Draft Basic Assessment Report for the Proposed Raslouw x 15 Sewer Pipeline

Reference No: Gaut: 002/13-14/E0287

September 2014

BOKAMOSO
LANDSCAPE ARCHITECTS &
ENVIRONMENTALCONSULTANTS
P.O. BOX 11375
MAROELANA
0161
TEL: (012) 346 3810
Fax: 086 570 5659
Email:Lizelleg@mweb.co.za

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Application Form
GDARD

Gauteng Department of Agriculture and Rural Development

Application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2010 (Version1)

Kindly note that:

1. This application form is to be completed for both the Basic Assessment process and the Scoping & EIA process.
2. This application form is current as of 2 August 2010. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
3. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. It is in the form of a table that can extend itself as each space is filled with typing.
4. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.
5. Incomplete applications may be returned to the applicant for revision.
6. The use of "**not applicable**" in the report must be done with **circumspection** because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. Three copies of this form and the attachments must be handed in at the offices of the relevant competent authority as detailed below.
8. No faxed or e-mailed applications shall be accepted. Only hand delivered or posted applications will be accepted.
9. Unless protected by law, and clearly indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/Environmental Assessment Practitioner (EAP) must provide any Interested and Affected Party (I&AP's) with the information contained in this application on request, during any stage of the application process.
10. Attachments, where applicable, to this document are to be ordered in the following prescribed manner

Annexure - A	Locality map
Annexure - B	a) Proof of notification to the Land owner b) Proof of receipt of such notice by the owner
Annexure - C	List of all organs of state and State Departments of where the draft report will be submitted, their full contact details and contact person

Annexure -D	Property description list
Annexure -E	Current land use zonings list
Addendum-A	Declaration of Independence by EAP to be submitted with the report if the application form was submitted by applicant -

DEPARTMENTAL DETAILS

Gauteng Department of Agriculture and Rural Development
Attention: Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch
P.O. Box 8769
Johannesburg
2000

Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch
18th floor Glen Cairn Building
73 Market Street, Johannesburg

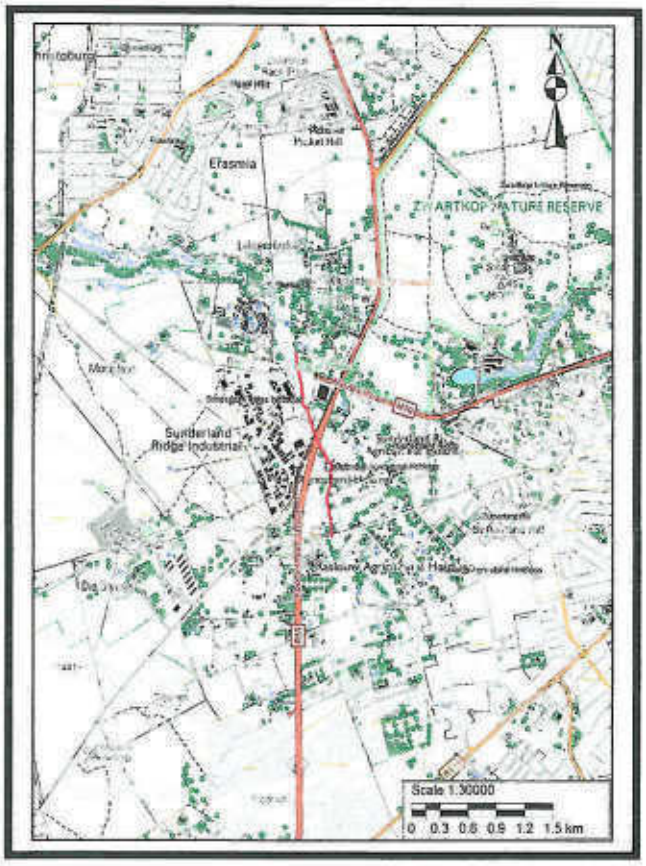
Administrative Unit telephone number: (011) 355 1345
Department central telephone number: (011) 355 1900

	(For official use only)
File Reference Number:	
Application Number:	
Date Received:	

1. NATURE OF THE ACTIVITY

Installation of external sewer pipeline for Raslouw x 15.
Refer to Figure 1 Locality Map

Activities to be applied for in terms of the 2010 Amended NEMA EIA Regulations:
Listing Notice 1, R544, 18 June 2010 – Activity 9, 11, 18, 37 & 40
Listing Notice 3, R546, 18 June 2010 – Activity 16 & 24



Select the appropriate box with regards to the application form submission

An application for conducting a basic assessment (as defined in the regulations)?	X	**A resubmission of an application for conducting a basic assessment (as defined in the regulations)?**	
An application for conducting a Scoping & EIA process (as defined in the regulations)		**A resubmission of an application for conducting a SR & EIA process (as defined in the regulations)**	

If this is a class application, has a copy of approval letter to undertake such an application been attached as such application may/shall not be undertaken without an approval from this Department

Has this project or a substantial similar project which has been previously submitted by the applicant been denied authorisation by the relevant authority in the last three (3) years

YES	NO X

If yes will the application contain new or additional material not submitted previously

YES	NO

To be noted that Regulation 68 of EIA Regulations, 2010 states that no applicant may resubmit an application which is substantially similar to an application previously denied authorisation by the relevant authority unless 3 years has lapsed since the refusal or new material is to be presented

2. PROJECT DETAILS

Project title:

Raslouw x 15 (external sewer line)

To be noted that the project will be registered under this title and this title must be duplicated through the application life of the project

Local authority(ies) in whose jurisdiction the proposed application will fall

City of Tshwane Metropolitan Municipality

3. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Also Refer to Annexure F for proposed services alignments, lengths and co-ordinates

Alternative:

Latitude (S):	Longitude (E):
n/a	n/a

In the case of linear activities:

ITEM 1:

	Latitude (S):	Longitude (E):
• Starting point of the activity	25°49'55.25"S	28°6'29.69"E
• Middle point of the activity	25°50'23.56"S	28°6'38.17"E
• End point of the activity	25°50'53.24"S	28°6'43.05"E

ITEM 2:

	Latitude (S):	Longitude (E):
• Starting point of the activity		
• Middle point of the activity		
• End point of the activity		

ITEM 3:

	Latitude (S):	Longitude (E):
• Starting point of the activity		
• Middle point of the activity		
• End point of the activity		

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Annexure

Addendum of route alternatives attached: n/a

Property description:

The following farms/ properties will be affected:

- Holding 1 and 4 of Raslouw Agricultural Holdings;
- Portion 124, 166, 164, 163, 607, 606, 446, 412 and 168 of the Farm Zwartkop 356 JR; and
- Portion 462 of the Farm Mooiplaats 355 JR Portion 462.

Also refer to Annexure E for detailed map of the study area (including properties/ farms/ areas traversed/ affected).

(Farm name, portion etc.) Where a large number of properties (including alternatives) are involved (e.g. linear activities), please attach a list of the property descriptions to this application.

4. ACTIVITIES APPLIED FOR

Describe the activity and associated infrastructure, which is being applied for, in detail

The installation of an external sewer pipeline for Raslouw x 15.

Which Listing Notice is the activity(ies) listed under?

Listing Notice 1 [X] Listing Notice 2 [ ] Listing Notice 3 [X]

If "or also" listed under Listing Notice 3, describe the Geographical Area triggering the activity and its regional, provincial, national & international significance

An application may be made for more than one listed or specified activity that, together, make up one development proposal. All the listed activities that make up this application must be listed.

Indicate the number and date of the relevant Government Notice:	**Activity No (s) (in terms of the relevant notice): e.g. Listing notices 1, 2 or 3**	**Describe each listed activity as per the wording in the relevant listing notice:**
Listing Notice 1, R544, 18 June 2010	Activity 9	The construction of facilities or infrastructure exceeding 1000 meters in length for the bulk transportation of water, sewage or storm water – (i) With an internal diameter of 0,36 meters or more; or (ii) With a peak throughput of 120 liters per second or more; excluding where: a. Such facilities or infrastructure are for bulk transportation of water, sewage or storm water drainage inside a road reserve; or

		Where such construction will occur within urban areas but further than 32 meters from a watercourse, measured from the edge of the watercourse.
Listing Notice 1, R544, 18 June 2010	Activity 11	The construction of: (i) Canals; (ii) Channels; (iii) Bridges; (iv) Dams (v) Weirs; (vi) Bulk storm water outlet structures; (vii) Marinas; (viii) Jetties exceeding 50 square metres in size; (ix) Slipways exceeding 50 square metres in size; (x) Buildings exceeding 50 square metres in size; or (xi) Infrastructure or structures covering 50 square metres or more Where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.
Listing Notice 1, R544, 18 June 2010	Activity 18	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from: (i) A watercourse; (ii) The sea (iii) The seashore; (iv) The littoral active zone, an estuary or a distance of 100 metres inland of the highwater mark of the sea or an estuary, whichever distance is the greater- But excluding where such infilling, depositing, dredging, excavation, removal or moving: (a) Is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or (b) Occurs behind the development setback line
Listing Notice 1, R544, 18 June 2010	Activity 37	The expansion of facilities or infrastructure for the bulk transportation of water, sewage or storm water where: (b) The facility or infrastructure is expanded by more than 1000 metres in length; or (c) Where the throughput capacity of the

		facility or infrastructure will be increased by 10% or more- excluding where such expansion: (i) Relates to transportation of water, sewage or storm water within a road reserve; or (ii) Where such expansion will occur within urban areas but further than 32 metres from a watercourse, measured from the edge of the watercourse.	
Listing Notice 1, R544, 18 June 2010	Activity 40	The expansion of i. Jetties by more than 50 square metres ii. Slipways by more than 50 square metres; or iii. Buildings by more than 50 square metres iv. Infrastructure by more than 50 square metres Within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, but excluding where such expansion will occur behind the development setback line.	
Listing Notice 3, R546, 18 June 2010	Activity 16	The construction of: i. Jetties exceeding 10 square meters in size; ii. Slipways exceeding 10 square meters in size; iii. Building with a footprint exceeding 10 square meters in size; or iv. Infrastructure covering 10 square meters or more Where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development	In Gauteng: i. A protected area identified in terms of NEMPAA, excluding conservancies; ii. National Protected Area Expansion Strategy Focus areas; iii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; iv. Sites or areas identified in terms of an International Convention; v. Sites identified as irreplaceable or important in the Gauteng Conservation Plan; vi. Any declared protected area including Municipal or Provincial nature Reserves as contemplated by the Environment Conservation Act, 1989

		setback line.	(Act No. 73 of 1989) and the Nature Conservation Ordinance (Ordinance 12 of 1983); vii. Areas zoned for a conservation purpose.
Listing Notice 3, R546, 18 June 2010	Activity 24	The expansion of: a) Jetties where the jetty will be expanded by 10 square meters in size or more; b) Slipways where the slipway will be expanded by 10 square meters or more; c) Buildings where the buildings will be expanded by 10 square meters or more in size; or d) Infrastructure where the infrastructure will be expanded by 10 square meters or more Where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	In Gauteng: i. A protected area identified in terms of NEMPAA, excluding conservancies; ii. National Protected Area Expansion Strategy Focus areas; iii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; iv. Sites or areas identified in terms of an International Convention; v. Sites identified as irreplaceable or important in the Gauteng Conservation Plan; vi. Any declared protected area including Munic9pal or Provincial nature Reserves as contemplated by the Environment Conservation Act, 1989 (Act No. 73 of 1989) and the Nature Conservation Ordinance (Ordinance 12 of 1983); vii. Areas zoned for a conservation purpose.

Please note that any authorisation that may result from this application will only cover activities specifically applied for.

5. OTHER AUTHORISATIONS REQUIRED

5.1 DO YOU NEED ANY AUTHORISATIONS IN TERMS OF ANY OF THE FOLLOWING LAWS?

4.1.1 National Environmental Management: Waste Act	Yes/**No**
4.1.2 National Environmental Management: Air Quality Act	Yes/**No**
4.1.3 National Environmental Management: Protected Areas Act	**Yes**/No – Possibility, To be confirmed
4.1.4 National Environmental Management: Biodiversity Act	**Yes**/No – Possibility, To be confirmed
4.1.5 Mineral Petroleum Development Resources Act	Yes/**No**
4.1.6 National Water Act	**Yes**/No -Possibility. To be confirmed
4.1.7 National Heritage Resources Act	Yes/**No**
4.1.8 Other (please specify)	Yes/**No**
4.2 Have such applications been lodged already?	Yes/**No**

6. BACKGROUND INFORMATION

Project applicant:	Purple Roof Developers (Pty) Ltd		
Trading name (if any):	Purple Roof Developers (Pty) Ltd		
Contact person:	Peet Joubert		
Physical address:	Shop 16, Square@midstream, Brakfontein road, Midstream, 1692		
Postal address:	Postnet Suite 514, Private Bag x 1007, Lyttelton		
Postal code:	0140	Cell:	082 934 2294
Telephone:	-	Fax:	012-687 1483
E-mail:	peet@midfix.co.za		

Project Environmental Assessment Practitioner:	Bokamoso Landscape Architects & Environmental Consultants CC		
Contact person:	Lizelle Gregory		
Postal address:	P.O. Box 11375, Maroelana		
Postal code:	0161	Cell:	083 255 8384
Telephone:	(012) 346 3810	Fax:	086 570 5659
E-mail:	lizelleg@mweb.co.za		
EAP qualifications & relevant experience	Registered Landscape Architect & Environmental Consultant (degree obtained from the University of Pretoria) , with more than 21 years experience in: • The compilation of Environmental Evaluation Reports, • Environmental Management Plans, • Strategic Environmental Assessments; • All stages of Environmental Input; • EIA under the ECA and the new and amended NEMA Regulations; and • Various other Environmental Reports and documents.		
Professional affiliation(s) (if any)	The South African Council of the Landscape Architects Profession (SACLAP);Institute for Landscape Architects in South Africa (ILASA); and Institute for Environmental Management and Assessment (IEMAS), Member of the Institute of Impact Assessment Practitioners (IAIA)		

Landowner:	**See Annexure G attached**
Contact person:	
Postal address:	
Postal code:	
Telephone:	
E-mail:	

In instances where there is more than one landowner (including for alternative sites), please attach a list of landowners with their contact details to this application.

In instances where the landowner is not the applicant –attach proof of notification of the landowner and a proof of receipt of such notice by the owner, manager or person in control of the land.

List of the land owner is attached	Yes
Landowner notification proof is attached	Yes
Landowner proof of receipt of such notification is attached	No

Local authority in whose jurisdiction the proposed activity will fall:	City of Tshwane Metropolitan Municipality Open Space Management Section
Contact person:	Rudzani Mukheli
Postal address:	P O Box 1454, Pretoria
Postal code:	0001
Cell:	
Telephone:	(012) 358 8731
Fax:	012 358 8934
E-mail:	rudzanim@tshwane.gov.za

In instances where there is more than one local authority involved (including for alternative sites), please attach a list of local authorities with their contact details to this application.

List of local authorities is attached	n/a

List of properties is attached	Yes

Town(s) or district(s):	City of Tshwane Metropolitan Municipality
Street/Physical address:	Open Space Management Section, 11 Francis Baard Street, Pretoria

In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

List of towns or districts is attached	n/a

State Departments administering a law affecting the environment:	Department of Water Affairs Crocodile West and Marico Water Management Area
Contact person:	Mr. Justice Maluleke
Postal address:	Private Bag X995, Pretoria
Postal code:	0001
Cell:	
Telephone:	012 392 1409
Fax:	012 392 1486
E-mail:	MalulekeJ@dwa.gov.za

In instances where there is more than one State Department involved, please attach a list of all State Departments with their contact details.

Current land-use zoning: Roads & Agricultural

In instances where there is more than one current land-use zoning (including alternatives), please attach a list of current land use zonings that also indicate which portions each use pertains to , to this application.

List of current land use zonings is attached: n/a

Locality map:

A locality map(s) (including alternatives) must be attached to the back of this document, as Annexure A. The scale of the locality map must be between 1:10 000 and 1:50 000. The scale must be indicated on the map. The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites;
- all rivers within a 1km radius of the site or alternative sites; and
- a north arrow.

7. COMPLIANCE WITH CONDITIONS

Have you ever been in non-compliance with a condition of an authorisation or exemption issued by this Department or any other provincial or national environmental department in terms of the Environment Conservation Act (No 73 of 1989) or the National Environmental Management Act (No 107 of 1998) as amended?	YES	**NO x**

If yes, indicate details of non-compliance together with reasons for non-compliance:

Attach all relevant documentation e.g. compliance audit reports, pre-directives, directives, compliance notices

8. ACTIVITY INFORMATION

Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R6 million	
What is the expected yearly income that will be generated by or as a result of the activity?	Not applicable- no yearly income from Bulk Services	
Will the activity contribute to service infrastructure?	**YES X**	NO
Will the activity contribute to a public amenity	**YES X**	NO
Total number of new employment opportunities to be created in the development phase of this activity.	50	
Of these opportunities how many are:		
Women	7	
People with disabilities		
Female	1	
Male	2	
Youth		

Female	10
Male	30
What is the expected value of the employment opportunities during the development phase?	R350 000
What percentage of this will accrue to previously disadvantaged individuals?	60%
Total number of new employment opportunities to be created in the operational phase of this activity.	10
Of these opportunities how many are: Women	2
People with disabilities	4
Female	2
Male	2
Youth	4
Female	2
Male	2
What is the expected current value of the employment opportunities during the first 10 years?	R500 000
What percentage of this will accrue to previously disadvantaged individuals?	60%

Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

The Raslouw Extension 15 Township development has been approved and this development together with many other developments in the area makes it necessary to upgrade the existing municipal water and sewage networks. Without the proposed upgradings, the existing municipal services networks will not have the capacity to accommodate new developments.

Indicate any benefits that the activity will have for society in general:

The society in general will benefit from the installation of external services, because of the need for development and the provision of a sewer line.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

The development aims to upgrade the sewage system by installing/upgrading the required external sewage pipelines. The surrounding local community as well as the tenants and occupants of the new developments will benefit from the installation of such new and upgraded services. The rates and taxes payable to the involved local authority for such new services holds significant financial advantages to the local authority and this financial benefits will eventually make it possible for the local authority to fulfill in the social needs of the communities within the Tshwane area.

