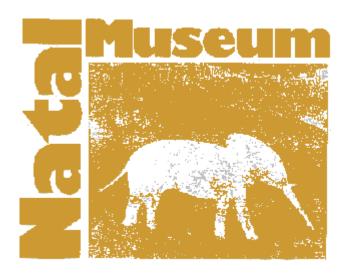
<u>Archaeological Survey of the Receiving Streams Project: Lions and eMpofana Rivers</u>

For Umgeni Water

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EXECUTIVE SUMMARY

The area to be affected by the Receiving Streams along the Lions and eMpofana Rivers was surveyed for potential archaeological sites. Previous surveys in adjacent areas had recorded archaeological sites and thus there was a high probability that archaeological sites would occur in the affected area.

Eight archaeological/cultural sites were recorded in the vicinity of the affected area. These sites are the remains of Iron Age and Colonial settlements dating to either the Late Iron Age (AD 1000 to AD 1824) and/or the Historical Period (AD 1824 onwards). Further analysis would be able to provide a more precise date. In addition to these archaeological sites, various isolated artefacts were noted.

INTRODUCTION

The Natal Museum Institute for Cultural Resource Management was approached by Umgeni Water to undertake an archaeological survey of the Receiving Streams along the Lions and eMpofana Rivers. This report describes the sites recorded during the survey and suggests further mitigation. The exact location of archaeological sites are not given in this report due to the sensitive nature of archaeological sites. However, Umgeni Water has the locations of these sites on a 1:5 000 orthophoto map.

All archaeological sites, and certain cultural sites, in KwaZulu-Natal are protected by the KwaZulu-Natal Heritage Act of 1998. This legislation protects archaeological sites from damage, alteration and/or destruction as a result of potential development and/or research. A permit for the destruction of these sites, recorded in the survey, will be required from KwaZulu-Natal Heritage.

TERMS OF REFERENCE

The Terms of Reference for this project are:

- Description of archaeological sites along the Receiving Streams within the "servitude line"
- Assessment of the significance of each archaeological site.
- Assessment of the mitigation required for each archaeological site
- Time cost implication for mitigation

The ToR should be slightly altered in that the "servitude line" should be changed to the 100 year flood level. If flooding is to occur in the future then it may impact on archaeological sites. It is for this reason that I have included the flood level as the outer boundary. The ToR were given to the archaeological team the day before the contract began, and there was no time to change these ToR.

METHODOLOGY

The Natal Museum is the provincial repository for recorded archaeological sites. No archaeological sites had been previously recorded in the affected area, however, other sites have been recorded in the vicinity outside of the affected area. This information indicated that there is a probability that other archaeological sites may occur in the affected area.

The fields survey entailed walking the affected area and doing a ground survey. The visibility of archaeological sites was limited due to the dense vegetation, and thus I concentrated on small open areas. In this way I could sample parts of the site over a broad area. Stone-walling is also visible when viewed from an height. Human graves were noted, even if they are not archaeological, since they are sensitive issues.

Sites that were on, or near, the boundary of the 100 year flood level were recorded. This was undertaken in case the levels of the receiving streams were changed in the future. Thus, future archaeological surveys will not be needed.

Defining archaeological significance

Archaeological sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance evaluation of archaeological sites.

These criteria are:

• State of preservation of:

- Organic remains:
- Faunal
- Botanical
- Presence of a cultural deposit
- Features:
- Ash Features
- Graves
- Middens
- Cattle pens

• Spatial arrangements:

- Internal housing arrangements
- Intra-site settlement patterns
- Inter-site settlement patterns

• Features of the site:

- Are there any unusual, unique or rare artefacts at the site?
- Is it a type site?
- Does the site have a very good example of a specific time period, feature, or artefact?

• Research:

- Providing information on current research projects
- Salvaging information for potential future research projects

• Inter- and intra-site variability

- Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and/or artefacts?
- Can this particular site yield information about a community's social relationships within itself, or between other communities.

• Archaeological Experience:

The personal experience and expertise of the CRM practitioner should not be ignored.
Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

• Educational:

- The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.
- Educational value is in terms of display at an Heritage institution

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. These test-pit excavations may require further excavations if the site is of high significance. Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts.

FINDINGS

Description of Archaeological Sites

Eight cultural sites were recorded in the affected area during this survey; however, several other sites have been noted in the general area. The sites probably date to the Historical Period and do not require further mitigation, unless affected by water levels (i.e. if the height of the Receiving Streams are changed). The archaeological sites and their significance are summarised in Table 1.

Several graves are noted in this report. These do not fall under the jurisdiction of an archaeologist, and Umgeni Water is responsible for the management and discussions with local communities and/or people, regarding each grave.

Site 1:

This site is a recent site and occurs outside the 100 year flood level. The site was recorded since these are human graves, and they are in close proximity to the flood level. According to the land owner people still lay claim to this grave.

The site is of high significance but there will be no impact by the receiving streams.

Mitigation Required:

Umgeni Water may need to enter discussions with owners of the grave if they are affected.

