

20 February 2017



SLR Consulting
SLR Consulting (Fourways office)
Block 7 Fourways Manor Office Park
Cnr Roos and Macbeth Streets
Fourways,
Johannesburg,
2060

Attention: Ms. Mase Rantsieng

OPINION PERTAINING TO THE INFRASTRUCTURE CHANGES TO THE SURFACE INFRASTRUCTURE LAYOUT FOR THE TSHIPI BORWA MINE NEAR HOTAZEL, IN THE JOHN TOALO GAETSEWE DISTRICT MUNICIPALITY NORTHERN CAPE PROVINCE

1. Background

Professional Grave Solutions – Heritage Unit, completed a Heritage Impact Assessment (HIA) for Ntsimbintle Mining (Pty) Ltd on Portions 1, 2, 3 and 8 of the farm Mamatwan 331 and the farm Moab 700 in the Kgalagadi District Municipality of the Northern Cape Province (Figure 1). This study area covered the current Tshipi Borwa Mine footprint area (Figure 1).

During the 2009 HIA only one heritage feature of low heritage significance was identified. No further heritage resources were identified.

SLR Consulting (Pty) Ltd requested PGS Heritage (Pty) Ltd to assess the possible impact on heritage resources, if any, that will be associated with the changes to the approved surface infrastructure layout at the Tshipi Borwa Mine as part of an environmental management programme report (EMPr) amendment process.

Changes to Tshipi's approved layout include:

- an increase in the number, position, volume and layout of waste rock dumps;
- a change to the design, capacity and position of the sewage treatment plant;
- a change to the stormwater management system, position including additional storage;

- a change to the potable water storage facilities capacity and position;
- a change to the position of the office, plant, workshop and related infrastructure;
- a change to the number, position, volume and layout (footprint) of the ore stockpiles;
- a change to the design of the railway line and an increase in length;
- the establishment of an additional temporary run-off-mine (ROM) stockpile area;
- the establishment of a tyre bays;
- the establishment of additional weighbridges;
- the establishment of an additional topsoil stockpile area (No. 2); and
- a change in the position secondary crushing and screening plant.

This EMPr makes provision for the changes listed above including the addition of proposed facilities. Additional proposed facilities include the expansion of the approved topsoil stockpile area (No.1), expansion of topsoil stockpile No.2, the change in the position of the approved 78ML stormwater dam and establishment of a clean and dirty water separation system. In addition to this, Tshipi is proposing on mining the barrier pillar between the Tshipi Borwa Mine and South 32 (Mamatwan Mine).

