

HERITAGE SCREENER

CTS Reference Number:	СТS19_020
Client:	Enviroworks
Date:	July 2021
Title:	Proposed upgrade to the reception area and development of family accommodation units at the Addo Elephant Park Main Rest Camp.

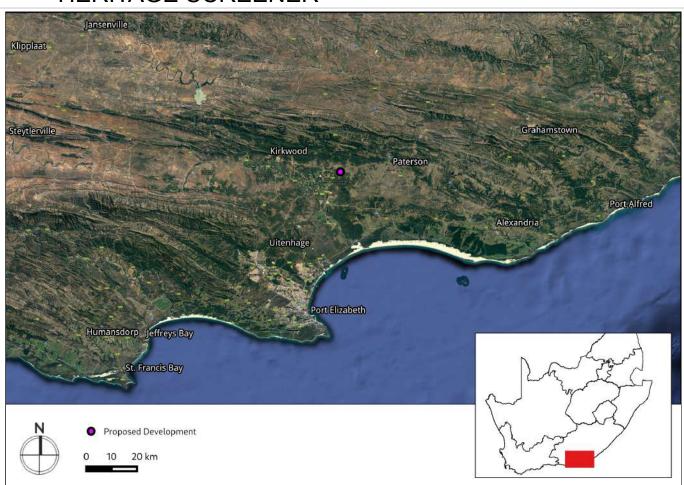


Figure 1a. Satellite map indicating the location of the proposed development in the Eastern Cape Province

Recommendation by CTS Heritage Specialists

RECOMMENDATION:

As it is not likely that the proposed development will impact significant archaeological, built environment or cultural landscape heritage resources, it is recommended that no further heritage studies are required for this proposed development. However, due to the very high palaeontological sensitivity of the development area, it is recommended that a Desktop Palaeontological Assessment be completed by a suitably qualified palaeontologist.



1. Proposed Development Summary

South African National Parks (SANPARKS) has identified the need to upgrade the reception area and develop family accommodation units at the Addo Elephant Park Main Rest Camp. Please refer to the attached Scope of Works.

2. Application References

Name of relevant heritage authority(s)	ECPHRA
Name of decision making authority(s)	DEADP

3. Property Information

Latitude / Longitude	33°26'44.52"S 25°45'6.51"E			
Erf number / Farm number	Addo National Elephant Park Main Camp Chalets - Portion 5 of Wolve Kop Farm No. 82 and Farm No. 150. Gate - Portion 4 of Wolve Kop Farm No. 82			
Local Municipality	Sundays River Valley			
District Municipality	Sarah Baartman			
Province	Eastern Cape			
Current Use	Natural vegetation adjoining the Addo Elephant National Park main rest camp and entrance gate.			
Current Zoning	Protected Area			



4. Nature of the Proposed Development

Total Surface Area 1390m2 (gate) and 26800m2 (chalets)	
Depth of excavation (m)	Maximum depth approximately 3 metres
	Entrance Gate - Approx. 8 metres at highest point.
Height of development (m)	Visitor Day Centre - Approx. 6 metres
	New chalets - Approx. 5 metres

5. Category of Development

X	Triggers: Section 38(8) of the National Heritage Resources Act
	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 000m² 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

See attached Scope of Works



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



Figure 1b. Overview Map. Satellite image (2020) indicating the proposed development area relative to Kirkwood.



