

APPENDIX B:

**BORROW PIT LAYOUT, LOCALITY PLANS, MAPS AND
PHOTOS**



Figure A: Heuningneskloof borrow pit adjacent to the gravel service road



Figure B: Photo taken from within the Heuningneskloof borrow pit showing disused concrete sleepers

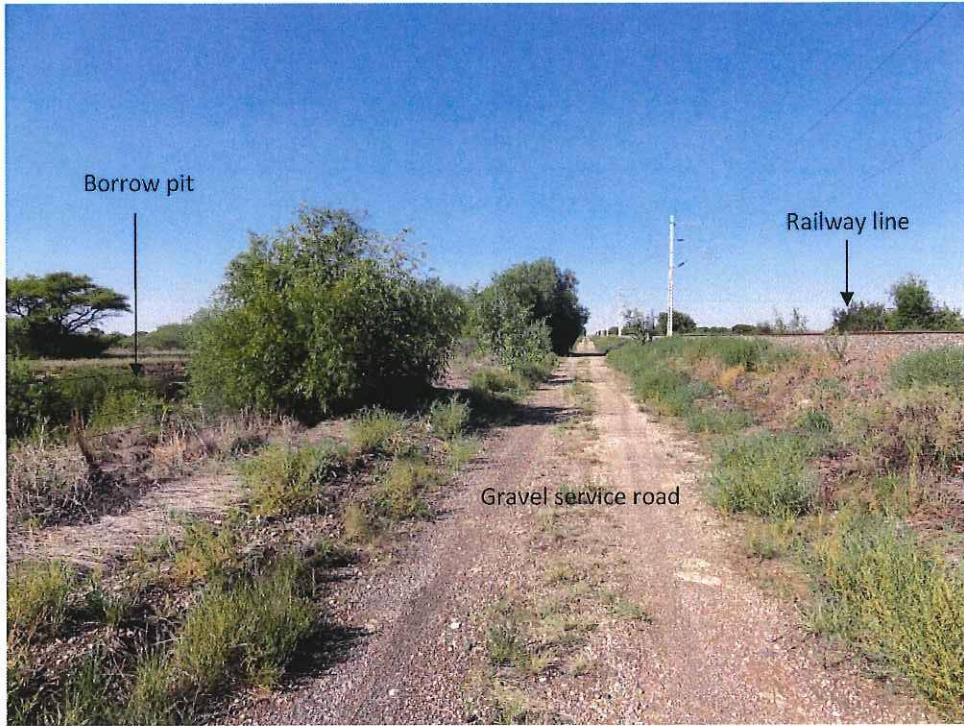
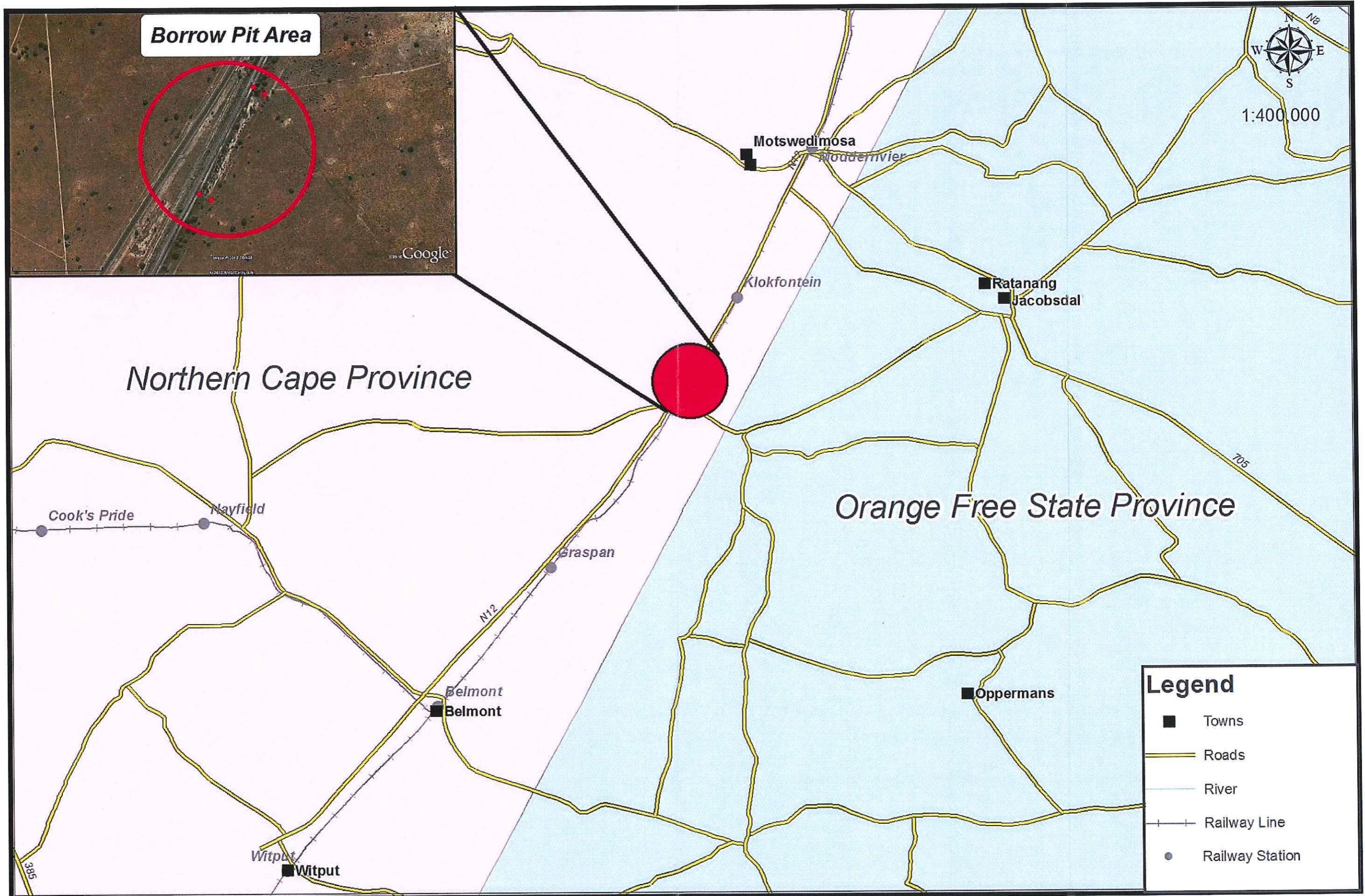
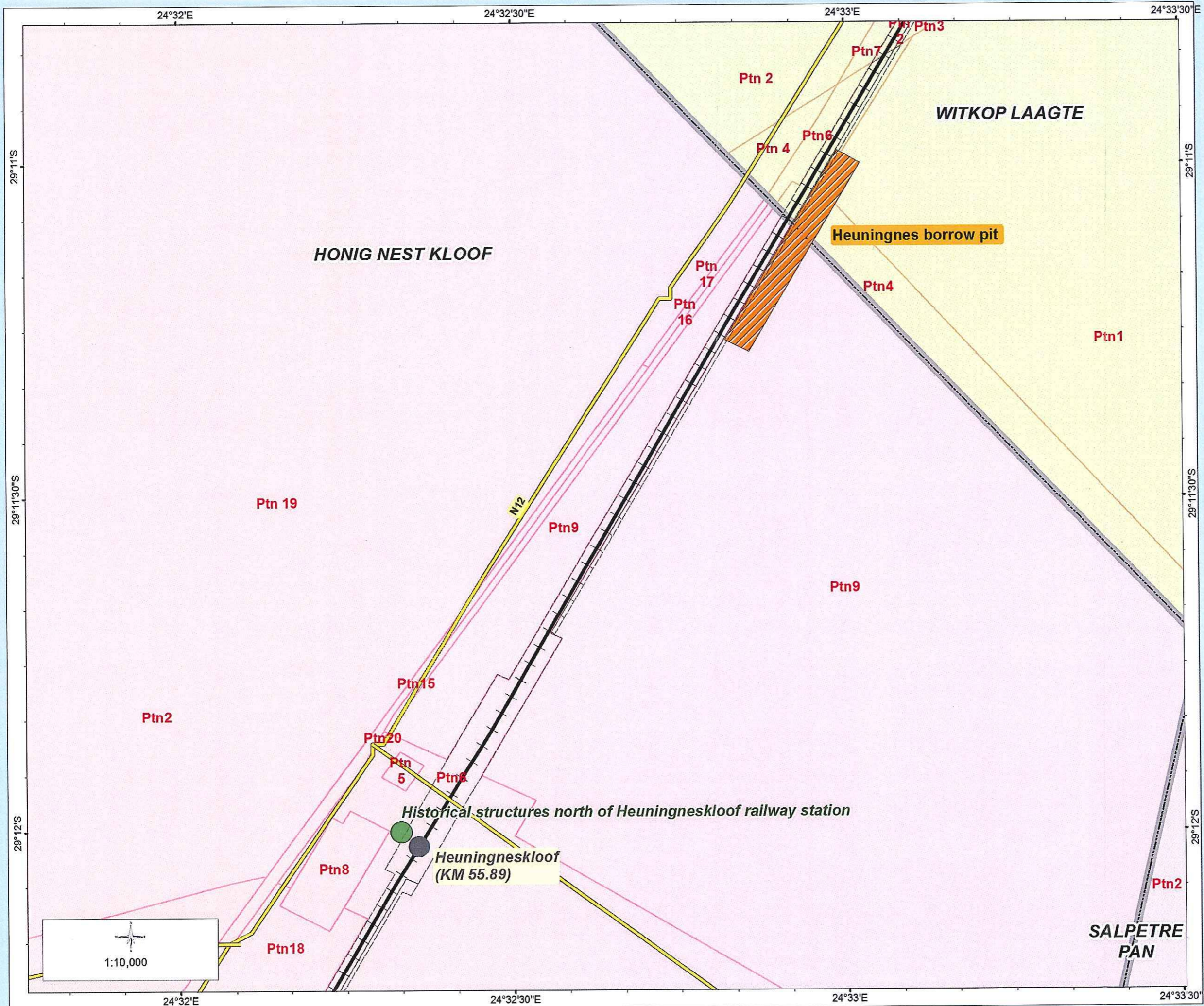


