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**HERITAGE IMPACT ASSESSMENT
NOOITGEDACHT WATER SUPPLY PROJECT**

Prepared for

DIANE ERASMUS ENVIRONMENTAL SERVICES

By

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Executive summary

Some Stone Age tools were found during a heritage impact assessment of the proposed Nooigedacht Water Supply Project.

Four historical cemetery sites were also located alongside, or close to, the proposed water pipeline route.

The aim of the proposed project is to supply farmers and farm labourers living in the Moorreesburg area with potable water, via the main Withoogre – Hopfield pipeline.

The Stone Age remains, comprising Early Stone Age and Middle Stone Age tools, were located at four sites surveyed along the route. The tools, however, were all found in severely disturbed context and are not considered to be of scientific or cultural value.

The family cemeteries were located on the farms Uitzig, Wolwekloof, Boplaas and Bitterfontein. Burial remains and cemeteries are protected under the National Heritage Resources Act (No 25 of 1999) and have been assigned a high significance rating.

The cemeteries are extremely sensitive sites and care should be taken to avoid these sites during planning, construction and implementation of the project.

Overall, however, the receiving environment is not considered to be archaeologically or historically sensitive, vulnerable or threatened. Almost all areas along the route have been cultivated and most are currently under wheat.

The overall impact of the proposed Nooigedacht Water Supply Project on heritage remains is therefore considered to be low.

The probability of locating significant heritage remains during implementation of the project is also considered to be low.

With regard to the proposed Nooigedacht Water Supply Project, the following heritage recommendations are made.

- All burial/historical cemetery sites along or close to the proposed pipeline route must be avoided during construction of the pipeline route.
- No further detailed studies are required.

1.0 INTRODUCTION

1.1 Background

Diane Erasmus Environmental Services have requested that the Agency for Cultural Resource Management undertake a heritage impact assessment (HIA) of the proposed Nooigedacht Water Supply Project.

The aim of the proposed project is to supply farmers and farm labourers living in the Moorreesburg area with potable water, via the main Withoogte – Hopefield pipeline.

The aim of the HIA is to locate, identify and map archaeological and historical remains that may be negatively impacted by the planning, construction and implementation of the proposed development, and to propose measures to mitigate against the impact.

2.0 TERMS OF REFERENCE

The terms of reference for the HIA were:

1. to determine whether there are likely to be any archaeological or historical sites of significance within the proposed pipeline route;
2. to identify and map any sites of archaeological and historical significance within the proposed pipeline route;
3. to assess the sensitivity and conservation significance of archaeological and historical sites potentially affected by the proposed development;
4. to assess the significance of any impacts resulting from the proposed development, and
5. to identify mitigatory measures to protect and maintain any valuable archaeological and historical sites that may exist within the proposed pipeline route.

3.0 THE STUDY SITE

1. The study site and layout of the proposed water supply network is illustrated in Figure 1.

All areas along the route have been cultivated and most are currently under wheat.

4.0 LEGISLATION

Archaeological sites, including burials and cemeteries, are protected under the National Heritage Resources Act (No. 25 of 1999). The Act came into effect on 01 April 2000, and replaces the National Monuments Act (No. 28 of 1969).

It is an offence to destroy, damage, excavate, or remove from its original position, or collect, any archaeological material or object (including burials and graves/cemeteries), without a permit issued by the South African Heritage Resources Agency (SAHRA).

5.0 STUDY APPROACH AND DOCUMENTATION OF ARCHAEOLOGICAL SITES

The approach used in the HIA entailed a ground and vehicle survey of the proposed pipeline route.

7.0 RESULTS OF THE HERITAGE IMPACT ASSESSMENT

7.1.1 Stone Age remains

Stone Age remains were located at four sites surveyed along the route.

7.1.1.1 GPS reading S 33°07.256 E 18°36.310

One Middle Stone Age¹ (MSA) quartzite core and flaked cobble was located in a degraded loose gravel patch close to the proposed water pipeline route near Patrysvei. The tool was found in a severely disturbed context.