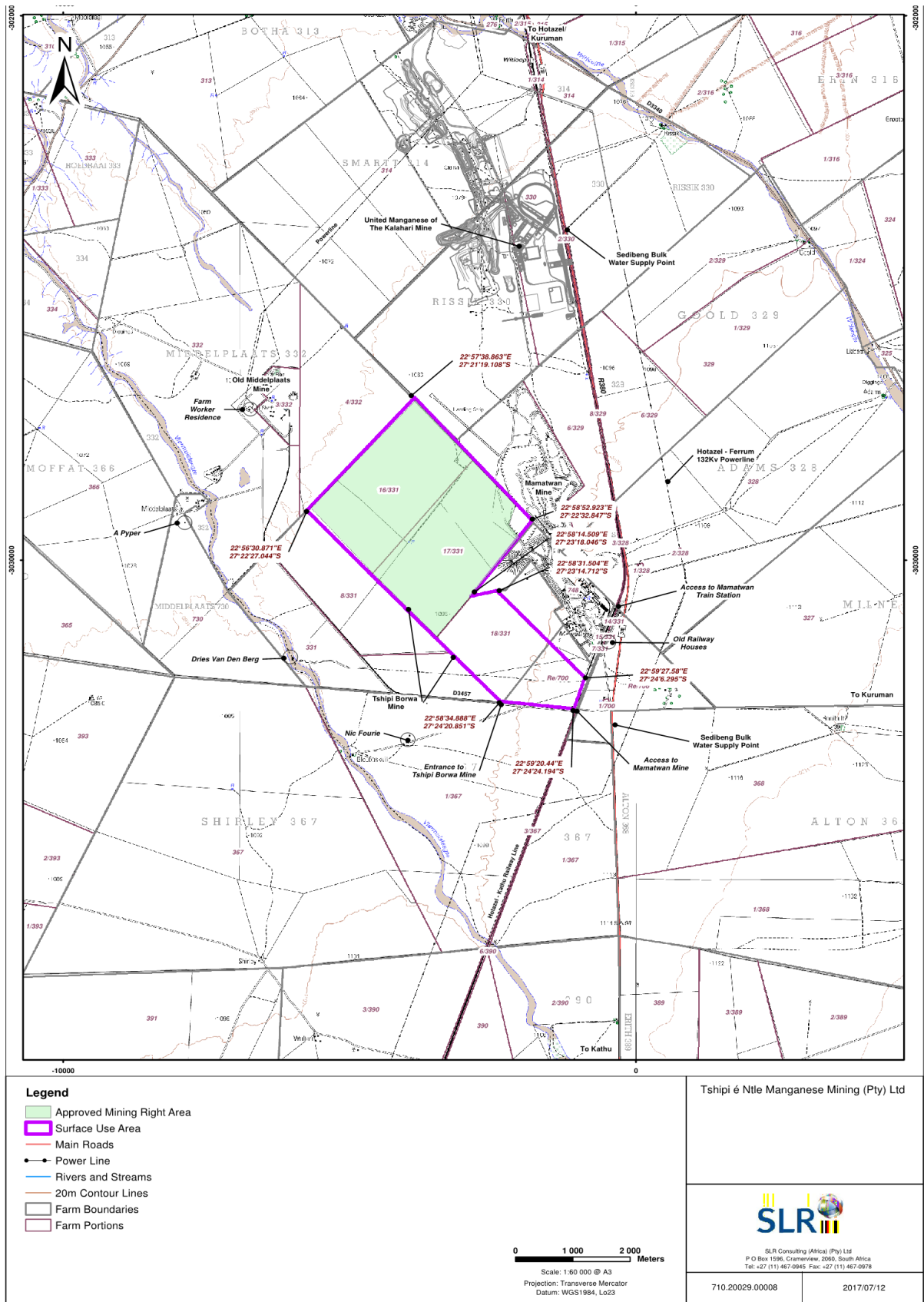


Figure 1 – Local setting

2. Current layout and possible impacts

Since 2009 the Tshipi Borwa Mine developed as an active manganese mine with a footprint covering the original study area (Figure 2). The location of the low significance heritage site is illustrated in Figure 2. The low significance heritage resource identified in 2009 has since been destructed as per recommendation of the 2009 HIA.

