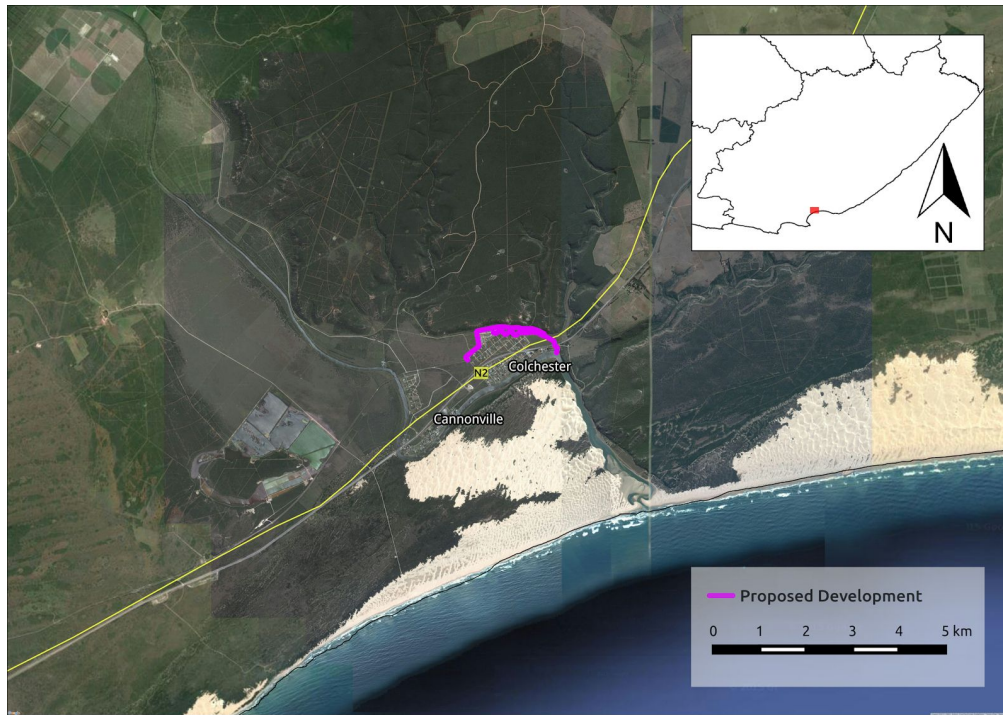




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## HERITAGE SCREENER

CTS Reference Number:	CTS15_011	
Client:	CEN Integrated Environmental Management	
Date:	23 September 2015	
Title:	Colchester Stormwater Infrastructure	
Recommendation by CTS Heritage Specialists: (Type 1)	<p><b>The heritage resources in the area proposed for development are sufficiently recorded</b> - 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, but <b>monitoring by an archaeologist during excavation is recommended for the retention pond.</b></p>	

**Figure 1a.** Satellite image with proposed development area indicated in Eastern Cape near Port Elizabeth.



## 1. Proposed Development Summary

Proposed stormwater management infrastructure along the northern and eastern area of Colchester. The project includes the construction of a stormwater retention pond (approximately 4 hectares), a bulk stormwater pipeline, a stormwater ditch and berm (approximately 1.7km in length), and a temporary water main for discharge of water into the Sundays River during construction.

## 2. Application References

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

## 3. Property Information

<b>Farm Name and Number</b>	Florida 321 and a number of properties in Colchester
<b>Local Municipality</b>	Nelson Mandela Bay
<b>District Municipality</b>	Nelson Mandela Metro
<b>Previous Magisterial District</b>	Port Elizabeth
<b>Province</b>	Eastern Cape
<b>Current Use</b>	Residential & Agricultural
<b>Current Zoning</b>	Residential
<b>Total Extent</b>	1.7km pipeline and 4ha retention pond

#### 4. Nature of the Proposed Development

Surface area to be affected/destroyed	1.7km pipeline and 4ha retention pond
Depth of excavation (m)	Between 1 and 3m
Height of development (m)	NA
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.	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 <sup>2</sup> 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 <sup>2</sup>	
5. Other (state):	