Significance of finds: **low**

Suggested mitigation: **none required**

7.1.1.2 GPS reading S 33°07.091 E 18°36.111

Two large Early Stone Age² (ESA) cores and one ESA/MSA chunk was located among a pile of stone close to the proposed route near De Gunst. The tools were found in a severely disturbed context.

Significance of finds: **low**

Suggested mitigation: **none required**

¹ A term referring to the period between 200 000 and 20 000 years ago.

² A term referring to the period between 2 million and 200 000 years ago.

7.1.3 GPS reading S 33°07.243 E 18°31.346

Relatively large numbers of ESA and MSA tools were located among a large pile of stone and building rubble in a severely degraded wetland area near the farm Nelskop (Figure 2). The tools comprise cores, large chunks and flakes, flaked cobbles and a cleaver. Two incomplete handaxes were also found. All the tools are in quartzite.

Significance of finds: **medium to low**

Suggested mitigation: **none required**

7.1.4 GPS reading S 33°06.199 E 18°34.438

A handful of ESA cores, flakes and flaked cobbles were found among a pile of stone about 50 metres east of the fence line in a severely degraded drift area near the farm Wolwekloof.

Significance of finds: **low**

Suggested mitigation: **none required**

7.2 Graves/historical cemeteries

Four historical family cemeteries were located close to the proposed pipeline route.

7.2.1 GPS reading S 33°06.431 E 18°32.078

A small cemetery was located alongside the road/fence line on the farm Uitzig (Figure 3). Measuring about 10 m x 10 m, at least four graves with headstones were counted, the oldest dating to 1913.

Significance of finds: **high**

Suggested mitigation: **the cemetery must be avoided during construction of the pipeline**

7.2.2 GPS reading S 33°06.099 E 18°34.436

A small family cemetery, containing two grave sites, was located alongside the road/fence line on the farm Wolwekloof (Figure 4). The cemetery measures about 15 m x 4 m. The oldest grave is dated 1920.

Significance of finds: **high**

Suggested mitigation: **the cemetery must be avoided during construction of the pipeline**

7.2.3 GPS reading S 33°05.068 E 18°31.051

A relatively large cemetery, measuring about 10 m x 25 m was located alongside the road on the farm Boplaas (Figure 5). Fifteen individual graves were counted, the oldest dating to 1897.

Significance of finds: **high**

Suggested mitigation: **the cemetery must be avoided during construction of the pipeline**

7.2.4 GPS reading S 33°05.340 E 18°38.258

A large cemetery was located about 12 metres from the road on the farm Bitterfontein (Figure 6). Access to the site was limited, but at least individual graves with headstones were counted.

Significance of finds: **high**

Suggested mitigation: **graveyard must be avoided during construction of the pipeline**

8.0 IMPACT STATEMENT

The overall impact of the proposed Nootgedacht Water Supply Project on heritage sites/remains is considered to be low to negligible.

The probability of locating significant archaeological remains during implementation of the project is also considered to be low.

10.0 CONCLUDING STATEMENT

In general, the receiving environment is not considered to be archaeologically or historically sensitive, vulnerable or threatened.

Graves/historical cemeteries are extremely sensitive and must be avoided during planning, construction and implementation of the pipeline.

11.0 RECOMMENDATIONS

With regard to the proposed Nootgedacht Water Supply Project the following heritage management recommendations are made.

1. All cemeteries must be avoided during planning, construction and implementation of the proposed pipeline route. Burial sites are extremely sensitive and are protected under the National Heritage Resources Act (No. 25 of 1999).
2. No further detailed studies are required.

The above recommendations are subject to the approval of the South African Heritage Resource Agency.

