

**A SURVEY OF CULTURAL RESOURCES IN THE
PROPOSED ROOIPOORT DAM,
OLIFANTS RIVER, NORTHERN PROVINCE**

For:

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SUMMARY

A survey of cultural resources for the proposed Rooipoort dam, Olifants River, Northern Province.

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the area in which the proposed development is to take place.

A large number of sites have been documented within or just outside the area of potential impact. Negative impact on cultural sites can be mitigated by collecting data by means of surveys and excavations. It is therefore recommended, in section 7 of this report, that

- Development can continue only if suitable mitigation measures are applied to the various archaeological sites. In this regard, six sites located within the area of potential impact are judged to be of significance and will need mitigation work (see Table 1 & Appendix 2):

No.	Site No.	Classification	Proposed mitigation
12.	(2429BB13)	- Early Iron Age:	3 = extensive excavation
19.	(2429BB20)	- Early Iron Age:	2 = controlled sampling
22.	(2429BB23)	- Early Iron Age:	3 = extensive excavation
23.	(2429BB24)	- Early Iron Age:	2 = controlled sampling
24.	(2429BB25)	- Early Iron Age:	2 = controlled sampling
47.	(2429BD23)	- Middle Stone Age:	2 = controlled sampling

- Carefull consideration should also be given to the sites that are judged to be outside the area of potential impact. Especially in the case of the archaeological sites. It might be that these sites were linked to each other, either directly or consecutively in time. Understanding this relationship would also be part of the mitigation of the sites that are directly impacted.
- Development can continue only if suitable mitigation measures are applied to the large number of graves found, individually or in cemeteries, in the area of potential impact. In this regard, eleven sites were identified that will need mitigation measures (see Table 1).
- The developers should be notified that archaeological sites might be exposed

during the construction work. If anything is noticed, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

- A lot of local people are using the area for resources such as fire wood and collecting herbs. Their activities should be acknowledged and they they should be given the opportunity to harvest these materials before it is drowned by the water.
- The various mitigation measures will produce a lot of historical information about the area as well as objects relating to this. It is recommended that, if development takes place, this be presented locally at a site museum.

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1. AIMS OF THE SURVEY

The National Cultural History Museum was requested by **Danie Joubert & Associates** to survey a section of the Olifants River in which it is planned to construct a dam. This area is located approximately 100 km from Pietersburg in the north west, and 80 km from Burgersfort in the south east, in Northern Province. The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the areas that is to be developed.

2. TERMS OF REFERENCE

The **Terms of Reference** for the study were to:

- 2.1 Identify all objects, sites, occurrences and structures of an archaeological or historical nature located in the area of the proposed development.
- 2.2 Assess the significance of the cultural resources in terms of their historical, social, religious, aesthetic and scientific value.
- 2.3 Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
- 2.4 Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources. This can include recommendations for the sustainable development and use of the identified cultural resources.
- 2.5 Develop procedures to be implemented if previously unidentified cultural resources are uncovered during the construction phase.

3. DEFINITIONS

The following aspects have a direct bearing on the survey and the resulting report:

- 3.1 **Cultural resource** is a broad, generic term covering any physical, natural and spiritual properties and features adapted, used and created by humans in the past and present. They can, but are not necessarily, identified with defined locations.

- 3.2 The **significance** of the sites and artifacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential.
- 3.3 Significance is site-specific and relates to the content and context of the site. Sites regarded as having low significance have already been recorded in full and require no further mitigation. Sites with medium to high significance require further mitigation.
- 3.4 The latitude and longitude of an archaeological site are to be treated as sensitive information by the developer, and should not be disclosed to members of the public.
- 3.5 All recommendations are made with full cognisance of the relevant legislation, in this case the **National Monuments Act (No 28 of 1969, as amended)**.

4. METHODOLOGY

4.1 Preliminary investigation

4.1.1 Survey of the literature

A survey of the relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. In this regard, various anthropological, archaeological and historical sources were consulted - see list of references below.