#### 6. Additional Infrastructure Required for this Development

The project itself relates to the upgrade of infrastructure.
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## 7. Mapping

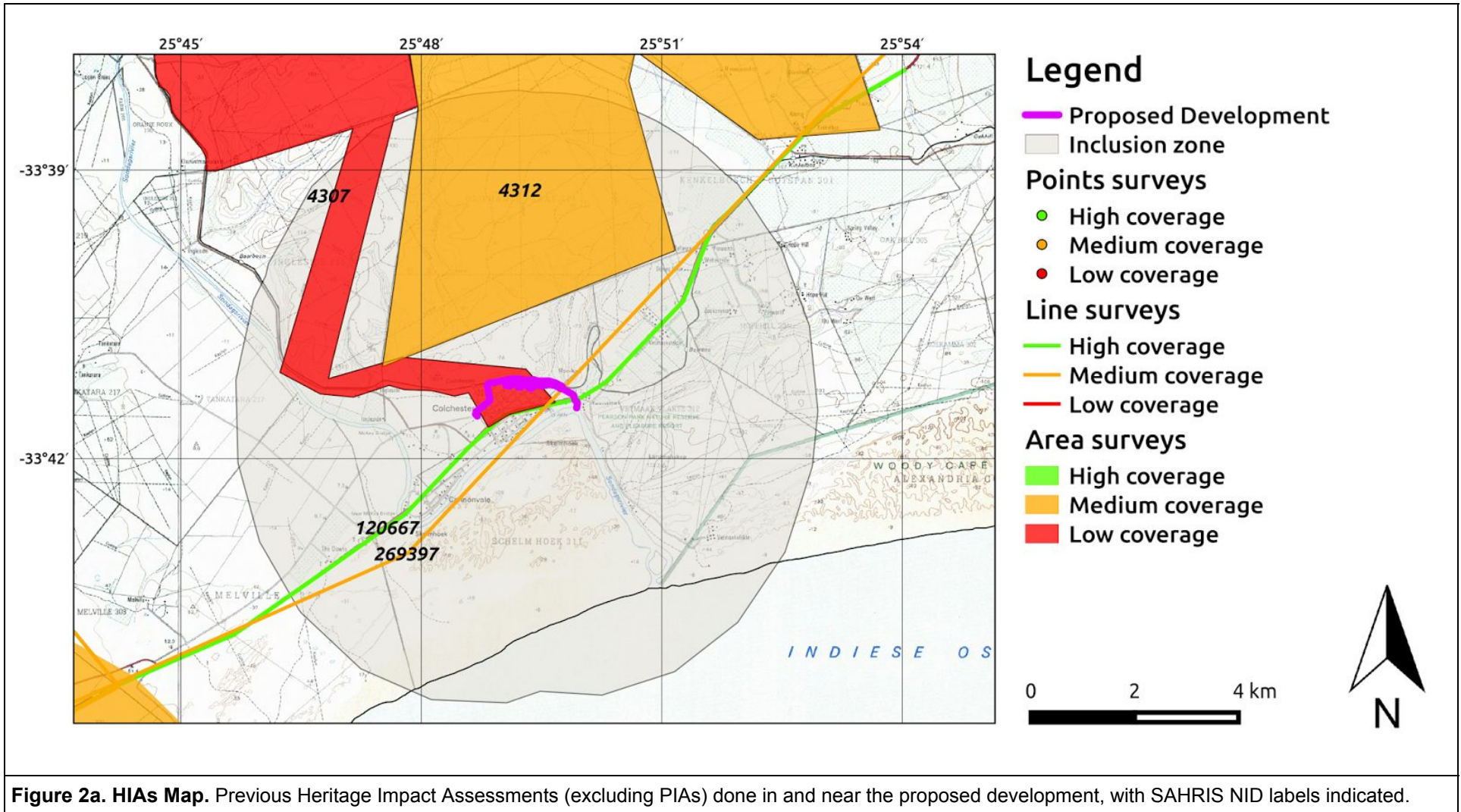


**Figure 1b. Overview Map.** Satellite image with proposed development indicated.