Figure C: Photo of the borrow pit, gravel service road and adjacent railway line

LOCALITY MAP: BORROW PIT HEUNINGNESKLOOF STATION





NGQURA 16 MTPA MANGANESE: Heritage sites - Heuningneskloof Borrow Pit

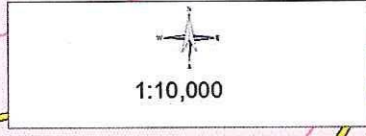
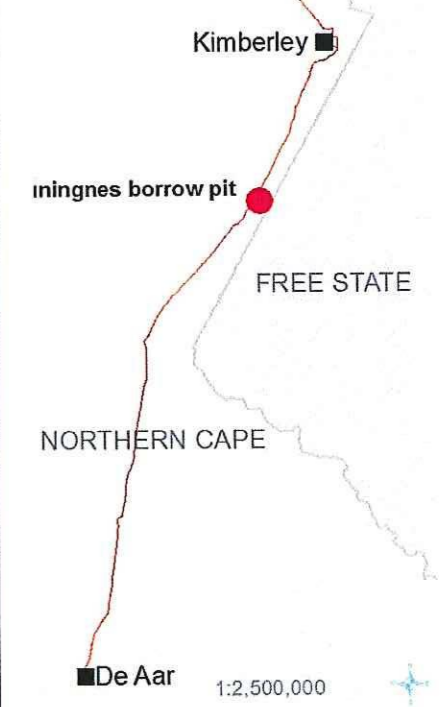
Legend

- Farm Boundary
- Farm Portion(Portion numbers indicated in red)
- Borrow Pit
- Heritage Sites
- Rail Line
- Road
- Rail Station
- Railway servitude

Data sources and acknowledgements

HATCH: Heritage site positions, Stations, Rail line
 DWA: River data
 NGI: Roads, Towns, Province boundaries
 Disclaimer:
 Although the greatest care has been taken to ensure that this map is up to date and accurate, HATCH gives no warranty, express or implied, as to the accuracy, reliability, completeness or utility of this information.