<u>Site 2:</u>

This site is an old stone-walled feature that runs from the top of the hill, to the flood plain. The wall consists of a double row of large rocks and/or boulders, with smaller stones between these two, acting as an infill. It is not possible to estimate the age of this walling. The lower part of the walling will be affected by the 100 year flood level.

The site is of low significance and the impact a low impact by the receiving streams

Mitigation required:

The site requires no further mitigation.

Site 3:

This site is a single human grave. The grave is known to the owners of the property, however, no-one knows to whom the grave belongs. The site occurs just above the 100 year flood level.

The site is of high significance but there will be no impact by the receiving streams.

Mitigation required:

No mitigation is currently required since the grave is outside of the affected area.

Site 4:

This site is a single human grave. The grave is known to the owners of the property, however, no-one knows to whom the grave belongs. The site occurs just above the 100 year flood level.

The site is of high significance but there will be no impact by the receiving streams.

Mitigation required:

No mitigation is currently required since the grave is outside of the affected area.

Site 5:

This site is a single human grave. The grave is known to the owners of the property, however, no-one knows to whom the grave belongs. The site occurs just above the 100 year flood level.

The site is of high significance but there will be no impact by the receiving streams.

Mitigation required:

No mitigation is currently required since the grave is outside of the affected area.

Site 6:

This site is a possible grave that occurs just inside the "servitude line". Currently the site is a large tree that has grown over a distinct semi-circle pile of stones. These stones are not haphazard in shape and appear to have been purposefully placed. The stones form a semi-circle of $1 \text{ m} \times 2 \text{ m}$, and is approximately 0.5 cm above the ground.

If the site is a human grave then the site is high significance and thus the impact by the receiving streams will be high.

Mitigation required:

The Client will need to inquire whether anyone in the area has a claim to this grave, and enter subsequent negotiations. If no-one claims the grave, then it may be best to leave it. The Natal Museum has a policy of not collecting human remains, unless they are to be irreversibly damaged by development. Since this grave is on the boundary of the servitude and 100 year flood level, since I do not anticipate that it will be affected.

Site 7:

This site is an Historical building a few meters north of Site 6. The building is ± 3 m x 2 m x 3 m in size and appears to be made from Pietermaritzburg red brick. The building apparently dates to c. AD 1903 and was used as a place to dry flowers. The building is thus just outside of the 100 year flood level. I am not qualified to deal with the architectural significance of such a building, however, it is unlikely to be affected.

The site is, until further assessment by a historical architect, of medium significance.

Mitigation required:

I do not anticipate that the site will be affected by the Receiving streams. However, if amendments to the water transfer levels are made then further mitigation may be required. If this site is then affected by the Receiving Streams, then an historical architect will need to assess the site. Since Site 8 will be assessed by KwaZulu-Natal Heritage, I suggest that Site 7 is assessed at the same time – the two sites are within 300 m of each other. Further recommendations should come from KwaZulu-Natal Heritage.

Site 8:

This site is an old bridge built in AD 1927. Presently only the ramp leading up to the bridge and the pillars on each side of the river remain. The bridge is currently not in use, however it will be flooded by the Receiving Stream. Since this structure and that of Site 7, pre-date 1940 (i.e. older than 60 years), they may be protected by provincial heritage legislation.

Mitigation required:

According to KwaZulu-Natal Heritage the following people need to be informed regarding this bridge:

- KwaZulu-Natal Heritage since a permit for the damage of this site will be required, and that they will need to assess the site in terms of further mitigation; and,
- Department of Transport to ensure that this bridge is on their list of bridges and that it is not currently used.

CONCLUSION

The area to be affected by the Receiving Streams was surveyed for archaeological and historical sites. The ToR initially indicated that only the "servitude lines" were to be surveyed, however, the 100 year flood level was also included since if sites were affected in a flood it would be as a result of the heightened water table of the Receiving Streams.

A total of eight archaeological / historical / cultural sites were recorded during the course of the survey. Most of these sites were located just outside of the 100 year flood level. Other sites were also recorded in the vicinity of the affected area. Two sites will be directly affected by 100 year flood level, and only one site by the servitude area.

The archaeological sites in the area to be affected by the Receiving Streams do not pose any major threat to the development plans. The development can continue once the archaeological mitigation has occurred and the developer has been issued with a permit for the damage and destruction of the site. The developer will require a permit for the destruction of the archaeological sites in the affected area. This permit is available from KwaZulu-Natal Heritage in Pietermaritzburg.

Table 1: Archaeological sites recorded in the vicinity of the Receiving Streams

Site No.	Type of Site	Archaeological	Impact on Site by	Archaeological Mitigation
		Significance	Receiving Streams	Required ¹
1	Human Graves	High	None	None
2	Stone-walling	Low	Low	None
3	Human graves	High	None	None
4	Human graves	High	None	None
5	Human graves	High	None	None
6	Human graves	High	None	None
7	Historical Building	High	None	None
8	Historical Bridge	High	High	None, but needs assessment by
				KwaZulu-Natal Heritage

¹ I do not anticipate that certain sites will be affected by the Receiving streams. However, if amendments to the water transfer levels are made then further mitigation may be required.