9. DECLARATIONS

The Applicant

I, **Peet Joubert on behalf of Purple Roof Developers (Pty) Ltd** ,declare that I -

- am[1], the applicant in this application for **Raslouw x 15 – sewer line** [have appointed / will appoint] an environmental assessment practitioner to act as the independent environmental assessment practitioner for this application / will apply to obtain exemption from the requirement to appoint / obtain an environmental assessment practitioner[2];
- will provide the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the Environmental Impact Assessment Regulations, 2010, including but not limited to –
  - costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
  - costs incurred in respect of the undertaking of any process required in terms of the Regulations;
  - costs in respect of any fee prescribed by the Minister or MEC in respect of the Regulations;
  - costs in respect of specialist reviews, if the competent authority decides to recover costs; and
  - the provision of security to ensure compliance with conditions attached to an environmental authorisation, should it be required by the competent authority;
- will ensure that the environmental assessment practitioner is competent to comply with the requirements of these Regulations and will take reasonable steps to verify whether the EAP complies with the Regulations;
- will inform all registered interested and affected parties of any suspension of the application as well as of any decisions taken by the competent authority in this regard;
- am responsible for complying with the conditions of any environmental authorisation issued by the competent authority;
- hereby indemnify the Government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action which the applicant or environmental assessment practitioner is responsible for in terms of these Regulations;
- will not hold the competent authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to obtaining an environmental authorisation or prior to an appeal being decided in terms of these Regulations;
- will perform all other obligations as expected from an applicant in terms of the Regulations;
- all the particulars furnished by me in this form are true and correct; and
- I am aware that a false declaration is an offence in terms of regulation 71 and is punishable in terms of section 24F of the Act.

Signature of the applicant[3]/ Signature on behalf of the applicant:

Purple Roof Developers (Pty) Ltd

Name of company (if applicable):

09-01-2014

Date:

Signature of the Commissioner of Oaths:

Date:

09-01-2014

Designation:

Commissioner of Oaths Official stamp below:

LIZE ESSAKOW
ESSAKOW ATTORNEYS
COMMISSIONER OF OATHS R.S.A
PRACTICING ATTORNEY,
CONVEYANCER, NOTARY
MT CASCADE 1, MIDLANDS ESTATE
MIDSTREAM EXT28

[1] If this is signed on behalf of the applicant, proof of such authority from the applicant must be attached.
[2] If exemption is obtained from appointing an EAP, the responsibilities of an EAP shall automatically apply to the person conducting the environmental impact assessment in terms of the Regulations.
[3] If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority.

ADDENDUM A

10. DECLARATIONS[4]

The Environmental Assessment Practitioner;

I, **Lizelle Gregory,** declare under oath that I –

- I act as the independent environmental practitioner for this application **Raslouw x 15 – sewer line,**
- 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 environmental 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 regulation 8 of the regulations 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 ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- 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;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of regulation 71 and is punishable in terms of section 24F of the Act.

For Basic Assessment applications I further declare under oath that

- I will fix the site notice(s) in a conspicuous place, on the property(ies) where it is intended to undertake the activity(ies)
- I will place a notice in the required newspaper(s)
- I will provide the following with all the project information and give I&AP's an opportunity to register as an I&AP
    - landowners and occupiers of adjacent land
    - landowners and occupiers of land within 100 metres of the boundary of the property
    - the ward councillor
    - any organisation that represents the community in the area of the application
    - the municipality which has jurisdiction over the area in which the proposed activity will be undertaken
    - any organ of state that may have jurisdiction over any aspect of the activity of the applicant's intention to submit an application to the competent authority; and
- I will include on the register all persons as required per Regulation 55 (1) (c)
- The Reports as submitted will contain the same information (including layout, project design and mitigation) as provided to the registered I&APs for comment
- All issues raised by the I&APs during the public participation process will be included in the Comments and Response Report as attached

For Scoping/ EIA applications I further declare under oath that

- I will fix the site notice(s) in a conspicuous place, on the property(ies) where it is intended to undertake the activity(ies)
- I will place a notice in the required newspaper(s)
- I will provide the following with all the project information and give I&AP's an opportunity to register as an I&AP
    - landowners and occupiers of adjacent land
    - landowners and occupiers of land within 100 metres of the boundary of the property
    - the ward councillor

[4] Addendum A must be completed and submitted with the report if application form was done and submitted by the applicant.

- any organisation that represents the community in the area of the application
- the municipality which has jurisdiction over the area in which the proposed activity will be undertaken
- any organ of state that may have jurisdiction over any aspect of the activity of the applicant's intention to submit an application to the competent authority; and

- I will include on the register all persons as required per Regulation 55 (1) (c)
- The Reports as submitted will contain the same information (including layout, project design and mitigation) as provided to the registered I&APs for comment
- All issues raised by the I&APs during the public participation process will be included in the Comments and Response Report as attached

Signature of the Environmental Assessment Practitioner:

Bokamoso Landscape Architects and Environmental Consultants CC

Name of company:

16/01/2014

Date:

Signature of the Commissioner of Oaths:

16/01/2014

Date:

Designation:

Commissioner of Oaths Official stamp (below)

GESERTIFISEER 'N WARE AFSKRIF
VAN DIE OORSPRONKLIKE
CERTIFIED A TRUE COPY OF THE ORIGINAL

AR SWART
Commissioner of Oaths/Kommissaris van Ede
Professionele Rekenmeester (SAIPA), Lid no.: 8140
Chris Hougardstr 262, Wierdapark, 0149

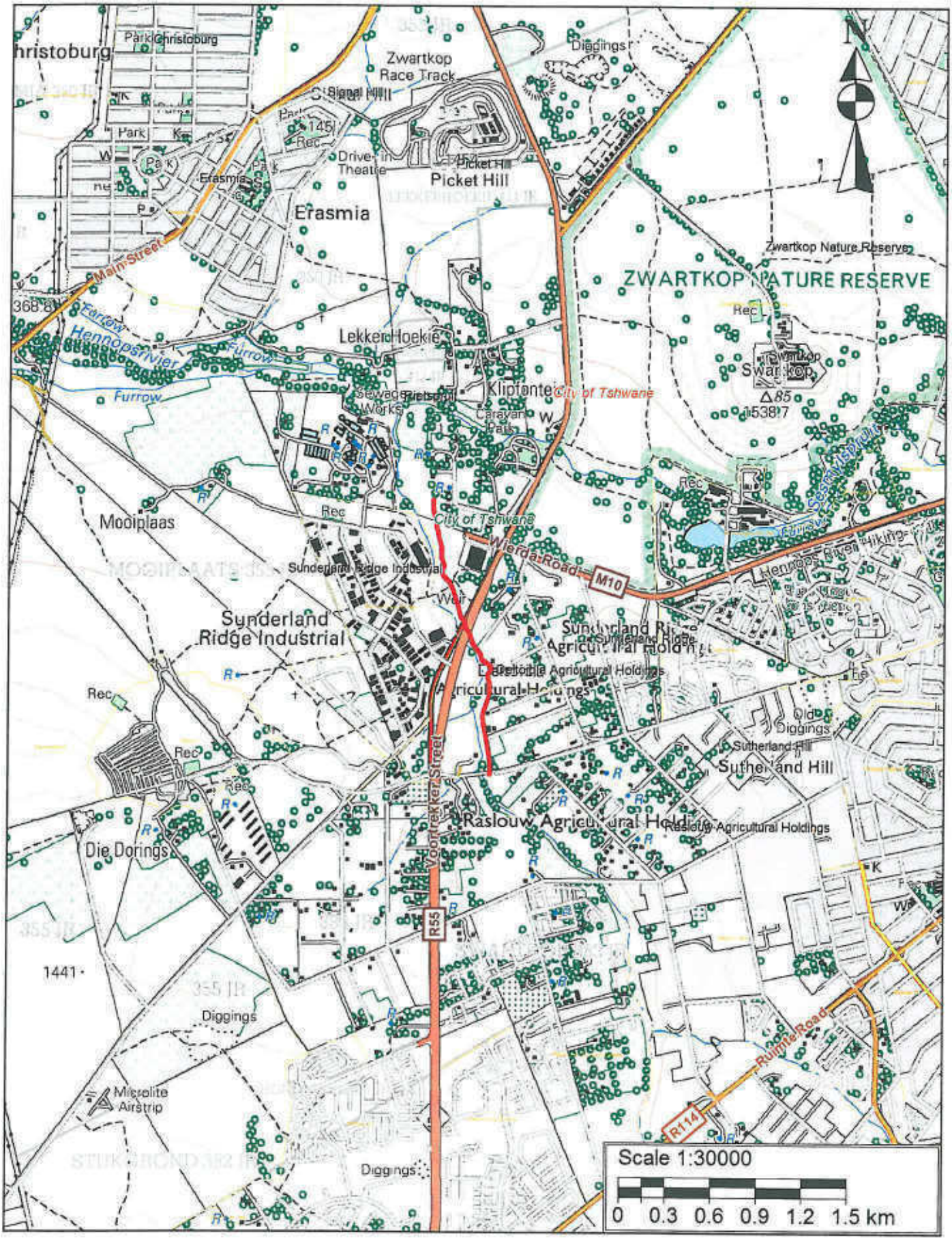
11. CHECKLIST

To ensure that all information that the Department needs to be able to process this application, please check that:

- Where requested, supporting documentation has been attached;
- All relevant sections of the form have been completed; and
- The form has been signed by the applicant, by the EAP or both.

12. ANNEXURES

Locality Map


Zwartkop Race Track
Diggings
Signal Hill
Drive-in Theatre
Picket Hill
Erasmia
Zwartkop Nature Reserve
ZWARTKOP NATURE RESERVE
Main Street
Furrow
Hennopsrivier
Lekker Hoekie
Klipfontein
City of Tshwane
Sewage Pietsom Works
Caravan Park
Mooiplaas
Wierda Road
M10
Sunderland Ridge Industrial
Raslouw Agricultural Holdings
Sutherland Hill
Die Dorings
Voortrekker Street
R55
Rec
Mispolite Airstrip
Ruimte Road
R114
Scale 1:30000
0 0.3 0.6 0.9 1.2 1.5 km

Proof of Notification to the Land Owners

LEBOMBO GARDEN BUILDING
36 LEBOMBO ROAD
ASHLEA GARDENS
0081

P.O. BOX 11375
MAROELANA
0161

Tel: (012) 346 3810
Fax: 086 570 5659
E-mail: lizelleg@mweb.co.za
Website: www.bokamoso.biz

Bokamoso ENVIRONMENTAL

Dear Landowner **10 December 2013**

Basic Assessment Process in terms of the National Evironmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2010 for the Raslouw X15 in the City of Tshwane Metropolitan Municipality area of Gauteng

The following Farms/Properties will be affected:
Holding 1 and 4 of Raslouw Agricultural Holdings; Portion 124, 166, 164, 163, 607, 606, 446, 412 and 186 of the Farm Zwartkop 356 JR; and Portion 462 of the Farm Mooiplaats 355 JR Portion 462.

We hereby confirm that Purple Roof Developers (Pty) Ltd, appointed Bokamoso Landscape Architects and Environmental Consultants CC, to undertake a Basic Assessment Process in terms of the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment (EIA) Regulations, 2010 for the External reticulation of Service for Sewage of Raslouw X15 as listed above.

In terms of the 2010 amended NEMA EIA Regulations, the applicant, if not the land-owner, must notify the land-owner and tenants of a proposed development planned on a property occupied by the land-owner/tenant. In the case of this application the property occupied by you (as the land-owner/ tenant) forms part of the land-parcel earmarked for the above-mentioned project.

This notification therefore represents the formal notification of land-owners and/or tenants of the proposed construction of Raslouw X15 in and around the Raslouw Agricultural Holdings, Farm Zwartkop 356 JR and Farm Mooiplaats 355 JR. This notification letter will be submitted as part of the formal application to be submitted to the Gauteng Department of Agriculture and Rural Development (GDARD).

This notification also affords you the opportunity to register (at an early stage) as an Interested and Affected Party (I&AP) in the Basic Assessment Process. In order to register you are requested to fill in your full details on the form supplied below and to fax or e-mail your details to Juanita de Beer (public participation co-ordinator of Bokamoso) for the inclusion of your details onto our public participation database.

Once you are registered as an interested and affected party, we will keep you informed of the progress with the application and we will make all correspondence, documents and other information regarding the application available to you throughout the application process.

Registration as Interested and Affected Party	
Farm Name:	
Erf / Portion Number:	
Street Address:	
Landowner:	Name & Surname: Email address: Telephone: Cell phone: Fax Number: Postal Address:
Tenant Details: (if applicable)	Name & Surname: Email address: Telephone: Cell phone: Fax Number: Postal Address:

Sincerely,

p.p.

Lizelle Gregory
Bokamoso Landscape Architects and Environmental Consultants cc

List of REGISTERED LETTERS
Lys van GEREGISTREERDE BRIEWE
(With an insurance option/met 'n versekeringsopsie)

Post Office

Full tracking and tracing/Volledige volg en spoor

Name and address of sender
Naam en adres van afsender Bokamoso PO Box 11375, Mooreland 0161
Raslouw X 15

Enquiries/Navrae
Toll-free number
Tolvry nommer
0800 111 502

No	Name and address of addressee / Naam en adres van geadresseerde	Insured amount / Versekerde bedrag	Insurance fee / Verseke-ringsgeld	Postage / Posgeld	Service fee / Diensgeld	Affix Track and Trace customer copy / Plak Volg-en-Spoor-kliëntafskrif
1	Gauwrds P.O. Box 52276, Wierda Park, 0149					RD 885 057 075 ZA CUSTOMER COPY 301028R
2	Signature Property 4 P.O. Box 2194, Zwavelpoort, 0036					RD 885 058 990 ZA CUSTOMER COPY 301028R
3	Underwear City P.O. Box 13718, Laudium, 0037					RD 885 059 006 ZA CUSTOMER COPY 301028R
4	Pyramid Investments (eight) P.O. Box 14218, Laudium, 0037					RD 885 059 010 ZA CUSTOMER COPY 301028R
5	Francois Le Roux Fourie P.O. Box 21266, Valhalla, 0137					RD 885 059 023 ZA CUSTOMER COPY 301028R
6	Anna Christina Janse van Rensburg P.O. Box 13646, Clubview, 0014					RD 885 059 037 ZA CUSTOMER COPY 301028R
7	Nomusa Twala P.O. Box 89206, Heuweloord, Heuweloord Ext 3, 0173					RD 885 059 045 ZA CUSTOMER COPY 301028R
8						
9						
10						
	Total / Totaal	R	R	R	R	

Number of letters posted
Getal briewe gepos 7

Signature of client
Handtekening van kliënt .....

Signature of accepting officer
Handtekening van aanneembeampte .....

Date stamp
0063
11 DEC 2013
Datumstempel

The value of the contents of these letters is as indicated and compensation is not payable for a letter received unconditionally. Compensation is limited to R100,00. No compensation is payable without documentary proof. Optional insurance of up to R2 000,00 is available and applies to domestic registered letters only.

Die waarde van die inhoud van hierdie briewe is soos aangedui en vergoeding sal nie betaal word vir 'n brief wat sonder voorbehoud ontvang word nie. Vergoeding is beperk tot R100,00. Geen vergoeding is sonder dokumentêre bewys betaalbaar nie. Opsionele versekering van tot R2 000,00 is beskikbaar en is slegs op binnelandse geregistreerde briewe van toepassing.

Proof of Receipt of such Notice
by the Owners
(not available yet)

List of all Organs of State and State Departments of where the Draft Report will be submitted

Local authority in whose jurisdiction the proposed activity will fall:	**City of Tshwane Metropolitan Municipality**		
Contact person:	Livhuwani Siphuma		
Postal address:	Private Bag X1454, Pretoria		
Postal code:	0001	**Cell:**	-
Telephone:	(012) 358 8871	**Fax:**	
E-mail:	livhuwanis@tshwane.gov.za		

Local authority in whose jurisdiction the proposed activity will fall:	**Department of Water Affairs**		
Contact person:	Mr. Justice Maluleke		
Postal address:	Private Bag X 313, Pretoria		
Postal code:	0001	**Cell:**	-
Telephone:	(012) 336 6507	**Fax:**	(012) 336 8311
E-mail:	MalulekeJ@dwa.gov.za		

Local authority in whose jurisdiction the proposed activity will fall:	**PHRAG**		
Contact person:	Maphata Ramphele		
Postal address:	38 Rissik Street, Johannesburg		
Postal code:	2000	**Cell:**	-
Telephone:	011-355 2572	**Fax:**	011-355 2513
E-mail:	Maphata.ramphele@gauteng.gov.za		

Local authority in whose jurisdiction the proposed activity will fall:	**Eskom Northern Region**		
Contact person:	Annelien Potgieter		
Postal address:	P.O. Box 36099, Menlopark, Pretoria		
Postal code:	0102	**Cell:**	-
Telephone:	012-421 3170	**Fax:**	012-421 3757
E-mail:	central@eskom.co.za		

Local authority in whose jurisdiction the proposed activity will fall:	**SANRAL**		
Contact person:			
Postal address:	Private Bag x 17, Lynnwood Ridge		
Postal code:	0040	**Cell:**	-
Telephone:	012-426 6200	**Fax:**	012-348 1512
E-mail:	schmidk@nrd.co.za		

Property Description List

- Holding 1 of Raslouw Agricultural Holdings;
- Holding 4 of Raslouw Agricultural Holdings;
- Portion 124 of the Farm Zwartkop 356 JR;
- Portion 166 of the Farm Zwartkop 356 JR;
- Portion 164of the Farm Zwartkop 356 JR;
- Portion 163 of the Farm Zwartkop 356 JR;
- Portion 607of the Farm Zwartkop 356 JR;
- Portion 606 of the Farm Zwartkop 356 JR;
- Portion 446 of the Farm Zwartkop 356 JR;
- Portion 412 of the Farm Zwartkop 356 JR;
- Portion 168 of the Farm Zwartkop 356 JR;
- Portion 462 of the Farm Mooiplaats 355 JR.