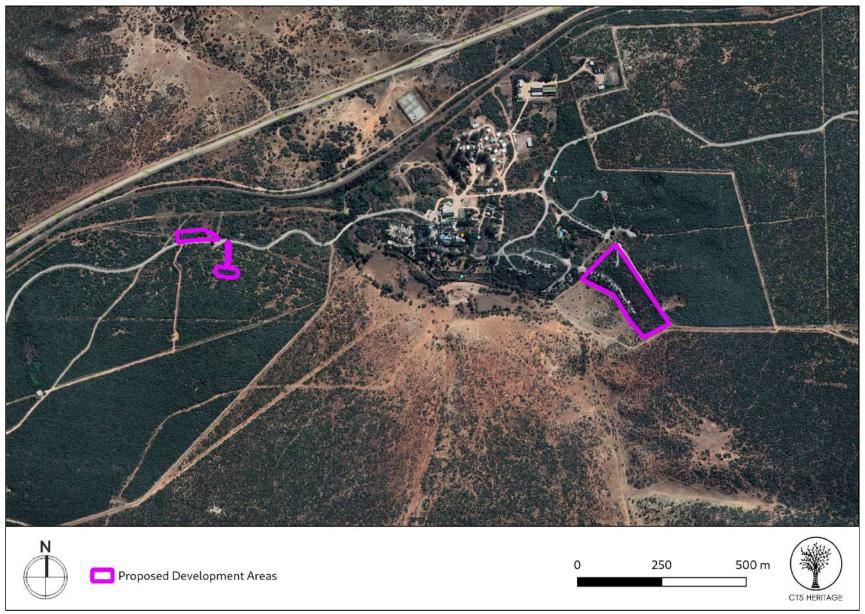


Figure 1c. Overview Map. Satellite image (2019) indicating the proposed development area at closer range.





Figure 1d. Overview Map. Satellite image (2019) indicating the proposed development area for the Main Gate at closer range.





Figure 1e. Overview Map. Satellite image (2019) indicating the proposed development area for the Main Camp at closer range.



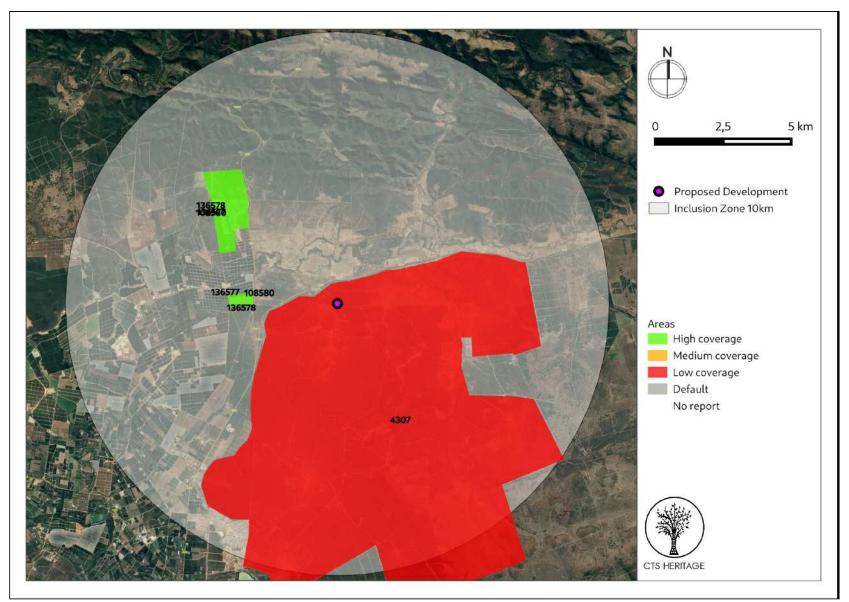


Figure 2. Previous HIAs Map. Previous Heritage Impact Assessments surrounding the proposed development area within 5km, with SAHRIS NIDS indicated. Please see Appendix 2 for a full reference list.