4.1.2 Data sources

The **Archaeological Data Recording Centre (ADRC)**, housed at the National Cultural History Museum, Pretoria, was consulted.

4.1.3 Other sources

The topocadastral and other maps were also studied - see list of references below.

4.2 Field survey

The field survey was done according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. The area was subdivided into an imaginary grid, using the most obvious topographical features such as valleys, ridges and the river self. Each block of the grid was then surveyed, for the potential for human use, by the members of the survey team walking over it. Special attention was given to outcrops, cliffs were inspected for rock shelters, while stream beds and unnatural topographical occurrences such as trenches, holes and clusters of trees were investigated.

4.3 Documentation

All sites, objects and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities were determined by means of the **Global Positioning System** (GPS)¹ and plotted on a map. This information was added to the description in order to facilitate the identification of each locality.

5. DESCRIPTION OF THE AREA

The approximately 30 km section of the river that was surveyed, is located along the road that link Pietersburg in the north west with Burgersfort in the south east. In this

¹ According to the manufacturer a certain deviation may be expected for each reading. Care was, however, taken to obtain as accurate a reading as possible, and then correlate it with reference to the physical environment before plotting it on the map.

area, the river forms the border between the Thabamooopo and Sukhukhuneland districts (see Fig. 1).

The original vegetation of the area is classified by Acocks (1975:44) as Mixed Bushveld. However, large sections of the area that was surveyed is currently being used for agricultural purposes, largely destroying the original vegetation. The result of this is also that archaeological sites that may have occurred in the area, were damaged or destroyed by the ploughing activities. It is only in the areas where the river start to cut through the mountain that the effect of agriculture is less.

6. DISCUSSION

Human beings have been living in this area since the Early Stone Age. This is evidenced by the occurrence of a few Acheulian type stone tools that were identified. The number of tools of this type, however, is very small. The tools usually occur in or near stream beds and as such are viewed not to be in a primary context.

During the Middle Stone Age times the occupation of the area took place on a large scale. This is evidenced by the large number of sites, which are indicated by the stone tools and the waste flakes of the tool production. This latter type of material usually indicates a factory or living site. Although this is by and large surface material, some of these sites need further consideration purely on the basis of the quantity of material they contain.

A few sites containing Late Stone Age material, was also identified. Late Stone Age people usually preferred to stay in rock shelters, which does not occur in this particular area. However, open camp sites are known to exist and a few such sites were identified. Similarly to the MSA, these are surface sites and the material is judged not to be in a primary context any more.

It is, however, the various Iron Age sites in the Olifants River drainage basin that are of importance to archaeologists. These sites are identified by such remains as pottery, iron slag, hut daga, grindstones, etc. Archaeologists use this material to identify different groups of people, their movement and settlement. It is common practice to divide the Iron Age into two large periods: Early Iron Age (AD 200-1000) and Later Iron Age (AD 1000-1850).

Based on the pottery that was found in the area, it is evident that Iron Age people have been moving into the area, following the river, as early as AD 600-800 and that Iron Age people have been living there till AD 1200 and maybe later. Oral tradition indicate that the predecessors of the current Sotho-speaking inhabitants moved into the area by AD 1700. Of this later settlement, nothing have as yet been identified in the archaeological record. It is presumed that the sites relating to this period of settlement is still being

occupied today.

Table 1: Summary of sites and impact assessment at the Rooipoort Dam site (see Appendix 2)