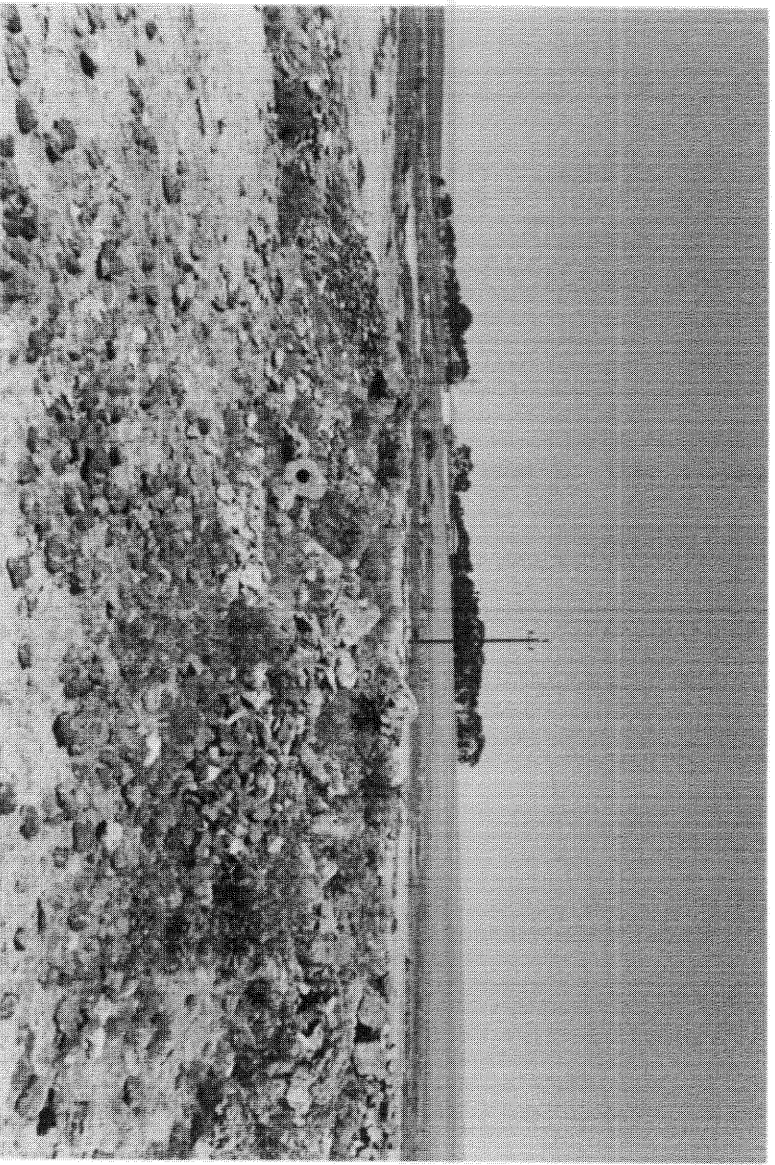


Figure 2. Heritage Impact Assessment, proposed Nootigedacht Water Supply Project. MSA and ESA tools were found among large piles of stone and building rubble near the farm Nelskop.