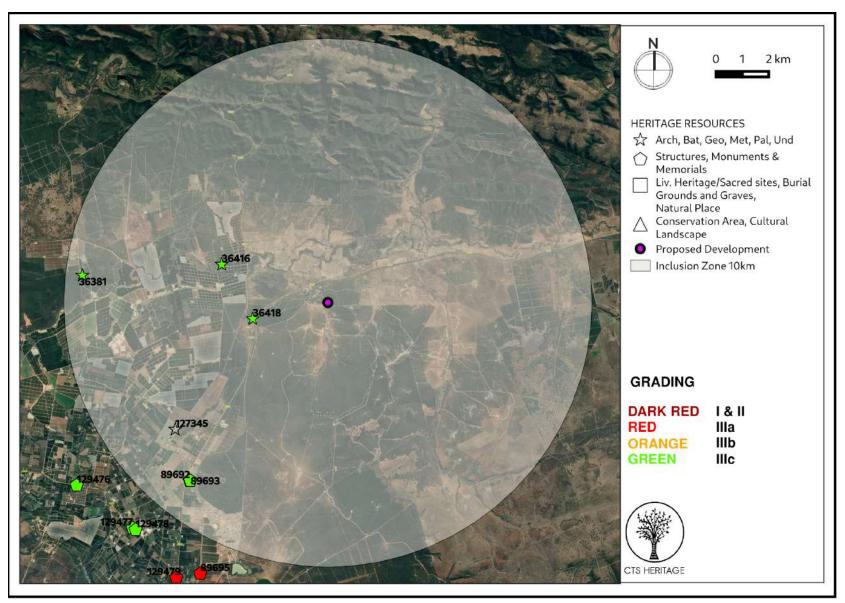


Figure 3. Heritage Resources Map. Heritage Resources previously identified in and near the study area. See insets a to d below with SAHRIS Site IDs indicated. Please See Appendix 4 for a full description of heritage resource types.



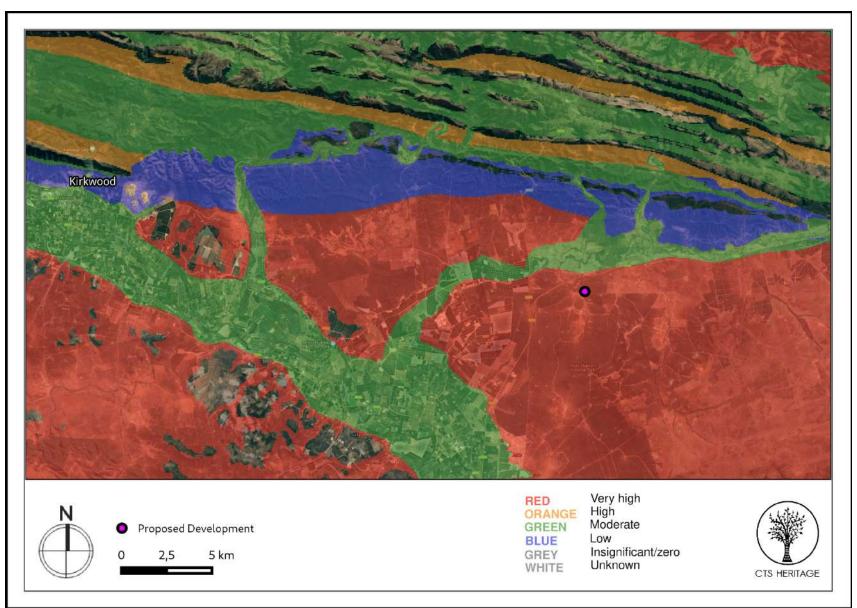


Figure 4a. SAHRIS Palaeosensitivity Map. Indicating very high fossil sensitivity underlying the study area. Please See Appendix 3 for a full guide to the legend.



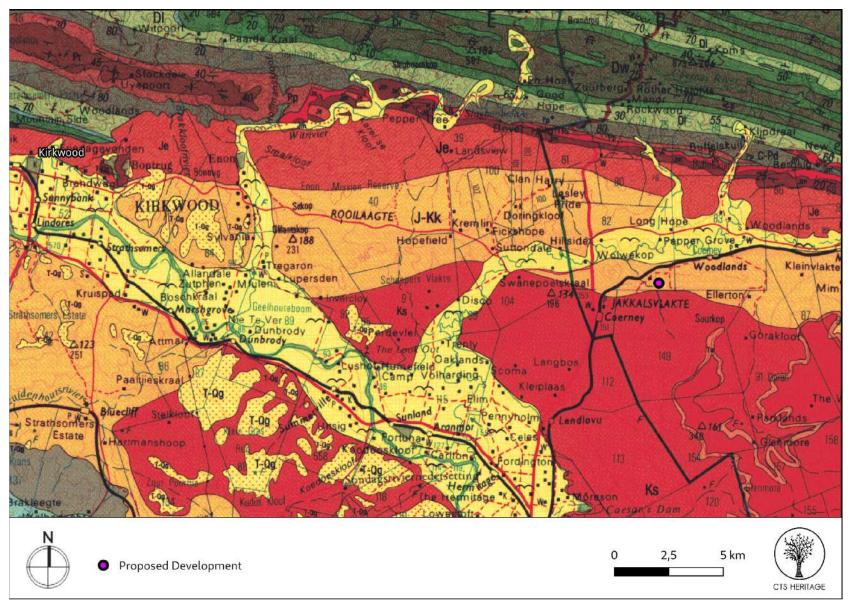


Figure 4b. Geology Map. Extract from the Council of GeoScience Port Elizabeth Map 3324 indicating that the development area is underlain by sediments of the J-Kk: Kirkwood Formation (Orange) and the Ks: Sundays River Formation (Red)





Figure 5a. Locality Map.