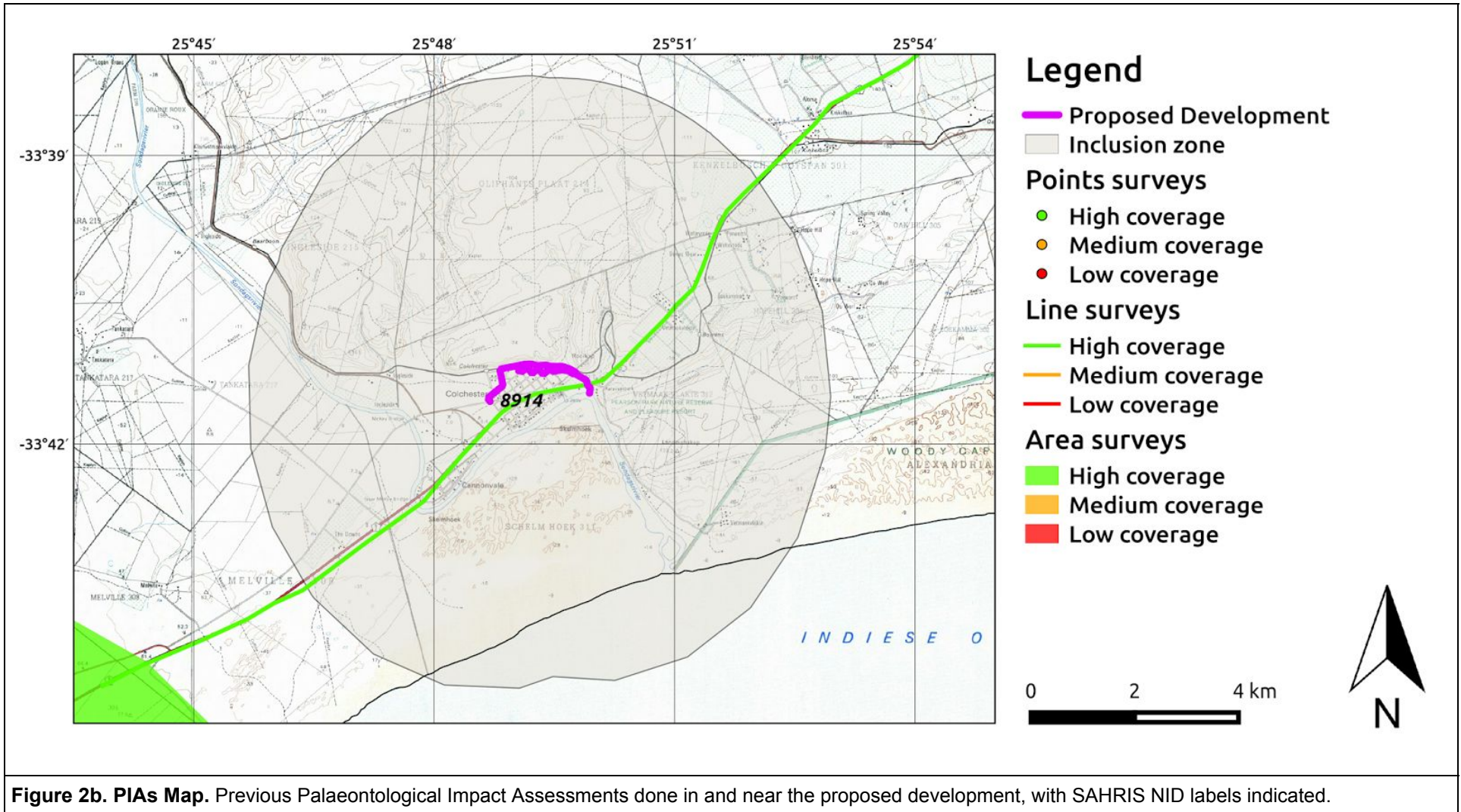


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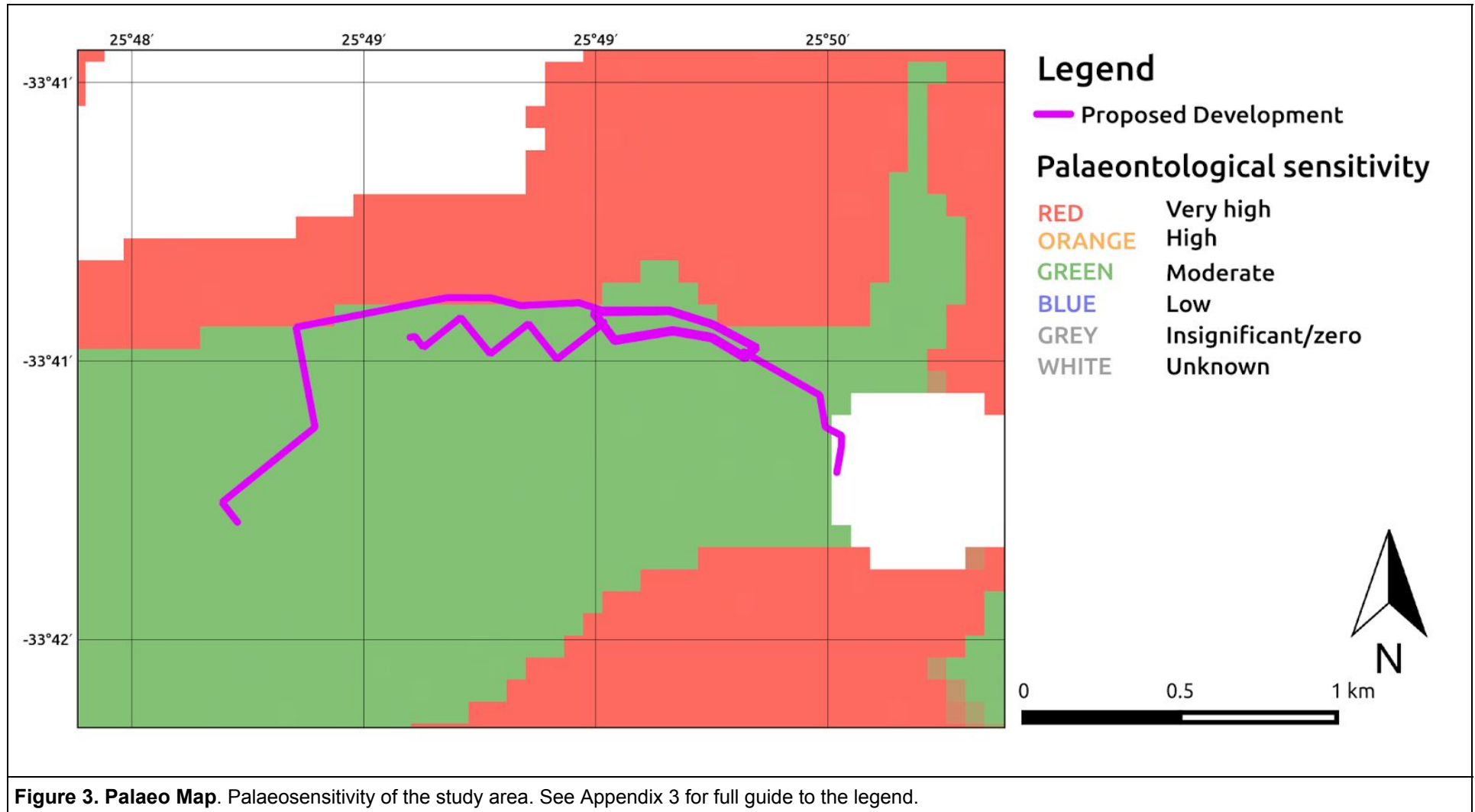


