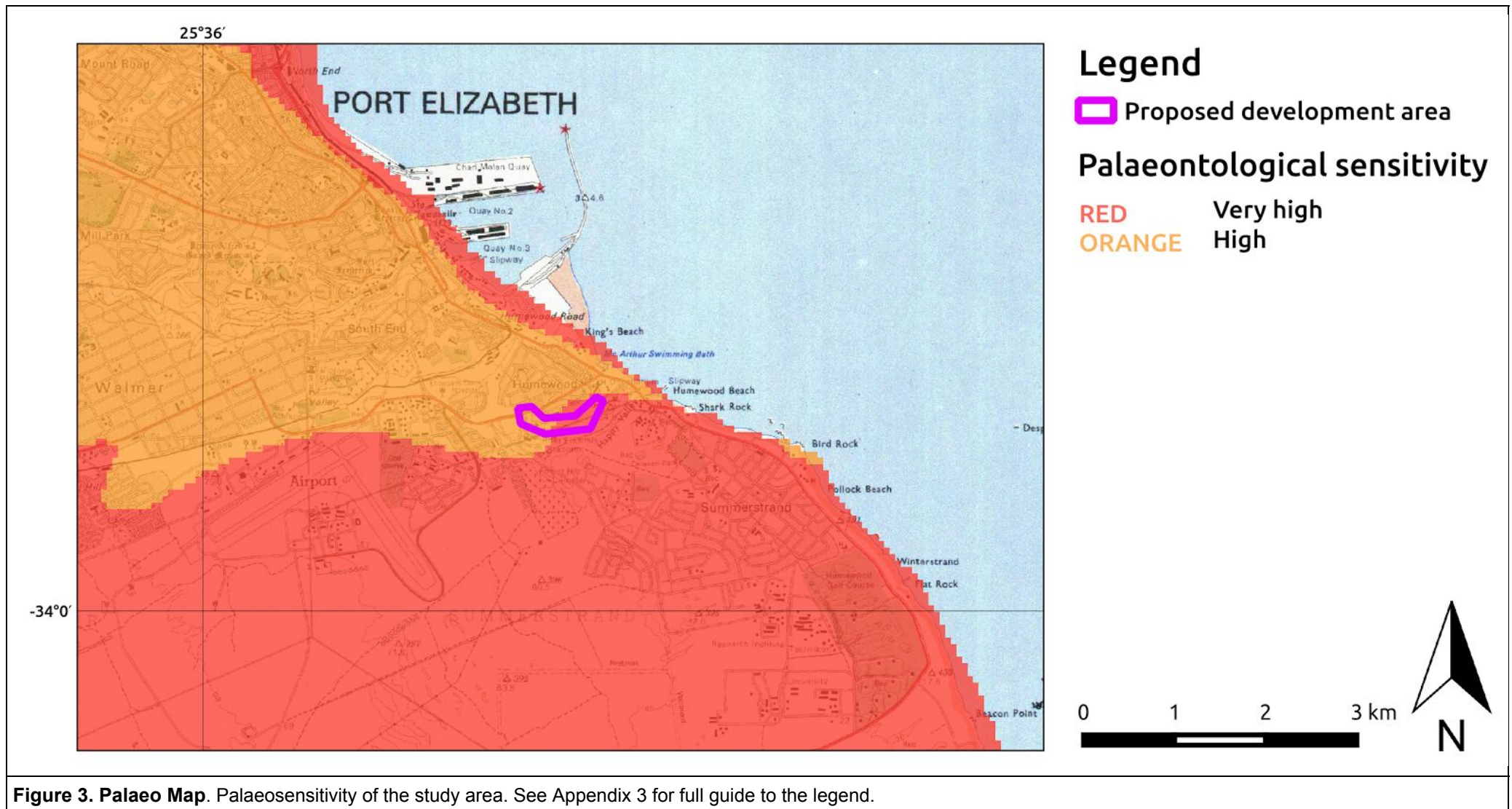


Figure 1b. Overview Map. Satellite image with proposed development indicated.