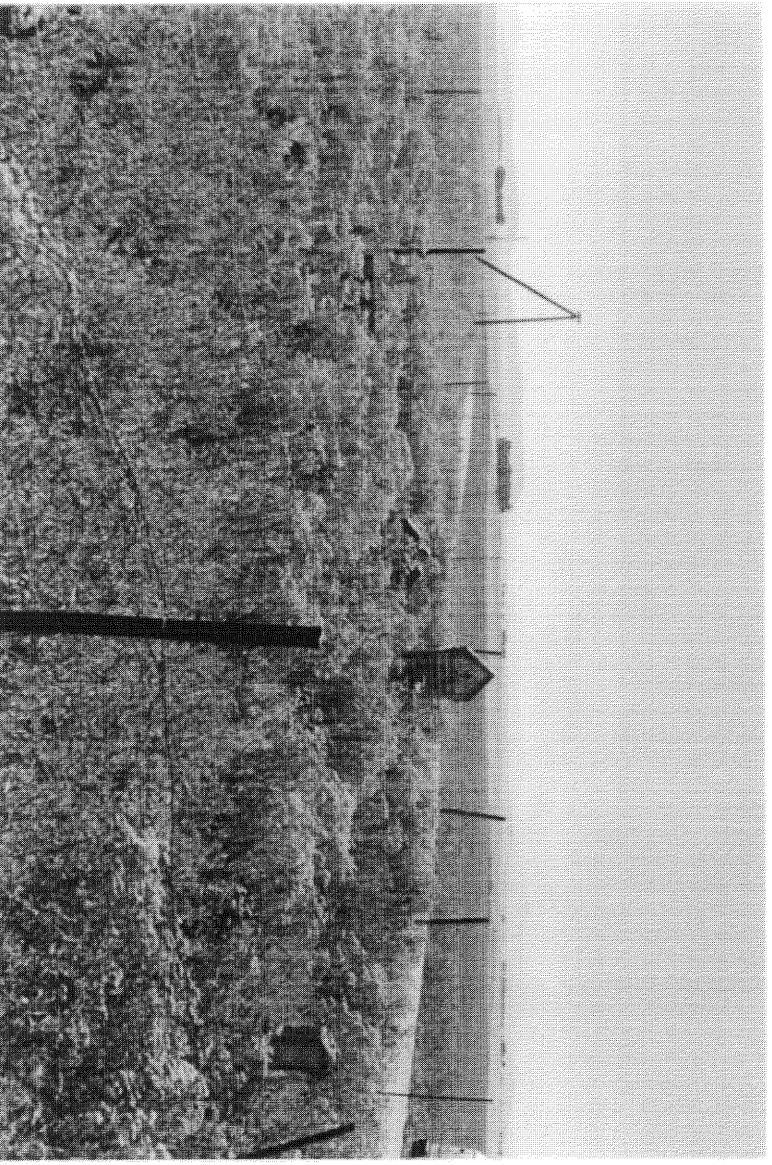


Figure 3. Heritage Impact Assessment, proposed Nootigedacht Water Supply Project. Cemetery on the farm Uitzig.