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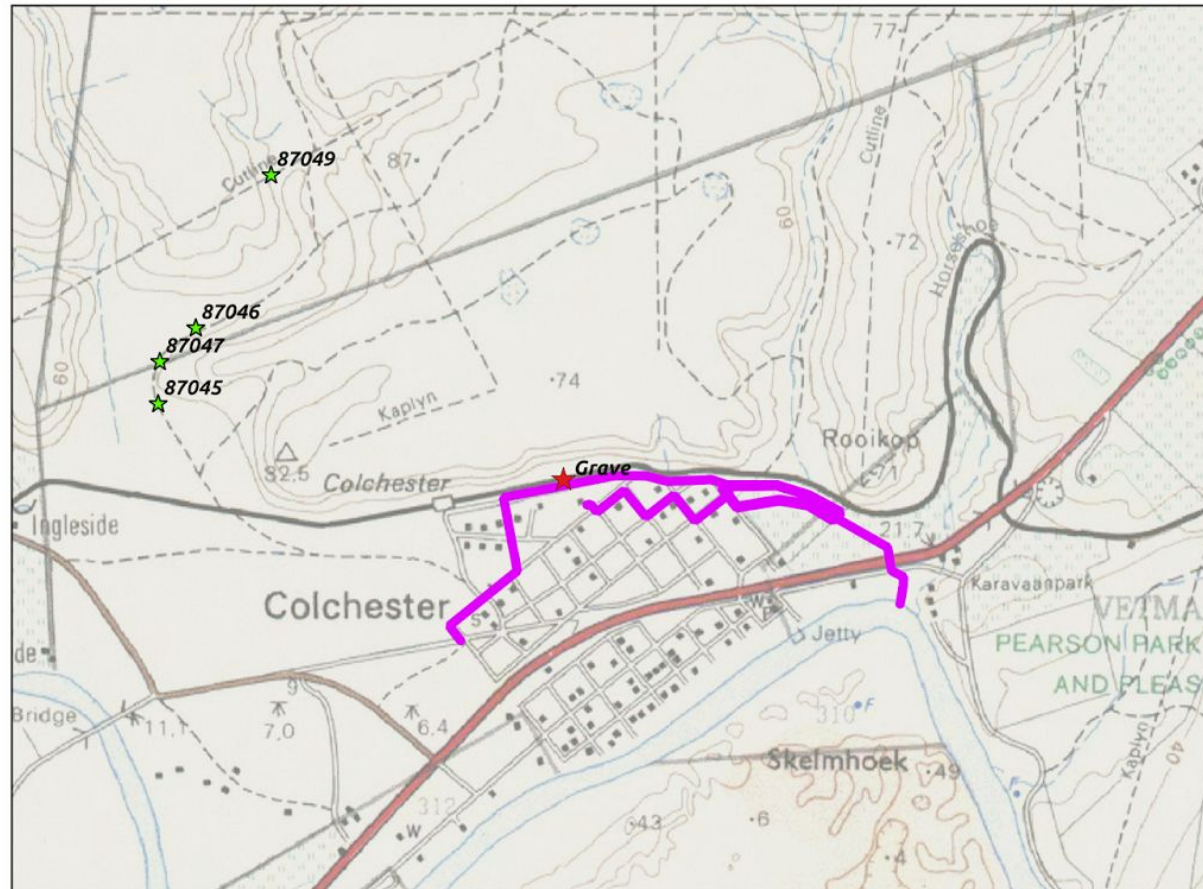
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## Legend

- Proposed Development
- Inclusion zone

## Heritage resources

### Type

- ☆ Arch, Bat, Geo, Met, Pal, Und
- ⬡ Structures, Monuments & Memorials
- Liv. Heritage/Sacred sites, Burial Grounds and Graves, Natural, Place
- △ Conservation Area, Cultural Landscape

### Grading

- |          |          |
|----------|----------|
| DARK RED | I & II   |
| RED      | IIIa     |
| ORANGE   | IIIb     |
| GREEN    | IIIc     |
| CLEAR    | Ungraded |

0 0.5 1 km



**Figure 4. Heritage Resources Map.** Heritage resources previously identified in and near the study area, with SAHRIS site IDs indicated.