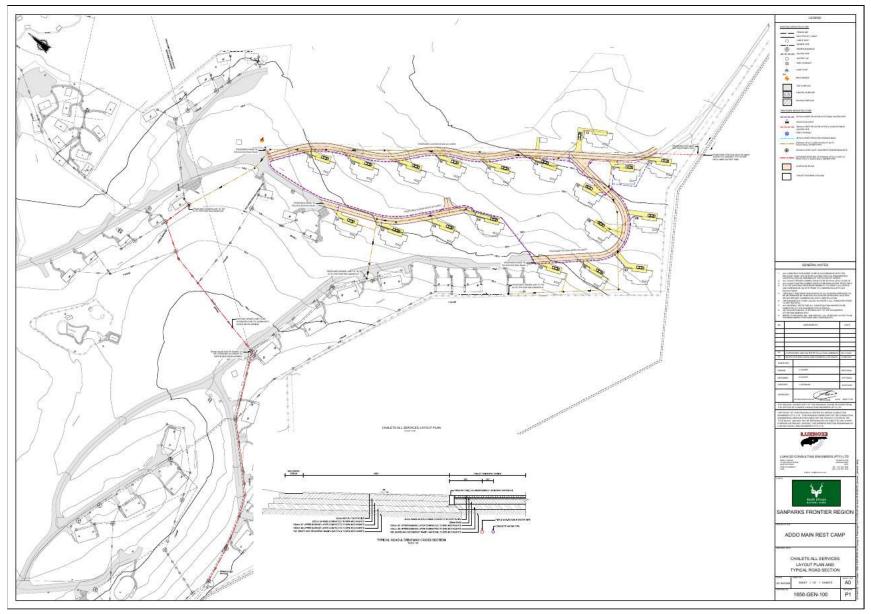


Figure 5b. Site Development Plan. Main Camp



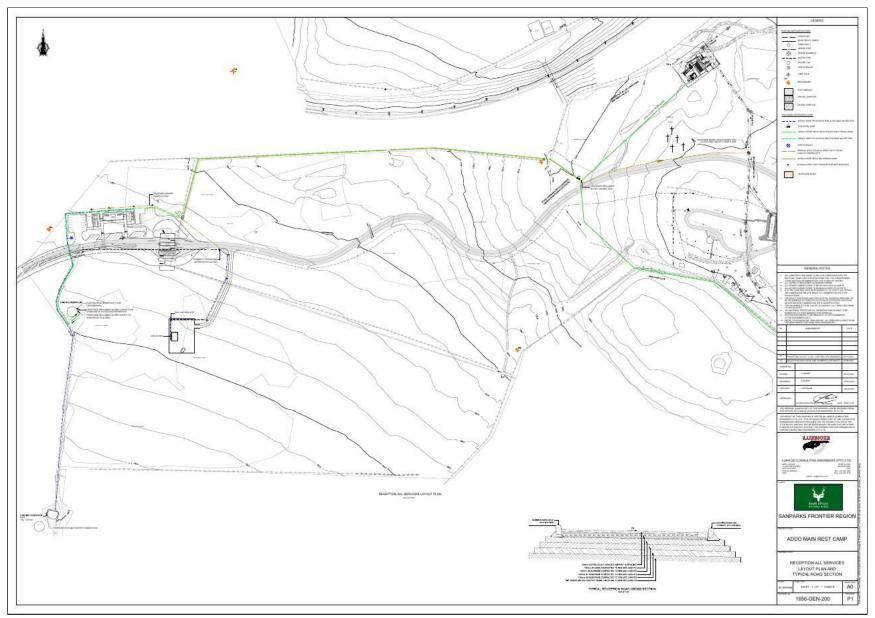


Figure 5c. Site Development Plan. Main Gate





Figure 6a. Site Images. Existing Main Gate Complex and gate area proposed for development





Figure 6b. Site Images. Existing chalets adjacent to area proposed for development





