



ARCHAEOLOGICAL SPECIALIST STUDY: LETTER OF EXEMPTION

CONSTRUCTION OF SPORTS FIELD IRRIGATION AND FACILITIES INFRASTRUCTURE IN CALVINIA, HANTAM LOCAL MUNICIPALITY, NORTHERN CAPE

1. Introduction

The proposed activity is for the construction of sports field irrigation and facilities infrastructure in Calvinia (Hantam Local Municipality), in the Northern Cape Province (Figure 1).

The municipal sports facilities infrastructure in Calvinia has not been upgraded in more than 20 years. The intention is to utilize treated effluent for the sports field's irrigation.

The Independent Environmental Practitioner is Enviroafrica cc.

2. Project description

Existing irrigation for the municipal sports fields in Calvinia currently takes place via abstracting water from the town's drinking water supply network. This is unsustainable given the extreme water shortages experienced by the town during the hot summer months. The proposal is therefore to utilize treated wastewater from Calvinia's Waste Water Treatment Works as a source of supply for the municipal sports fields. This includes the Calvinia showground sports field, the Calvinia De Kraal sports field, the Calvinia Secondary school sports field and Calvinia Primary school sports field. The project also includes a proposed new grass pitch, a 900 seat pavillion and high mast lighting for the De Kraal soccer field, and high mast lighting for the Calvinia showgrounds sports field. The irrigation system infrastructure to allow for the required flow rate includes a 4.49km long rising main irrigation pipeline, which will be buried underground (Figure 2).

3. Approach to the study

A field assessment of the route for the proposed pipeline was undertaken on the 7th June, 2019 (Figure 3). The survey was done by vehicle and on foot. A full photographic record of the route was also taken (Figures 4-22). Much of the route will be located in the road reserve and informal gravel footpaths, before accessing the affected school sports fields. A short section of the pipeline will cross a small, highly degraded unnamed stream south of the R355 (Figure 15), established business premises (Figure 18) and alongside Dorp Street (Figure 21), before connecting again to the R355.

4. Archaeological context

Very little archaeological research or work has been done in Calvinia. A search of the SAHRIS data base revealed only three formal archaeological surveys in the town. No archaeological remains were recorded during an AIA for the proposed upgrading of the Calvinia WWTW/Oxidation Dam, and the Calvinia Cemetery (Webley & Halkett 2009a, b). The Archaeology Contracts Office also conducted an HIA for a borrow pit alongside the R27 outside Calvinia however no heritage resources were identified in this assessment either (Hart & Halkett 2011).



5. Results of the field assessment

- No archaeological resources were encountered.
- No old or protected buildings, structures or features will be impacted by proposed construction activities.

6. Conclusion

The overall archaeological impact significance of the proposed sports field irrigation project at Calvinia is considered to be VERY LOW.

No archaeological or historical heritage resources were identified during a brief field assessment.

Therefore there are no objections to the development proceeding.

7. Recommendations

1. The project should be allowed to proceed as planned.
2. If any unmarked human remains/graves are uncovered during construction work, these must be immediately reported to the South African Heritage Resources Agency/SAHRA (Att: Ms Natasha Higgitt 021 462 4502), the Environmental Control Officer (ECO), and the contracted archaeologist (Jonathan Kaplan 0823210172)
3. The above recommendations must be included in the Environmental Management Plan (EMP) for the proposed development.

It is recommended that exemption from further specialist archaeological studies and mitigation be granted for this development.



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8. References

Hart, T. & Halkett, D. 2011. Heritage Impact Assessment, proposed strengthening (partial reconstruction) of National Route 27 Section 7 & 8 between Western/Northern Cape Border (km 40.0) and Calvinia (KM 70). Archaeology Contracts Office, Cape Town

Webley, L. & Halkett, D. 2009a. Archaeological Impact Assessment for the proposed upgrading and extension of the Oxidation Dams at the Calvinia WWTW, Namakwa District, Northern Cape Province. Report prepared for Irme van Zyl Environmental Consultant. Archaeology Contracts Office, Cape Town.