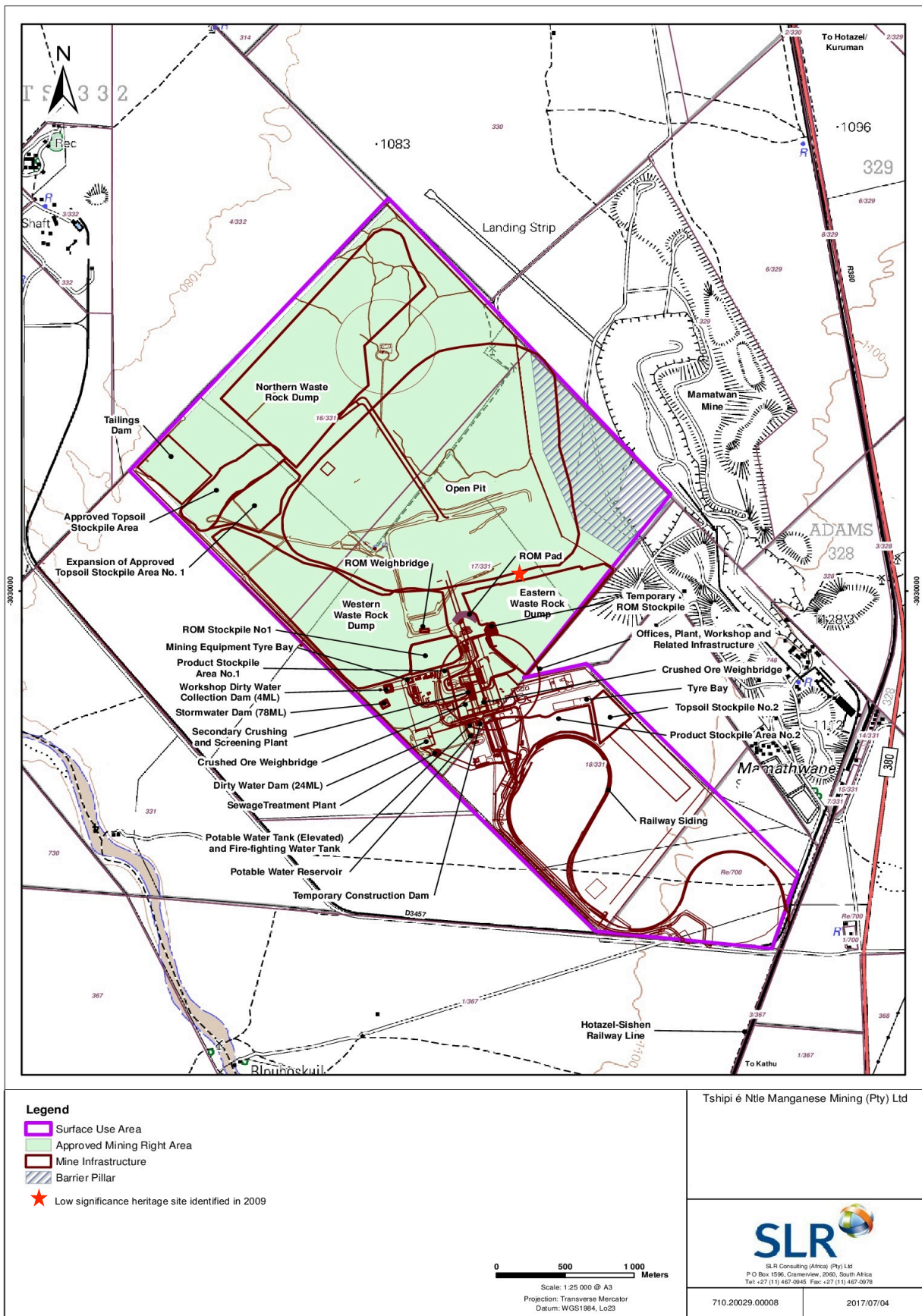


Figure 2 – Current layout

3. Comments from SAHRA

As part of the EMP amendment process, a public consultation process was undertaken. Comment received during the public consultation process are tabulated below.

Table 1: Issues and concerns raised by IAPs:

IAP details	Date of comment	Issue raised	Response
Kathryn Smuts	11 July 2013	<p>We have received notification of your intention to expand the infrastructure at the Tshipi Borwa Mine located on farms Mamatwan 331, Moab 700, to the south of Hotazel in the John Taolo Gaetsewe District Municipality. In terms of the National Heritage Act (NHRA) no 25 of 1999, heritage resources, including archaeological or palaeontological sites over 100 years old, graves older than 60 years, structures older than 60 years are protected. They may not be disturbed without a permit from the relevant heritage resources authority. This means that before such sites are disturbed by development it is incumbent on the developer (or mine) to ensure that a Heritage Impact Assessment is done. It must include the archaeological component (Phase 1) and any other applicable heritage components. Appropriate (Phase 2) management actions, which involved recording, sampling, and dating sites that are to be destroyed, must be done as required.</p> <p>Although it is stated in the Background Information Document (BID) submitted to SAHRA that no significant heritage resources or cultural materials have been found to occur at the Tshipi Borwa Mine, no indication of a professional assessment is given. SAHRA therefore requests that a full Heritage Impact Assessment is conducted prior to any development related activities occurring on site.</p> <p>Consequently, the quickest process to follow for the archaeological component would be to contract a specialist to provide a Phase 1 Archaeological Impact Assessment Report. This must be done before any development related activities take</p>	<p>As part of the approved EMP process that was undertaken for the mine, a heritage impact assessment was undertaken on the farm Moab 700 and Mamatwan 331. The findings of this study indicated that no sites of significance were located on these farms. As part of the project, an independent heritage specialist was appointed to confirm if the project would result in a change in the findings of the heritage study undertaken for the approved EMP. With reference to this opinion, there are no changes to the results and recommendations that were made.</p>

