

ARCHAEOLOGICAL IMPACT ASSESSMENT REPORT

LEVUVHU RIVER GOVERNMENT WATER SCHEME

NAVAMBE TO VALDESIA PIPELINE BORROW PITS

NOVEMBER 2007

TABLE OF CONTENTS

1	SURVEY AREA	1
2	THE AIM	1
3	ARCHAEOLOGICAL, ETHNO-HISTORICAL AND HISTORICAL BACKGROUND	1
4	DEFINITIONS	2
	4.1 Midden	2
	4.2 Old Agricultural Land	2
	4.3 Ancient Graves (Burials)	3
5	SURVEYING METHODS	3
6	THE SURVEY LOCALITIES: DESCRIPTION, ARCHAEOLOGICAL OCCURRENCES AND RECOMMENDATIONS	4
	6.1 Borrow Pit A	4
	6.2 Borrow Pit B	5
	6.3 Borrow Pit C	6
	6.4 Borrow Pit D	7
	6.5 Borrow Pit E	9
	6.6 Borrow Pit F	11
	6.7 Borrow Pit G	13
	6.8 Borrow Pit H	14
7	RECOMMENDATIONS FOR BORROW PITS A – G	15

LEVUVHU RIVER GOVERNMENT WATER SCHEME

MAVAMBE TO VALDESIA PIPELINE BORROW PITS

1 SURVEY AREA

The survey area is situated mainly in the Levuvhu River valley, a prime area for human settlement.

During the planning stages of the building of the Ndoni Dam two Phase 2 archaeological studies were conducted:

- 1.1 The excavation of pits and remains of pole and dagha huts belonging to the Early Iron Age, ± 400 to ± 700 AD. The study was conducted in the vicinity of the dam wall.

The migration of the Early Iron Age was from west to east with the Levuvhu River and surrounding areas being one of the migration routes.

Early Iron Age sites are located at a depth of 50 cm to 1 m below the ground surface. Care should therefore be taken for these sites when excavating borrow pits. When an Early Iron Age site is unearthed, clay pots, fire places and burnt clay (dagha) will be observed.

- 1.2 The translocation of hundreds of graves dating from 1950. Infant burials were also found and translocated (*pers com* Henk Steyn).

The survey area can be classified as sensitive and care should be taken during the excavation of borrow pits.

2 THE AIM

To undertake a Phase 1 archaeological impact assessment of the Mavambe to Valdesia pipeline borrow pits in order to assess the impact of the proposed project on archaeological sites and features and to make relevant recommendations.

3 ARCHAEOLOGICAL, ETHNO-HISTORICAL AND HISTORICAL BACKGROUND

Human occupation in the Soutpansberg area commenced at ± 1.8 million years ago.

± 1.8 million to $\pm 300\ 000$ years ago, Early Stone Age – Homo erectus.

± 300 000 to ± 30 000 years ago, Middle Stone Age – Homo sapiens afer (common throughout the Soutpansberg area).

± 30 000 years ago to ± 1850, Late Stone Age Proto San and San (Bushmen). The hunter, Fredrick Courteney Selous, met these Late Stone Age people in the area during his hunting trips during the first half of the 1800 era.

300 AD to 1000 AD, Early Iron Age Bantu Negro.

1100 AD to 1400 AD, Middle Iron Age.

1400 AD to ± 1720 AD various small groups of people arrived from the north of the Limpopo River. Early Sotho (Vhanghona), Vhatzinda, Lembethy, Mbedzi and Lemba were incorporated in the Venda group.

± 1720 the Venda proper arrived (Singo clans).

Late 1800, the arrival of the Europeans.

As seen in the described settlement chronology of the study area intensive human occupation has taken place over a long time period. Many early settlement sites up to ± 1400 are buried under the ground surface and therefore, care should be taken during excavations for middens, concentrations of stone tools, ceramics, porcelain, metal objects and burned clay. On finding any of these an archaeologist should be informed and consulted.

4 DEFINITIONS

4.1 Midden

A mixture of ash and household refuse such as clay pot remnants, iron and copper objects, shell and glass beads, burnt clay, plant remains, animal bone, glass, porcelain, and in some cases, human burials.