Figure 6c. Site Images. Area proposed for chalet development



8. Heritage statement and character of the area

This application is for proposed upgrades and development at the Main Gate and Main Camp of the Addo National Park located in the Sunday's River Valley. At the beginning of the 19th century, the Sundays River formed the eastern border of the then Cape Colony. The area around Kirkwood was consequently the scene of many armed conflicts - Khoi against Xhosa, Khoi and Xhosa together against the Boers and British together and finally the Boers against the British during the Second Anglo-Boer War. During this war, General Jan Smuts and his Commando of 250 men passed through the valley on their epic campaign to the northwest. The Sundays River Valley irrigation scheme was started in the early 1920s, targeting British settlers on small holdings (10 morgen in size) along the banks of the Sundays River. A large dam was constructed on the Sundays River (Lake Mentz) to supply the area with water for irrigation, and a canal system was put in place to supply water to farms from Kirkwood, at the upper end of the valley, to Addo at the lower end.

Historic period remains are also found in the area, with early farmhouses, churches and several farm burial grounds having been noted, ranging from formal, enclosed graves to informal stone-packed burial mounds (Van Ryneveld 2016, NID 374575). It is not anticipated that the proposed development will negatively impact on any existing built environment heritage resources or known graves. Furthermore, as the proposed development consists of an expansion of existing infrastructure, there is no "change of character" to the site and no negative impact to the cultural landscape is anticipated.

As a source of freshwater, the Sundays River valley has likely been occupied continuously throughout history. According to Webley (2003 SAHRIS NID 4307), Early and Middle Stone Age scatters are found along the banks of the Sundays River. These scatters are found immediately below the topsoil, at a depth of no more than 30cm and appear to have been deposited through river action, and as such, are not *in situ*. The artefacts identified consist of flaked quartzite cobbles with cortex and quartzite flakes. Very few diagnostic flakes were identified. In her assessment of a number of borrow pits, van Ryneveld (2012, SAHRIS NID 49462) did not identify any archaeological resources within the two borrow pits located near the proposed development area. According to Gaigher (2013 SAHRIS NID 125198), "Excavations at sites such as Melkhoutboom and Vygeboom (inside Addo Park) have uncovered graves with rich grave goods indicating a complex belief system. The rock art too indicates the San occupants took part in trance before painting... Many of the shell middens in the Addo Park contain pottery, confirming the presence of the Khoekhoen in the area." According to Gaigher (2013), "The majority of hunter-gatherer groups had been pushed out of the Zuurberg by the 1820's and were forced to move further inland to escape European settlement on their lands."

The previous heritage studies that have been conducted in the area (Figure 2) have identified isolated and scattered artefacts of the Early, Middle and Later Stone Age (Binneman, 2010; NID 7159). Generally, archaeological artefacts in this region are found in road cuttings, tracks and paths as the dense vegetation of the area largely obscures their presence elsewhere. ESA material known from the area includes handaxes and cleavers that are usually found in river gravels, although *in situ* ESA tools have been found in spring deposits near Addo (Binneman 2016, NID 365749). MSA flake and blade tools are similarly usually found in secondary contexts, and may be found with associated fossil bone material (Binneman 2010). LSA sites, though present, are usually obscured by the dense vegetation in this region. When found, they are usually represented by limited numbers of stone tools and bone fragments, and organic preservation is generally poor (Binneman 2016). Cave sites in the nearby mountains, on the contrary, often contain well-preserved deposits and rock paintings. Khoe sites, dating to the past 2 000 years, also occur in the area, and their sites are marked by the presence of indigenous ceramics and domesticated animal bone. These groups were also responsible for the creation of large middens of freshwater mussels, sometimes associated with human burials, that can be found on the banks of the Sunday's River (Binneman 2016). Burials and graves associated with pre-colonial as well as historic communities are also to be found in the area (Binneman 2013, NID 175196).

The area proposed for development adjacent to the Main Gate has been previously disturbed through landscaping and the development of the existing gate and as such, it is very unlikely that the proposed development at the Main Gate will negatively impact on significant archaeological heritage. The area proposed for the development of the additional chalets is heavily vegetated and while it is possible that significant archaeological heritage exists in this area, it is unlikely.