Site no. site	Type of of impact	Significance prediction	Certainty of of impact	Status	Recommended management action requirement	Legal	
D2429BB2	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB3	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB4	Historic	Medium	Definite	Negative	Relocation of graves	Permits	
D2429BB5	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB6	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB7	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB8	Stone Age	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB9	Historic	Low	Possible	Neutral	1 = no further action necessary	None	
D2429BB10	Historic	Medium	Definite	Negative	Relocation of graves	Permits	
D2429BB11	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB12	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB13	Iron Age	Medium	Definite	Positive	3 = extensive excavation/mapping necessary	NMC permit	
D2429BB14	Historic	Medium	Definite	Negative	Relocation of graves	Permits	
D2429BB15	Historic	Medium	Definite	Negative	Relocation of graves	Permits	
D2429BB16	Historic	Medium	Definite	Negative	Relocation of graves	Permits	
D2429BB17	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB18	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB19	Iron Age	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BB20	Iron Age	Medium	Definite	Positive	2 = controlled sampling/mapping necessary	NMC permit	
D2429BB21	Historic	Medium	Definite	Negative	Relocation of graves	Permits	
D2429BB22	Historic	Medium	Definite	Negative	Relocation of graves	Permits	
D2429BB23	Iron Age	Medium	Definite	Positive	3 = extensive excavation/mapping necessary	NMC permit	
D2429BB24	Iron Age	Medium	Definite	Positive	2 = controlled sampling/mapping necessary	NMC permit	
D2429BB25	Iron Age	Medium	Definite	Positive	2 = controlled sampling/mapping necessary	NMC permit	

D2429BD1	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD2	Stone Age	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD3	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD4	Stone Age	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD5	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD6	Historic	Low	Definite	Neutral	1 = no further action necessary	None	

Site no. site	Type of of impact	Significance prediction	Certainty of of impact	Status	Recommended management action requirement	Legal	
D2429BD7	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD8	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD9	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD10	Stone Age	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD11	Historic	Medium	Definite	Negative	Relocation of graves	Permits	
D2429BD12	Historic	Medium	Definite	Negative	Relocation of graves	Permits	
D2429BD13	Historic	Medium	Possible	Negative	Relocation of graves	Permits	
D2429BD14	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD15	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD16	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD17	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD18	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD19	Historic	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD20	Stone Age	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD21	Iron Age	Low	Definite	Neutral	1 = no further action necessary	None	
D2429BD22	Historic	Medium	Definite	Negative	Relocation of graves	Permits	
D2429BD23	Stone Age	Medium	Definite	Positive	2 = controlled sampling/mapping necessary	NMC permit	
D2429BD24	Historic	Low	Definite	Neutral	1 = no further action necessary	None	

A large number of structures that were recently abandoned, also occurs. Some were abandoned due to people migrating to the cities, others because of development projects. Most of these structures are not older than 50 years and were therefore not recorded. Also, there is a significant amount of such structures in areas that are not impacted by the proposed development. There is, however, some of these sites that have graves associated with them.

Finally, there is also a large number of formal and informal cemeteries in the area. Some of these are so isolated that it is doubtful that all of them were located, even though every possible effort was made.

7. RECOMMENDATIONS

A large number of sites have been documented within or just outside the area of potential impact. Impact to cultural sites can be mitigated by collecting data during excavation. It is therefore recommended that

- Development can continue only if suitable mitigation measures are applied to the various archaeological sites. In this regard, six sites located within the area of potential impact are judged to be of significance and will need mitigation work (see Table 1 & Appendix 2):

No.	Site No.	Classification	Proposed mitigation
12.	(2429BB13)	- Early Iron Age:	3 = extensive excavation
19.	(2429BB20)	- Early Iron Age:	2 = controlled sampling
22.	(2429BB23)	- Early Iron Age:	3 = extensive excavation
23.	(2429BB24)	- Early Iron Age:	2 = controlled sampling
24.	(2429BB25)	- Early Iron Age:	2 = controlled sampling
47.	(2429BD23)	- Middle Stone Age:	2 = controlled sampling

- Development can continue only if suitable mitigation measures are applied to the large number of graves found, individually or in cemeteries, in the area of potential impact. In this regard, eleven sites were identified that will need mitigation measures (see Table 1).
- The developers should be notified that archaeological sites might be exposed during the construction work. If anything is noticed, it should be reported immediately to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.
- A lot of local people are using the area for resources such as fire wood and collecting herbs. Their activities should be acknowledged and they they should be

given the opportunity to harvest these materials before it is drowned by the water.