Current Land Use Zonings List/Maps


N
Legend
Sewer Line
Agricultural Potential
1.High
5.Very Low - None
0
200
400
600

Services Alignments, Lengths & Co-ordinates Map

RASLOUW X15

NOTES AND SPECIFICATIONS

GENERAL

SANITATION

LEGEND

WATER

CITY OF TSHWANE

AMENDMENTS

WATER AND SANITATION

RASLOUW X15

SEWER ALIGNMENT

PROJECT STATUS

Affected Landowners List

Holding 1 of Raslouw Agricultural Holdings
City of Tshwane

Holding 4 of Raslouw Agricultural Holdings
Gouwras
Posbus 52276
Wierda park
0149

Portion 124 of the Farm Zwartkop 356 JR
Signature Property 4
Po Box 2194
Zwavelpoort
0036

Portion 166 of the Farm Zwartkop 356 JR
Not available (Will be contacted during public participation process)

Portion 164 of the Farm Zwartkop 356 JR
Pyramid Investments (Eight)
P O Box 14218
Laudium
0037

Portion 163 of the Farm Zwartkop 356 JR
Underwear City
P O Box 13718
Laudium
0037

Portion 607of the Farm Zwartkop 356 JR
Not available (Will be contacted during public participation process)

Portion 606 of the Farm Zwartkop 356 JR
Nomusa Twala
P O Box 89206
Heuweloord

Heuweloord Ext 3
0173

Portion 446 of the Farm Zwartkop 356 JR
Not Available (Will be contacted during public participation process)

Portion 412 of the Farm Zwartkop 356 JR
Anna Christina Janse Van Rensburg
P O Box 13646
Clubview
0014

Portion 168 of the Farm Zwartkop 356 JR
Francois Le Roux Fourie
P O Box 21266
Valhalla
0137

Portion 462 of the Farm Mooiplaats 355 JR
Not Available (Will be contacted during public participation process)

Declaration of Independence by EAP to be submitted with the report if the application form was submitted by applicant

(NOT APPLICABLE)

Acknowledgement Letters From GDARD

agriculture and
rural development
Department: Agriculture and Rural Development
GAUTENG PROVINCE

Diamond Building, 11 Diagonal Street, Johannesburg
P O Box 8769, Johannesburg, 2000

Telephone: (011) 240 2500
Fax: (011) 240 2700
Website: http://www.gdard.gpg.gov.za

Reference:	Gaut: 002/13-14/E0287
Enquiries:	Justine Chan
Telephone:	(011) 240 3048
Email:	Justine.Chan@gauteng.gov.za

Bokamoso Landscape Architects and Environmental Consultants

Email/Fax: lizelleg@mweb.co.za

Dear Sir / Madam

Application for Environmental Authorisation: Raslouw extension 15 (external sewer line)

The Department acknowledges having received the application form for environmental authorisation of the above-mentioned project on 17/01/2014, but final amendments were received on 13/02/2014.

The application has been assigned the reference number Gaut: 002/13-14/E0287. Kindly quote this reference number in any future correspondence in respect of the application.

Please circulate the draft report to any state department that administers a law relating to a matter affecting the environment to comment.

You are required to submit two (2) copies (full colour CDs-PDF) of the Draft Basic Assessment Report as well as proof of submission to state departments referred to above.

In order to determine whether a biodiversity assessment is required and, if so, which specialist studies are required, please send a shapefile (WGS84 datum; geographic co-ordinate system) of the application site to our biodiversity information service (GDACE_BiodiversityInfo@gauteng.gov.za), the e-mail clearly indicating the project reference number. Where biodiversity assessment is required; please ensure that it is

conducted consistent with the *GDACE Requirements for Biodiversity Assessments*. A copy of this document can be obtained by e-mailing GDACE_BiodiversityInfo@gauteng.gov.za

In terms of Regulation 67(1) (2) of the NEMA EIA Regulations 2010, this application will lapse should you fail to submit the requested information within 6 months of the date of signature of this letter, except in the case where the Department has received and accepted written explanation for failure to submit such information.

Please draw the applicant's attention to the fact that the activity may not commence prior to an environmental authorisation being granted by the Department.

Yours faithfully

Boniswa Belot
Deputy Director: Strategic Administration Support
Date: 21/02/2014

CC: Purple Roof Developers (Pty) Ltd Att: P Joubert
Email/Fax: peet@midfix.co.za

agriculture and rural development
Department: Agriculture and Rural Development
GAUTENG PROVINCE

11 Diagonal Street, Diamond Building, Newtown, Johannesburg
P O Box 8769, Johannesburg, 2000

Telephone: (011) 240-2500
Fax: (011) 240-2700
Website: http://www.gdard.gpg.gov.za

Reference:	Gaut: 002/13-14/E0287
Enquiries:	Faith Mlambo
Telephone:	011 240-3053
Email:	faith.mlambo@gauteng.gov.za

Bokamoso Landscape Architects and Environmental Consultants

Email/Fax: lizelleg@mweb.co.za

Dear Sir/ Madam

Request for extension of time to submit Draft Basic Assessment Report: Raslouw extension 15 (external sewer line)

The Department acknowledges having received your request for extension of time to submit Draft BA for the abovementioned project on 04/07/2014.

Your request for extension of time to submit Draft BA has been granted. Thus, you have until 04/01/2015 to submit the Draft BA.

Please draw the applicant's attention to the fact that the activity may not commence prior to an environmental authorisation being granted by the Department.

Yours faithfully

Boniswa Belot
Deputy Director: Strategic Administration Support
Date: 08/08/2014
CC: Purple Roof Developers (Pty) Ltd

Att: P Joubert
Email/Fax: peet@midfix.co.za

Basic Assessment

Gauteng Department of Agriculture and Rural Development (GDARD)

Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2010

List of all organs of state and State Departments where the draft report has been submitted, their full contact details and contact person

Kindly note that:

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2010and must be submitted together with the application form.

2. This application form is current as of 2 August 2010. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.

3. **A draft Basic Assessment Report must be submitted to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken; the submission of such a draft report to such State Departments must be done on the day of submission of the draft report to the competent authority, this Department. (Attach a signed proof of such submission). signed**

4. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.

5. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.

6. An incomplete report may be returned to the applicant for revision.

7. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.

8. Five (5) copies (3 hard copies and 2 CDs-PDF) of the final report and attachments must be handed in at offices of the relevant competent authority, as detailed below.

9. No faxed or e-mailed reports will be accepted. Only hand delivered or posted applications will be accepted.

10. Unless protected by law, and clearly indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/EAP must provide any interested and affected party with the information contained in this application on request, during any stage of the application process.

DEPARTMENTAL DETAILS

Gauteng Department of Agriculture and Rural Development
Attention: Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch
P.O. Box 8769
Johannesburg
2000

Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch
18th floor Glen Cairn Building
73 Market Street, Johannesburg

Admin Unit telephone number: (011) 355 1345
Department central telephone number: (011) 355 1900

(For official use only)

File Reference Number:						
Application Number:						
Date Received:						

(i) Submission to State Department (Section 3 above)

(A) Has a draft report for this application been submitted to all State Department administering a law relating to a matter likely to be affected as a result of the activity? **YES**

(B) Is a list of State Departments referred to in section A above been attached to this report, **YES**

if no, state reasons for not attaching the list.

SECTION A: ACTIVITY INFORMATION

1. ACTIVITY DESCRIPTION

Project title (must be the same name as per application form):

Raslouw extension 15 (external sewer line)

Select the appropriate box

The application is for an upgrade of an existing development		The application is for a new development	X	Other, specify	

Describe the activity and associated infrastructure, which is being applied for, in detail

Installation of a new external sewer pipeline for Raslouw x 15.

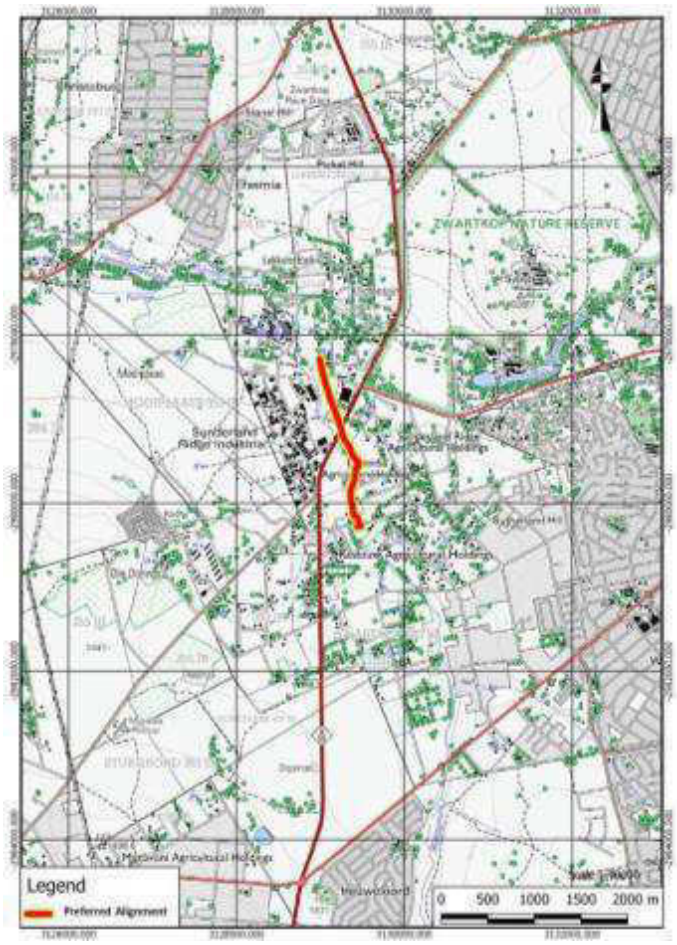


Figure 1: Locality Map

Figure 2: Aerial Map

Activities Applied for

Indicate the number and date of the relevant Government Notice:	Activity No (s) (in terms of the relevant notice) :	Describe each listed activity:
Listing Notice 1, R544, 18 June 2010	Activity 9	The construction of facilities or infrastructure exceeding 1000 meters in length for the bulk transportation of water, sewage or storm water – (i) With an internal diameter of 0,36 meters or more; or (ii) With a peak throughput of 120 liters per second or more; excluding where: a. Such facilities or infrastructure are for bulk transportation of water, sewage or storm water drainage inside a road

		reserve; or Where such construction will occur within urban areas but further than 32 meters from a watercourse, measured from the edge of the watercourse.
Listing Notice 1, R544, 18 June 2010	Activity 11	The construction of: (i) Canals; (ii) Channels; (iii) Bridges; (iv) Dams (v) Weirs; (vi) Bulk storm water outlet structures; (vii) Marinas; (viii) Jetties exceeding 50 square metres in size; (ix) Slipways exceeding 50 square metres in size; (x) Buildings exceeding 50 square metres in size; or (xi) Infrastructure or structures covering 50 square metres or more Where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.
Listing Notice 1, R544, 18 June 2010	Activity 18	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from: (i) A watercourse; (ii) The sea (iii) The seashore; (iv) The littoral active zone, an estuary or a distance of 100 metres inland of the highwater mark of the sea or an estuary, whichever distance is the greater- But excluding where such infilling, depositing, dredging, excavation, removal or moving: (a) Is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental

		authority; or (b) Occurs behind the development setback line	
Listing Notice 1, R544, 18 June 2010	Activity 37	The expansion of facilities or infrastructure for the bulk transportation of water, sewage or storm water where: (b) The facility or infrastructure is expanded by more than 1000 metres in length; or (c) Where the throughput capacity of the facility or infrastructure will be increased by 10% or more- excluding where such expansion: (i) Relates to transportation of water, sewage or storm water within a road reserve; or (ii) Where such expansion will occur within urban areas but further than 32 metres from a watercourse, measured from the edge of the watercourse.	
Listing Notice 1, R544, 18 June 2010	Activity 40	The expansion of i. Jetties by more than 50 square metres ii. Slipways by more than 50 square metres; or iii. Buildings by more than 50 square metres iv. Infrastructure by more than 50 square metres Within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, but excluding where such expansion will occur behind the development setback line.	
Listing Notice 3, R546, 18 June 2010	Activity 16	The construction of: i. Jetties exceeding 10 square meters in size; ii. Slipways exceeding 10 square meters in size; iii. Building with a footprint exceeding 10 square meters in size; or iv. Infrastructure covering 10 square meters or	In Gauteng: i. A protected area identified in terms of NEMPAA, excluding conservancies; ii. National Protected Area Expansion Strategy Focus areas; iii. Sensitive areas as identified in an environmental

		more Where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; iv. Sites or areas identified in terms of an International Convention; v. Sites identified as irreplaceable or important in the Gauteng Conservation Plan; vi. Any declared protected area including Municipal or Provincial nature Reserves as contemplated by the Environment Conservation Act, 1989 (Act No. 73 of 1989) and the Nature Conservation Ordinance (Ordinance 12 of 1983); vii. Areas zoned for a conservation purpose.
Listing Notice 3, R546, 18 June 2010	Activity 24	The expansion of: a) Jetties where the jetty will be expanded by 10 square meters in size or more; b) Slipways where the slipway will be expanded by 10 square meters or more; c) Buildings where	In Gauteng: i. A protected area identified in terms of NEMPAA, excluding conservancies; ii. National Protected Area Expansion Strategy Focus areas;

		the buildings will be expanded by 10 square meters or more in size; or d) Infrastructure where the infrastructure will be expanded by 10 square meters or more Where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	iii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; iv. Sites or areas identified in terms of an International Convention; v. Sites identified as irreplaceable or important in the Gauteng Conservation Plan; vi. Any declared protected area including Municipal or Provincial nature Reserves as contemplated by the Environment Conservation Act, 1989 (Act No. 73 of 1989) and the Nature Conservation Ordinance (Ordinance 12 of 1983); vii. Areas zoned for a conservation purpose.

2. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations:

Title of legislation, policy or guideline:	Administrating Authority:	Promulgation Date:
National Environmental Management Act No. 107 of 1998 (as amended)	**National & Provincial**	**27 November 1998**

The NEMA is primarily an enabling Act in that it provides for the development of environmental implementation plans and environmental management plans. The principles listed in the act serve as a general framework within which environmental management and implementation plans must be formulated.

The Minister of Environmental Affairs and Tourism passed (in April 2006) Environmental Impact Assessment Regulations[1] (the Regulations) in terms of Chapter 5 of the National Environmental management Act, 1998[2] (NEMA). The new Regulations came into effect on 3 July 2006.

The Minister of Environmental Affairs passed (in June 2010) the Amended Environmental Impact Assessment Regulations in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA). The Amended Regulations came into effect on 2 August 2010, and therefore all new applications must be made in terms of the Amended NEMA regulations and not in terms of the 2006 NEMA Regulations or the New Regulations of the ECA. The purpose of this process is to determine the possible negative and positive impacts of the proposed development on the surrounding environment and to provide measures for the mitigation of negative impacts and to maximize positive impacts.

Notice **No. R 544, R 545 and R 546** of the Amended Regulations list the activities that indicate the process to be followed. The activities listed in Notice No. R 544 requires that a Basic Assessment process be followed and the Activities listed in terms of Notice No. R 545 requires that the Scoping and EIA process be followed. Notice No. 546 has been introduced to make provision for Activities in certain geographical and sensitive areas.

Subsequently, Listing (R. 546) requires that a Basic Assessment Process be followed. It should however be noted that the Draft Guideline Document of DEA [Department of Environmental Affairs, previously known as the Department of Environmental Affairs and Tourism] states that if an activity being applied for is made up of more than one listed activity, and the Scoping and EIA process is required for one or more of these activities, the Scoping and EIA process must be followed for the whole application.

Implications for the development:

Significant – The application for the proposed pipeline consist of activities listed under Notice R. 544 (Listing No. 1) and R. 546 (Listing No. 3) and therefore a Basic Assessment Report will be submitted to GDARD for consideration.

National Water Act, 1998 (Act No. 36 of 1998)	**National & Provincial**	**20 August 1998**

The purpose of this Act is to ensure that the Nation's water resources are protected, used, developed, conserved, managed and controlled in ways that take into account, amongst other factors, the following:

- Meeting the basic human needs of present and future generations;
- Promoting equitable access to water;
- Promoting the efficient, sustainable and beneficial use of water in the public interest;
- Reducing and preventing pollution and degradation of water resources;
- Facilitating social and economic development; and
- Providing for the growing demand for water use.

In terms of the section 21 of the National Water Act, the developer must obtain water use licences if the following activities are taking place:

a) Taking water from a water resource;
b) Storing water;
c) Impeding or diverting the flow of water in a water course;
d) Engaging in a stream flow reduction activity contemplated in section 36;
e) Engaging in a controlled activity identified as such in section 37(1) or declared under section 38(1);
f) Discharging waste or water containing waste into a water resource through a pipeline, canal, sewer, sea outfall or other conduit;
g) Disposing of waste in a manner which may detrimentally impact on a water resource;
h) Disposing in any manner which contains waste from or which has been heated in any industrial or power generation process;
i) Altering the bed, banks, course or disposing of water found underground if it is necessary for the safety of people;
j) Removing, discharging, or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people; and
k) Using water for recreational purposes.

The National Water Act also requires that (where applicable) the 1:50 and 1:100 year flood line be indicated on all the development drawings (even the drawings for the external services) that are submitted for approval.