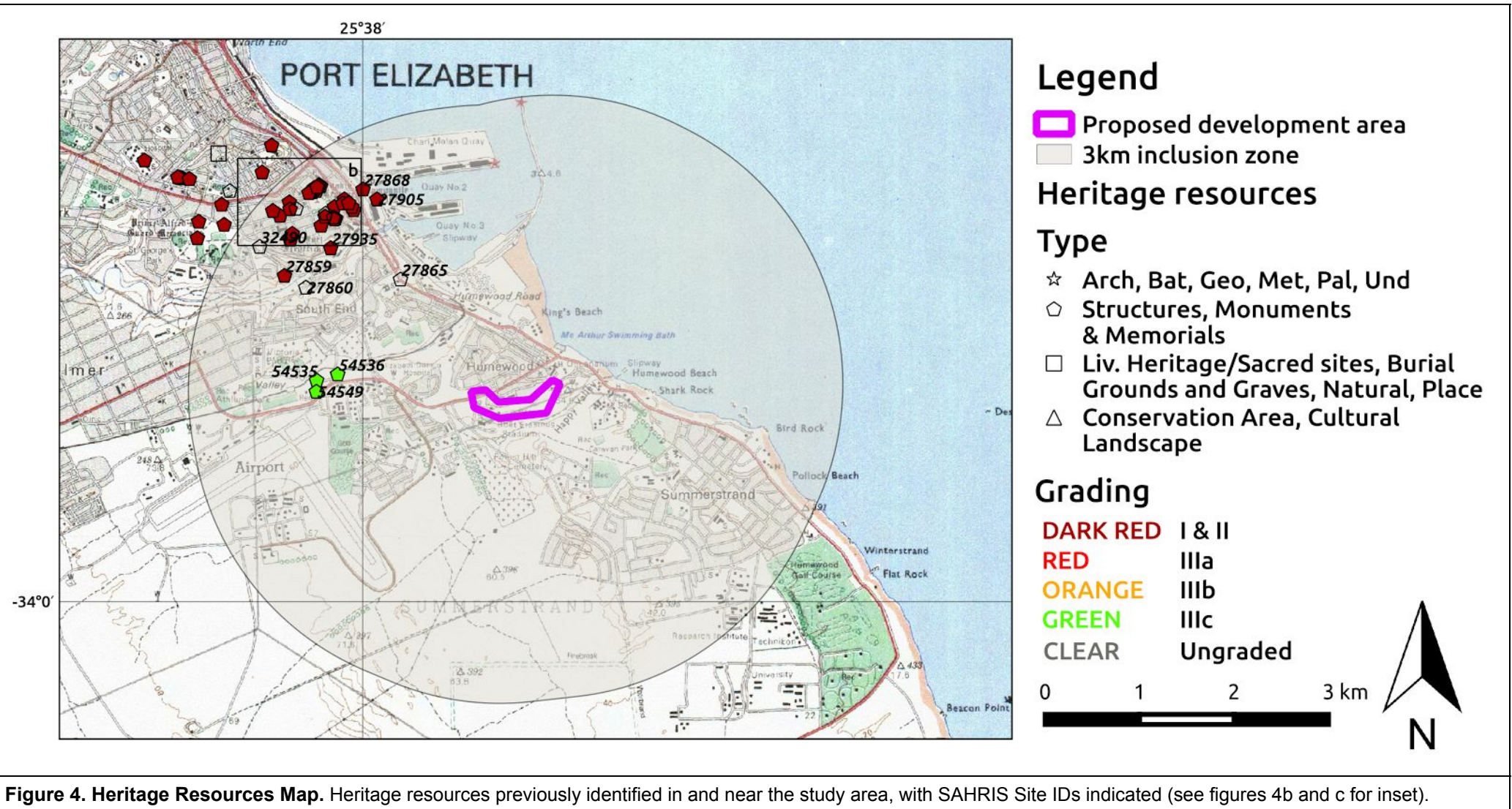


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