4.2 Old Agricultural Land

When the term old agricultural land is used, the following attributes will be present:

- 4.2.1 The presence of *Sclerocarya birrca* (Marula) and other trees and plants which were not removed due to their protection by tribal law;
- 4.2.2 Secondary plants like *Dichrostachys cinerea* (Sicklebush) and other *Acacia* species;

4.2.3 Total absence of normal plant growth as still present in the surrounding areas.

4.3 Ancient Graves (Burials)

Pre-historic Late Stone Age and historic archaeological graves are roughly circular.

4.3.1 A round pit was dug.

4.3.2 The body was placed in the pit in a contracted (flexed) upright position and covered with soil from the pit.

4.3.3 A few stones were placed on the burial in a roughly circular pattern.

4.3.4 Occasionally, the body was placed on its left or right side, also in a flexed position. The grave stones were placed in a roughly circular pattern.

4.3.5 Infant burials occur beneath hut floors or next to the entrance of the hut. What is important is that still born babies were placed in clay pots and buried in river banks, near springs and other wet areas, resulting in very small to large infant burial sites.

4.3.6 Graves since the early 1900's are elongated with bodies flat on their backs.

5 SURVEYING METHODS

The survey was done by vehicle and on foot looking for the following:

5.1 Disturbances of the normal plant growth;

5.2 The presence of secondary plant growth e.g. Sicklebush, etc.

5.3 The presence of alien plants;

5.4 The inspection of man-made disturbances like road cuttings, trenches, excavations, bulldozing and agricultural activities.

5.5 The inspection of natural disturbances by:

- ant works
- animal burrows
- erosion gulleys and dongas

5.6 The inspection of prime areas for archaeological activities such as confluences of rivers and streams, rocky outcrops, small rocky hills and prominent high peaks and cliffs in the mountains.

6 THE SURVEY LOCALITIES: DESCRIPTION, ARCHAEOLOGICAL OCCURRENCES AND RECOMMENDATIONS

6.1 Borrow Pit A

The area has many Marula trees and the natural plant growth, as evident in surrounding areas, is absent.

Limit excavations exist on the site, no archaeological material was found in the excavated soil.

Conclusion

Old agricultural land, no archaeological material was observed.

Recommendation

A borrow pit can be excavated at Locality A without any danger of damage to the cultural heritage.



6.2 Borrow Pit B

The natural plant growth of this area is absent on the site allocated for a borrow pit. Marula trees do, however, occur.

Conclusion

Old agricultural land, no archaeological material was observed.

Recommendation

A borrow pit can be excavated at Locality B without endangerment of the cultural heritage.





6.3 Borrow Pit C

The natural plant growth of this area is absent on the site allocated for a borrow pit. Marula trees do, however, occur.

Conclusion

Old agricultural land, no archaeological material was observed.

Recommendation

A borrow pit can be excavated at Locality C without endangerment of the cultural heritage.



6.4 Borrow Pit D

The site allocated for Borrow Pit D is a rocky outcrop, a potential area for cultural activity.

During the examination of the rocky outcrop packed stone structures were found. They are roughly circular in form. The stone structures are possible graves (see definition in 4.3).

Comparable structures were found in various parts of Venda during previous research projects. On further examination of these structures they proved to be graves.

These graves can only be identified by a few people with good ethno-historical and archaeological knowledge. Even the local people in the areas in which they occur cannot, for the larger part, identify them.

Good examples of these structures are at S23° 07.525 and E30° 22.451.

Recommendation

The rocky outcrop should be voided as several potential graves are present in this area.

When graves are to be disturbed every related or unrelated mishap amongst the surrounding population will be attributed to the excavators.

Should work be done in this area, Phase 2 archaeological work would need to commence to excavate and translocate the graves prior to any borrow pit excavation.