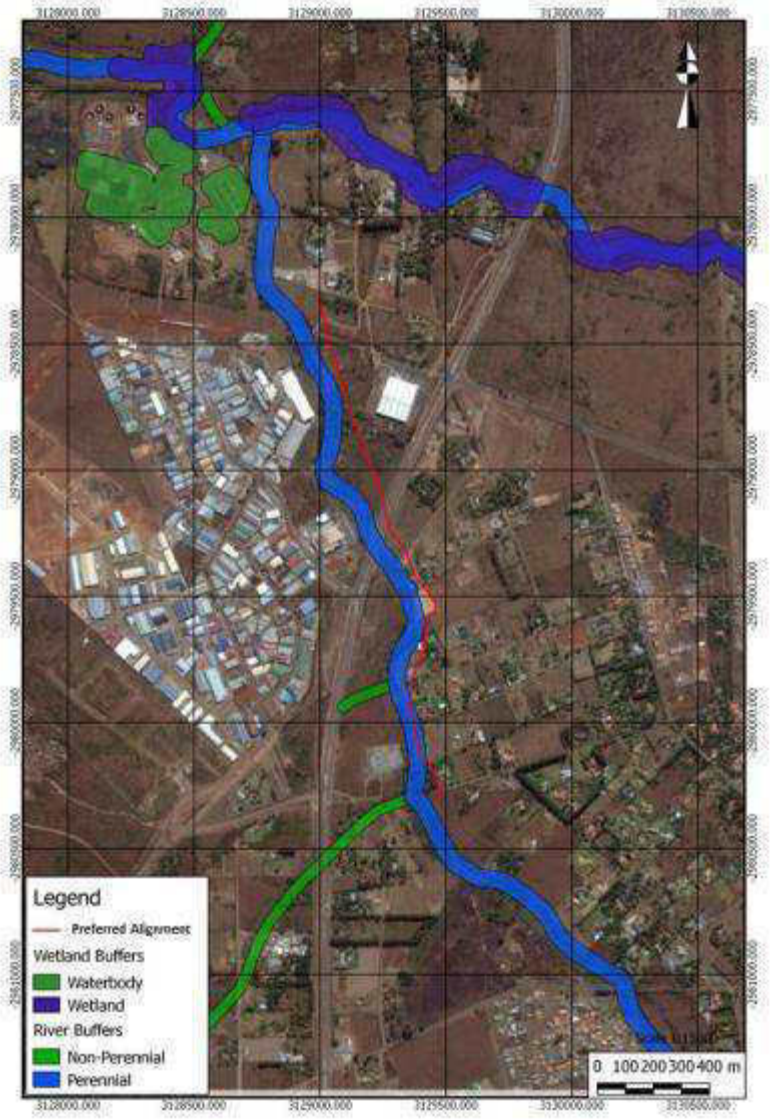


Figure 3 – Hydrology Map

Implications for the development:

The proposed development is subject to flood lines (Perennial Rivers) as the proposed pipeline is planned to run along the 1:100 year floodline, thus it will be less than 500 meters away from the river. Therefore in terms of Section 21 of the National Water Act, the developer will need a water use license for the proposed development. However, the proposed sewer line does not transect the wetland or riparian zone at any point and no buffer was recommended by the specialist. **(Refer to Figure 3 – Hydrology Map)**

National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004)	National & Provincial	2004

The NEMA: AQA serves to repeal the Atmospheric Pollution Prevention Act (45 of 1965) and various other laws dealing with air pollution and it provides a more comprehensive framework within which the critical question of air quality can be addressed.

The purpose of the Act is to set norms and standards that relate to:

- Institutional frameworks, roles and responsibilities
- Air quality managemnt planning
- Air quality monitoring and information management
- Air quality managment measures
- General compliance and enforcement.

Amongst other things, it is intended that the setting of norms and standards will achieve the following:

- The protection, restoration and enhancement of air quality in South Africa
- Increased public participation in the protection of air quality and improved public access to relevant and meaningful information about air quality.
- The reduction of risks to human health and the prevention of the degradation of air quality.

The Act describes various regulatory tools that should be developed to ensure the implementation and enforcement of air quality management plans. These include:

- Priority Areas, which are air pollution 'hot spots'.
- Listed Activities, which are 'problem' processes that require an Atmospheric Emission Licence.
- Controlled Emitters, which includes the setting of emission standards for 'classes' of emitters, such as motor vehicles, incinerators, etc.
- Control of Noise.
- Control of Odours.

On 22 November 2013 the list of activties which result in atmospheric emissions that have or may have a deterimental effect on the environment, was amended.

Implications for the development:

During the construction phase, dust and the generation of noise can become

a significant factor, especially to the surrounding landowners. However if the development is well planned and the mitigating measures are successfully implemented the proposed pipeline's contribution to air pollution and the generation of air pollution can become less significant. None of the listed activities, according to this Act, have been triggered.

National Heritage Resources Act (Act No. 25 of 1999)	**National & Provincial**	**1999**

The National Heritage Resources Act legislates the necesity and heritage impact assessment in areas earmarked for development, which exceed 0.5ha. The Act makes provision for the potential destruction to existing sites, pending the archaelogist's recommendations through permitting procedures. Permits are administered by the South African Heritage Resources Agency (SAHRA).

Implications for the development:

No features of Heritage importance were identified during the Assessment within the sewer servitude, however some old structures were identified in the surrounding area but these structures will not be affected or demolished for purposes of the proposed project. If any such features are discovered during construction activities and clearing of the application site, the correct "procedures for an Environmental incident" **(at the end of EMP, Appendix H)** must be followed.

National Environmental Management Protected Areas Act (Act No. 57 of 2003)	**National**	**2003**

The purpose of this Act is to provide for the protection, conservation and management of ecologically viable areas representative of South Africa's biological biodiversity and its natural landscapes.

Implications for the development:

This Act will not have to be considered for the application as the study area does not fall in any protected areas.

Figure 4 – Protected areas

National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004)	**National**	**2004**

The Biodiversity Act, provides for the management and protection of the country's biodiversity within the framework established by NEMA. It provides for the protection of species and ecosystems in need of protection, sustainable use of indigenous biological resources, equity and bioprospecting, and the establishment of a regulatory body on biodiversity- **South African National Biodiversity Institute.**

Objectives of the Act:

(a) With the framework of the National Environmental Management Act, to provide for:

(i) The management and conservation of biological diversity within the Republic and of the components of such biological diversity:

(ii) The use of indigenous biological resources in a sustainable manner; and

(iii) The fair and equitable sharing among stakeholders of benefits arising from bio-prospecting involving indigenous biological resources;

(b) To give effect to ratified international agreements relating to biodiversity which are binding on the republic;

(c) To provide for co-operative governance in biodiversity management and conservation; and

(d) To provide for a South African National Biodiversity Institute to assist in achieving the objectives of this Act.

Under this Act notices are published in terms of alien and invasive species or threatened ecosystems in order to promote the biodiversity of natural resources and protect species endemic to South Africa.

Figure 5 – Irreplaceable Map

Implications for the development:

The proposed development is situated within the Carletonville Dolomite Grassland vegetation type according to Mucina and Rutherford (2006). No red data plant species have been identified on the proposed study area. The proposed external sewer pipeline is on the verge of an irreplaceable site that is situated along the perennial river to the west of the proposed pipeline.

GDARD Draft Ridges Policy	**Provincial**	**2001**

The biodiversity and socio-cultural value of ridges and their essential role in ecosystem processes will be established in order to show why it is absolutely imperative that the Department adopts a no-go development policy for the ridges of Gauteng. It is important to remember that the quartzite ridges of Gauteng, together with the Drakensberg Escarpment, should be regarded as one of the most important natural assets in the entire region of the northern provinces of South Africa. They are characterized by a unique plant species composition that is found nowhere else in South Africa or the world (Bredenkamp & Brown, 1998). Ridges are important for biodiversity hotspots, red data/threatened species, invertebrates, wildllife corridors, ecosystem processes and socio-cultural value (aesthetic value).

Figure 6 – Ridges

A ridge is defined as any topographic feature in the landscape that is characterized by slopes of 5° or more, as determined by means of a GIS digital elevation model.

Implications for the development:

The policy will not have to be considered for the application as the study area does not fall on a ridge/tansformed ridge.

Conservation of Agricultural Resources Act (Act No. 43 of 1983)	**National**	**1 June 1983**

This act provides for control over the utilization of natural agricultural resources of South Africa in order to promote the conservation of soil, water sources and the vegetation as well as the combating of weeds and invader plants; and for matters connecting therewith.

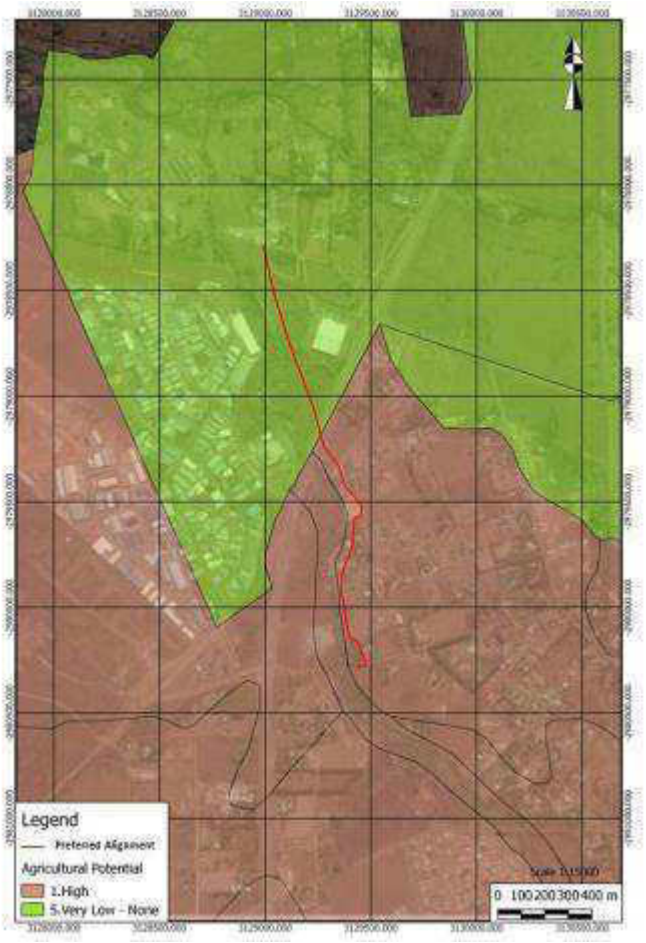


Figure 7 – Agricultural Potential

Implications for the development:

Not Significant – According to the Gauteng Agricultural Potential Atlas (GAPA

3), the Raslouw X 15 sewer pipeline is located on land with high and low agricultural potential. However, it should be noted that the surrounding areas is in the process of being developed or already developed for industrial, residential or other land uses. In addition, GIS Data and GIDS data from GDARD also clearly indicates that the development is located within the Gauteng Urban Edge (2010), and does not fall within any of the Seven Agriculture Hubs identified for the Gauteng province. (Please refer to Figure 7 – Agriculture Potential Map)

GDARD Agricultural Hub Policy	**Provincial**	**2006**

GDARD identified 7 Agricultural Hubs in Gauteng province. These hubs are earmarked for agricultural activities and there are policies and guidelines that should be taken into consideration when one plans to develop in these hubs areas. Urban development is usually not supported in these hubs.

Figure 8 – Agricultural Hubs

Implications for the development:

Not significant - The study area is not situated within any of the 7 agricultural hubs identified for Gauteng.

Gauteng Urban Edge 2010	Provincial	2010

According to Mr. Neels du Toit of the Gauteng Department of Economic Development the urban edge is now delineated on a yearly basis and it is the responsibility of the local authorities to request for a yearly amendment to the urban edge.

From this year onwards the urban edge will be reviewed at the end of September and it will be adjusted to be in accordance with the proposals supplied by the various local authorities.

Figure 9 – Urban Edge

Implication for the development:

The proposed study area is included into the urban edge as indicated on the

spatial development framework, the 2007 provincial urban edge and into the revised 2010 urban edge. The proposed development is regarded as in line with this policy.

National Environmental Management: Waste Act (Act 59 of 2008)	**National**	**2008**

This Act aims to consolidate waste management in South Africa, and contains a number of commendable provisions, including:

- The establishment of a national waste management strategy, and national and provincial norms and standards, for amongst other, the classification of waste, waste service delivery, and tariffs for such waste services;
- Addressing reduction, reuse, recycling and recovery of waste;
- The requirements for industry and local government to prepare integrated waste management plans;
- The establishment of control over contaminated land;
- Identifying waste management activities that requires a license, which currently include facilities for the storage, transfer, recycling, recovery, treatment and disposal of waste on land;
- Co-operative governance in issuing licenses for waste management facilities, by means of which a licensing authority can issue an integrated or consolidated license jointly with other organs of state that has legislative control over the activity; and
- The establishment of a national waste information system.

On 29 November 2013 the Minister of Environmental Affairs and Tourism amended the list of waste management activities that might have a detrimental effect on the environment.

Implication for the development:

Not significant – No waste management license will be required during the construction or operational phases of the proposed sewer pipeline. Due to the fact that a small amount of solid construction waste will be stored and handled on the site, before it is hauled away and dumped at the nearest registered landfill site.

Red List Plant Species Guidelines	**Provincial**	**26 June 2006**

The purpose of these guidelines is to promote the conservation of Red List Plant Species in Gauteng, which are species of flora that face risk of extinction in the wild. By protecting Red List Plant Species, conservation of diverse landscapes is promoted which forms part of the overall environmental preservation of diverse ecosystems, habitats, communities, populations,

species and genes in Gauteng.

These Guidelines are intended to provide a decision-making support tool to any person or organization that is responsible for managing, or whose actions affect, areas in Gauteng where populations of Red List Plant Species grow, whether such person or organization be an organ of state or private entity or individual; thereby enabling the conservation of the Red List Plant Species that occur in Gauteng.

Implication for the development:

A small section of the proposed sewer pipeline might possibly have some Orange Listed Plant species present according to the map (Figure 10). No Red or Orange Listed Plant species have been encountered during the specialist's assessments and none are expected to occur due to the high level of disturbance.

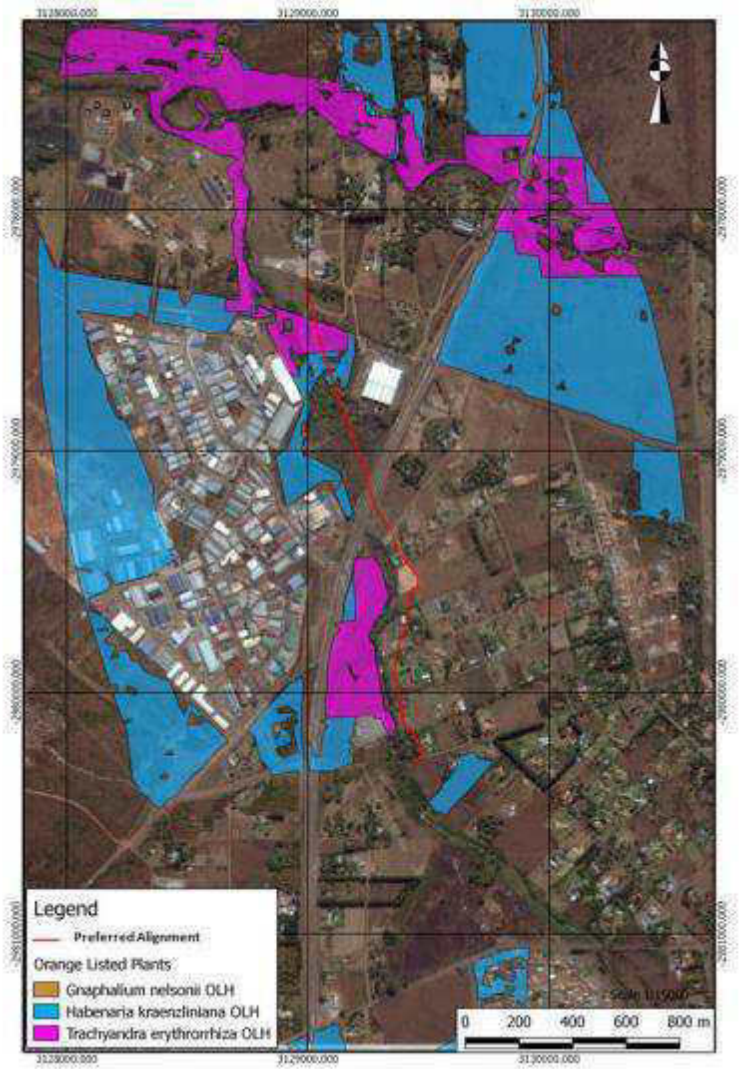


Figure 10 – Orange Listed Plants

Gauteng Noise Control Regulations, 1999	Provincial	1999

The regulation controls noise pollution. According to the acceptable noise levels in a residential area situated within an urban area is 55dBA and the maximum acceptable noise levels in a rural area is 45dBA.

Implication for the development:

Within the construction phase of the proposed pipeline, the impact of noise could be problematic, but such impacts are generally short term. One should note that practical mitigation measures for noise pollution are low, but certain measures can be implemented to mitigate the severity. During the operational phase, there will be no noise impacts. **(Please Refer to Appendix H (EMP) for a list of suitable guidelines and mitigation measures)**

The Gauteng Transport Infrastructure Act, 2001	Provincial	2001

The Act was created to consolidate the laws relating to roads and other types of transport infrastructure in Gauteng; and to provide for the planning, design, development, construction, financing, management, control, maintenance, protection and rehabilitation of provincial roads, railway lines and other transport infrastructure in Gauteng; and to provide for matter connected therewith.

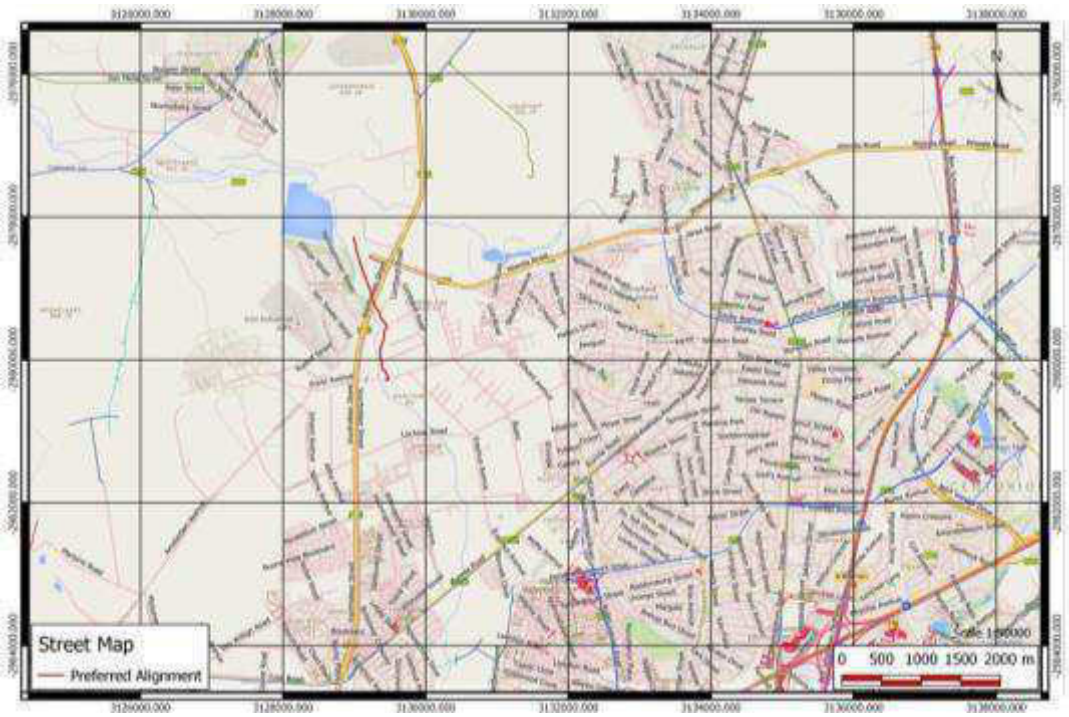


Figure 11 – Roads and Railways

Implication for the development:

All developments in Gauteng must take the Gauteng Road network as published into consideration and no development may be planned across any provincial or K-route.