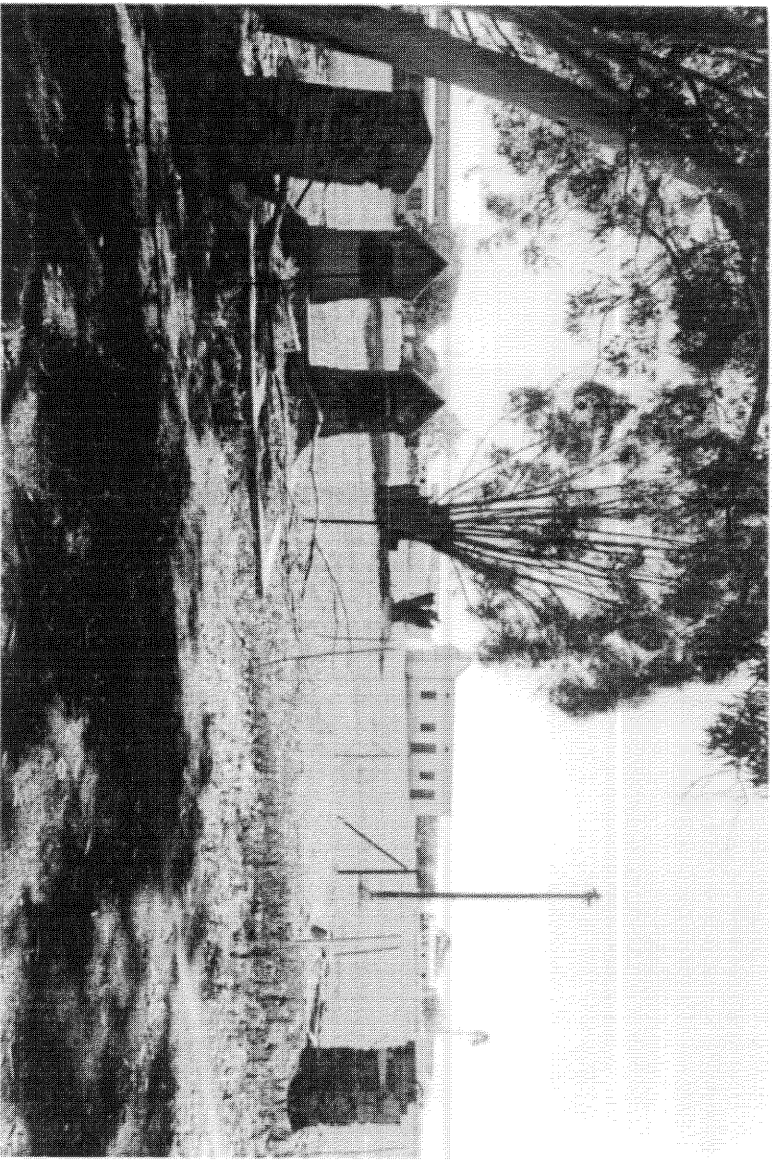


Figure 4. Heritage Impact Assessment, proposed Nootitgedacht Water Supply Project. Cemetery on the farm Wolwekloof.

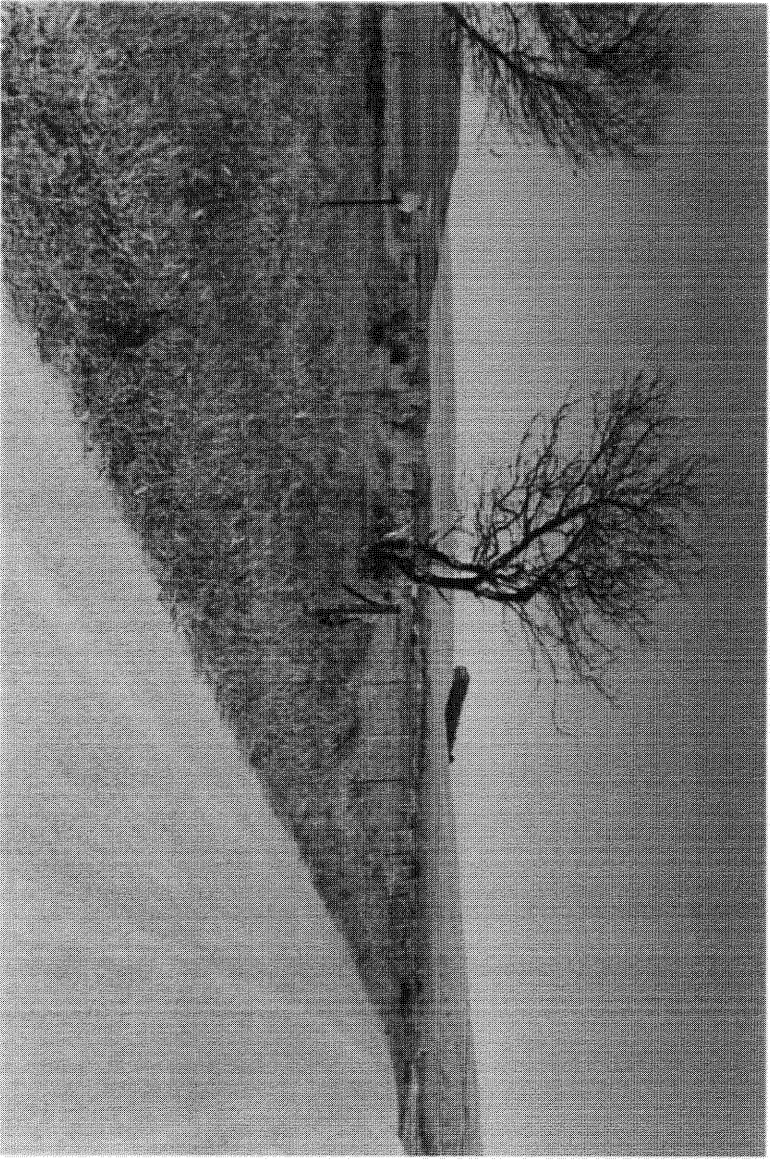


Figure 5. Heritage Impact Assessment, proposed Nootitgedacht Water Supply Project. Cemetery on the farm Boplaas.