The area proposed for development is underlain by sediments of very high palaeontological sensitivity belonging to the Kirkwood Formation and the Sundays River Formation according to the Council of GeoScience Map 3324 (Figure 4a and 4b). According to Wilken's Palaeontological Assessment for the upgrade of the adjacent R336 (2020), "The



Kirkwood Formation is of high importance for palaeontology. It is one of the few fossil bearing beds of the Early Cretaceous and might fill a gap in the terrestrial Mesozoic fossil record. It is very well known for the "Wood Beds" containing large amounts of fossil flora such as conifers, cycads and ferns. It has provided evidence of four taxonomically distinct groups of sauropod. The Kirkwood Formation has yielded Theropods, Ornithopods, frogs, turtles, Sphenodontids, crocodiles and some mammalian bones." Wilken goes on to note that "The Sundays River Formation is a shallow marine deposit, ranging from estuarine, lagoonal, and shallow shelf deposits. The fossils found in this Formation include foraminifera, ostracods, bivalves, brachiopods, gastropods, ammonoids, crustaceans, echinoderms, plant material and vertebrate fossils. A near complete fossil of the plesiosaur *Leptocleidus capensis* was recovered in 1911."

As the palaeontological sensitivity of the area proposed for development is very high, it is recommended that a Desktop Palaeontological Assessment be completed by a suitably qualified palaeontologist.

RECOMMENDATION:

As it is not likely that the proposed development will impact significant archaeological, built environment or cultural landscape heritage resources, it is recommended that no further heritage studies are required for this proposed development. However, due to the very high palaeontological sensitivity of the development area, it is recommended that a Desktop Palaeontological Assessment be completed by a suitably qualified palaeontologist.



APPENDIX 1

List of heritage resources within the 10km Inclusion Zone from SAHRIS

Site ID	Site no	Full Site Name	Site Type	Grading
36381	WIL005	Willowmore 005	Artefacts	Grade IIIc
36416	CBF001	Citrus Bend Farm 001	Artefacts	Grade IIIc
36418	CBF002	Citrus Bend Farm 002	Artefacts	Grade IIIc
127345	Langbos Citrus	Langbos Citrus Dam site	Palaeontological	
89692	LGBW004	Langbos Bulk Water Supply Services 004	Building	Grade IIIc
89693	LGBW005	Langbos Bulk Water Supply Services 005	Building	Grade IIIc
130069	3325BC/ Borrow pits/ property Disco 99/ Site DR 2006.	Stone scatter	Archaeological	Grade IV



APPENDIX 2

Reference List

	Heritage Impact Assessments			
Nid	Report Type	Author/s	Date	Title
4307	AIA Phase 1	Lita Webley	11/06/2003	Addo Elephant National Park: Upgrading of Existing Tourist Road Network and Construction of Southern Access Road near Colchester - Phase 1 Archaeological Impact Assessment
6805	AIA Phase 1	Len van Schalkwyk, Elizabeth Wahl	01/09/2007	Heritage Impact Assessment of Gamma Grassridge Power Line Corridors and Substation, Eastern, Western and Northern Cape Provinces, South Africa
8086	AIA Phase 1	Johan Nel	14/11/2008	Final Report Heritage Resources Scoping Survey & Preliminary Assessment Transnet Freight Line EIA, Eastern Cape and Northern Cape
49462	AIA Phase 1	Karen Van Ryneveld	06/04/2012	Utilization Of Existing Gravel Borrow Pits, Cacadu District, Eastern Cape, South Africa
92575	HIA Phase 1	Elize Becker	10/10/2012	Phase 1 Heritage Impact Assessment Kimberley to De Aar
93185	HIA Phase 1	Elize Becker	01/11/2012	Phase 1 Heritage Impact Assessment Hotazel to Kimberley and De Aar to Port Ngqura
104309	AIA Phase 1	Johan Binneman	01/05/2012	A Phase 1 Archaeological Impact Assessment for the proposed expansion of the existing agricultural activities on Falcon Ridge, Portion 274 of Strathomers estate no. 42, Sundays River Valley Municipality, Eastern Cape Province.
125198	HIA	Stephan Gaigher	01/07/2013	HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED UPGRADING OF STORMWATER INFRASTRUCTURE IN VALENCIA, ADDO, SUNDAYS RIVER VALLEYMUNICIPALITY, EASTERN CAPE PROVINCE
129751	HIA Phase 1	Elize Becker	20/02/2013	Phase 1 Heritage Impact Assessment Hotazel to Kimberley and De Aar to Port of Ngqura
136577	AIA Phase 1	Johan Binneman	05/09/2012	A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT FOR THE PROPOSED EXPANSION OF THE EXISTING AGRICULTURAL ACTIVITIES ON RIVER BEND CITRUS FARM, REMAINDER OF FARM 82 WOLVE KOP, PORTION 1 OF FARM 77 WELLSHAVEN AND PORTION 3 OF FARM 77 HONEYVALE, NEAR ADDO, SUNDAY
136578	PIA Desktop	John E Almond	01/08/2012	PALAEONTOLOGICAL SPECIALIST STUDY: DESKTOP ASSESSMENT Expansion of River Bend Citrus Farm near Addo, Sundays River Valley Municipality, Eastern Cape
151768	PIA Phase 1	John E Almond	01/11/2013	Palaeontological specialist assessment: combined desktop and field-based study: PROPOSED 16 MTPA EXPANSION OF TRANSNET'S EXISTING MANGANESE ORE EXPORT RAILWAY LINE & ASSOCIATED INFRASTRUCTURE BETWEEN HOTAZEL AND THE