IAP details	Date of comment	Issue raised	Response
		<p>place. The Phase 1 Archaeological Impact Assessment Report will identify the archaeological sites and assess their significance. It should also make recommendations (as indicated in Section 38 of the NHRA) about the process to be followed. For example there may need to be a management actions phase (Phase 2) where the specialist will collect or excavate material and date the site. At the end of the process, the heritage authority may give permission for destruction of the sites.</p> <p>SAHRA is satisfied that, as all work will involve only shallow, surface excavations, no Palaeontological Impact Assessment will be necessary. Any other heritage resources that may be impacted such as built structures over 60 years old, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict, and cultural landscapes or viewsapes must also be assessed.</p>	
Kathryn Smuts from the South African Heritage Resource Agency	28 August 2013 via email	<p>SAHRA has reviewed the Draft Scoping Report for the proposed amendment to the Tshipi Borwa Manganese Mine. The DSR refers to a heritage report compiled in 2009 by Mr Henk Steyn. Although this report was compiled for another application on the same property, the area surveyed covers enough of that affected by the current application to serve as an adequate indicator of the likely heritage resources found on the properties.</p> <p>As indicated in the SAHRA review comment for that 2009 report, SAHRA supports the application provided that:</p> <ul style="list-style-type: none"> if any evidence of archaeological sites or artefacts (e.g., concentrations of stone artefacts, fossil bones, ostrich egg shell flasks), unmarked human burials or other heritage resources is found during mining activities, SAHRA APM Unit (Colette Scheermeyer/ Katie Smuts, tel: 021-4624502) must 	<p>As part of the approved EMPr process that was undertaken for the mine, a heritage impact assessment was undertaken on the farm Moab 700 and Mamatwan 331. The findings of this study indicated that no sites of significance were located on these farms. As part of the project, an independent heritage specialist was appointed to confirm if the project would result in a change in the findings of the heritage study undertaken for the approved EMPr. With reference to this opinion, there are no changes to the results and recommendations that were made.</p> <p>It is important to note that as part of the project, activities and infrastructure have remained within the boundaries of the Tshipi Borwa mine surface use and mining rights area. This is the area that was surveyed as part of the heritage assessment undertaken as part of the approved EMPr in 2009.</p> <p>It is important to note that even though no heritage sites are</p>

IAP details	Date of comment	Issue raised	Response
		<p>be alerted immediately, and a professional archaeologist and/or palaeontologist, depending on the nature of the finds, must be contacted as soon as possible to inspect the findings;</p> <ul style="list-style-type: none"> • If archaeological and/or palaeontological heritage resources are identified in the course of mining operations and related activities, a Phase 2 rescue/ sampling operation may need to be undertaken by a specialist. For this purpose, the relevant professional will require a management actions permit from SAHRA APM Unit in terms of section 35 of the National Heritage Resources Act (NHRA, No. 25 of 1999). On receipt of a satisfactory management actions (Phase 2) permit report from the archaeologist and/or palaeontologist, SAHRA APM Unit will make further recommendations in terms of the report. • Where bedrock is to be affected, a Palaeontological Desk Top study must be undertaken to assess whether or not the development will impact upon palaeontological resources, or at least a letter from an accredited palaeontologist mitigating for an exemption is needed to indicate that this is unnecessary. If the area is deemed sensitive, a full Phase 1 Palaeontological Impact Assessment will be required and if necessary a Phase 2 rescue operation might be necessary. 	<p>located within the Tshipi Borwa Mine, Tshipi is committed to contact SAHRA as well as a qualified specialist in the event of a chance find. Further to this, in the event of chance find, heritage resources cannot be disturbed or removed without the necessary permits.</p>
Natasha Higgitt	March 2017 2017	<p>While the operational mine area has been surveyed for heritage resources previously (SAHRIS Case ID 2904 http://sahra.org.za/sahris/cases/tshipi-emp-amendment and 3629 http://sahra.org.za/sahris/cases/portion-3-8-farm-mamatwan-no331). SAHRA requests that a Desktop Heritage Impact Assessment (HIA) is conducted by a qualified heritage practitioner for the proposed EMP amendment as part of the S&EIA Process. The Desktop HIA must also include a consolidation of all previous HIAs conducted for the project to ensure that heritage has been adequately assessed for the project. The Scoping Report and all appendices must be</p>	<p>As part of the approved EMP process that was undertaken for the mine, a heritage impact assessment was undertaken on the farm Moab 700 and Mamatwan 331. The findings of this study indicated that no sites of significance were located on these farms. Taking this into account, only a desktop study was done for the project. As part of the project, an independent heritage specialist was appointed to confirm if the project would result in a change in the findings of the heritage study undertaken for the approved EMP. With reference to this opinion, there are no changes to the results and recommendations that were made.</p>

IAP details	Date of comment	Issue raised	Response
		submitted so that an informed comment may be issued. Should you have any further queries, please contact the designated official using the case number quoted above in the case header.	It is important to note that even though no heritage sites are located within the Tshipi Borwa Mine, Tshipi is committed to contact SAHRA as well as a qualified specialist in the event of a chance find. Further to this, in the event of chance find, heritage resources cannot be disturbed or removed without the necessary permits.

4. Conclusion

It is our opinion that the additional changes to the infrastructure layout that forms part of the EMPr amendment will not have an impact on heritage resources and will further not present a loading on any cumulative impact on heritage resources in the area. PGS Heritage has performed heritage surveys for this current mine as well as the UMK and Mamatwan mines to the north and north east of the Tshipi Borwa mine as well as numerous survey toward Hotazel, and can with confidence indicate that the load on the cumulative impact of heritage resources will be negligible as the bulk of heritage finds are confined to the riverine areas about 1 km to the west of the study area.