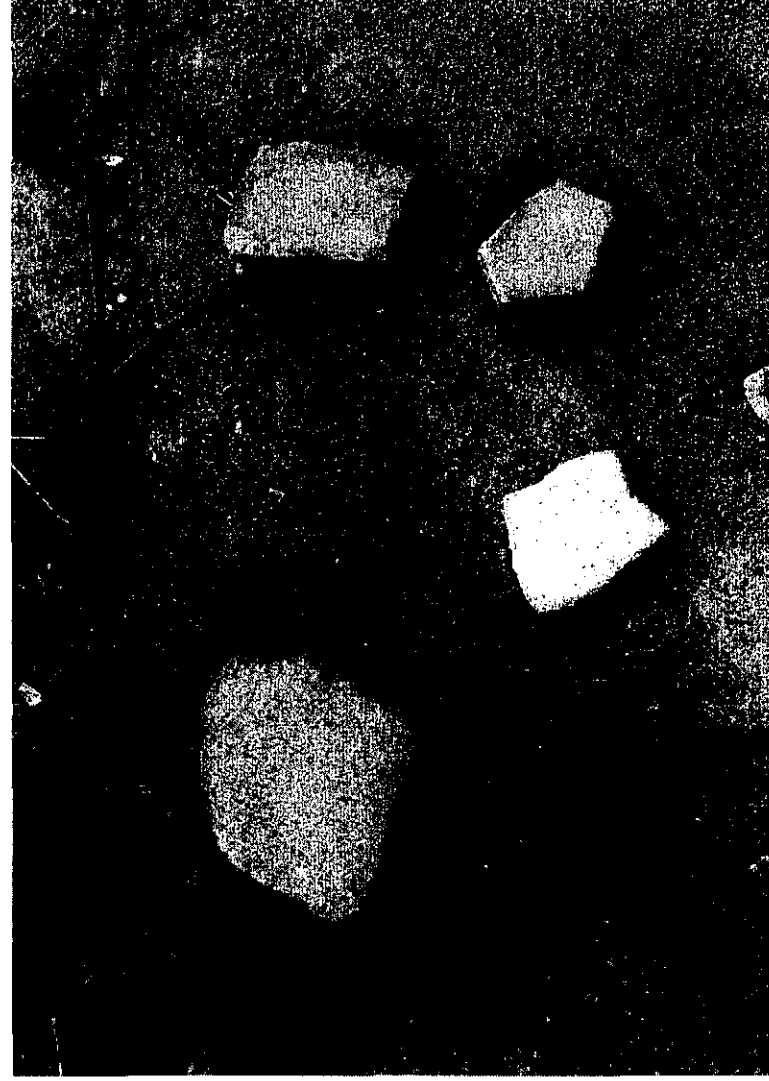
6.5 Borrow Pit E

Sisal plants, Bluegum trees and Sicklebush indicate former habitation and disturbance of the natural habitat.

Pieces of three cement floors were found. No other building material was present. The cement floors could have been part of corrugated iron or pole and dagha buildings.

Recommendation

Work can proceed. Care should, however, be taken if large quantities of porcelain are unearthed. An archaeologist should be informed and consulted.



6.6 Borrow Pit F

This borrow pit is situated on the bank of the Levuvhu River.

No disturbance of the natural plant growth was observed.

Close inspection of a cutting, formed by the building of a road towards and along the river, showed no evidence of archaeological or historical artefacts.

Recommendation

Work can proceed. Care should, however, be taken for the presence of Early Iron Age sites normally located beneath the ground surface. These sites contain clay pots in pits up to 2 m deep and burnt clay from pole and daga structures.

Infant burials could also be present in the form of clay pots with infant remains inside.





6.7 Borrow Pit G

Excavations exist on the site. No cultural remains were present in the excavated soil.

The natural habitat of this area is extensively disturbed by intensive utilisation for cattle farming and the erection of structures for cattle farming.

Damage on the site renders it useless for any archaeological research, even if archaeological sites were present.

Recommendation

Excavation of the borrow pit can proceed.





6.8 Borrow Pit H

The area has “Jakkalsbessie” trees and the natural plant growth, as evident in surrounding areas, is absent.

Limited excavations exist on the site, no archaeological material was found in the excavated soil..