- The various mitigation measures will produce a lot of historical information about the area as well as objects relating to this. It is recommended that if development takes place, this should be presented locally at a site museum.
- Carefull consideration should also be given to the sites that are judged to be outside of the area of potential impact. Especially in the case of the arearchaeological sites. It might be that these sites were linked to each other, either directly or consecutively in time. Understanding this relationship would also be part of the mitigation of the sites that are directly impacted.

8. REFERENCES

8.1 Unpublished sources

8.1.1 Data base

Archaeological Data Recording Centre, (former) Tvl section, National Cultural History Museum, Pretoria.

8.2 Published sources

8.2.1 Books and journals

Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.

Evers, T.M. 1974. Three Early Iron Age sites in the north eastern Transvaal Lowveld. *South African Journal of Science* 69.

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Holm, S.E. 1966. *Bibliography of South African Pre- and Protohistoric archaeology*. Pretoria: J.L. van Schaik.

Mason, R. 1962. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.

Van Riet Lowe, C. n.d. *The distribution of Prehistoric rock engravings and paintings in South Africa*. Archaeological Survey, Archaeological Series No. 7.

Van Warmelo, N.J. 1977. *Anthropology of Southern Africa in Periodicals to 1950*. Pretoria: Government Printer.

8.2.2 Maps

1: 50 000 Topocadastral maps - 2429BB, 2429BD

9. PROJECT TEAM

J van Schalkwyk
S Moifatswane

APPENDIX 1: STANDARDIZED SET OF CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON CULTURAL RESOURCES

Significance of impact:

- low where the impact will not have an influence on or require to be significantly accommodated in the project design
- medium where the impact could have an influence which will require modification of the project design or alternative mitigation
- high where it would have a “no-go” implication on the project regardless of any mitigation

Certainty of prediction:

- Definite: More than 90% sure of a particular fact. Substantial supportive data to verify assessment
- Probable: More than 70% sure of a particular fact, or of the likelihood of that impact occurring
- Possible: Only more than 40% sure of a particular fact, or of the likelihood of an impact occurring
- Unsure: Less than 40% sure of a particular fact, or the likelihood of an impact occurring

Status of the impact:

With mitigation and the resultant recovery of material, a negative impact can be turned positive. Describe whether the impact is positive (a benefit), negative (a cost) or neutral

Recommended management action:

For each impact, the recommended practically attainable mitigation actions which would result in a measurable reduction of the impact, must be identified. This is expressed according to the following:

- 1 = no further investigation/action necessary
- 2 = controlled sampling and/or mapping of the site necessary
- 3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary
- 4 = preserve site at all costs

Legal requirements:

Identify and list the specific legislation and permit requirements which potentially could be infringed upon by the proposed project, if mitigation is necessary.

APPENDIX 2: SURVEY RESULTS²

[Previous site numbers relate to other known sites on a particular ¼ degree sheet already documented in the ADRC, and does not necessarily refer to sites occurring on or close to the specific area of development.]

1. Site number: 2429BB2

Location: Inkomst 308KS: S 24°14'00.8"; E 29°49'22.3" [X 2681184.615; Y -83578.800]

Description: Cemetery containing ± 20 graves. Some have slate headstones, decorated with folk art and date as far back as 1897. Fenced.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

2. Site number: 2429BB3

Location: Matabatas Location 306KS: S 24°14'45.1"; E 29°50'53.7" [X 2682556.896; Y -86149.110]

Description: Single grave, marked with stone cairn.

Discussion: Falls outside the area of potential impact, but still within the safety zone

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

3. Site number: 2429BB4

Location: Matabatas Location 306KS: S 24°14'47.1"; E 29°50'58.8" [X 2682619.289; Y -86289.781]

Description: Cemetery containing ± 20 graves, 7 with headstones. All part of an old settlement abandoned ± 60 years ago. A single grave, with headstone, occurs approximately 50 m to the north east of this site.

Discussion: Falls just inside the area of potential impact and the graves will have to be relocated if the area is going to be submerged

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: Relocation of graves

² See Appendix 1 for an explanation of the conventions used in assessing the cultural remains.