Any further questions can be directed to me.

Regards



Wouter Fourie

Accredited Professional Archaeologist (ASAPA), Accredited Professional Heritage Practitioner (APH)

Director

PGS Heritage (Pty) Ltd

Declaration of Independence

I, Wouter Fourie, declare that –

General declaration:

- I act as the independent archaeological specialist in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting heritage impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in section 38 of the NHRA when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- All the particulars furnished by me in this form are true and correct;
- I will perform all other obligations as expected of an archaeological specialist in terms of the Act and the constitutions of my affiliated professional bodies; and
- I realise that a false declaration is an offence in terms of regulation 71 of the Regulations and is punishable in terms of section 24F of the NEMA.

Disclosure of Vested Interest

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;

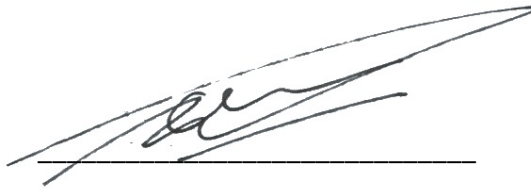
HERITAGE CONSULTANT -

PGS Heritage (Pty) Ltd

PRINCIPAL HERITAGE PRACTITIONER

Wouter Fourie

SIGNATURE -

A handwritten signature in black ink, appearing to be 'Wouter Fourie', is written over a solid horizontal line. The signature is stylized and slanted upwards to the right.

**PROFESSIONAL CURRICULUM
FOR WOUTER FOURIE**



Name: Wouter Fourie
Profession: Archaeologist
Date of birth: 1974-04-30
Parent Firm: PGS Heritage (Pty) Ltd
Position at Firm: Director
Years with firm: 14
Years of experience: 20
Nationality: South African
HDI Status: White

EDUCATION:

Name of University or Institution : University of Pretoria
Degree obtained : BA
Major subjects : Archaeology, Geography and Anthropology
Year : 1996

Name of University or Institution : University of Pretoria
Degree obtained : BA [Hons] (Cum laude)
Major subjects : Archaeology and Geography
Year : 1997

Name of University or Institution : National Nuclear Regulator
Certificate obtained : Radiation Protection Officer Certificate
Year : 1999

Name of University or Institution : University of Cape Town
Certificate obtained : Project Management Foundations short course
Year : 2015

Name of University or Institution : University of Cape Town
Certificate obtained : MPhil – Conservation of Built Environment
Year : Current

Professional Qualifications:

Professional Heritage Practitioner – Association of Professional Heritage Practitioners (APHP)
Professional Archaeologist - Association of Southern African Professional Archaeologists -
Professional Member – No 043

CRM Accreditation

Principal Investigator - Grave Relocations
Field Director – Iron Age
Field Supervisor – Colonial Period and Stone Age
Accredited with Amafa KZN

Languages:

Afrikaans
English – Speaking (Good) Reading (Good), Writing (Good)

KEY QUALIFICATIONS

Archaeological Mitigation and excavations, Cultural Resource Management and Heritage Impact Assessment Management, Project management, Archaeology, Anthropology, Applicable survey methods, Fieldwork and project management, Geographic Information Systems

CONFERENCE PAPERS AND PUBLICATIONS

- 2004 - Research poster, Probabilistic Modeling of Archaeological Sites, Pilanesberg National Park. *South African Association of Archaeologist Conference, Kimberley*
- 2005 - 'The Return of a King' - The repatriation of King Michael Tjiseseta, *Paper delivered at the conference of the Pan-African Archaeological Association for Prehistory and Related Studies in Gaborone, Botswana, in July 2005.*
- 2005 - Paper delivered at the Three Universities Seminar, University of Pretoria: The repatriation of King Michael Tjiseseta.
- 2006 - *Paper delivered at ASAPA conference, Pretoria. Tavistock: Good grave relocation practice.*
- 2008 – Probabilistic Modeling of archaeological sites, Pilanesberg National Park. Paper delivered at the *Association of Southern African Professional Archaeologists – Conference, Cape Town*
- 2008 - Archaeological Impact Assessments within South African legislation. *South African Archaeological Bulletin 63 (187): 77–85, 2008*
- 2011 - Archaeology, Physical Anthropology and DNA analysis – The case of Queen Thomo Jezangani Ndwandwe. *Association of Southern African Professional Archaeologists – Conference, Swaziland*
- 2011 – POSTER – H.S. Steyn, W. Fourie and M. Hutten. Kappa Omega Transmission Line: Findings from an Archaeological Walk Down. *Association of Southern African Professional Archaeologists – Conference, Swazi Land*
- 2011 – POSTER – W. Fourie and J. van der Walt. Sterkspruit: Micro-layout of Late Iron Age stone walling, Lydenburg, Mpumalanga. . *Association of Southern African Professional Archaeologists – Conference, Swazi Land*
- 2011 – POSTER – P.D. Birkholtz, W. Fourie and W.C. Nienaber. Onverwacht: Archaeological and Historical Analysis of Swazi settlement layout. *Association of Southern African Professional Archaeologists – Conference, Swazi Land*
- 2012 - Heritage management: compliance or just a nuisance during the Environmental Management Programme implementation. 17th annual IAIA conference, Somerset West, Western Cape.
- 2016 - Implementing Responsible Grave Relocation – The case for Comprehensive Grave Relocation Action Plan for Integrated Project Management. 21st annual IAIA conference, Port Elizabeth, Eastern Cape.