INSET MAP

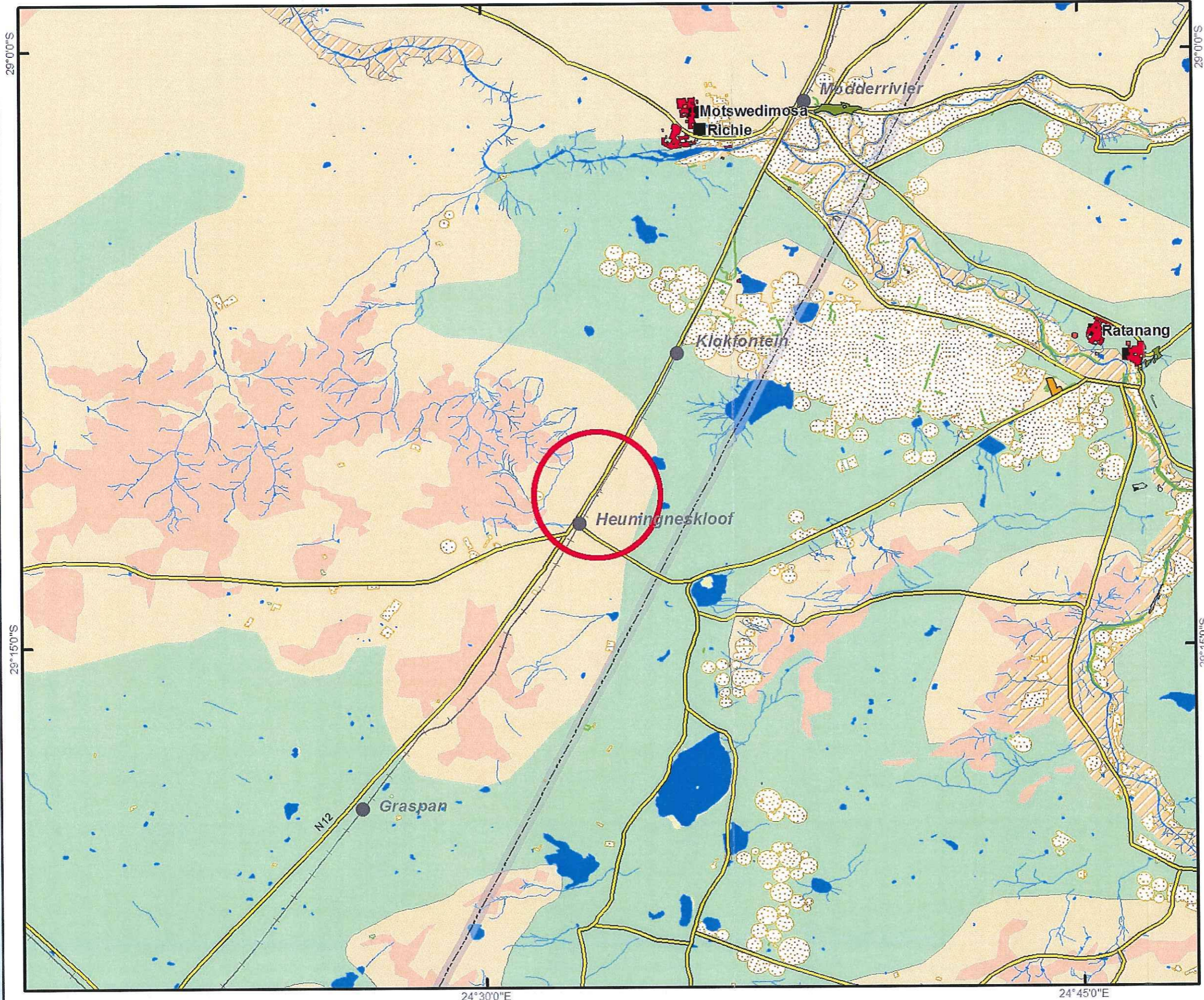


Map produced by:
 HATCH

Map Date: JANUARY 2013

Map represented in Geographic co-ordinates - not to be used for accurate measurements.

SENSITIVITY MAP: BORROW PIT HEUNINGNESKLOOF STATION



This map shows the vegetation- and land use types in the Heuningneskloof area

Data sources:
 All main feature data sets: Rural development and land reform (2008)
 Vegetation map: SANBI (2006)

LEGEND (main features)

- Towns
- Roads
- River
- + Railway Line
- Railway Station
- River area
- Vegetation

Classification:

Vegetation Map:

- Highveld Salt Pans (Least threatened)
- Kimberley Thornveld (Least threatened)
- Northern Upper Karoo (Least threatened)
- Upper Gariap Alluvial Vegetation (Vulnerable)
- Vaalbos Rocky Shrubland (Least threatened)