Legal requirements: Permits from NMC, Dept of Health and SAPS

4. Site number: 2429BB5

Location: Matabatas Location 306KS: S 24°14'41.5"; E 29°51'02.4" [X 2682450.687; Y - 86392.364]

Description: Single grave, with headstone.

Discussion: Falls outside of the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

5. Site number: 2429BB6

Location: Koedoeskop 408KS: S 24°13'59.5"; E 29°50'05.1" [X 2681148.728; Y - 84789.344]

Description: Single grave, with headstone, in middle of the street in the village.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

6. Site number: 2429BB7

Location: Koedoeskop 408KS: S 24°14'12.1"; E 29°50'28.7" [X 2681537.284; Y - 85447.184]

Description: Formal cemetery, containing approximately 100 graves, most of recent origin.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

7. Site number: 2429BB8

Location: Matabatas Location 306KS: S 24°14'45.2"; E 29°51'16.0" [X 2682560.718; Y - 86775.350]

Description: MSA and LSA material in a small valley on the eastern side of a rocky outcrop. Two recently abandoned hut are also located here.

Discussion: This is surface material and is therefore not in a primary context any more.

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

8. Site number: 2429BB9

Location: Matabatas Location 306KS: S 24°14'42.5"; E 29°51'05.5" [X 2682482.005; Y - 86482.446]

Description: Old settlement site abandoned within the last 50 years.

Discussion: This is not an old site and therefore not of cultural significance. There might, however, be some unidentified graves close to the houses.

Significance of impact: Low

Certainty of prediction: Possible

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

9. Site number: 2429BB10

Location: Matabatas Location 306KS: S 24°14'49.8"; E 29°50'50.4" [X 2682710.253; Y - 86069.191]

Description: Cemetery containing ± 40 graves, 3 with headstones.

Discussion: Falls inside the area of potential impact and the graves will have to be relocated

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: Relocation of graves

Legal requirements: Permits from NMC, Dept of Health and SAPS

10. Site number: 2429BB11

Location: Plaats 304KS: S 24°12'39.0"; E 29°52'20.1" [X 2678695.189; Y -88604.935]

Description: Cemetery containing ± 20 graves. Fenced.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

11. Site number: 2429BB12

Location: Plaats 304KS: S 24°13'07.0"; E 29°52'23.8" [X 2679557.382; Y -88712.417]

Description: Approximately 10 graves, partially surrounded with a stone wall.

Discussion: Falls outside of the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

12. Site number: 2429BB13

Location: Plaats 304KS: S 24°13'17.9"; E 29°52'19.8" [X 2679895.119; Y -88597.444]

Description: EIA site with potsherds and hut floors. Pottery seems to belong to the Doornkop facie of the EIA, ie. c. AD 600-800

Discussion: Falls inside the area of potential impact. As these sites are very rare, this one will have to be excavated.

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Positive

Recommended management action: 3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary

Legal requirements: NMC permit

13. Site number: 2429BB14

Location: Plaast 304KS: S 24°13'22.2"; E 29°52'23.2" [X 2680018.717; Y -88681.318]

Description: Cemetery containing ± 25 graves, 3 with headstones.

Discussion: Falls inside the area of potential impact and the graves will have to be relocated. It is situated right on the bank of the river and will not last many seasons before it is swept

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: Relocation of graves

Legal requirements: Permits from NMC, Dept of Health and SAPS

14. Site number: 2429BB15

Location: Plaats 304KS: S 24°13'20.5"; E 29°52'24.4" [X 2679972.813; Y -88721.106]

Description: Three graves marked with stone cairns.

Discussion: Falls inside the area of potential impact

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: Relocation of graves

Legal requirements: Permits from NMC, Dept of Health and SAPS

15. Site number: 2429BB16

Location: Plaats 304KS: S 24°13'15.7"; E 29°52'41.9" [X 2679828.244; Y -89218.602]

Description: Cemetery containing ± 15 graves, 4 with headstones. Located amongst big trees.