Conclusion

Old agricultural land, no archaeological material was observed.

Recommendation

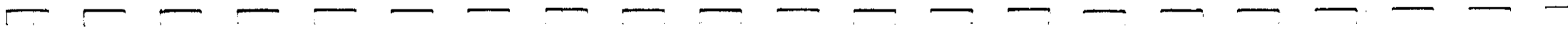
Borrow Pit H can be excavated at locality H without any danger to the cultural heritage.

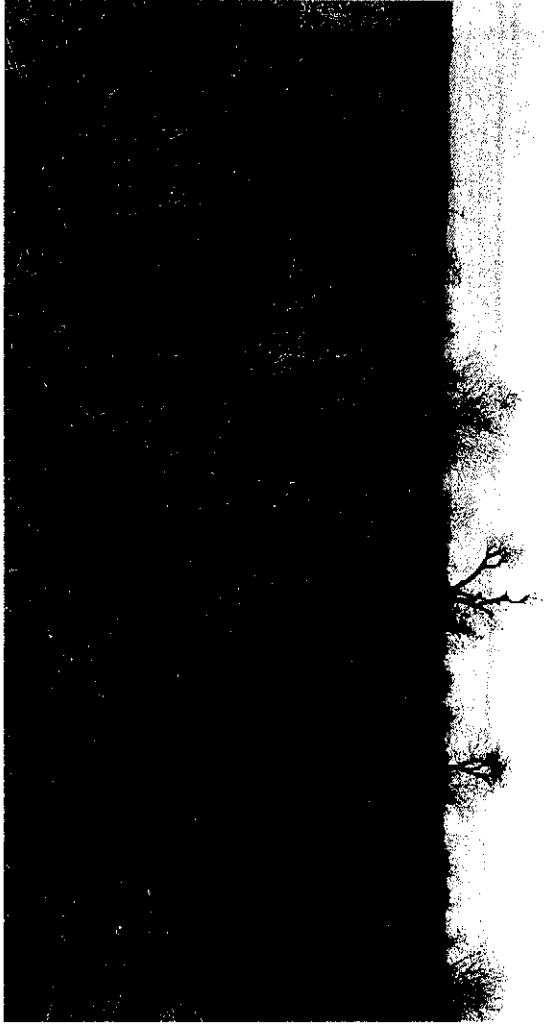


7 RECOMMENDATIONS FOR BORROW PITS A – G

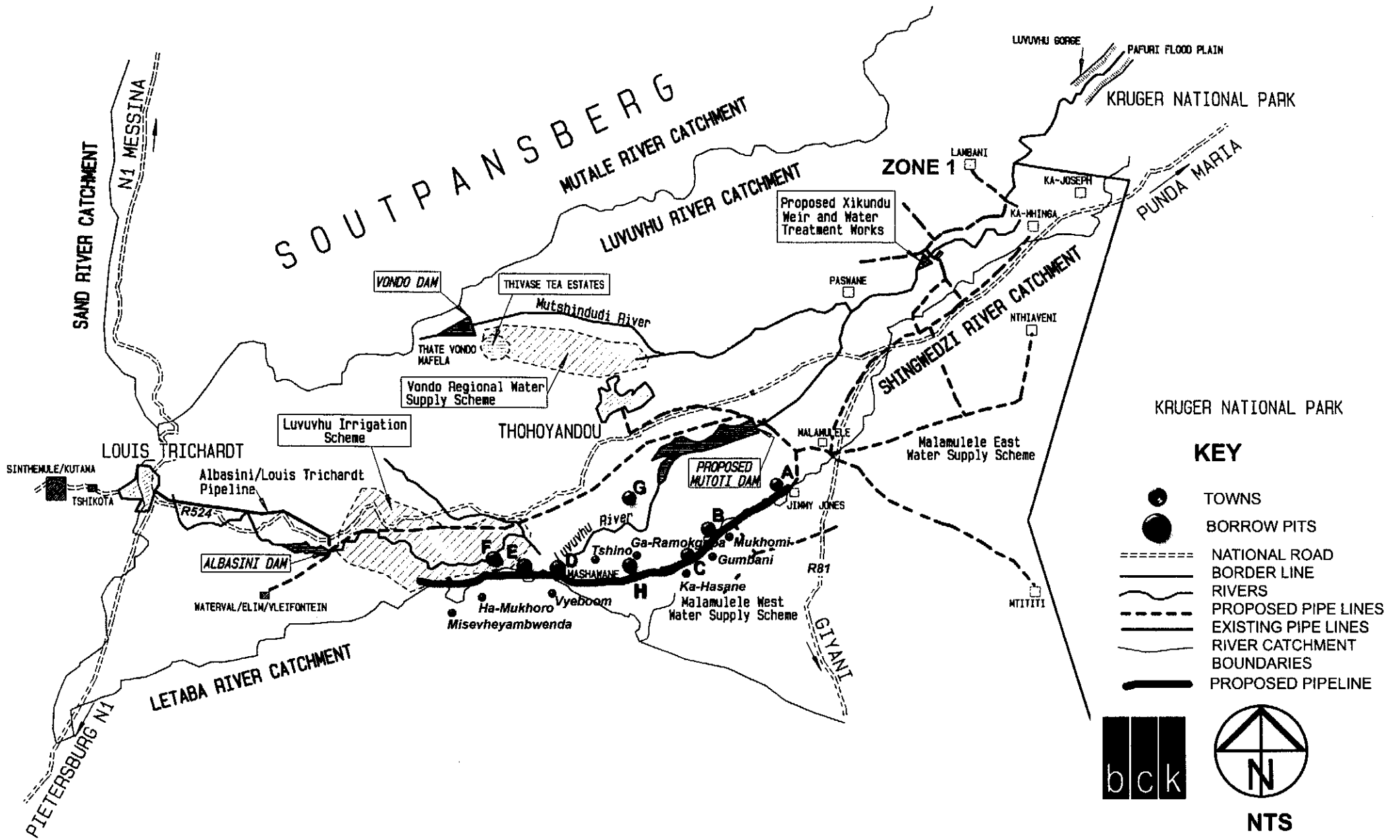
Excavation of the borrow pits can proceed, except Borrow Pit D where possible graves are present. Should work continue on this specific locality, a Phase 2 archaeological process is necessary to excavate and translocate the possible graves. The possible graves are classified as graves, because many structures occur together, thus forming a burial site.