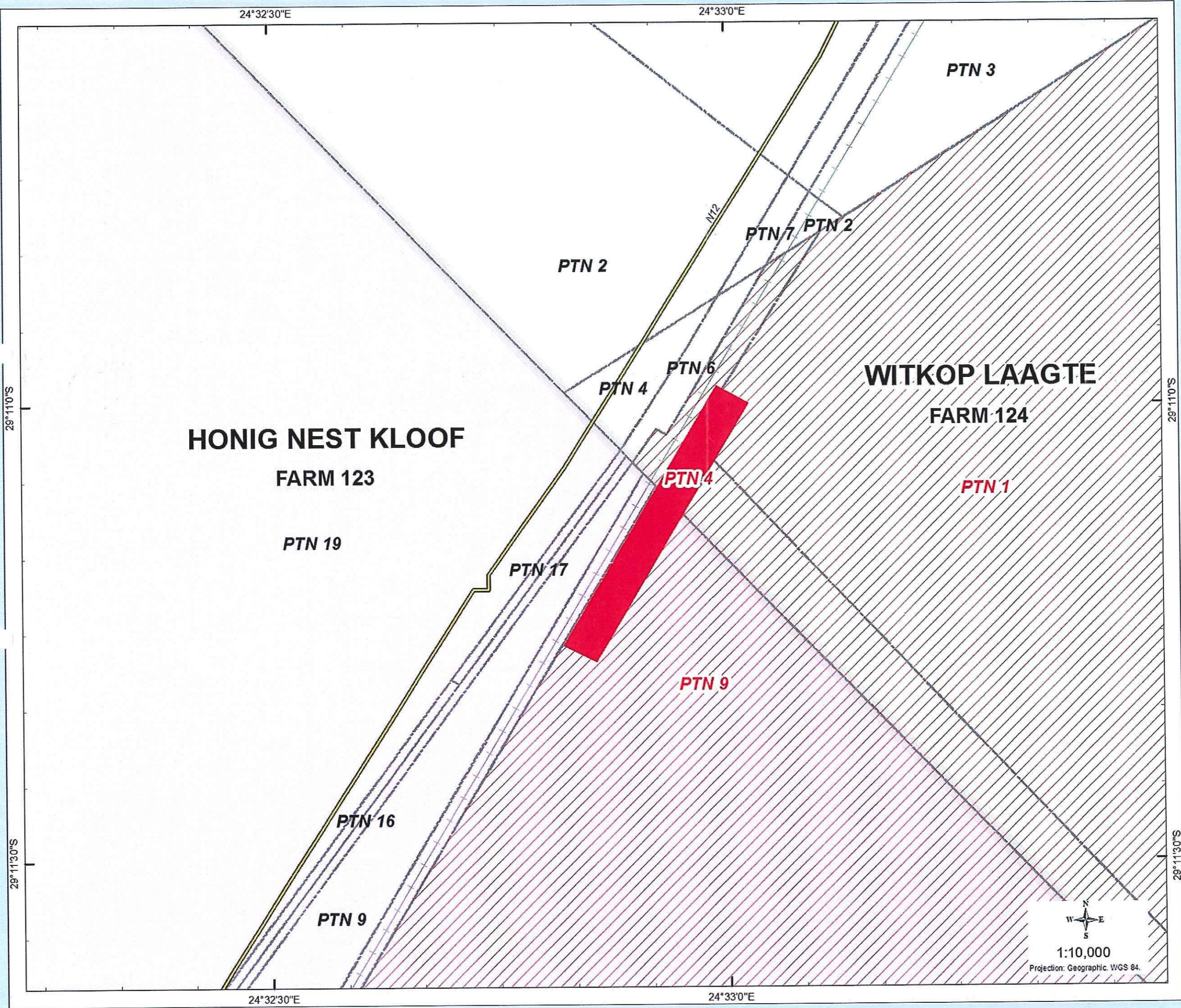
Vegetation Type:

- Cultivated land
- Orchard vineyard
- Woodland

Land use Type:

- Land use
- Caravan park
- Cemetery
- Golf course
- High urban density
- Low urban density
- Recreation area
- Rifle range

1:250,000



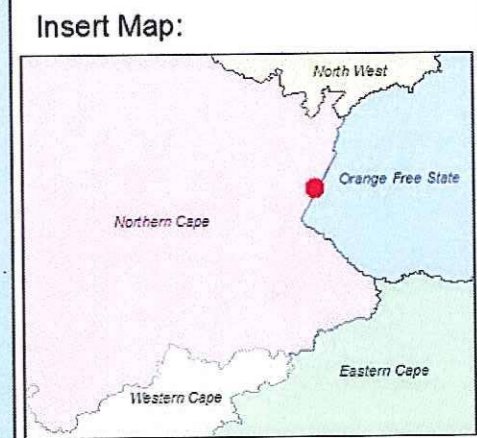
**NGQURA 16 MTPA
MANGANESE:
Cadastral map -
Heuningneshloof Borrow Pit**

Aknowledgements:
1/50 000 Vector data set was obtained from the
Chief Directorate: Surveys and Mapping (2008)

Disclaimer Example:
Although the greatest care has been taken to
ensure that this map is up to date and accurate,
HATCH gives no warranty, express or implied,
as to the accuracy, reliability, completeness or
utility of this information.