Discussion: Falls inside the area of potential impact

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: Relocation of graves

Legal requirements: Permits from NMC, Dept of Health and SAPS

16. Site number: 2429BB17

Location: Rostok 410KS: S 24°13'55.3"; E 29°55'27.7" [X 2681067.617; Y -93888.512]

Description: Cemetery with ± 15 graves, 5 with headstones. Fenced.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

17. Site number: 2429BB18

Location: Rostok 410KS: S 24°14'02.7"; E 29°56'10.4" [X 2681315.617; Y -95088.719]

Description: Ten graves, marked with cement slabs. Next to dirt road.

Discussion: Falls outside the area that is to be impacted upon.

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

18. Site number: 2429BB19

Location: Rostok 410KS: S 24°14'07.4"; E 29°56'07.9" [X 2681444.388; Y -95020.146]

Description: EIA pottery belonging to the Doornkop facie of the EIA (c. AD 600-800).

Discussion: Falls outside the area that is to be impacted upon.

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

19. Site number: 2429BB20

Location: Jachtlust 418KS: S 24°14'10.5"; E 29°52'49.9" [X 2681515.727; Y -89433.684]

Description: EIA pottery belonging to the Doornkop facie of the EIA, ie. c. AD 600-800

Discussion: Located in an old agricultural field. Although the material is disturbed out of context, these sites are very rare and should be investigated.

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Positive

Recommended management action: 2 = controlled sampling and/or mapping of the site necessary

Legal requirements: NMC permit

20. Site number: 2429BB21

Location: Jobskop 411KS: S 24°14'26.3"; E 29°58'25.9" [X 2682055.599; Y -98906.332]

Description: Single grave, marked with cement slab

Discussion: Falls inside the are of potential impact

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: Relocation of grave

Legal requirements: Permits from NMC, Dept of Health and SAPS

21. Site number: 2429BB22

Location: Ebenhaezer 303KS: S 24°12'31.4"; E 29°53'25.4" [X 2678460.620; Y -90451.356]

Description: Formal cemetery with ± 50 graves, some with headstones.

Discussion: Falls inside the area of potential impact

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: Relocation of graves

Legal requirements: Permits from NMC, Dept of Health and SAPS

22. Site number: 2429BB23

Location: Begroting 296KS: S 24°13'21.2"; E 29°58'22.9" [X 2680055.103; Y -98838.460]

Description: EIA pottery and bone material. Pottery belong to the Doornkop facie of the EIA, ie. c. AD 600-800.

Discussion: Falls inside the area of potential impact. As there are only a few of these sites known, it is important that they be studied

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Positive

Recommended management action: 3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary

Legal requirements: NMC permit

23. Site number: 2429BB24

Location: Scheiding 407KS: S 24°14'37.6"; E 29°48'52.3" [X 2682308.741; Y -82714.571]

Description: EIA pottery in old agricultural field. The pottery belong to the Eiland facie of the EIA, ie. c. AD 900-1200.

Discussion: Although the pottery is disturbed out of context, it would be important to investigate this area further.

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Positive

Recommended management action: 2 = controlled sampling and/or mapping of the site necessary

Legal requirements: NMC permit

24. Site number: 2429BB25

Location: Scheiding 407KS: S 24°14'40.6"; E 29°48'15.9" [X 2682407.457; Y - 81698.420]

Description: Pottery belonging to the Eiland facie of the EIA, ie. c. AD 900-1200.

Discussion: The area is subject to much eroding and the pottery was found out of primary context. This site falls just outside the area of potential impact. It would, however, be important to investigate it as it might relate to the previous site (2429BB24)

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Positive

Recommended management action: 2 = controlled sampling and/or mapping of the site necessary

Legal requirements: NMC permit

25. Site number: 2429BD1

Location: Grootdraai 429KS: S 24°18'22.5"; E 29°45'06.9" [X 2689192.604; Y - 76327.221]

Description: Informal cemetery (ie. no fencing, etc.) with ± 130 graves. Some have headstones, while most are marked by cairns.