INTERNATIONAL PROJECTS

- 2016 – 2017 - Anadarko International – Grave Relocation Action Plan for the Afungi Liquid Natural Gas Project, Palma, Northern Mozambique
- 2013 – 2016 SLR Consulting - Heritage Impact Assessment, Manica Gold Project, Manica Province, Mozambique
- 2012 - SLR Consulting - Heritage Impact Assessment, Namoya SALR – Gold Mine, Maniema Province in the eastern Democratic Republic of Congo (DRC)
- 2012 - Consolidated Contractors Group S.A.L. -Mitigation and Grave Relocation at Site 37-A3-16 on the Mahalpye to Kudumatse Road Construction Project Central District, Botswana
- 2010 - Digby Wells & Associates - Grave Relocation Procedures and Consultation – RAP Process, Kibali Gold Mine, Watsa, Oriental Province, Democratic Republic of the Congo

- 2010 - Digby Wells & Associates - Archaeological Study, Kibali Gold Mine, Watsa, Oriental Province, Democratic Republic of the Congo
- 2008 - Digby Wells & Associates - Mmamabula Mining Project CIC, Botswana

HERITAGE IMPACT ASSESSMENTS

South African

Below a selected list of over 400 heritage studies completed

- Gautrain Management Agency (SiVEST Environmental) – Gautrain Rapid Rail Link – Feasibility Study – Heritage Specialist
- GRAP103 – Heritage Register for the Ekurhuleni Metropolitan Municipality, Aurecon
- Solar Reserve (Worley Parson RSA), Heritage Impact Assessment, Humansrus Solar Park, Daniëlsskuil, Northern Cape
- Solar Reserve (Worley Parson RSA), Heritage Impact Assessment, Rooipunt Solar Park, Upington, Northern Cape
- Solar Reserve (Worley Parson RSA), Heritage Impact Assessment, Arriesfontein Solar Park, Daniëlsskuil, Northern Cape
- Solar Reserve (Worley Parson RSA), Heritage Impact Assessment, Slypklip Solar Park, Kimberley, Northern Cape
- Mainstream Renewable Power South Africa (SiVest), Heritage Impact Assessment, Loeriesfontein Solar Park, Northern Cape
- Mainstream Renewable Power South Africa (SiVest), Heritage Impact Assessment, De Aar Solar Park, Northern Cape
- Mainstream Renewable Power South Africa (SiVest), Heritage Impact Assessment, Droogfontein Solar Park, Kimberley, Northern Cape
- Kumba Iron Ore (Synergistics), Heritage Impact Assessment, Shishen Relocation Project, Northern Cape
- Eskom, Archaeological Walkdown, Hydra-Perseus Transmission line (260km), Northern Cape Province
- Nature Conservation Corporation, Phase 2 Heritage Impact Assessment and EMP, Gamma-Omega Transmission line (550km), Western Cape Province
- Aurecon, Archaeological Walk Down and EMP, Eros- Neptune Transmission Line (380km), Transkei, Eastern Cape Province
- Indwe Environmental Services, Heritage Impact Assessment, Lady Slipper Development, Uitenhage, Eastern Cape
- West Brook, Grave Investigation, Port Elizabeth, Eastern Cape
- Nature Conservation Corporation, Phase 2 Heritage Impact Assessment and EMP, Hydra-Perseus Transmission line (260km – selected areas), Northern Cape Province
- GCS (Pty) Ltd, Archaeological Impact Assessment, Tormin Mineral Sands, Namakwaland Coast, Western Cape
- Strategic Environmental Focus, Heritage Impact Assessment, Kalahari Manganese, Hotazel, Northern Cape
- BHP Billiton, Heritage Impact Assessment, Hotazel Manganese Metals, Hotazel, Northern Cape
- BHP Billiton, Initial Heritage Management Plan for prospecting operations, Northern Cape
- Pikwane Diamonds, Heritage Impact Assessment – Waterloo Street, Kimberley, Northern Cape
- TGME, Heritage Assessment – Browns Hill, Pilgrim’s Rest, Mpumalanga,
- Digby Wells & Associates Heritage Assessment – Koert Louw Zyn Pan Colliery, Limpopo
- Bohlweki Environmental, Heritage Mitigation, Springkell Development, Modderfontein
- Digby Wells & Associates, Heritage Impact Assessment, Khutala Colliery, Mpumalanga
- TWP Environmental, Heritage Impact Assessment, Wesizwe Platinum, North West Province
- Bohlweki Environmental, Heritage Impact Assessment, Stone River Arch Development,