H P PRINSLOO
Cell: 0824921309









LEVUVHU RIVER GOVERNMENT WATER SCHEME

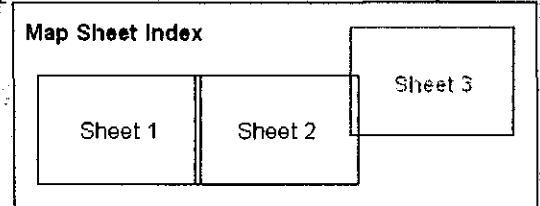
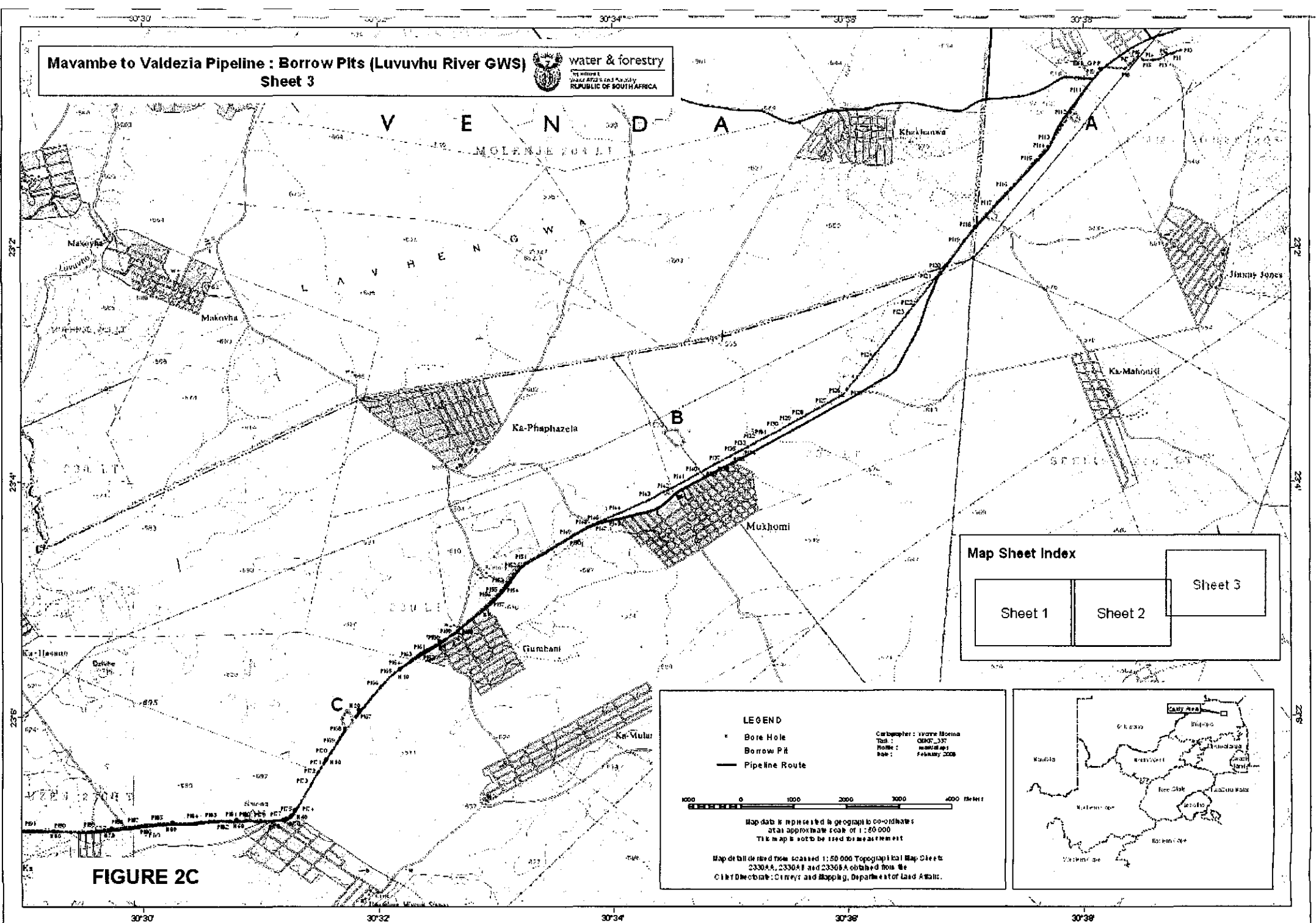
FIGURE 1: PROJECT LOCALITY PLAN



Mavambe to Valdezia Pipeline : Borrow Pits (Luvuvhu River GWS)
Sheet 3



water & forestry
 Department of Water and Forestry
 REPUBLIC OF SOUTH AFRICA



LEGEND

- Bore Hole
- Borrow Pit
- Pipeline Route

Cartographer : Ivonne Moseka
 Title : MAG_337
 Date : 14 February 2008

Map data is represented in geographical co-ordinates at an approximate scale of 1:50 000. This map is not to be used for measurement.

Map details derived from scanned 1:50 000 Topographical Map Sheets 2330AA, 2330AB and 2330BA obtained from the Chief Director: Cartography and Mapping, Department of Land Affairs.