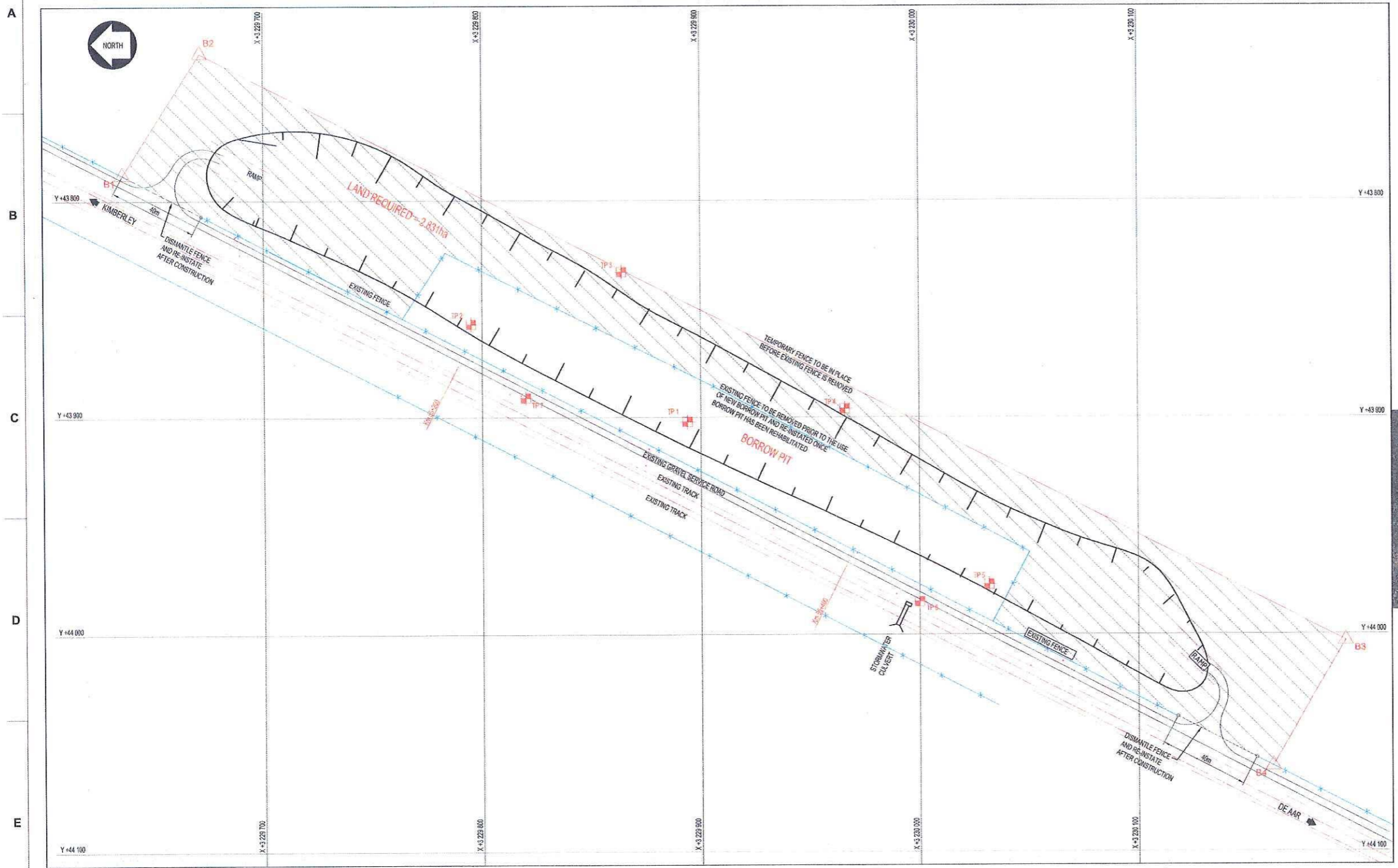
Legend

- Borrow pit
- Farm Boundary
- Farm Portions
- Farm Portions Affected
- Belmont Station
- Roads
- Towns
- Railway Line