				PORT OF NGQURA, NORTHERN & EAS	
164624	AIA Phase 1	Johan Binneman	23/09/2013	PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT FOR THE PROPOSED CLEARING OF INDIGENOUS VEGETATION FOR THE CONSTRUCTION OF A BOUNDARY FENCE AROUND THE SOUTH AFRICAN POLICE SERVICE'S TRAINING FACILITY AT SLAGBOOM, NEAR ADDO, SUNDAYS RIVER VALLEY MUNICIPALITY, EA	
175196	HIA Phase 1	Johan Binneman	01/04/2013	A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT FOR THE PROPOSED CLEARING OF LAND FOR AGRICULTURAL PURPOSES ON PANZI CITRUS FARM NEAR KIRKWOOD, DIVISION OF UITENHAGE, SUNDAYS RIVER VALLEY MUNICIPALITY, EASTERN CAPE PROVINCE	
359574	HIA Phase 1	Karen Van Ryneveld	15/09/2014	Phase 1 Archaeological & Cultural Heritage Impact Assessment – The Dassiesridge Wind Energy Facility (WEF), between Kirkwood and Uitenhage, Cacadu District, Eastern Cape, South Africa. 15 September 2014. Prepared by: Karen van Ryneveld (ArchaeoMap	
359576	PIA Phase 1	John E. Almond	15/10/2014	PROPOSED DASSIESRIDGE WIND ENERGY FACILITY NEAR UITENHAGE, CACADU DISTRICT, EASTERN CAPE. By John E. Almond,	
365749	AIA Phase 1	Johan Binneman	29/02/2016	PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENTS FOR THE PROPOSED CLEARING OF VEGETATION IN THREE AREAS TO ESTABLISH CITRUS ORCHARDS ON THE FARM BOSCHKRAAL NEAR KIRKWOOD, SUNDAY'S RIVER VALLEY LOCAL MUNICIPALITY EASTERN CAPE PROVINCE	
374575	AIA Phase 1	Karen Van Ryneveld	22/10/2016	Phase 1 Archaeological and Cultural Heritage Impact Assessment - Kirkwood Bulk Water Supply Scheme, Sunday's River Valley Local Municipality, Eastern Cape	
374576	PIA Desktop	John Almond	22/10/2016	Palaeontological Specialist Study: Combined Desktop Assessment and Letter of Exemption - Proposed Upgrade of the Kirkwood Bulk Water Supply Scheme, Sunday's River Valley Local Municipality, Eastern Cape	
	AIA Phase 1	Jenna Lavin, Nicholas Wiltshire	30/01/2020	ARCHAEOLOGICAL SPECIALIST STUDY In terms of Section 38(8) of the NHRA Proposed upgrade the National Route R336 between Kirkwood and Addo in the Eastern Cape	
	PIA Phase 1	Dewald Wilken	30/01/2020	PALAEONTOLOGICAL SPECIALIST STUDY In terms of Section 38(8) of the NHRA Proposed upgrade the National Route R336 between Kirkwood and Addo in the Eastern Cape	



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 (National)			
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 (National)			
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.