Discussion: Falls just outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

26. Site number: 2429BD2

Location: Blaauwbloometjes Kloof 428KS: S 24°18'21.9"; E 29°45'29.6" [X 2689180.739; Y -76975.816]

Description: Some LSA material at western base of a small hill.

Discussion: This is surface material washed down from higher up the slope and is therefore not in a primary context any more.

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

27. Site number: 2429BD3

Location: Blaauwbloometjes Kloof 428KS: S 24°18'23.5"; E 29°45'37.4" [X

2689228.044; Y -77187.035]

Description: Small cemetery with \pm 5 graves, 3 with headstones. Fenced.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

28. Site number: 2429BD4

Location: Blaaubloometjes Kloof 428KS: S 24°18'59.4"; E 29°45'42.1" [X 2690336.374; Y -77310.676]

Description: MSA and LSA material found as surface material around the base of a small hill.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

29. Site number: 2429BD5

Location: Blaauwbloometjes Kloof 428KS: S 24°18'36.9"; E 29°45'50.7" [X 2689642.379; Y -77559.779]

Description: Small cemetery with \pm 7 graves, 3 with headstones.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

30. Site number: 2429BD6

Location: Blaauwbloometjes Kloof 428KS: S 24°18'30.4"; E 29°45'47.5" [X 2689429.590; Y -77470.718]

Description: Grave, with headstone, in old cattle kraal.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

31. Site number: 2429BD7

Location: Blaauwbloometjes Kloof 428: S 24°18'29.2"; E 29°45'45.7" [X 2689398.560;

Y -77422.954]

Description: Grave, with headstone, in old cattle kraal.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

32. Site number: 2429BD8

Location: Blaauwbloemetjes Kloof 428KS: S 24°18'25.4"; E 29°45'40.5" [X 2689274.673; Y -77274.190]

Description: Three graves in old cattle kraal, marked with cement slabs.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

33. Site number: 2429BD9

Location: Diamant 422KS: S 24°17'03.5"; E 29°46'05.6" [X 2686771.033; Y -77995.739]

Description: Small cemetery containing ± 4 graves, one with a headstone. Fenced.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

34. Site number: 2429BD10

Location: Jachtlust 418KS: S 24°15'18.7"; E 29°51'04.8" [X 2683595.649; Y -86453.083]

Description: MSA tools and flakes

Discussion: Occurs as surface material, therefore not viewed as in primary context.

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

35. Site number: 2429BD11

Location: Jachtlust 418KS: S 24°15'23.4"; E 29°51'28.2" [X 2683744.267; Y -87106.594]

Description: Two graves marked with slabs of cement.

Discussion: Falls inside the area of potential impact
Significance of impact: Medium
Certainty of prediction: Definite
Status of impact: Negative
Recommended management action: Relocation of graves
Legal requirements: Permits from NMC, Dept of Health and SAPS

36. Site number: 2429BD12

Location: Jachtlust 418KS: S 24°15'25.5"; E 29°51'29.1" [X 2683809.052; Y - 87134.403]

Description: Cemetery with ± 16 graves, marked with cement slabs and stone cairns, located below big trees.

Discussion: Falls inside the area of potential impact
Significance of impact: Medium
Certainty of prediction: Definite
Status of impact: Negative
Recommended management action: Relocation of graves
Legal requirements: Permits from NMC, Dept of Health and SAPS

37. Site number: 2429BD13

Location: Jachtlust 418KS: S 24°15'21.4"; E 29°52'03.7" [X 2683676.655; Y - 88114.029]

Description: Possible grave. Large number of old houses in the vicinity. People moved away ± 20 years ago when a lime pit was planned in the area.

Discussion: Falls inside the area of potential impact
Significance of impact: Medium
Certainty of prediction: Possible
Status of impact: Negative
Recommended management action: Relocation of grave
Legal requirements: Permits from NMC, Dept of Health and SAPS

38. Site number: 2429BD14

Location: Jachtlust 418KS: S 24°15'29.1"; E 29°52'12.1" [X 2683924.255; Y - 88346.609]

Description: Grave, marked with stones.