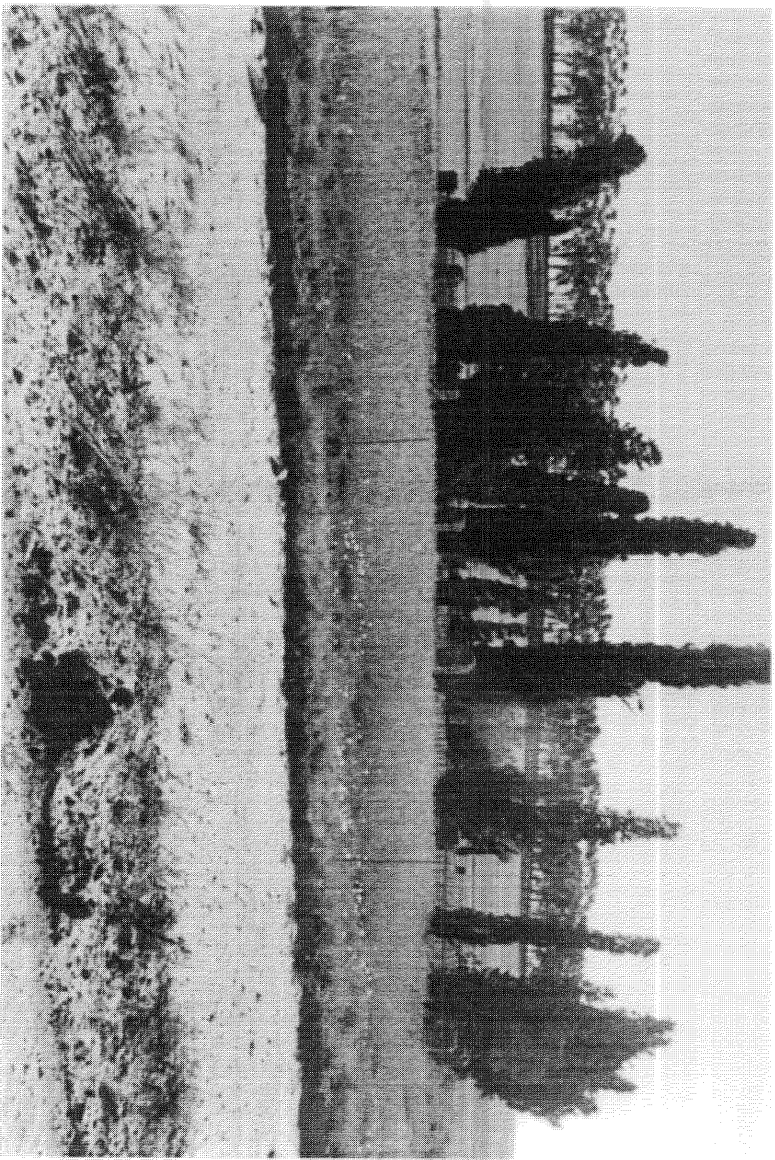
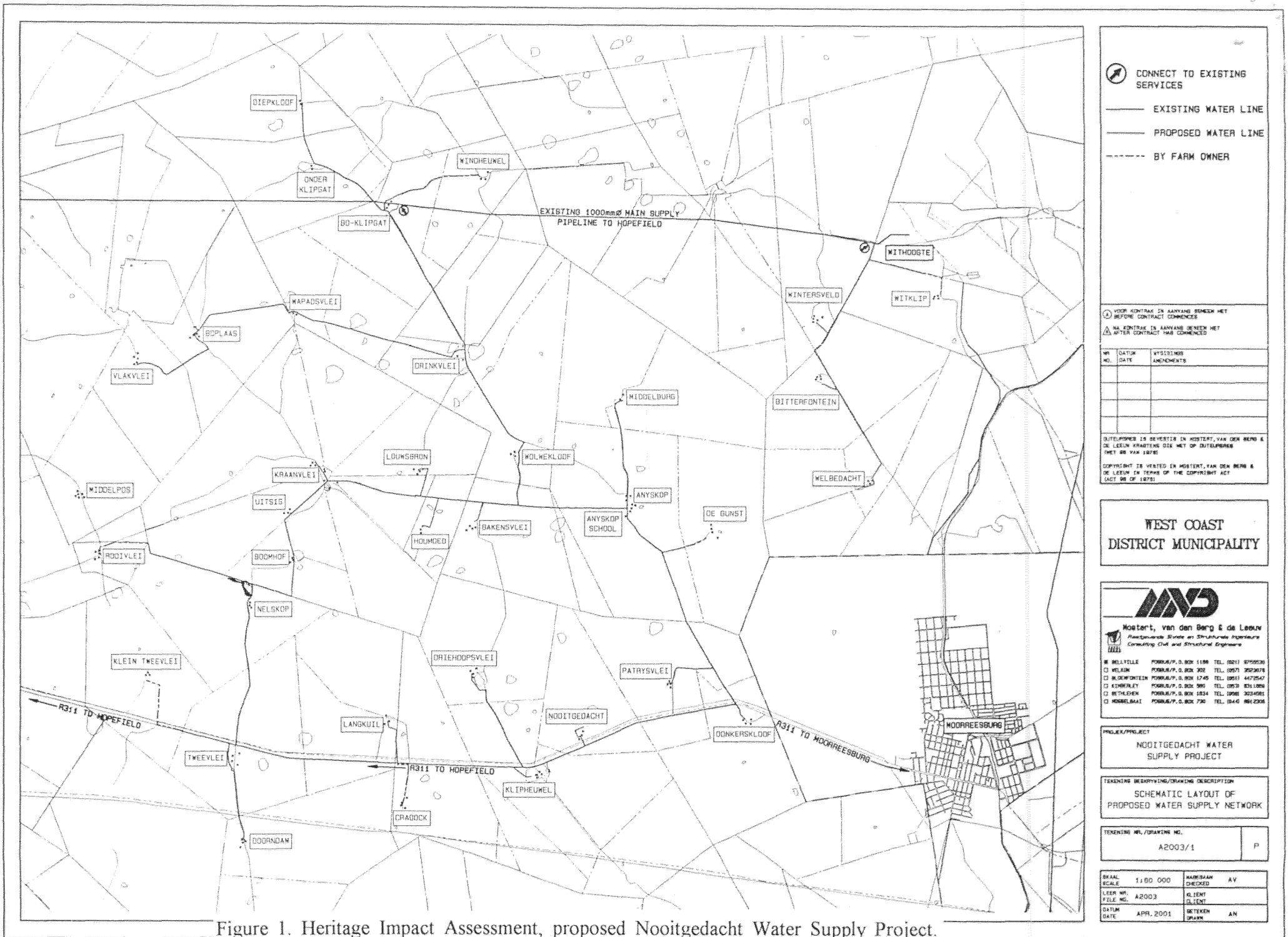