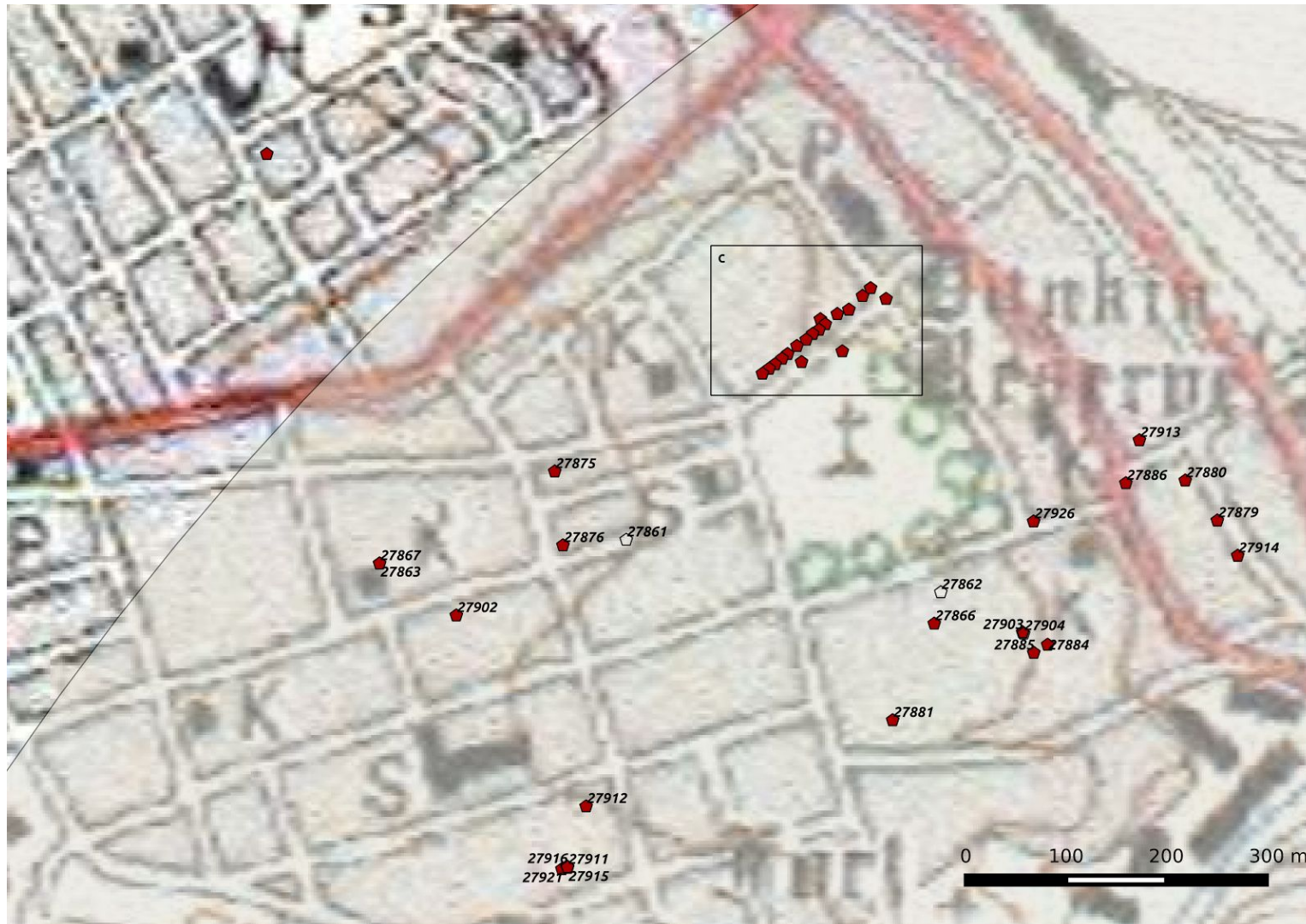