Discussion: Falls outside the area of potential impact
Significance of impact: Low
Certainty of prediction: Definite
Status of impact: Neutral
Recommended management action: 1 = no further investigation/action necessary
Legal requirements: None

39. Site number: 2429BD15

Location: Jachtlust 418KS: S 24°15'32.9"; E 29°52'12.7" [X 2684044.372; Y - 88365.605]

Description: Two graves, marked with slabs of cement

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

40. Site number: 2429BD16

Location: Jachtlust 418KS: S 24°15'31.6"; E 29°52'13.4" [X 2684004.427; Y - 88374.316]

Description: Two graves, marked with stone cairns

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

41. Site number: 2429BD17

Location: Jachtlust 418KS: S 24°15'31.6"; E 29°52'18.8" [X 2684005.449; Y - 88537.911]

Description: Grave, marked with stone cairn

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

42. Site number: 2429BD18

Location: Jachtlust 418KS: S 24°15'22.0"; E 29°52'27.9" [X 2683711.687; Y - 88796.438]

Description: Two graves, marked with cement slabs.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

43. Site number: 2429BD19

Location: Jachtlust 418: S 24°15'20.9"; E 29°52'20.2" [X 2683676.447; Y -88573.817]

Description: Four graves, marked with stone cairns. Fenced.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

44. Site number: 2429BD20

Location: Jachtlust 418KS: S 24°15'15.2"; E 29°49'53.9" [X 2683469.742; Y - 84453.886]

Description: LSA material being exposed due to erosion.

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

45. Site number: 2429BD21

Location: Jachtlust 418KS: S 24°15'13.4"; E 29°49'43.6" [X 2683406.477; Y - 84163.717]

Description: Small rock shelter with EIA pottery in it. Pottery belong to the Eiland facie of the EIA, ie. c. AD 900-1200. Below this shelter, on river bank, there is a stone structure that seems similar to stone jetty.

Discussion: It seems as if the pottery was left in the shelter by chance, as there is no sign of other deposit. The function of the stone structure is uncertain, and does not relate to anything in the shelter

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

46. Site number: 2429BD22

Location: Zeekoegat 421KS: S 24°15'17.0"; E 29°49'22.6" [X 2683526.038; Y - 83570.635]

Description: Informal cemetery with ± 30 graves, some with headstones.

Discussion: Falls inside the area of potential impact

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: Relocation of graves

Legal requirements: Permits from NMC, Dept of Health and SAPS

47. Site number: 2429BD23

Location: Zeekoegat421KS: S 24°15'18.5"; E 29°49'30.0" [X 2683573.423; Y -

83779.095]

Description: Large concentration of MSA tools and flakes

Discussion: Although this is surface material, the abundance of material makes further investigation necessary

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Positive

Recommended management action: 2 = controlled sampling and/or mapping of the site necessary

Legal requirements: NMC permit

48. Site number: 2429BD24

Location: Zeekoegat 421KS: S 24°15'29.8"; E 29°50'01.8" [X 2683926.430; Y - 84674.002]

Description: Three graves, one with a headstone

Discussion: Falls outside the area of potential impact

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

APPENDIX 3: GLOSSARY AND ABBREVIATIONS

This section is included to give the reader some necessary background. It must be kept in mind, however, that these dates are all relative and serve only to give a very broad framework for interpretation.

STONE AGE

Early Stone Age (ESA)	2 000 000 - 150 000 Before Present
Middle Stone Age (MSA)	150 000 - 30 000 BP
Late Stone Age (LSA)	30 000 - until c. AD 200

IRON AGE

Early Iron Age (EIA)	AD 200 - AD 1000
Late Iron Age (LIA)	AD 1000 - AD 1830

HISTORICAL PERIOD

Since the arrival of the white settlers - c. AD 1840 in this part of the country

National Monuments Council (NMC)