3. ALTERNATIVES

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment
The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. **Do not** include the no go option into the alternative table below.

Note: After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

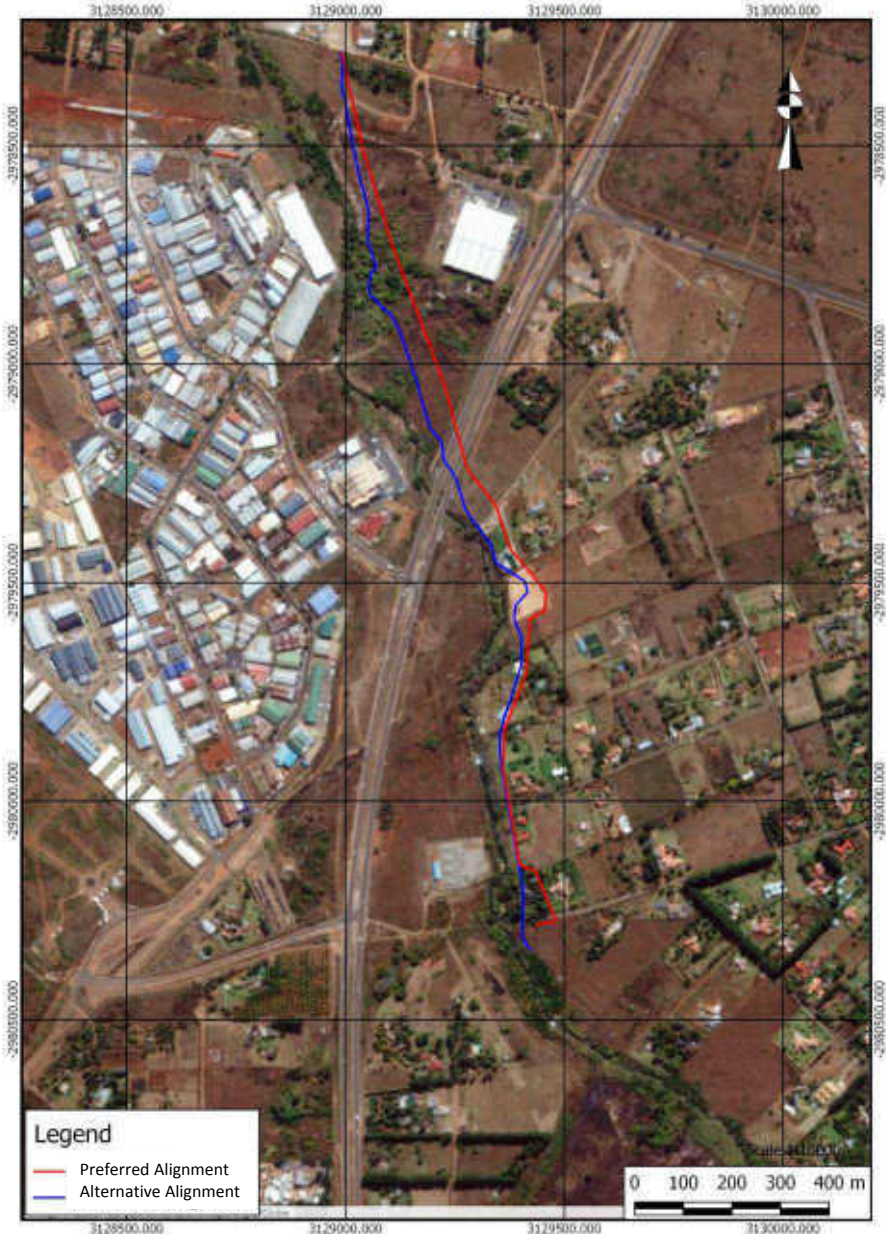


Figure 12 – Proposed and Alternative Alignments

Provide a description of the alternatives considered

No.	**Alternative type**, either alternative: site on property, properties, activity, design, technology, operational or other(provide details of "other")	**Description**
1	Proposal	External Services (Sewer) ***Please refer to Figure 1 and 2 for this preferred alignment***
2	Alternative 2	Alignment Alternative ***Please refer to Figure 12 that illustrate the two alternative alignments***

NOTE: The numbering in the above table must be consistently applied throughout the application report and process

4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the total physical size (footprint) of the proposal as well as alternatives. Footprints are to include all new infrastructure (roads, services etc), impermeable surfaces and landscaped areas:

Alternative:	**Size of the activity:**
Alternative 1(Proposed activity)	
Alternative 2 (if any)	
Alternative 3 (if any)	
	Ha

or, for linear activities:

Alternative:	**Length of the activity:**
Alternative 1(Proposed activity)	**2.00 km**
Alternative 2 (if any)	**2.00 km**
Alternative 3 (if any)	
	m/km

Indicate the size of the site(s) or servitudes (within which the above footprints will occur):

Alternative:	**Size of the site/servitude:**
Alternative 1(Proposed activity)	**1.2 ha**
Alternative 2 (if any)	**1.2 ha**
Alternative 3 (if any)	
	Ha/m^2

5. SITE ACCESS

Alternative 1 (Proposal)

Does ready access to the site exist, or is access directly from an existing road?

YES	NO
X	

If NO, what is the distance over which a new access road will be built: m

Describe the type of access road planned:

The proposed pipelines are situated to the east of the Sunderland Ridge Industrial Area and it traverses the R55. The pipeline originates in the south at Poole Avenue and there is ready access. However, the proposed pipeline traverses a number of properties.

Include the position of the access road on the site plan.

Alternative 2

Does ready access to the site exist, or is access directly from an existing road?

YES	NO
X	

If NO, what is the distance over which a new access road will be built: m

Describe the type of access road planned:

The proposed pipelines are situated to the east of the Sunderland Ridge Industrial Area and it traverses the R55. The pipeline originates in the south at Poole Avenue and there is ready access. However, the proposed pipeline traverses a number of properties.

Include the position of the access road on the site plan.

Alternative 3

Does ready access to the site exist, or is access directly from an existing road?	YES	NO
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

N/A

Include the position of the access road on the site plan.

PLEASE NOTE: Points 6 to 8 of Section A must be duplicated where relevant for alternatives

Section A 6-8 has been duplicated 1 Number of times

(only complete when applicable)

6. SITE OR ROUTE PLAN

A detailed site or route (for linear activities) plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document. The site or route plans must indicate the following:

- the scale of the plan, which must be at least a scale of 1:2000 (scale cannot be larger than 1:2000 i.e. scale can not be 1:2500 but could where applicable be 1:1500)
- the property boundaries and numbers of all the properties within 50m of the site;
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- the exact position of each element of the application as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, septic tanks, storm water infrastructure and telecommunication infrastructure;
- walls and fencing including details of the height and construction material;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites including (but not limited thereto):
  - Rivers and wetlands;
  - the 1:100 and 1:50 year flood line;
  - ridges;
  - cultural and historical features;
  - areas with indigenous vegetation (even if it is degraded or infested with alien species);
- for gentle slopes the 1m contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- the positions from where photographs of the site were taken.
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the 32m position from the bank to be clearly indicated)

7. SITE PHOTOGRAPHS

Colour photographs from the center of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under the appropriate Appendix**.** It should be supplemented with additional photographs of relevant features on the site, where applicable.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity. To be attached in the appropriate Appendix.

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

Note: Complete Section B for the proposal

Further:

Instructions for completion of Section B for linear activities

1) For linear activities (pipelines etc) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
2) Indicate on a plan(s) the different environments identified
3) Complete Section B for each of the above areas identified
4) Attach to this form in a chronological order
5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section B has been duplicated for sections of the route **"insert No. of duplicates"** times

Instructions for completion of Section B for location/route alternatives

1) For each location/route alternative identified the entire Section B needs to be completed
2) Each alterative location/route needs to be clearly indicated at the top of the next page
3) Attach the above documents in a chronological order

Section B has been duplicated for location/route alternatives 1 times

(complete only when appropriate)

Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application

Section B is to be completed and attachments order in the following way

- All significantly different environments identified for Alternative 2 is to be completed and attached in a chronological order; then
- all significantly different environments identified for Alternative 3 is to be completed and attached chronological order
- etc

Section B - Section of Route [ ] (complete only when appropriate for above)

Section B – Location/route Alternative No. **Alternative 1 (Preferred)** (complete only when appropriate for above)

1. PROPERTY DESCRIPTION

Property description:

The following farms/ properties will be affected:

- Holding 1 and 4 of Raslouw Agricultural Holdings;
- Remainder of Holding 122, Raslouw Agricultural Holdings;
- Portion 124, 125 166, 164, 163, 608, 607, 606, 446, 412, 406 and 168 of the Farm Zwartkop 356 JR; and
- Portion 462 of the Farm Mooiplaats 355 JR.

(Farm name, portion etc.)

2. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure

adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Alternative:	**Latitude (S):**	**Longitude (E):**

In the case of linear activities:

Alternative:	**Latitude (S):**	**Longitude (E):**
• Starting point of the activity		
• Middle point of the activity		
• End point of the activity		

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Appendix

Addendum of route alternatives attached **Please refer to Appendix D**

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat	**1:50 – 1:20**	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5

4. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site.

Ridgeline	Plateau	Side slope of hill/ridge	Valley	Plain	**Undulating plain/low hills**	River front

5. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

REFER TO APPENDIX I: FIGURE 13 – SOILS MAP AND FIGURE 14 – DOLOMITE MAP

a) Is the site located on any of the following?

Shallow water table (less than 1.5m deep)	YES	**NO maybe**
Dolomite, sinkhole or doline areas	**YES X**	NO
Seasonally wet soils (often close to water bodies)	YES	**NO X**
Unstable rocky slopes or steep slopes with loose soil	YES	**NO X**
Dispersive soils (soils that dissolve in water)	YES	**NO X**

Soils with high clay content (clay fraction more than 40%)	YES	**NO** Adjacent to an area with high clay content
Any other unstable soil or geological feature	YES	**NO X**
An area sensitive to erosion	YES	**NO X**

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

Please note for clarity purposes all figures within the Basic Assessment for Raslouw x 15 is in a larger format at the back of the Report

Figure 13 – Soils

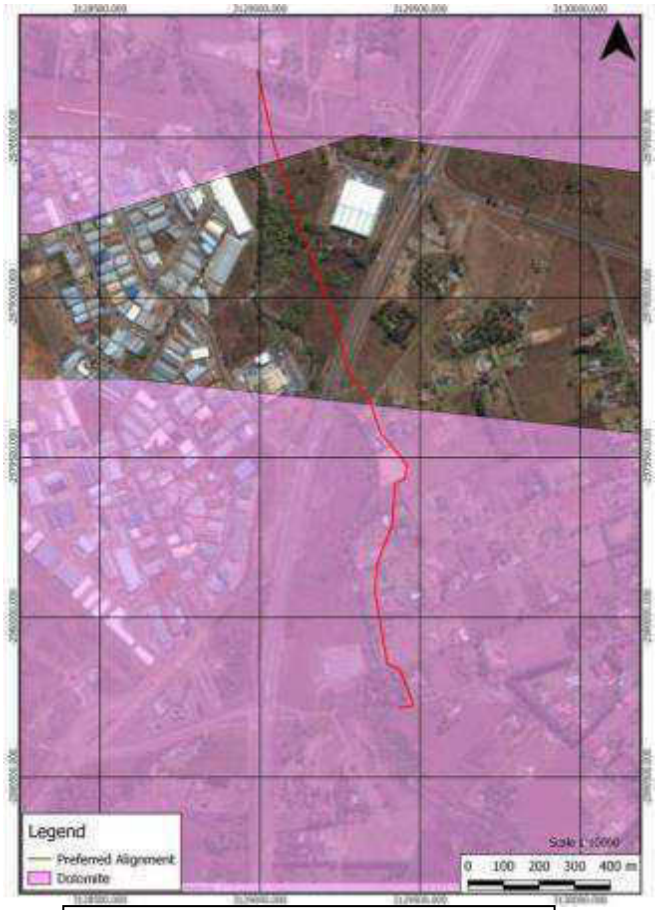


Figure 14 – Dolomite

b) are any caves located on the site(s)	YES	**NO X**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

c) are any caves located within a 300m radius of the site(s)	YES	**NO X**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

d) are any sinkholes located within a 300m radius of the site(s)	YES	**NO X**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department

The proposed pipeline is partly situated on dolomite and precautionary measures will need to be implemented during the construction phase. The Environmental Management Plan (EMP) will include mitigation/management measures for the dolomitic areas.

6. AGRICULTURE

REFER TO APPENDIX I: FIGURE 7 – AGRICULTURAL POTENTIAL MAP

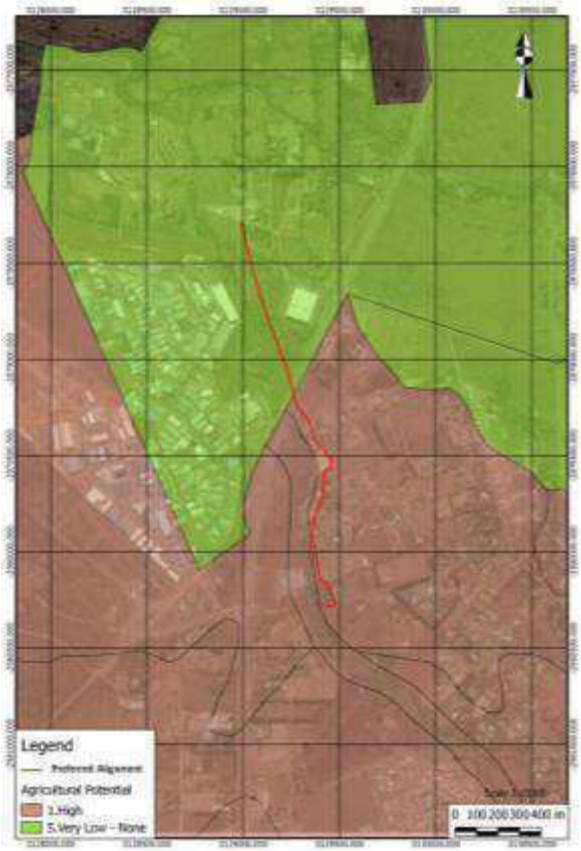


Figure 7 – Agricultural Potential

Does the site have high potential agricultural soils as contemplated in the Gauteng Agricultural Potential Atlas (GAPA)?	**YES X**	NO

Please note: The Department may request specialist input/studies depending on the nature of the soil type and location of the site

Implications for the development

No Agricultural Potential Study was conducted for the proposed development due to the following:

- The proposed development site under application is situated next to an industrial area, with no landowners/ tenants practicing agricultural activities;
- The proposed application is linear and thus too small for economic viable agricultural activities:
- The application site is situated within an area underline by the dolomitic conditions, and extensive irrigation of such soils is not supported;
- The Agricultural Potential of the proposed application site according to GAPA version 3 indicates a High Agricultural Potential as well as low Agricultural potential;
- The proposed development sites are located within the Gauteng urban Edge (2010), and not located within any of the seven Agriculture Hubs identified for the Gauteng Province. (Please refer to figure 9 – Urban Edge Map)

7. GROUNDCOVER

To be noted that the location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Indicate the types of groundcover present on the site and include the estimated percentage found on site

Natural veld - good condition **% =**	Natural veld with scattered aliens **% = 10**	Natural veld with heavy alien infestation **% =**	Veld dominated by alien species % **= 40**	Landscaped (vegetation) % = **25**
Sport field % =	Cultivated land % =	Paved surface (hard landscaping) % = **5**	Building or other structure % = **20**	Bare soil % =

Please note: The Department may request specialist input/studies depending on the nature of the groundcover and potential impact(s) of the proposed activity/ies.

Are there any rare or endangered flora or fauna species (including red list species) present on the site	YES	**NO X**

If YES, specify and explain:

Please note that the Wetland Study as well as the Ecological Assessment was done for Alternative 2 as that was the initial alignment. However, the current Preferred Alignment is situated a small distance to the east of Alternative 2. The change in alignment was done to move away from the river system and outside of the floodlines and therefore from an ecological point of view the amended alignment (Preferred Alternative) has a much lower impact on the river and fauna and flora environments. As the specialists surveyed the

proposed study area as well as the surrounding area the specialist studies is adequate for both alignments and takes all into consideration.

A wetland/water course identification and delineation study was conducted by Terra Soil Science for the proposed sewer line. According to the specialist, the proposed sewer line is situated in an area comprising mainly of dolomite. Chert with shale and quartzite also occurs in the general area.

The topography of the site and stream channel is relatively flat to undulating. The topography of the site contributes to water accumulation areas and water flow paths.

The proposed sewer line is planned to mainly be aligned along the contours that is 5m or more above the water level of the Rietspruit and the sewer line will be between 15 and 130m away from the channel. The transition from the terrestrial area outside the drainage line into the drainage line is characterized by a steep slope, in most of the areas. Significant amounts of human impacts in the form of developments (residential, light commercial), roads and fences, occur within the proposed sewer pipeline alignment and surrounding areas. In a number of places, the banks of the Rietspruit have been altered due to a variety of construction and earth moving activities (images of such impacts can be found in the Wetland Delineation Study in Appendix G).

The soils of the site are exclusively rocky Hutton (orthic A horizon / red apedal B horizon / unspecified material – usually hard or weathering rock) forms up to the immediate drainage channel. The materials that have been deposited in the drainage channel are characterized to be predominantly of granitic origin, which is mainly coarse grained quartz particles with occasional primary minerals derive from granite. These materials have been transported up to 4km downstream. Consequently, this indicates severe erosion and sedimentation within the area.

According to Terra Soil Science there is no other wetland features on the banks or along the sewer line transect apart from the Rietspruit drainage feature. These findings are based on vegetation and soil characteristics. It is important to note that the vegetation component consists mainly of exotic plant species that have colonized the banks of the Spruit. This will be the result of the highly altered nature of the channel banks, edges and deposition zones, mainly due to the human impact.