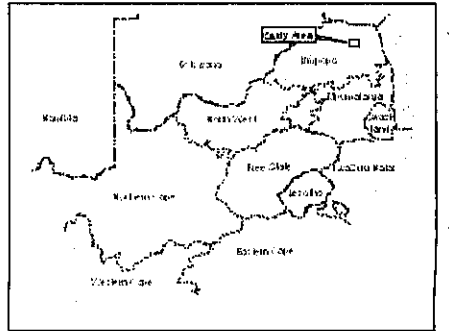
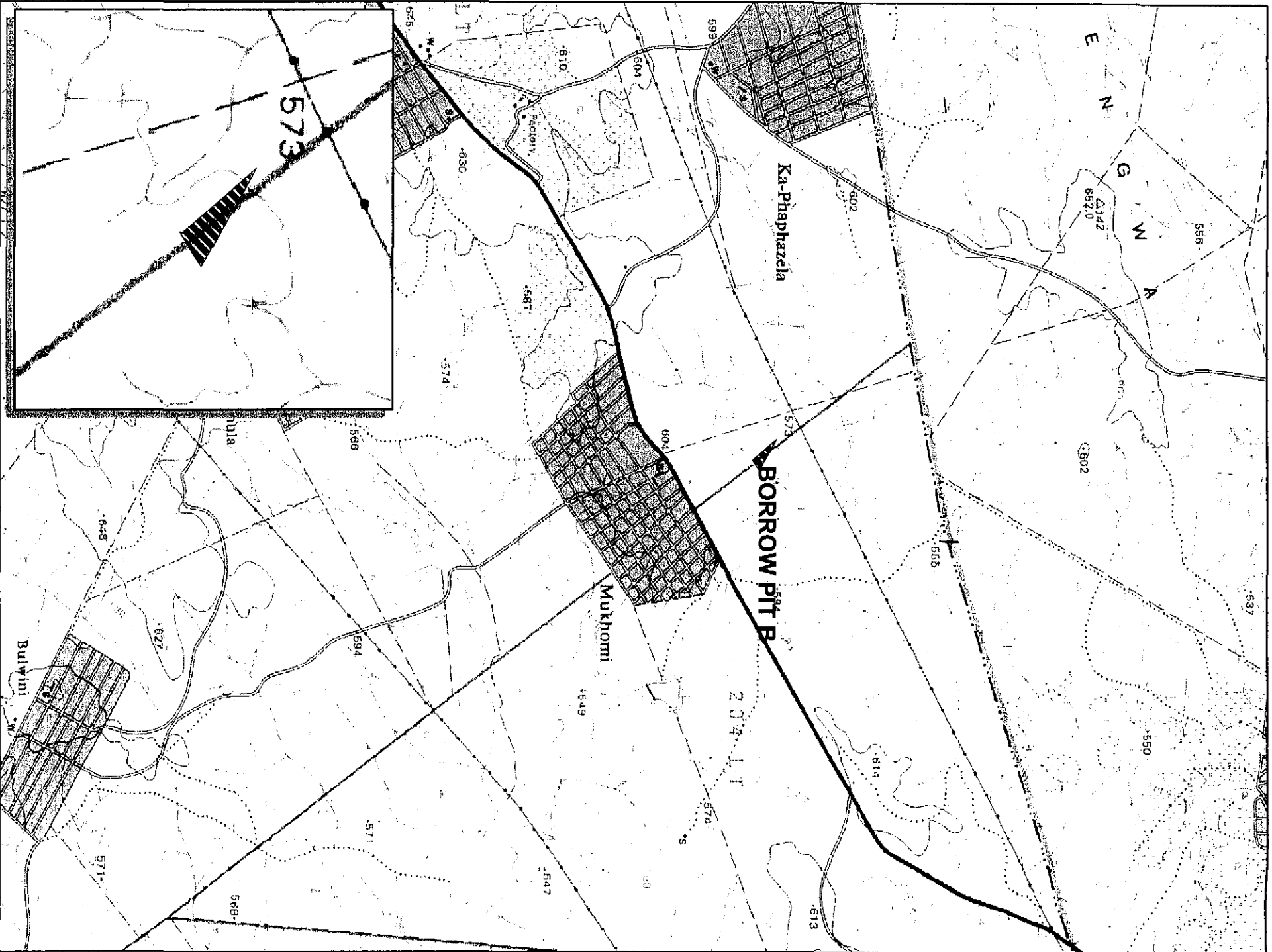


FIGURE 2C





NORTH

LEUVUHU RIVER GOVERNMENT WATER SCHEME



FIGURE 3:
LOCALITY MAP OF
BORROW PIT B