## 8. Heritage statement and character of the area

CEN Environmental is undertaking a Basic Assessment process for the upgrade of the stormwater system in Colchester.

The area of the proposed development is underlain by alluvium of moderate sensitivity and is at the border of the Sundays River Formation of very high fossil sensitivity. According to the palaeontologist who undertook the screening of the Fibre Optic Cable Project (Gess, 2011), *deposition of recent alluvium (...) have rendered the recovery of palaeontological material improbable*, therefore **no further Palaeontological Impact Assessment is required**.

The area is located 3.8km from the coastline near an estuary and behind an exposed sand dune. An inclusion zone of 5km was considered around the proposed development to characterise the heritage resources found in the area. Most of the pipeline will run between the housing development and the railway line. This area has already been disturbed by construction work and therefore no further studies are recommended.

A grave site was found on the *opposite side of the railway line*. The age of the graves is currently unknown, however it is expected that no impact on the graves will occur during the construction phase of the stormwater system. We recommend that temporary fencing is erected around this site during the construction period and that the foremen are given a clear briefing about the presence of graves in the area.

Previous Heritage Impact Assessments in the Addo Elephant Park (Webley, 2003 and 2007), about 1km north of Colchester, have identified a few Stone Age artefact scatters of low significance. According to Webley, *stone tool distributions are found beneath the soil surface throughout the area and are generally exposed by road cuttings, dongas and sometimes found concentrated on calcrete outcrops*. None of these have been deemed to have high heritage significance in the studies conducted thus far. It is therefore expected that further Stone Age material will be recovered in the wider area.

The proposed retention pond is located in an area of ground which has been transformed by farming and subsequent vegetation clearing activities next to the residential area and the main road. Google Earth imagery from 2003 to 2015 was also assessed and it is clear that the area to be impacted by the retention pond is in a natural deflation which is regularly flooded. The possibility of finding *in situ* material on the surface in this area is therefore minimal. It is more likely that *in situ* Stone Age material is located below the surface. We therefore recommend that **an archaeologist monitors the excavation of the retention pond during the construction phase**.



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## APPENDIX 1 - Site List

Site ID	Site no	Full Site Name	Site Type	Grading
8745	ADD001	Addo 001	Artefacts	IIIc
8746	ADD002	Addo 002	Artefacts	IIIc
8747	ADD003	Addo 003	Artefacts	IIIc
8748	ADD004	Addo 004	Artefacts	IIIc

## APPENDIX 2 - Reference List

Nid	Author/s	Date	Report Type	Title
4307	Webley, L.	11/06/2003	AIA	Addo Elephant National Park: Upgrading of Existing Tourist Road Network and Construction of Southern Access Road near Colchester - Phase 1 Archaeological Impact Assessment
4312	Webley, L.	16/11/2007	AIA	Phase 1 Archaeological Impact Assessment on the Construction of 50 km of Loop Roads on the Farms Addo Heights [209], Lismore [208], Zoute Fontein [210], Nieu Jaars Kop
8914	Gess, R.	30/03/2011	PIA	Palaeontological heritage component of FibreCo Telecommunications, basic assessment for the proposed fibre optic data cable project: Route 5: PE to Durban
120667	Binneman, J. and C. Booth	01/01/2011	AIA	Upgrading of the N2 highway between Coega and Colchester as well as the construction of the new Sundays River bridge, and four borrow pits, Nelson Mandela Metropolitan Municipality, Port Elizabeth, Eastern Cape Province
269397	Booth, C.	02/03/2015	AIA	FibreCo Repeater Sites Routes 3 and 4_Heritage_2015 AIA report



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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 (Kwa-Zulu Natal)
<b>DEA</b>	Department of Environmental Affairs
<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
<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.





## 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.**