A buffer is not included in the wetland delineation as the drainage feature has been impacted severely by human activities. The proposed sewer line transect is outside of the delineated wetland/riparian zone for its entire length. Please refer to Figure 15 for River/Wetland Boundary or the Wetland

Delineation Study.

The following can be concluded from the specialist report:

- The channel, banks and edges of the Rietspruit have been impacted severely by historical human impacts;
- The proposed sewer line runs outside of the wetland/riparian zone for its entire length;
- A wetland buffer is not proposed for this project mainly due to the fact that there is no water ingress from the surrounding landscape into the Rietspruit other than through surface runoff and several man-made structures;
- It is concluded that the construction of the sewer line, if conducted according to sound site management practices will not influence the status or nature of the Rietspruit in its current state.

Figure 15 – Wetland/River Boundary

Recommendations with regards to erosion and siltation management were listed in the wetland delineation report and these have been incorporated in the EMP for the proposed sewer line.

An Ecological Assessment was conducted by Enviro-Insight for the proposed sewer pipeline and surrounding environment. The study area falls within the Carletonville Dolomite Grassland. The area is surrounded by ecological support areas as well as important areas according to the GDARD Conservation Plan (V3.3) from GIS data. However, on the site it is rather disturbed and transformed with existing roads, garden areas, security walls, security fencing, houses and associated infrastructure as well as some rubble dumping. Exotic plant species also has an impact on the proposed study area at present.

Three habitat units have been identified along the proposed pipeline and surrounding areas. Firstly there is a transformed unit, which is majority of the proposed area, which includes housing, boundary fences, rock dumps and roads. No red data fauna and flora species were identified or are expected to occur due to the high level of transformation. The drainage line was also identified as a unit and it was found to be largely disturbed with indigenous plant species as well as alien plant species. No red data species have been or are expected to be identified due to disturbance. The third habitat unit is a semi-natural terrestrial vegetated area with high clay content and a number of indigenous tree, grass and forb species.

According to the Ecological Assessment, the proposed pipeline is unlikely to affect any red data plant species as none were observed or are expected to occur. With regards to the red data fauna species, the level of disturbance has limited the presence of fauna species on a permanent basis. The drainage line might be used as a migratory corridor for fauna species. The associated human impacts and presence of alien and invasive plant species contributes to the disturbed state of the area.

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban edge, May 2002) or within 600m (if outside the urban edge, May 2002) radius of the site	YES	NO x

If YES, specify and explain:

Are their any special or sensitive habitats or other natural features present on the site?	YES X	NO

If YES, specify and explain:

The drainage line to the west of the proposed sewer pipeline can be seen as a natural feature, however, it is disturbed through human impacts and the presence alien plant species. A buffer was not recommended by the specialist due to the high level of disturbance and transformation of the

drainage line.				
Was a specialist consulted to assist with completing this section			**YES X**	NO
If yes complete specialist details:				
Name of the specialist:	J.H. van der Waals			
Qualification(s) of the specialist: Professional Registration	PhD Soil Science, Pri.Sci.Nat			
Postal address:	-			
Postal code:	-			
Telephone:	012 993 0969	Cell:	082 570 1297	
E-mail:	johan@terrasoil.co.za	Fax:	086 274 6653	
Are any further specialist studies recommended by the specialist?			YES	**NO X**
If YES, specify:				
If YES, is such a report(s) attached?			YES	NO
If YES list the specialist reports attached below				
Signature of specialist:		Date:	April 2014	

Name of the specialist:	Sam Laurence, Luke Verburgt, Lukas Niemand		
Qualification(s) of the specialist: Professional Registration	BSc Conservation Biology, BSc Marine Science, BSc Zoology, BSc Honours Zoology, BSc Honours Wildlife Management, MSc (C) Wildlife Management, MSc Zoology: Registered as a professional scientist for Zoology and Ecology (Pri. Sci. Nat)		
Postal address:	46 The Woods, Kent Street, Meyerspark		
Postal code:	0184		
Telephone:		Cell:	0724371742
E-mail:	info@enviro-insight.co.za	Fax:	
Are any further specialist studies recommended by the specialist?		YES	**NO X**
If YES, specify:			
If YES, is such a report(s) attached?		YES	NO
If YES list the specialist reports attached below			
Signature of specialist:		Date:	April 2014

Please note; If more than one specialist was consulted to assist with the filling in of this section then this table must be appropriately duplicated

8. LAND USE CHARACTER OF SURROUNDING AREA

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

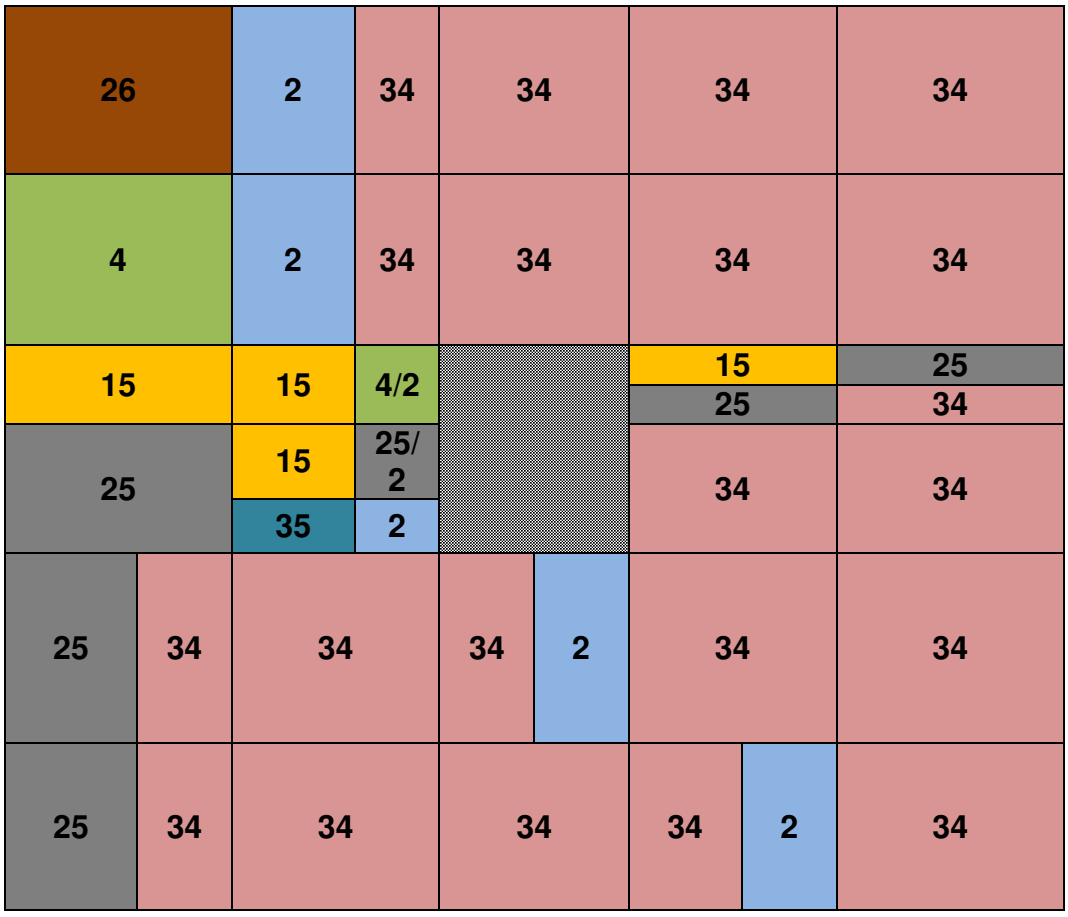
1. Vacant land	**2. River, stream, wetland**	3. Nature conservation area	**4. Public open space**	5. Koppie or ridge
6. Dam or reservoir	7. Agriculture	8. Low density residential	9. Medium to high density residential	10. Informal residential

11. Old age home	12. Retail	13. Offices	14. Commercial & warehousing	**15. Light industrial**
16. Heavy industrial[AN]	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities
21. Golf course/polo fields	22. Airport[N]	23. Train station or shunting yard[N]	24. Railway line[N]	**25. Major road (4 lanes or more)[N]**
26. Sewage treatment plant[A]	27. Landfill or waste treatment site[A]	28. Historical building	29. Graveyard	30. Archeological site
31. Open cast mine	32. Underground mine	33.Spoil heap or slimes dam[A]	**34. Agricultural Holdings**	**35. Substation**
Other land uses (describe):				

NORTH

WEST

EAST



SOUTH

NOTE: Each block represents an area of 250m X250m

= Site

Note: More than one (1) Land-use may be indicated in a block

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an "A" and with an "N" respectively.

Have specialist reports been attached	YES	NO
		X

If yes indicate the type of reports below

N/A

9. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the area and the community condition as baseline information to assess the potential social, economic and community impacts.

The application site (pipeline alignment) is surrounded by Industrial developments to the West and Residential (agricultural holdings) developments to the East of the proposed sewer pipeline. This pipeline will originate in the south at Poole Avenue along the 1:100 year floodline to the north of the Sunderland Ridge Industrial area. Approximately at the 1km interval of the pipeline it will traverse the R55 (Voortrekker Street).

The Raslouw Extension 15 Township development has been approved and this development together with many other developments in the area makes it necessary to upgrade the existing municipal water and sewage networks. Without the proposed upgradings, the existing municipal services networks will not have the capacity to accommodate new developments.

The development aims to upgrade the sewage system by installing/upgrading the required external sewage pipelines. The surrounding local community as well as the tenants and occupants of the new developments will benefit from the installation of such new and upgraded services. The rates and taxes payable to the involved local authority for such new services holds significant financial advantages to the local authority and this financial benefits will eventually make it possible for the local authority to fulfil in the social needs of the communities within the Tshwane area.

This development can be of economic importance to the surrounding community and the area as a whole thereby increasing the economic base of the Municipality. The proposed development will contribute by means of job opportunities during construction phase for construction related workers (skilled, semi-skilled and un-skilled individuals).

10. CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposal or alternatives, then you are requested to furnish this Department with written comment from the South African Heritage Resource Agency (SAHRA) – Attach comment in appropriate annexure

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) the construction of a bridge or similar structure exceeding 50m in length;

(c) any development or other activity which will change the character of a site-

(i) exceeding 5 000 m2 in extent; or

(ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m2 in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Are there any signs of culturally (aesthetic, social, spiritual, environmental) or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?	YES	**NO X**

If YES, explain:

If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

According to Archaetnos Archaeologists and Heritage Consultants and Leonie Marais-Botes Heritage Practitioner the study area previously mainly consisted of agricultural holdings. Majority of the greater study area can now be described as an industrial area (Sunderland Ridge). The site where the proposed sewer line will be developed is not situated in an area with great historical significance, although there is a couple of building structures older than 60 years in the surrounding area. These buildings older than 60 years are not within the proposed alignment, it is further than 700m from the site. No buildings of historical value will be demolished for the proposed pipeline.

In most parts of the study area there is infrastructure and other developments which have been altered the landscape from its natural form. The study area does not comprise of any spiritual, scientific, historical, aesthetic, or social value.

According to Archaetnos Archaeologists and Heritage Consultants and Leonie Marais-Botes Heritage Practitioner the study does not contain any surface archaeological deposits, possibly due to the large scale alteration of the original landscape. However, there is a possibility of sub-surface findings and should be taken into consideration in the EMP. Should any sub-surface archaeological material be discovered, construction work must be discontinued and a heritage practitioner (preferably an archaeologist) must be contacted to assess the find and make recommendations.

Furthermore, it was established that the site does not contain any marked graves. The possibility of graves not visible to the human eye always exists and this should also be taken into consideration in the compilation of the EMP. Should any sub-surface graves be discovered work should be ceased and a professional (preferably an archaeologist) must be contacted to assess the age of the grave/graves and advice on the way forward.

Some of the structures in the surrounding area were identified to be older than 60 years, should any of these structures be earmarked for demolition, a demolition permit must be obtained from the Provincial Heritage Authority of Gauteng (PHRAG). According to the specialist, there are no visible restrictions or negative impacts in terms of heritage associated with the site other than the structures older than 60 years. In terms of heritage this project can proceed.

If construction takes place and archaeological sites are exposed, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

Will any building or structure older than 60 years be affected in any way?	YES	**NO X**
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	**NO X**

If yes, please attached the comments from SAHRA in the appropriate Appendix

Section B – Location/route Alternative No. **Alternative 2** (complete only when appropriate for above)

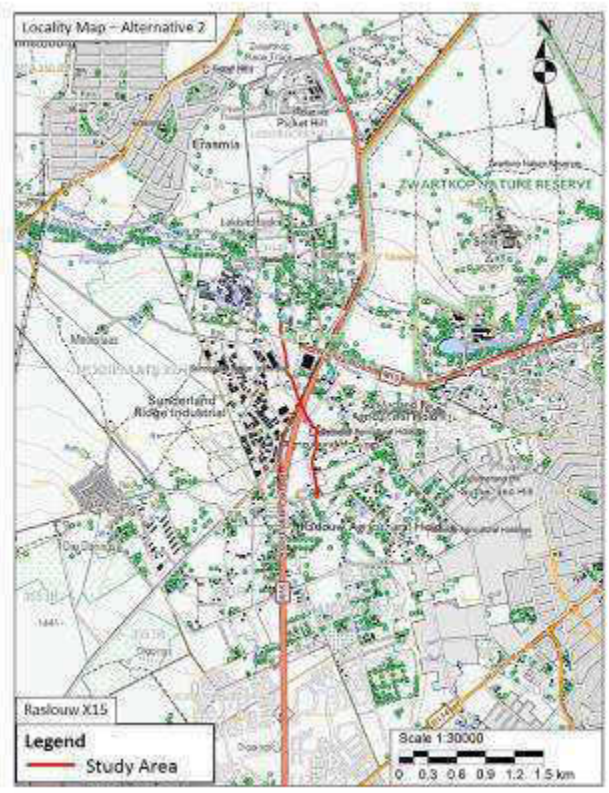


Figure 16: Locality Map for Alternative 2

Figure 17: Aerial Map for Alternative 2

11. PROPERTY DESCRIPTION

Property description:

The following farms/ properties will be affected:

- Holding 1 and 4 of Raslouw Agricultural Holdings;
- Portion 124, 166, 164, 163, 607, 606, 446, 412 and 168 of the Farm Zwartkop 356 JR; and
- Portion 462 of the Farm Mooiplaats 355 JR.

(Farm name, portion etc.)

12. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Alternative:	**Latitude (S):**	**Longitude (E):**

In the case of linear activities:

Alternative:	**Latitude (S):**	**Longitude (E):**

- Starting point of the activity
- Middle point of the activity
- End point of the activity

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Appendix

Addendum of route alternatives attached **Please refer to Appendix D**

13. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat	**1:50 – 1:20**	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5

14. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site.

Ridgeline	Plateau	Side slope of hill/ridge	Valley	**Plain**	**Undulating plain/low hills**	River front

15. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

REFER TO APPENDIX I: FIGURE 18 AND 19

b) Is the site located on any of the following?

Shallow water table (less than 1.5m deep)	YES	**NO maybe**
Dolomite, sinkhole or doline areas	**YES X**	NO
Seasonally wet soils (often close to water bodies)	YES	**NO X**
Unstable rocky slopes or steep slopes with loose soil	YES	**NO X**
Dispersive soils (soils that dissolve in water)	YES	**NO X**
Soils with high clay content (clay fraction more than 40%)	YES	**NO Adjacent to an area with high clay content**
Any other unstable soil or geological feature	YES	**NO X**
An area sensitive to erosion	YES	**NO X**

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

Figure 18 – Alternative 2 Soils

Figure 19 – Alternative 2 Dolomite

b) are any caves located on the site(s)

YES	NO
	X

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

c) are any caves located within a 300m radius of the site(s)

YES	NO
	X

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

d) are any sinkholes located within a 300m radius of the site(s)

YES	NO
	X

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department

The proposed pipeline is partly situated on dolomite and precautionary measures will need to be implemented during the construction phase. The Environmental Management Plan (EMP) will include mitigation/management measures for the dolomitic areas.

16. AGRICULTURE

REFER TO APPENDIX I: FIGURE 20

Figure 20 – Alternative 2 Agricultural Potential

Does the site have high potential agricultural soils as contemplated in the Gauteng Agricultural Potential Atlas (GAPA)?	YES X	NO

Please note: The Department may request specialist input/studies depending on the nature of the soil type and location of the site

Implications for the development

No Agricultural Potential Study was conducted for the proposed development due to the following:

- The proposed development site under application is situated next to an industrial area, with no landowners/ tenants practicing agricultural activities;
- The proposed application is linear and thus too small for economic viable agricultural activities:
- The application site is situated within an area underline by the dolomitic conditions, and extensive irrigation of such soils is not supported;
- The Agricultural Potential of the proposed application site according to GAPA version 3 indicates a High Agricultural Potential as well as low Agricultural potential;
- The proposed development sites are located within the Gauteng urban Edge (2010), and not located within any of the seven Agriculture Hubs identified for the Gauteng Province. (Please refer to figure 9 – Urban Edge Map)

17. GROUNDCOVER

To be noted that the location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Indicate the types of groundcover present on the site and include the estimated percentage found on site

Natural veld - good condition **% =**	Natural veld with scattered aliens **% = 10**	Natural veld with heavy alien infestation **% =**	Veld dominated by alien species **% = 40**	Landscaped (vegetation) % = **25**
Sport field % =	Cultivated land % =	Paved surface (hard landscaping) % = **5**	Building or other structure % = **20**	Bare soil % =

Please note: The Department may request specialist input/studies depending on the nature of the groundcover and potential impact(s) of the proposed activity/ies.

Are there any rare or endangered flora or fauna species (including red list species) present on the site	YES	**NO X**

If YES, specify and explain:

A wetland/water course identification and delineation study was conducted by Terra Soil Science for the sewer line. According to the specialist, the proposed sewer line is situated in an area comprising mainly of dolomite. Chert with shale and quartzite also occurs in the general area.

The topography of the site and stream channel is relatively flat to undulating. The topography of the site contributes to water accumulation areas and water flow paths.

The proposed sewer line is planned to mainly be aligned along the contours that is 5m or more above the water level of the Rietspruit and the sewer line will be between 15 and 130m away from the channel. The transition from the terrestrial area outside the drainage line into the drainage line is characterized by a steep slope, in most of the areas. Significant amounts of human impacts in the form of developments (residential, light commercial), roads and fences, occur within the proposed sewer pipeline alignment and surrounding areas. In a number of places, the banks of the Rietspruit have been altered due to a variety of construction and earth moving activities.