Webley, L. & Halkett, D. 2009b. Archaeological Impact Assessment for the proposed construction of a new cemetery at Calvinia, Namakwa District, Northern Cape Province. Report prepared for Irme van Zyl Environmental Consultants. Archaeology Contracts Office, Cape Town

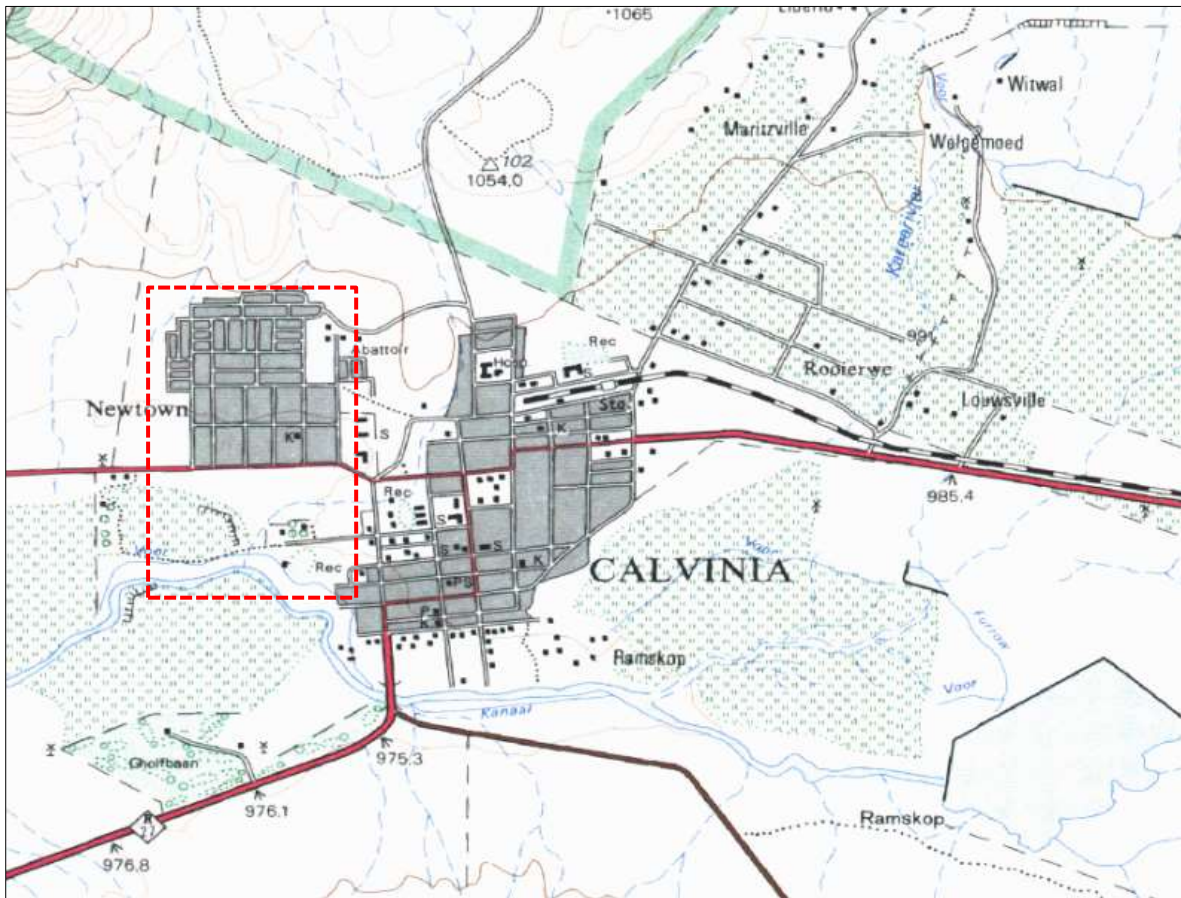


Figure 1. Locality map (3119BD Calvinia). Red polygon indicates project area



Figure 2. Google satellite map indicating the proposed sewer route. The blue line in the existing sewer pipeline from the Waste Water Treatment Works



Figure 3. Trackpaths in blue



Figure 4. Sewer route alongside the R355



Figure 5. Sewer route alongside the R355



Figure 6. Sewer route alongside the R355



Figure 9. Sewer route alongside the R355



Figure 7. Sewer route alongside the R355



Figure 10. Proposed sewer route



Figure 8. Sewer route alongside the R355



Figure 11. Proposed sewer route



Figure 12. Proposed sewer route



Figure 15. Proposed sewer route crossing small stream



Figure 13. Proposed sewer route



Figure 16. Proposed sewer route crossing small stream



Figure 14. Proposed sewer route inside school sports field



Figure 17. Proposed sewer route after small stream



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Figure 18. Proposed sewer route through business premises



Figure 21. Proposed sewer route alongside Dorp Street



Figure 19. Proposed sewer route



Figure 22. Proposed sewer route alongside R355 south



Figure 20. Proposed sewer route



Figure 23. Proposed sewer route alongside R355 south



Figure 24. Proposed sewer route alongside R355 south