1:10,000
Projection: Geographic, WGS 84.





| SETTING OUT TABLE | | |
|---------------------------------------|-----------|-------------|
| WGS 84 | | |
| BORROW PIT AREA EXTENT = 4.0 HECTARES | | |
| POINT | Y-COORD | X-COORD |
| B1 | 43788.187 | 3228635.228 |
| B2 | 43732.144 | 3229871.066 |
| B3 | 44003.131 | 3230195.236 |
| B4 | 44090.843 | 3230161.869 |

| COORDINATE LIST | | |
|----------------------------------|-----------|-------------|
| WGS 84 | | |
| GEOTECHNICAL TRIAL PIT LOCATIONS | | |
| POINT | Y-COORD | X-COORD |
| TP 1 | 43902.000 | 3228884.000 |
| TP 2 | 43857.000 | 3228735.000 |
| TP 3 | 43833.000 | 3228884.000 |
| TP 4 | 43896.000 | 3229966.000 |
| TP 5 | 43977.000 | 3230032.000 |
| TP 6 | 43985.000 | 3230080.000 |
| TP 7 | 43891.000 | 3229820.000 |

| BORROW MATERIAL | |
|--|---------------|
| APPROXIMATE BORROW QUANTITIES REQUIRED | |
| LAYER (TBA) | QUANTITY (m³) |
| BORROW MATERIAL | 100 000 |

NOTES
 1. REFER TO DOCUMENT NO. H500275-3-114-C-RPT 0027 MS, REPORT ON GEOTECHNICAL ENGINEERING SURVEY, FOR DETAILED GEOTECHNICAL TRIAL PIT RESULTS AND RECOMMENDATIONS.



BORROW PIT LOCALITY PLAN

LAYOUT SCALE 1:1000

NOTES
 1. DO NOT SCALE DRAWING - ONLY DIMENSIONS SHOWN TO BE USED.
 2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND LEVELS ON THE SITE AND NOTIFY THE NEC SUPERVISOR OF ANY VARIATIONS BEFORE CONSTRUCTION.

| NO. | DESCRIPTION | BY | CHKD | APPD | DATE |
|-----|----------------------|----|------|------|------|
| 0B | APPROVED FOR ENQUIRY | | | | |
| 0A | INTERNAL REVIEW | | | | |

REVISIONS
 This document including all design and information thereon is Confidential Intellectual Property of Transnet. Copyright and all other rights are reserved by Transnet. This document may only be used for its intended purpose.

| CONTRACTOR / CONSULTANT | | | | TRANSNET CAPITAL PROJECTS | | | |
|-------------------------|---------|------|----------|---------------------------|------|------|------|
| TITLE | NAME | SIGN | DATE | TITLE | NAME | SIGN | DATE |
| DRAWN | MUMJUMA | | 12 11 30 | | | | |
| CHECKED | P. ... | | 12 03 08 | | | | |
| DISC LEAD | | | | | | | |
| ENG. MANAGER | | | | | | | |
| PROJECT MGR | J. ... | | 08 03 13 | | | | |

HATCH DRAWING No: H339473-3212-10-042-0004-001
 Transnet Capital Projects
 TRANSNET
 237 MAHATMA GANDHI ROAD
 DURBAN TEL: 031 361 1696
 P.O. BOX 1073, DURBAN FAX: 0868 770815

NGQURA 16 MTPA MANGANESE
RAIL INFRASTRUCTURE
HEUNINGNESKLOOF STATION
BORROW PIT ON FARM HONIG NEST KLOOF 123
GENERAL ARRANGEMENT

| PROJECT NUMBER | OD | FBS | DIS | TYPE | DRAWING NO. | SHEET | REV | ID |
|----------------|-----|-----|-----|------|-------------|-------|-----|------------------------|
| H 3 3 9 4 7 3 | - 3 | - 2 | - 1 | - 2 | - C | - G | - A | - 0 0 4 - 0 1 - 0 B HA |

| DRAWING NO. | REFERENCE |
|-------------|--------------------|
| | REFERENCE DRAWINGS |

\$\$\$DATAENRYS\$