The soils of the site are exclusively rocky Hutton (orthic A horizon / red apedal B horizon / unspecified material – usually hard or weathering rock) forms up to the immediate drainage channel. The materials that have been deposited in the drainage channel are characterized to be predominantly of granitic origin, which is mainly coarse grained quartz particles with occasional primary minerals derive from granite. These materials have been transported up to 4km downstream. Consequently, this indicates severe erosion and sedimentation within the area.

According to Terra Soil Science there is no other wetland features on the banks or along the sewer line transect apart from the Rietspruit drainage feature. These findings are based on vegetation and soil characteristics. It is important to note that the vegetation component consists mainly of exotic plant species that have colonized the banks of the Spruit. This will be the result of the highly altered nature of the channel banks, edges and deposition zones, mainly due to the human impact.

A buffer is not included in the wetland delineation as the drainage feature has been impacted severely by human activities. The proposed sewer line transect is outside of the delineated wetland/riparian zone for its entire length.

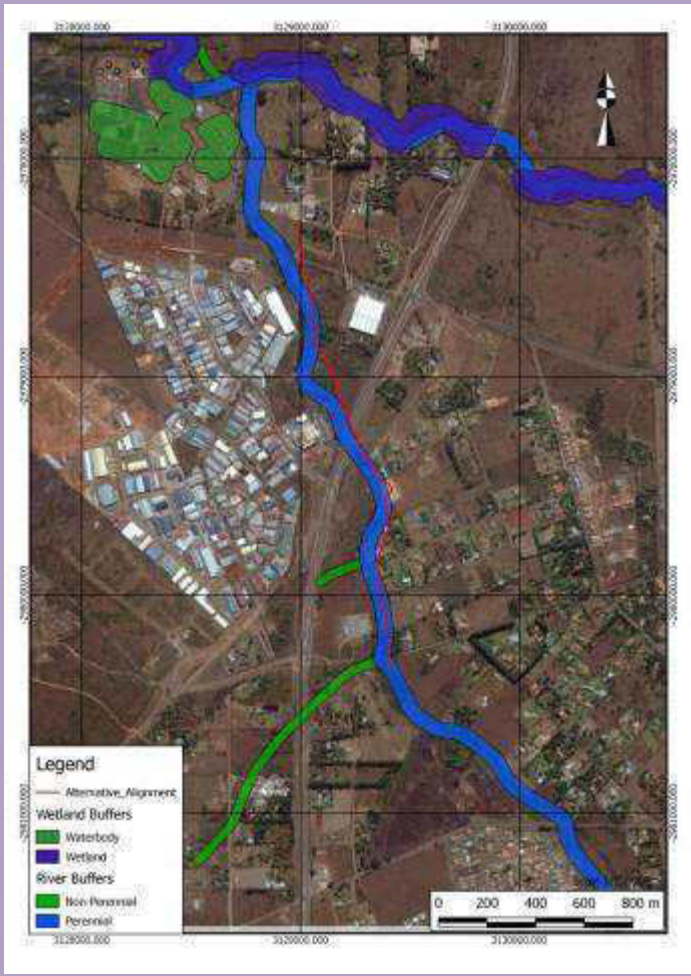


Figure 21 – Alternative 2 Rivers

An Ecological Assessment was conducted by Enviro-Insight for the sewer pipeline and surrounding environment. The study area falls within the Carletonville Dolomite Grassland. The area is surrounded by ecological support areas as well as important areas according to the GDARD Conservation Plan (V3.3) from GIS data. However, on the site it is rather

disturbed and transformed with existing roads, garden areas, security walls, security fencing, houses and associated infrastructure as well as some rubble dumping. Exotic plant species also has an impact on the proposed study area at present.

Three habitat units have been identified along the pipeline and surrounding areas. Firstly there is a transformed unit, which is the majority of the proposed area, which includes housing, boundary fences, rock dumps and roads. No red data fauna and flora species were identified or are expected to occur due to the high level of transformation. The drainage line was also identified as a unit and it was found to be largely disturbed with indigenous plant species as well as alien plant species. No red data species have been or are expected to be identified due to disturbance. The third habitat unit is a semi-natural terrestrial vegetated area with high clay content and a number of indigenous tree, grass and forb species.

Please note that the Alternative Alignment (Alternative 2) is on the 1:100 year floodline within the area with more riparian vegetation and possible habitat for fauna species.

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban edge, May 2002) or within 600m (if outside the urban edge, May 2002) radius of the site	YES	NO x

If YES, specify and explain:

Are their any special or sensitive habitats or other natural features present on the site?	YES X	NO

If YES, specify and explain:

The drainage line to the west of the alternative sewer pipeline can be seen as a natural feature, and this alignment runs along the 1:100 year floodline

Was a specialist consulted to assist with completing this section	YES X	NO

If yes complete specialist details:

Name of the specialist:	J.H. van der Waals		
Qualification(s) of the specialist: Professional Registration	PhD Soil Science, Pri.Sci.Nat		
Postal address:	-		
Postal code:	-		
Telephone:	012 993 0969	Cell:	082 570 1297
E-mail:	johan@terrasoil.co.za	Fax:	086 274 6653

Are any further specialist studies recommended by the specialist?	YES	NO X

If YES, specify:

If YES, is such a report(s) attached?	YES	NO

If YES list the specialist reports attached below

Signature of specialist:		Date:	April 2014

Name of the specialist:	Sam Laurence Luke Verburgt Lukas Niemand		
Qualification(s) of the specialist: Professional Registration	BSc Conservation Biology, BSc Marine Science, BSc Zoology, BSc Honours Zoology, BSc Honours Wildlife Management, MSc (C) Wildlife Management, MSc Zoology: Registered as a professional scientist for Zoology and Ecology (Pri. Sci. Nat)		
Postal address:	46 The Woods, Kent Street, Meyerspark		
Postal code:	0184		
Telephone:		Cell:	0724371742
E-mail:	info@enviro-insight.co.za	Fax:	
Are any further specialist studies recommended by the specialist?		YES	**NO X**
If YES, specify:			
If YES, is such a report(s) attached?		YES	NO
If YES list the specialist reports attached below			
Signature of specialist:		Date:	April 2014

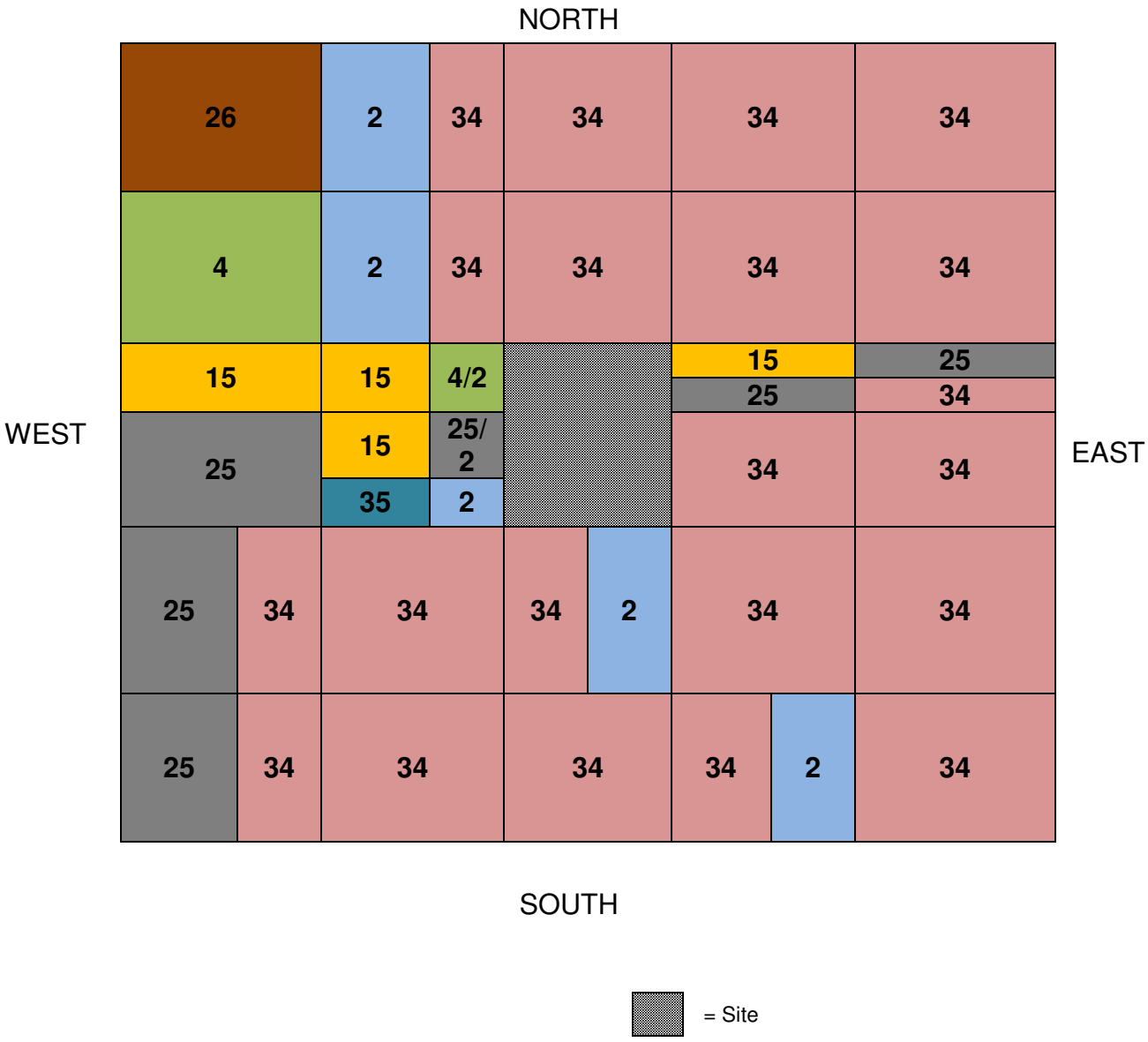
Please note; If more than one specialist was consulted to assist with the filling in of this section then this table must be appropriately duplicated

18. LAND USE CHARACTER OF SURROUNDING AREA

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

1. Vacant land	**2. River, stream, wetland**	3. Nature conservation area	**4. Public open space**	5. Koppie or ridge
6. Dam or reservoir	7. Agriculture	8. Low density residential	9. Medium to high density residential	10. Informal residential
11. Old age home	12. Retail	13. Offices	14. Commercial & warehousing	**15. Light industrial**
16. Heavy industrial[AN]	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities
21. Golf course/polo fields	22. Airport[N]	23. Train station or shunting yard[N]	24. Railway line[N]	**25. Major road (4 lanes or more)[N]**
26. Sewage treatment plant[A]	27. Landfill or waste treatment site[A]	28. Historical building	29. Graveyard	30. Archeological site
31. Open cast mine	32. Underground mine	33.Spoil heap or slimes dam[A]	**34. Agricultural Holdings**	**35. Substation**
Other land uses (describe):				

NOTE: Each block represents an area of 250m X250m



Note: More than one (1) Land-use may be indicated in a block

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an "Â" and with an "N" respectively.

Have specialist reports been attached	YES	NO X

If yes indicate the type of reports below

N/A

19. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the area and the community condition as baseline information to assess the potential social, economic and community impacts.

The application site (pipeline alignment) is surrounded by Industrial developments to the West and Residential (agricultural holdings) developments to the East of the proposed sewer pipeline. This pipeline will originate in south at Poole Avenue along the 1:100 year floodline to the north of the Sunderland Ridge Industrial area. Approximately at the 1km interval of the pipeline it will traverse the R55 (Voortrekker Street).

The Raslouw Extension 15 Township development has been approved and this development together with many other developments in the area makes it necessary to upgrade the existing municipal water and sewage networks. Without the proposed upgradings, the existing municipal services networks will not have the capacity to accommodate new developments.

The development aims to upgrade the sewage system by installing/upgrading the required external sewage pipelines. The surrounding local community as well as the tenants and occupants of the new developments will benefit from the installation of such new and upgraded services. The rates and taxes payable to the involved local authority for such new services holds significant financial advantages to the local authority and this financial benefits will eventually make it possible for the local authority to fulfil in the social needs of the communities within the Tshwane area.

This development can be of economic importance to the surrounding community and the area as a whole thereby increasing the economic base of the Municipality. The proposed development will contribute by means of job opportunities during construction phase for construction related workers (skilled, semi-skilled and un-skilled individuals).

20. CULTURAL/HISTORICAL FEATURES

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- *(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or*
- *(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;*

(d) the re-zoning of a site exceeding 10 000 m2 in extent; or
(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Are there any signs of culturally (aesthetic, social, spiritual, environmental) or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?	YES	**NO X**

If YES, explain:

If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

According to Archaetnos Archaeologists and Heritage Consultants and Leonie Marais-Botes Heritage Practitioner the study area previously mainly consisted of agricultural holdings. Majority of the greater study area can now be described as an industrial area (Sunderland Ridge). The site where the proposed sewer line will be developed is not situated in an area with great historical significance, although there is a couple of building structures older than 60 years in the surrounding area. These buildings older than 60 years are not within the alignment, it is further than 700m from the site. No buildings of historical value will be demolished for the pipeline.

In most parts of the study area there is infrastructure and other developments which have been altered the landscape from its natural form. The study area does not comprise of any spiritual, scientific, historical, aesthetic, or social value.

According to Archaetnos Archaeologists and Heritage Consultants and Leonie Marais-Botes Heritage Practitioner the study does not contain any surface archaeological deposits, possibly due to the large scale alteration of the original landscape. However, there is a possibility of sub-surface findings and should be taken into consideration in the EMP. Should any sub-surface archaeological material be discovered, construction work must be discontinued and a heritage practitioner (preferably an archaeologist) must be contacted to assess the find and make recommendations.

Furthermore, it was established that the site does not contain any marked graves. The possibility of graves not visible to the human eye always exists and this should also be taken into consideration in the compilation of the EMP. Should any sub-surface graves be discovered work should be ceased and a professional (preferably an archaeologist) must be contacted to assess the age of the grave/graves and advice on the way forward.

Some of the structures in the surrounding area were identified to be older than 60 years, should any of these structures be earmarked for demolition, a

demolition permit must be obtained from the Provincial Heritage Authority of Gauteng (PHRAG). According to the specialist, there are no visible restrictions or negative impacts in terms of heritage associated with the site other than the structures older than 60 years. In terms of heritage this project can proceed.

If construction takes place and archaeological sites are exposed, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

Will any building or structure older than 60 years be affected in any way?	YES	**NO X**
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	**NO X**

If yes, please attached the comments from SAHRA in the appropriate Appendix

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The Environmental Assessment Practitioner must follow any relevant guidelines adopted by the competent authority in respect of public participation and must at least –

1(a) Fix a notice in a conspicuous place, on the property where it is intended to undertake the activity which states that an application will be submitted to the competent authority in terms of these regulations and which provides information on the proposed nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations on the application may be made.

1(b) inform landowners and occupiers of adjacent land of the applicant's intention to submit an application to the competent authority

1(c) inform landowners and occupiers of land within 100 metres of the boundary of the property where it is proposed to undertake the activity and whom may be directly affected by the proposed activity of the applicant's intention to submit an application to the competent authority;

1(d) inform the ward councillor and any organisation that represents the community in the area of the applicant's intention to submit an application to the competent authority;

1(e) inform the municipality which has jurisdiction over the area in which the proposed activity will be undertaken of the applicant's intention to submit an application to the competent authority; and

1(f) inform any organ of state that may have jurisdiction over any aspect of the activity of the applicant's intention to submit an application to the competent authority; and

1(g) place a notice in one local newspaper and any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of these regulations.

2. LOCAL AUTHORITY PARTICIPATION

Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application.

Has any comment been received from the local authority?	YES	**NO x**

If "YES", briefly describe the comment below (also attach any correspondence to and from the local authority to this application):

If "NO" briefly explain why no comments have been received

Comments will be received from the local authority once the Basic Assessment Report is available for public review. The comments will be attached in the final document.

3. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?	YES	**NO x**

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

If "NO" briefly explain why no comments have been received

Comments will be received from the stakeholders once the Basic Assessment Report is available for public review. The comments will be attached in the final document.

4. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees and ratepayers associations. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

The practitioner must record all comments and respond to each comment of the public / interested and affected party before the application is submitted. The comments and responses must be captured in a Comments and Responses Report as prescribed in the regulations and be attached to this application.

5. APPENDICES FOR PUBLIC PARTICIPATION

All public participation information is to be attached in the appropriate Appendix. The information in this Appendix is to be ordered as detailed below

Appendix 1 – Proof of site notice

Appendix 2 – written notices issued to those persons detailed in 1(b) to 1(f) above

Appendix 3 – Proof of newspaper advertisements

Appendix 4 –Communications to and from persons detailed in Point 2 and 3 above

Appendix 5 – minutes of any public and or stakeholder meetings

Appendix 6 - Comments and Responses Report

Appendix 7 –Comments from I&APs on Basic Assessment (BA) Report

Appendix 8 –Comments from I&APs on amendments to the BA report

Appendix 9 – Copy of the register of I&APs

Appendix 10 – Comments from I&APs on the application

Appendix 11 - Other

SECTION D: RESOURCE USE AND PROCESS DETAILS

Note: Section D is to be completed for the proposal

Instructions for completion of Section D for alternatives

1) For each alternative under investigation, where such alternatives will have different resource and process details (e.g. technology alternative), the entire Section D needs to be completed
4) Each alterative needs to be clearly indicated in the box below
5) Attach the above documents in a chronological order

Section D has been duplicated for alternatives (complete only when appropriate)	0	times

Section D Alternative No.		(complete only when appropriate for above)

1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?	**YES X**	NO
If yes, what estimated quantity will be produced per month?	Not Available	

How will the construction solid waste be disposed of (describe)?

During the construction phase the disposal of solid waste will be the responsibility of the developer. An area on the application site will be earmarked for dumping of solid waste to be disposed of during construction. This area must be situated carefully not to be visual from the surrounding residents. The demarcated area must be easily accessible for dumping trucks to collect waste. The waste will be carted to registered landfill site.

Where will the construction solid waste be disposed of (describe)?