Alberton, Gauteng

- Digby Wells & Associates, Heritage Impact Assessment, Riversdale Colliery, Vryheid, KwaZulu-Natal
- Digby Wells & Associates, Heritage Impact Assessment, Top Star Dump, Johannesburg, Gauteng
- Bohlweki Environmental, Heritage Impact Assessment, Johannesburg Zoological Gardens, Gauteng Province

GRAVE RELOCATIONS

- 2015-7 - Optimum Coal Phase 2 – Relocation of 100 graves, Glencore. Pullenshope, Mpumalanga
- 2014 – Bigen Africa. Lufhereng Grave Investigation, Soweto, Gauteng. Principal Investigator.
- 2014 – Basil Read. Savanna City Residential Development. Relocation of 55 graves. Orange Farm, Gauteng. Principal Investigator.
- 2013-6 – Kalgold Project Harmony Gold. Relocation of 20 graves. Kraaipan, North West Province. Principal Investigator.
- 2013-4 – Ivanhoe Mining. Relocation of graves for the Platreef project. Mokopane, Limpopo Province. Principal Investigator.
- 2013-4 – Eskom SOC, Eskom Mookodi Substation grave relocation of 6 graves. Vryburg, North West Province. Principal Investigator.
- 2013 – Ntshovelo Coal. Relocation of 8 graves. Arbor, Mpumalanga.
- 2013 – Msobo Coal. Relocation of 9 graves for the Msobo Coal Lilliput project. Breyten, Mpumalanga. Principal Investigator.
- 2012-4 - Likweti Holdings, Likweti Grave Project, 1 Grave. Nelspruit, Mpumalanga. Principal Investigator
- 2012-3 - Fleurhof Holdings, Fleurhof rescue and grave relocation of 70 graves. Florida, Gauteng. Principal Investigator
- 2012 – 4 - Calgro/M3, Fleurhof grave rescue and relocation, 100 graves Florida, Gauteng. Principal Investigator
- 2012 - Department of Arts and Culture. JL Dube memorial site restoration. Ohlange Institute, Inanda, KwaZulu-Natal. Principal Investigator.
- 2012 - Delmas Super Centre. Delmas grave relocation of 1 grave. Delmas, Mpumalanga.
- 2012 - Anglo Coal, New Largo Colliery. 170 Graves. Ogies, Mpumalanga. Principal Investigator
- 2011-3 - Mashala Resources, Ferreiras Colliery, Ermelo. Relocation of 11 graves. Principal Investigator.
- 2011 - Xtsrata, ATCOM. Bierman cemetery. 14 graves. Principal Investigator Relocation of 8 graves, Kudumatse Road Upgrade, Botswana. Principal Investigator
- 2011 - Seaton Thompson, Kameeldoorn grave relocation. Single grave. Zeerust. Principal Investigator
- 2011 - SAHRA, Relocation of the remains of Queen Thomo KaNdwandwe, Durban, KZN. Principal Investigator
- 2011 - Roadcrete, Lanseria-Randburg Road Upgrade 6 graves, Randburg. Principal Investigator.
- 2011 - New Clydesdale Coal, Relocation of 7 graves from coal project, Witbank. Field Director, under WC Nienaber as PI
- 2011 - Kudumatse Road works. Removal of 11 Iron Age graves. Kudumatse, Botswana. Principal Investigator
- 2010-3 - Optimum Colliery, Hendrina, Mpumalanga. Relocation of 65 graves. Field Director, under WC Nienaber as PI
- 2010 - Investigation on the relocation of 3000 graves, Kibali, DRC. Principal Investigator