Figure 4b. Heritage Resources Map. Inset b within Port Elizabeth



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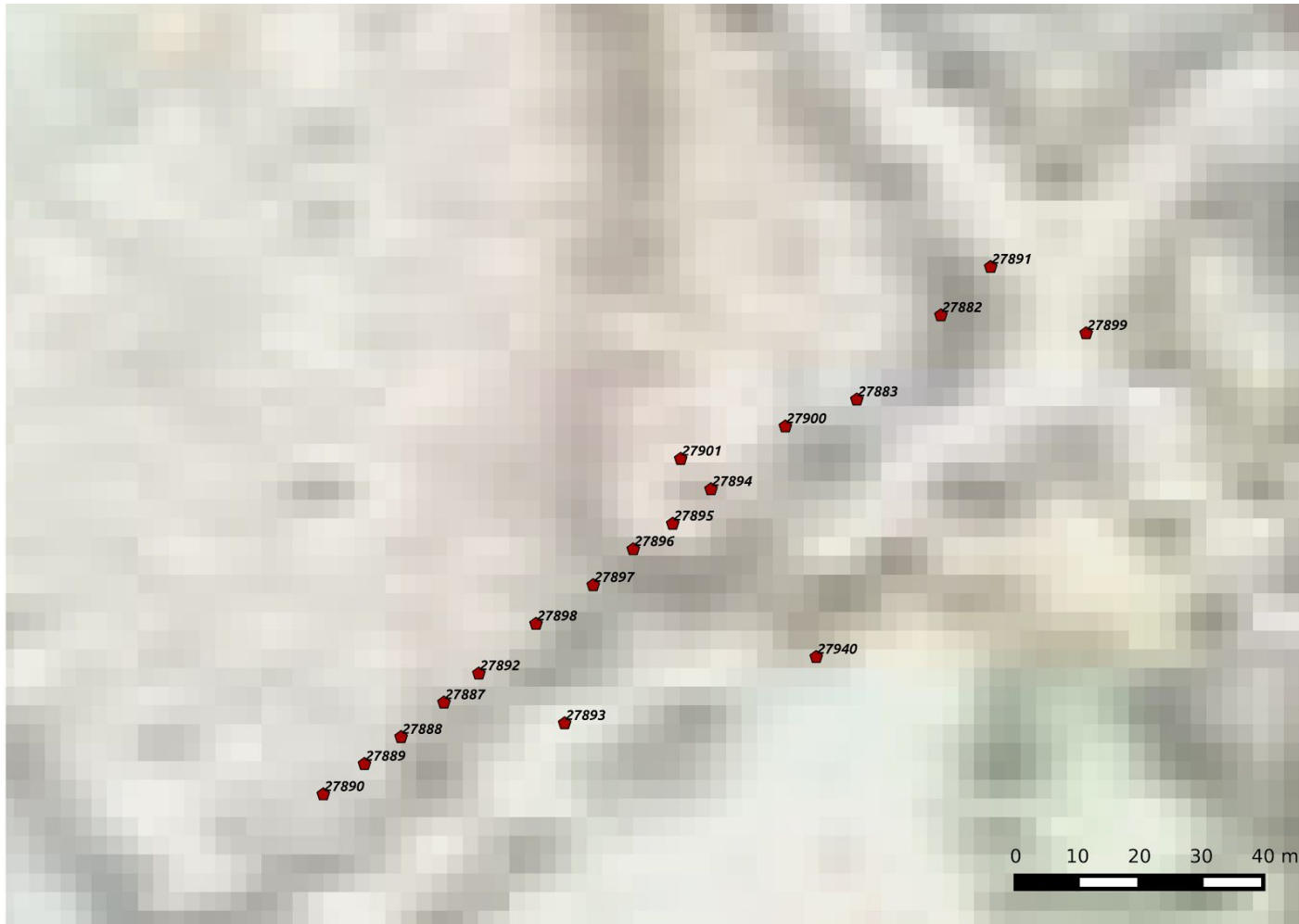


Figure 4c. Heritage Resources Map. Inset c, Donkin St, Port Elizabeth

8. Heritage statement and character of the area

Aurecon is undertaking an Environmental Impact Assessment process for the construction of a pump station in Humewood, Port Elizabeth. Two separate options are proposed. The building of the pump station will be 47m² and the sump will be 28m² and 7m deep. The total fenced area will be 840m². This extent does not trigger section 38(1) of the National Heritage Resources Act. The pipeline will be 250 mm in diameter and laid underground for a total length of about 400m. No further infrastructure is planned.