Figure 6. Heritage Impact Assessment, proposed Nooitgedacht Water Supply Project. Cemetery on the farm Bitterfontein.



CONNECT TO EXISTING SERVICES

— EXISTING WATER LINE
 - - - PROPOSED WATER LINE
 . . . BY FARM OWNER

⊙ VOOR KONTRAKT IN AANVAAG SOMMEK HET
 BEFORE KONTRAKT KOMMENS
 ▲ NA KONTRAKT IN AANVAAG SOMMEK HET
 NAFTER KONTRAKT HAN KOMMENS

NO	LOCATION	WYSIDINGS
NO.	DATE	ANCHORMENTS

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 DE LEEUW KRAATERS DIS HET OP OITELERSBERG
 (MET 08 VAN 1978)

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 (ACT 98 OF 1978)

**WEST COAST
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PROJEK/PROJECT
**NOOITGEDACHT WATER
 SUPPLY PROJECT**

TREKINGS/BEREKENING/DRUKING/DESCRIPTION
**SCHEMATIC LAYOUT OF
 PROPOSED WATER SUPPLY NETWORK**

TREKING NO./DRAWING NO.
A2003/1 P

SKAAL SCALE	1:50 000	NAAM/NAAM CHECKED	AV
LEER NR. FILE NO.	A2003	KLIJENT CLIENT	
DATUM DATE	APR. 2001	WETKEN DRAWN	AN

Figure 1. Heritage Impact Assessment, proposed Nooitgedacht Water Supply Project. Study site and layout of proposed water supply network.