- 2010 - Eyethu Coal, Relocation of 7 graves from coal project, Delmas. Field Director, under WC Nienaber as PI
- 2008 - WBHO, Relocation of 5 graves from South Deep tailings project, Fochville Gauteng Province. Field Director, under WC Nienaber as PI
- 2006 - Highland Gate Development. Dullstroom. Gate Developments. Relocation of 39 Graves. Field Director.
- 2006 - Cosmo City Development, Johannesburg. Basil Read Pty Ltd. Relocation of 135 graves. Field Director.
- 2003 - Tselentis Colliery, Duiker Mining. Relocation of 80 graves. Field Director
- 2003 - Alveda Park Development, NewHco. Relocation of 114 graves. Field Director
- 2002 - V3, Brakfontein, Centurion. Reconnaissance excavation on possible grave in new development area. Field Director
- 2002 - Kriel Collieries, Kriel. Investigation into the position of relocated graves on Kriel Golf Course. Principal Investigator
- 2002 - Gardener Ross Golf and Country Estate, DEVCO. Reconnaissance Excavation on possible graves. Field Director
- 2001-2 - iMpunzi Division of Duiker Mining, Witbank, Grave Relocation of 907 graves. Field Director

MITIGATION WORK

1. 2014-2017 - Raising of the Clanwilliam Dam – Heritage Mitigation, Clanwilliam, Western Cape. **Project Manager**
2. 2013 - Kappa Gamma, MSA Mitigation, Touws Rivier, Western Cape. **Field Director, Dr M.M. van der Ryst, PI**
3. 2012 - Misgund N1 Interchange upgrade, Iron Age Phase 2 excavation, Johannesburg, Gauteng Province. **Field Director, under Prof. JCA Boeyens, PI**
4. 2011 – Eskom 400kV – Dinaledi Spitskop – Phase 2 Historical Site, Mitigation - **Field Director, J.P Behrens, PI**
5. 2011 – Eskom 400 kV – Dinaledi Marang – Phase 2 Middel Stone Age Site, Mitigation **Field Director, Dr M.M. van der Ryst, PI**
6. 2011 – Eskom 400 kV – Dinaledi Marang – Phase 2 Late Iron Age, Mitigation - **Field Director, under Prof. JCA Boeyens, PI**
7. 2011 – Eskom 400 kV – Dinaledi Marang – Phase 2 Early Stone Age Site, Mitigation - **Field Director, under Dr K. Kumann, PI**
8. 2011 - Eskom 400kV – Dinaledi-Spitskop – Phase 2 Middel Stone Age Site, Mitigation - **Field Director, under Dr M.M van der Ryst, PI**
9. 2009 - Nkomati Mine, Onverwacht Phase 2 excavations, Badplaas, Mpumalanga. **Field Director, under Prof. TN Huffman, PI**
10. 2008 - TWP, Wesizwe Platinum Phase 2 excavations, Pilanesberg, North West Province. **Field Director, under Prof. TN Huffman, PI**
11. 2008 - The Heads Trust, Heritage Assessment and phase 2 documentation, and monitoring for Lydenburg Ext 38 housing development, Lydenburg, Mpumalanga. **Field Director, under Prof. JCA Boeyens, PI**
12. 2008 - Stonehenge x16, Phase 2 test excavations, Nelspruit, Mpumalanga. **Field Director, under Prof. TN Huffman, PI**
13. 2007 - Phase 2 mitigation of archaeological terrain. Hammanskraal West Proper. Ditsala Construction. Hammanskraal, Gauteng Province. **Field Director, under Prof. JCA Boeyens, PI**
14. 2007 - Phase 2 mitigation of archaeological terrain. Bokfontein Mining Project. Henric Ferrochrome, Brits North West Province. **Field Director, under Prof. JCA Boeyens, PI**
15. 2006 - Phase 2 mitigation of archaeological terrain. Gardener Ross Golf and Country Estate. **Field Director, under Prof. JCA Boeyens, PI**

POSITIONS HELD

- **2003 – 2017:** Director - PGS Heritage (Pty) Ltd / Director - Professional Grave Solutions Botswana (Pty) Ltd
- **2006 – 2008:** Project Manager – Matakoma-ARM, Heritage Contracts Unit, University of the Witwatersrand
- **2005-2007:** Director – Matakoma Heritage Consultants (Pty) Ltd
- **2000-2004:** CEO– Matakoma Consultants
- **1998-2000:** Environmental Coordinator – Randfontein Estates Limited. Randfontein, Gauteng
- **1997-1998:** Environmental Officer – Department of Minerals and Energy. Johannesburg, Gauteng

I Wouter Fourie, hereby confirm that the above information contained in my CV is true and correct.



W Fourie

10 May 2017
Date