COBUS DREYER
Pr. Archaeologist/Heritage Specialist

Tel: 051 - 444 1187
Fax: 051 - 401 2363
Cell: 083 - 357 7982

P.O. Box 12910
Brandhof
9324
dreyerc.HUM@mail.uovs.ac.za

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ARCHAEOLOGICAL AND HISTORICAL ASSESSMENT OF THE NUWEJAARSPRUIT PROJECT, HARRISMITH

INVESTIGATION

The area along the Nuwejaarspruit in the Harrismith district was visited on 3 October 2003 in the company of Elbie Erasmus of Enviroworks Environmental Consultants, Bloemfontein and Barend Smit of Ninham Shand Consulting Services.

The significance of certain structures was examined and the possibility of archaeological sites was also investigated. The Heritage Impact Assessment (HIA) is done in terms of the National Heritage Resources Act (NHRA), (25 of 1999) and under the Environmental Conservation Act, (73 of 1989).

The following observations were made.

LOCALITY

The relevant area is located along the Nuwejaarspruit, primarily on the farms Rosedale 167 (28°20'48"S. 29°02'19"E.) and Stillerust 766, (28°29'50"S. 28°39'08"E.) and further towards the confluence of the Nuwejaarspruit and the Wilge River near the town of Harrismith.

The representative of Ninham Shand identified the area.

DESCRIPTION

The area along the Nuwejaarspruit consists of grass covered field with cultivated and irrigated land in places. In several cases water is pumped from the Spruit for intensive irrigation practised on the riverbank.

ARCHAEOLOGICAL ASSESSMENT

The Nuwejaarspruit follows the contour at the lowest part of the landscape, which is normally not suitable for prehistoric human occupation. It is, therefore, unlikely that cultural remains in the form of stone tools and potsherds will occur in this area.

The inspected area is located on the flood plain along the Nuwejaarspruit and produced, as expected, no archaeological material. Due to the rolling topography the landscape offers no shelter in the form of rocks or crevasses. No stone tools or ceramic ware were recovered, neither were traces of rock art or graffiti of historical significance found at any of the sites.

PALAEONTOLOGICAL ASSESSMENT

The possible occurrence of fossils in the area was discussed with Mr J.C. Loock, Senior Lecturer, Geology Department, University of the Free State, Bloemfontein.

According to the literature the area to the south of Harrismith consist of sand stone and mud stone of the Katberg Formation, from the central part of the Beaufort Group, where Lystrosaurus and other Karroo reptile fossils have previously been discovered.

Lower down the river to the north of Harrismith, Dicynodon and Audenodon fossils have been found in layers of the lower part of the Beaufort Group, (Kitching 1977).

ASSESSMENT OF THE WEIRS IN THE NUWEJAARSPRUIT

During the early decades of the 1900s, several weirs were erected in the Nuwejaarspruit to control floodwater. Two of these walls were inspected in more detail to establish their value as cultural remains.

The structure on Rosedale 167 was built from natural stone and concrete mortar and is about 15m long (Figs.1-3). The position of the wall is indicated on the Ninham Shand map as number 30. A floodgate to control the flow of the water was constructed in the centre of the wall. The sluice was regulated by the turn of a big crank handle. Additional cement furrows and irrigation pipes were later installed to pump water from the dam and are still in place (Fig.). No inscription to indicate the age of the structure or date of erection was found on the wall.

The Stillerus site is indicated on the Ninham Shand map as position 36. The wall is about 20m long and consists of natural stone with concrete mortar (Figs.4-7). A floodgate was likewise placed in the centre of the wall. The flow of water was regulated by the adjustment of the sluice through the turn of a crank handle. Concrete columns were erected on top of the wall and sections of railway tracks

were planted upright on the side of the wall facing the flood. Two lorry chassis were placed across the concrete columns probably to support a bridge over the river.

No inscription or indication of the date of construction was found on the wall or columns. One of the sections of railway track was marked GR 1889, which could be the date and factory of the casting of the steel. The date of manufacture will in any case not give any indication of the time when the railway tracks were put out of service.

The similarity in the design and construction of the walls and the floodgates could indicate that both weirs were made by the same person.

DISCUSSION

The narratives of the farm owners turned out to be the only reliable source of information about the age and origin of the walls. The present owners of the land were contacted telephonically. Mr J.G. Wasserman of Stillerus related that his father-in-law, Mr A.J. Muller owned the land since 1918. Mr Wasserman speculated that the weirs in the Nuwejaarspruit could have been built prior to 1930 and were used to control the flow of the water during floods. He confirmed that these structures were in use up to the time of the building of the Sterkfontein Dam, but has never been used since.

Mr J.E. Odendaal, the owner of Rosedale is a relatively newcomer to the area. He related that he bought the farm in 1979 and has never used the weir to control floodwater.

Based on this information it can be accepted that the structures are probably older than sixty years and that it will fall under the protection of the National Heritage Resources Act (NHRA), (25 of 1999). In this case it may, therefore, not be damaged or removed. A permit from the South African Heritage Resources Agency will be needed for any alterations or removal of the structures. This had been confirmed during a personal discussion with Me Herma Gous, the Local Representative of SAHRA in the Free State. She undertook to respond on this matter after receiving of this archaeological report.

Me Gous also explained that permits for the removal or alterations of cultural remains are no longer issued by the South African Heritage Resources Agency (SAHRA) in Cape Town. This function has now been diverted and delegated to the Provincial Authorities. The relevant organisation is not in place yet and will have to be instigated by the Free State Provincial Government.

In the present state, no permits can be obtained neither from the National level nor from Provincial Authorities. The obtaining of a permit for the removal of any historical structures or archaeological remnants will have to be postponed until

such permits can officially be obtained. This delay will unquestionably result in serious repercussions in the progress of the work.

The stone and concrete structures in the Nuwejaarspruit are not unique, as several of these weirs are known from other part in the Free State. To preserve these specimens merely as examples of ingenious creations by laymen builders and black smiths could be debatable. The question then arises how accessible these specimens will be.

In the present situation the structures are actually causing obstructions to the water flow. They are not in use anymore and are not in a perfect condition. The fact that there is not much known about its history, contributes to the conclusion that the weirs should be removed.

RECOMMENDATIONS

It is recommended, therefore, that alternative ways of bypassing the structures in the flow of the Nuwejaarspruit, should seriously be considered.

The structures should be recorded and documented before dismantling and removal and that the floodgates should be donated to the Harrismith Museum for preservation. This was also the conclusion reached during a discussion with Mr J.C. Loock. He has knowledge and experience of this kind of structures from the Graaff-Reinet and Middelburg areas in the Karroo.

MITIGATION

It is possible that fossil material resembling bone or Calcrete could be discovered during construction work.

In case of the discovery of any stone tools, pottery and archaeological or palaeontological material of significance during the course of the work, all activities should temporarily be stopped in the specific area for inspection by specialists to be called in by the Environmental Consultant.

Mitigation measures will depend upon the alternative actions initiated and developed by the client to accommodate the situation.

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