A wider study area was provided by Aurecon covering a total of 17ha. CTS considered an inclusion zone of 3km to characterise the heritage resources in the area. Very few Archaeological Impact Assessments were previously undertaken in the inclusion zone and no archaeological resources were identified during any of these assessments. This is possibly due to the area being affected by flooding on the 1st of September 1968. Most of the original surface deposit has since been washed away.

The pipeline is proposed along an existing tarred road which has therefore already disturbed the linear component of this development. While it is possible that Middle and Later Stone Age material is present in the area, the likelihood of this being *in situ* and of significance is minimal. 55 buildings with heritage significance are within the inclusion zone but **no buildings of significance** are present within the development area.

According to the SAHRA palaeosensitivity maps the proposed study area is underlain by the Peninsula and the Schelm Hoek Formations of high to very high fossil sensitivity respectively. The proposed development will only overlie the Schelm Hoek Formation as the north-west section of the study area will not be affected. Two Palaeontological Impact Assessments were recently undertaken in the area by Almond (2015) and Prevec (2013). Both specialists found that the Holocene unconsolidated aeolianites of the Schelm Hoek formation are quite unfossiliferous, with the likelihood of identifying fossils of significance being very low. The low significance rating also applies to the Peninsula Formation as only trace fossils have been found (Prevec 2013). Both specialists therefore suggested that the projects be exempted from further palaeontological work. **A Palaeontological Impact Assessment is therefore not recommended but a fossil chance finds procedure should be included in the EMP.**

Considering the small footprint of the proposed development (840m² and 500m pipeline) and considering the low sensitivity in terms of palaeontology, CTS recommends that:

- **an Archaeological Impact Assessment should not be undertaken**
- **a palaeo chance finds procedure should be included in the EMP for the project (a PIA is not recommended).**

The presence of graves older than 60 years cannot be ruled out. In the event that graves or any other archaeological or palaeontological material is identified during construction, work must cease immediately and the Eastern Cape Provincial Heritage Resources Authority must be contacted to inspect the findings.

APPENDIX 1 - List of sites within 3 km inclusion zone

Site ID	Site no	Full Site Name	Site Type	Grading	Archival status	Current status
27859	9/2/073/0057	Robin Hill, 1 Harris Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27860	9/2/073/0060	Shri Siva Subramanier and Marriamman Aulayam, Upper Valley Road, South End, Port Elizabeth	Building	Grade IIIb	Register	Heritage Register
27861	9/2/073/0062	15 Pearson Street, Port Elizabeth	Building	Grade IIIb	Register	Heritage Register
27862	9/2/073/0063	21 Prospect Hill, Port Elizabeth	Building	Grade IIIb	Register	Heritage Register
27863	9/2/073/0049-001	Holy Trinity Anglican Church Hall, Havelock Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27865	9/2/073/0055	South End Museum, Humewood Road, Port Elizabeth (See 9/2/073/0061)	Building		Provisional monument	Provisional Protection
27866	9/2/073/0046	Prince Alfred's Guard Drill Hall, Prospect Hill, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27867	9/2/073/0049	Holy Trinity Anglican Church, Havelock Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27868	9/2/073/0041	Campanile, Strand Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27875	9/2/073/0035	8 Whitlock Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27876	9/2/073/0036	10 Whitlock Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27879	9/2/073/0028	City Hall, Market Square, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27880	9/2/073/0029	Erf 4763, 4764, Market Square, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27881	9/2/073/0030	Atheneum Club, Belmont Terrace, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27882	9/2/073/0024/015	25 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27883	9/2/073/0024/016	27 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27884	9/2/073/0025	10 Castle Hill, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27885	9/2/073/0026	12 Castle Hill, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site



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27886	9/2/073/0027	Library, Main Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27887	9/2/073/0024/010	49 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27888	9/2/073/0024/011	51 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27889	9/2/073/0024/012	53 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27890	9/2/073/0024/013	55 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27891	9/2/073/0024/014	21/23 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27892	9/2/073/0024/009	47 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27893	9/2/073/0024/008	45 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27894	9/2/073/0024/003	35 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27895	9/2/073/0024/004	37 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27896	9/2/073/0024/005	39 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27897	9/2/073/0024/006	41 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27898	9/2/073/0024/007	43 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27899	9/2/073/0024	Terrace, Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27900	9/2/073/0024/001	31 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27901	9/2/073/0024/002	33 Donkin Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27902	9/2/073/0021-001	Old Parsonage, Pearson Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27903	9/2/073/0022	7 Castle Hill, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27905	9/2/073/0023	Old Harbour Board Building, Fleming Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27910	9/2/073/0016/006	11 Cora Terrace, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27911	9/2/073/0016/007	13 Cora Terrace, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27912	9/2/073/0017	Fleming House, 20 Bird Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27913	9/2/073/0018	Feathermarket Hall, Baakens street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site



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27914	9/2/073/0019	Old Post Office, Court Street, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27915	9/2/073/0016/002	3 Cora Terrace, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27916	9/2/073/0016/003	5 Cora Terrace, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27917	9/2/073/0016/004	7 Cora Terrace, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27918	9/2/073/0016/005	9 Cora Terrace, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27921	9/2/073/0016/001	1 Cora Terrace, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27926	9/2/073/0010	Opera House, Whites Road, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27935	9/2/073/0006	Fort Frederick, Belmont Terrace, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
27940	9/2/073/0005	Donkin Reserve, Port Elizabeth	Building	Grade II	National monument	Provincial Heritage Site
32490	Brickmakerskloof Substation	Brickmakerskloof Substation	Building	Grade IIIb		
54535	ACSA001	PE Airport Stormwater Upgrade 001	Structures	Grade IIIc		
54536	ACSA002	PE Airport Stormwater Upgrade 002	Structures	Grade IIIc		
54549	ACSA003	PE Airport Stormwater Upgrade 003	Structures	Grade IIIc		

APPENDIX 2 - Reference List

Previous heritage assessments within the 3km inclusion zone

Nid	Author/s	Date	Report Type	Title
6699	Johan Binneman	11/01/2012	AIA	A letter of recommendation (with conditions) for the exemption of a full Phase 1 Archaeological Impact Assessment for the proposed Phase 2 redevelopment and landscaping of the southern portion of the Kings Beach node on the Nelson Mandela Bay Southern Beachfront (Erf 1031, Erf 576 and the remainder of Erf 575, Humewood), Eastern Cape Province
6705	Johan Binneman	01/09/2011	AIA	Letter of recommendation (with conditions) for the exemption of a full Phase 1 Archaeological Impact Assessment for the proposed development of a military health unit on a portion of Erf 1216, Port Elizabeth, Eastern Cape Province
120597	Rose Prevec	10/4/2013	PIA	Recommended exemption from further palaeontological impact assessment or mitigation. Proposed project: PE Airport Stormwater Upgrade
120761	Celeste Booth	29/05/2013	AIA	A Phase 1 Archaeological Impact Assessment (AIA) for the Airport Company of South Africa (ACSA) Proposed Port Elizabeth Airport Stormwater Upgrade, Walmer, Nelson Mandela Bay Municipality, Eastern Cape Province

Other heritage assessments within the wider Port Elizabeth area

Nid	Author/s	Date	Report Type	Title
6557	Karen van Ryneveld	9/7/2010	AIA	Driftsands Collector Sewer Augmentation, Port Elizabeth (Nelson Mandela Bay Municipality), Eastern Cape, South Africa
145758	Karen van Ryneveld	8/3/2013	AIA	Phase 1 Archaeological Impact Assessment Walmer Stormwater Detention Ponds and Associated Infrastructure, Erven 1935 and 7006, Walmer, Nelson Mandela Bay Municipality, Eastern Cape, South Africa
325114	John Almond	5/8/2015	PIA	Recommended Exemption From Further Palaeontological Studies: Public Access To Sardinia Bay Beach, Port Elizabeth, Nelson Mandela Bay Municipality, Eastern 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

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 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.

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.



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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.**