All construction solid waste will be disposed of at the nearest registered dumping site. No solid waste will be dumped on surrounding open areas or adjacent properties.

Will the activity produce solid waste during its operational phase?	YES	**NO X**
If yes, what estimated quantity will be produced per month?	Not applicable	

How will the solid waste be disposed of (describe)?

Not applicable

Has the municipality or relevant service provider confirmed that sufficient air space exists for treating/disposing of the solid waste to be generated by this activity? Not applicable	YES	NO

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

Not applicable

Note: If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?	YES	**NO X**
If yes, inform the competent authority and request a change to an application for scoping and EIA. Is the activity that is being applied for a solid waste handling or treatment facility?	YES	**NO**

	X

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.
Describe the measures, if any, that will be taken to ensure the optimal reuse or recycling of materials:

It is recommended that all construction waste materials be sorted into recyclable materials and non-recyclable materials and the recyclable materials should be re-used or disposed of by a recycling company.

Liquid effluent (other than domestic sewage)

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	YES	**NO X**
If yes, what estimated quantity will be produced per month?	Not Applicable	
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)?	Not Applicable	
Will the activity produce any effluent that will be treated and/or disposed of on site?	Yes	**NO X**
If yes, what estimated quantity will be produced per month?	Not Applicable	

If yes describe the nature of the effluent and how it will be disposed.

Not Applicable

Note that if effluent is to be treated or disposed on site the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA

Will the activity produce effluent that will be treated and/or disposed of at another facility?	YES	**NO X**

If yes, provide the particulars of the facility:

Facility name:			
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

Not Applicable

Liquid effluent (domestic sewage)

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?	YES	**NO X**
If yes, what estimated quantity will be produced per month?	Not applicable	
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the domestic effluent to be generated by this activity(ies)?	YES	NO **N/A**
Will the activity produce any effluent that will be treated and/or disposed of on site?	YES	**NO X**

If yes describe how it will be treated and disposed off.

Not Applicable

Emissions into the atmosphere

Will the activity release emissions into the atmosphere?	YES	**NO X**
If yes, is it controlled by any legislation of any sphere of government?	Not Applicable	

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.
If no, describe the emissions in terms of type and concentration:

The proposed development will not generate any emissions. Some additional vehicle/truck traffic during the construction phase may have an influence but this can be regarded as insignificant.

2. WATER USE

Indicate the source(s) of water that will be used for the activity

Municipal	Directly from water board	groundwater	river, stream, dam or lake	other	**the activity will not use water during the operational phase as it is a sewer pipeline**

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month: Not Applicable

If Yes, please attach proof of assurance of water supply, e.g. yield of borehole, in the appropriate Appendix

Does the activity require a water use permit from the Department of Water Affairs and Forestry? **YES maybe** / NO

If yes, list the permits required

In terms of the Section 21 of the National Water Act, the developer will need a water use license for activities (c) and (i) for the proposed development as the proposed sewer pipeline is within 500m from a watercourse.

If yes, have you applied for the water use permit(s)? NO

If yes, have you received approval(s)? (attached in appropriate appendix) Not Applicable

3. POWER SUPPLY

Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

Not applicable

If power supply is not available, where will power be sourced from?

Not Applicable

4. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

Not applicable

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

Not applicable

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2006, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

The public participation for the Raslouw x 15 sewer pipeline was done in order to ensure that all Interested and Affected Parties register.

The proposed project was advertised in the Beeld news paper on Friday, 28 February 2014 **(Refer to Appendix Ei – Proof of Newspaper advertisement).** Site notices were also erected at prominent points adjacent to the application site on 27 February 2014. **(Refer to Appendix Eii – Proof of Site Notice).** Furthermore Flyers were also distributed to residents, land owners, tenants and stakeholders in the surrounding area **(Refer to Appendix Eiii – Written Notices).**

It is the opinion of Bokamoso that the Public participation was extensive and transparent enough to ensure any comments or issues in regards to the proposed development to be addressed and to suggest possible mitigation measures.

Please note! The public participation process conducted in February 2014 was for the initial alignment that is running along the 1:100 year floodline. After the public participation process was conducted, the engineers designed a new alignment in order to move the pipeline further away from the riparian zone and to minimize the pipeline from crossing buildings or structures, thus it is aligned more on property boundary fences. From an environmental point of view, this is an improved and more viable alignment as the environmental impact will be less than with the initial alignment. Therefore this Basic Assessment Report has the new alignment as the preferred/proposed alignment and the initial alignment as the alternative alignment. It should be noted that the public participation process will be repeated to advertise the new preferred alignment and to ensure that all landowners have been notified. All registered Interested and Affected Parties will be notified of the review period for this Draft Basic Assessment Report as well as when the public participation process will be repeated.

Summary of response from the practitioner to the issues raised by the interested and affected parties
(A full response must be provided in the Comments and Response Report that must be attached to this report):

Please refer to Appendix E (iv) for the Comments and Issues Register.

2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts

The beneficial and adverse impacts of the proposed development have been discussed below.

The impacts are rated based on consideration of the following:

A). Significance:

❑	Improbable	-	Low possibility of impact to occur either because of design or historic experience.
❑	Probable	-	Distinct possibility that impact will occur.
❑	Highly probability	-	Most likely that impact will occur.
❑	Definite	-	Impact will occur, in the case of adverse impacts regardless of any prevention measures.

B).Intensity factor:

❑	Low intensity	-	natural and man made functions not affected
❑	Medium intensity	-	environment affected but natural and man made functions and processes continue
❑	High intensity	-	environment affected to the extent that natural or man made functions are altered to the extent that it will temporarily or permanently cease

C). Duration:

❑	Short term	-	<1 to 5 years - Factor 2
❑	Medium term	-	5 to 15 years - Factor 3
❑	Long term	-	impact will only cease after the operational life of the activity, either because of natural process or by human intervention
❑	Permanent	-	mitigation, either by natural process or by human intervention, will not occur in such a way or in such a time span that the impact can be considered

transient.

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Alternative 1 (Proposal)

Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:
CONSTRUCTION PHASE			
Beneficial Impacts			
Institutional Environment			
The proposed development will be in line with the current and proposed developments in the vicinity.	**High**	Not applicable	**High**
Fauna & Flora			
Eradication of invasive species.	**Medium**	Eradication of invasive species during the construction phase would benefit the biophysical environment. Not necessary to mitigate.	**Medium**
Social & Economic Environment			
Creation of Job opportunities.	**Medium**	The proposed development would create job opportunities during the construction phase. Should the local community not benefit from these opportunities, it could lead to an influx of people from other areas. Only employing people from the local community could mitigate the potential adverse impact.	**Medium**
Services			
Upgrading of existing services and the construction of new services.	**High**	The establishment of new services (sewer pipeline) will be essential to support the proposed development of Raslouw x 15 and other future developments.	**High**
Adverse Impacts			
Flora & Fauna			
Construction works will cause the eradication of existing vegetation – Site clearance forms part of any project of this scale. Large areas of exposed soil will cause erosion and dust pollution. Due to the already extensive disturbance within the study area by human activity, large bare soil areas are visible and can create opportunity for extensive erosion on site.	**Low**	• The project should be planned to ensure that only specific areas are cleared as the project progress to ensure that large areas are not exposed over long periods; • Before the removal of vegetation takes place, the area to be cleared must be clearly marked; • Strip topsoil at start of works and store in stockpiles no more than 1.5 m high in designated storage areas. The topsoil should contain the natural grass component as the seeds may help with the re-vegetation of the site during rehabilitation; • As many of the large indigenous tree specimens must be retained on the alignment during construction.	**None**

		• The trees to be retained must be marked and may not be disturbed during the construction activities; • Environmental damage caused by trenches may be kept to a minimum by forward planning and thereby reducing the actual time interval that trenches are kept open and may kill some mammals; • The contractor must ensure that no fauna species are trapped, hunted or killed during the construction phase.	
Possible spreading of invaders into the natural surrounding areas.	**Low**	No plants, not indigenous to the area, or exotic plant species should be introduced into the rehabilitation of the proposed pipeline.	**None**
Uncontrolled fires may cause damage and loss to vegetation and fauna in the area.	**Low**	If fires are required for cooking and heating purposes, these fires will only be permitted in designated areas on site.	**None**
Geology & Soils			
Soil erosion due to drainage systems – During the construction phase temporary measures should be implemented to manage storm water and water flow on the application site. If the storm water and water flow is not regulated and managed on site it could cause significant erosion of soil, as well as the pollution and siltation of the river running to the west of the pipeline.	**Low**	• Only the identified areas should be cleared of vegetation. This should be done in stages as construction works progress along the pipeline; • Implement temporary storm water management measures that will help to reduce the speed of the water. Sandbags can be placed between the pipeline and the river to assist with the prevention of water pollution, erosion and siltation; • If excavations or foundations fill up with storm water, these areas should immediately be drained and measures to prevent further water from entering the excavations should be implemented.	**None**
If not planned and managed correctly topsoil will be lost.	**Medium**	• A shake down area at the exits of the construction site should be established where the excessive soil on the tires of the construction vehicles can be brushed off and kept aside for later use during rehabilitation works; • The areas where topsoil will not be removed and which will be conserved during the construction phase should be marked with barrier tape to ensure that vehicles do not move across these areas, and construction activities does not damage the in-situ topsoil • The removed topsoil should be stored separately from all stockpiled materials and subsoil, according to the stockpiling methods as described below. The stockpiled topsoil should be used for rehabilitation and landscaping purposes after	**Low**

		construction has been completed; • The installation of services could leave soils exposed and susceptible to erosion. Soils should be stored adjacent to the excavated trenches that are excavated to install services, and this should be filled up with the in-situ material as the services are installed. All stones and rocks bigger than 80 mm should be removed from the top layer of soil and these disturbed areas should be re-vegetated immediately after works in a specific area are completed to prevent erosion; • Excavations on site must be kept to minimum and done only one section at a time. Excavated soils must be stockpiled directly on the demarcated area on site.	
Excavation is not kept dry.	**Medium**	Construction works and bulk earth works which involve the construction of excavations must be proposed for the dryer season,	**Low**
Incorrect construction could increase the possibility of doline and sinkhole formation due to the underlying dolomitic conditions of the area.	**High**	Due to the underlying dolomitic conditions it is important that the following be adhered to: • Damming and ponding of water should be prevented; • The standard precautionary measures for developing on dolomite should be adhered to. The wet services engineer must ensure that very strict precautionary measures and design and construction practices are implemented during any construction and/ or earth works on site; • Structures should adhere to the NHBRC standards and norms; • Threes should not be planted in close proximity to water bearing services. This will prevent the roots to penetrate the wet services which could cause water leakage; • All wet services should be regular inspected to prevent leaking pipes.	**Low**
Climate			
Construction during the rainy season can cause delays and damage to the environment.	**Low**	• It is recommended that the construction phase be scheduled for the winter months especially activities such as the installation of services, foundations, excavations and road construction; • It is also recommended that the precautionary measures be taken in order to prevent the extensive loss of soil during rainstorms. Large exposed areas should adequately be	**None**

		protected against erosion by matting or cladding; • Measures should be implemented during the rainy season to channel storm water away from open excavations and foundations.	
Construction during the dry and windy season could cause excessive dust pollution during construction works.	**Low**	Regular and effective damping down working areas (especially during the dry and windy periods) must be carried out to avoid dust pollution that will have a negative impact on the surrounding environment. When necessary, these working areas should be damped down at least twice a day.	**None**
Hydrology & groundwater			
Excavated materials that are stockpiled in wrong areas can interfere with the natural drainage.	**Low**	An area must be allocated for stockpiling of topsoil before any construction take place on the application site. The stockpiles must be situated away from any water source or drainage channel. A sediment fence or barrier must be constructed around the stockpile, to prevent soil from washing away by rain or any water.	**Low**
Cultural and Archaeology			
Occurrence of cultural historical assets on the proposed development site.	**None**	If archeological sites are exposed during construction work, it should immediately be reported to a museum, preferably on at which an archaeologist are available so that an investigation and evaluation of the site can be made.	**None**
Localized Vibration			
The noise created by earthmoving machinery will result in the greatest increase in ambient levels. This will be short term, being generated only during the day.	**Medium**	All construction activities must be restricted during normal working hours from 8:00 in the morning to no later than 18:00 in the afternoons. No construction may take place on Sundays and public holidays.	**Low**
Air pollution			
Nuisance to neighbours in terms of dust generation due to construction during the dry and windy season.	**Low**	The application site must be damped at a regular basis with water (more or less 3 to 4 times on a dry day). A water tanker should be used, if possible.	**Low**
Roads and Traffic			
Heavy vehicle traffic increase could disrupt the surrounding landowners' daily routines.	**Low**	Heavy vehicles must be instructed to only use the main roads during off-peak hours.	**Low**
Restrictions of access to surrounding properties and the study area during construction phases.	**Medium**	• To minimize the impacts or risks, heavy construction vehicles should avoid using the local road network during peak traffic times. • These vehicles should use only specific roads and strictly keep within the speed limits and abide to all traffic laws. No speeding or reckless driving should be allowed. Access to the site for construction vehicles should be planned to minimize the impact on the surrounding network; and • Warning signs should be erected on the roads that these vehicles will use, at big crossings/ access roads and on the site if needed.	**Low**
Damage to roads.	**Medium**	Specific roads must be allocated for the	**Low**

		use by construction vehicles.	
Safety and Security			
During the construction phase safety and security problems (especially for the surrounding residents) are likely to occur.	**Medium**	Construction must be completed in as short time as possible. No construction worker or relative may reside on the application site during the construction phase. All construction workers must leave the site at the end of a day's work. A security guard should be appointed on site to prevent any security problems.	**Low**
Construction activities could cause danger to children and animals of the surrounding residents.	**Low**	• Although regarded as a normal practice, it is important to erect proper signs indicating the operation of heavy vehicles in the vicinity of dangerous crossings and access roads or erven with in the development site, if necessary; • It is also important to indicate all areas where excavations took place/ are taking place and warning signs that clearly indicate areas with excavations must be placed immediately adjacent to excavations; • A barrier should be established around dangerous excavation areas; • With the exception of appointed security personnel, no other worker, friend or relatives will be allowed to sleep on the construction site (weekends included), in the public open space or on adjacent properties; and • No worker should be allowed to enter adjacent private properties without written consent of the legal owners to the contractor.	**None**
Disruption of Services			
Services to surrounding properties can be temporarily disrupted during the installation of the pipeline.	**Low**	Surrounding properties should be informed of disruption of services at least 48 hours in advance.	**Low**
Visual Impact			
Dumping of builder's rubble on neighbouring properties.	**Medium**	A specific location for building rubble must be allocated on site, to concentrate and collect the building rubble and cart it to a certified landfill site. The allocated area must be out of sight of neighbouring properties to have a less visual impact.	**Low**
Stockpile areas for construction materials.	**Medium**	An area on the site must be allocated for the stockpiling of construction materials. The area must be situated on the application site, and must be situated to have a minimal visual impact on the neighbouring area.	**Low**
Veld fires may cause damage to infrastructure, vegetation and neighbouring properties.	**Low**	A specific area on site must be allocated, which will have the least impact on the environment on the environment and surrounding landowners, for fires of construction workers. This allocated area must be far from any structures and no fires may be lit except in the designated location.	**Low**
The construction vehicles, the site	**Medium**	Before any construction commence on	**Low**

camp and other construction related facilities will have a negative visual impact during the construction phase.		site, an area on site must be demarcated for a site camp.	
Waste Management			
Site office, camp and associated waste (visual, air and soil pollution)	**Medium**	• Temporary waste storage points on site shall be determined. These storage points shall be accessible by waste removal trucks; • These points should not be located in areas highly visible from the properties of the surrounding landowners/ tenants/ in areas where the wind direction will carry bad odours across the properties of adjacent tenants or landowners; • The site camp and the rest of the study area should appear neat at all times; • Waste materials should be removed from the site on a regular basis, to a registered dumping site; and • The site camp should not be located in a highly visual area on the study area, or a screen or barrier should be erected as not have a negative impact on the sense of place.	**Low**
Disposal of building waste & liquids	**Medium**	• All the waste generated by the proposed developments must be dumped at a preselected area on site to be carted to a register landfill site; • THESE AREAS SHALL BE PREDETERMINED AND LOCATED IN AREAS THAT ARE ALREADY DISTURBED.; • Small lightweight waste items should be contained in skips with lids to prevent wind littering; • All waste must be removed to a recognized waste disposal site/ landfill site on a weekly basis. No waste materials may be disposed of on or adjacent to the site; • The storage of solid waste on site, until such time that it may be disposed of, must be in the manner acceptable to the local authority; and • Keep records of waste reuse, recycling and disposal for future reference.	**Low**
OPERATIONAL PHASE			
Beneficial Impacts			
Social & Economic Environment			
Increase in surrounding property values	**High**	The availability of sanitation services will increase the property values of areas such as Raslouw x 15.	**High**
Adverse Impacts			

Hydrology			
Leaking pipes could cause ground water pollution risks.	**Low**	Pipes should be inspected on a regular basis.	**None**
Fauna and Flora			
Invasive and exotic plant species growing within the servitude of the proposed sewer line.	**High**	Any post-development re-vegetation or landscaping exercise should use species indigenous to South Africa. As far as possible indigenous plants naturally growing along the proposed alignment but would be otherwise destroyed during the construction should be used for re-vegetation/ landscaping purposes.	**Low**

Alternative 2

Potential impacts:	**Significance rating of impacts:**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**
CONSTRUCTION PHASE			
Beneficial Impacts			
Institutional Environment			
The proposed development will be in line with the current and proposed developments in the vicinity.	**High**	Not applicable	**High**
Fauna & Flora			
Eradication of invasive species.	**Medium**	Eradication of invasive species during the construction phase would benefit the biophysical environment. Not necessary to mitigate.	**Medium**
Social & Economic Environment			
Creation of Job opportunities.	**Medium**	The proposed development would create job opportunities during the construction phase. Should the local community not benefit from these opportunities, it could lead to an influx of people from other areas. Only employing people from the local community could mitigate the potential adverse impact.	**Medium**
Services			
Upgrading of existing services and the construction of new services.	**High**	The establishment of new services (sewer pipeline) will be essential to support the proposed development of Raslouw x 15 and other future developments.	**High**
Adverse Impacts			
Flora & Fauna			
Construction works will cause the eradication of existing vegetation – Site clearance forms part of any project of this scale. Large areas of exposed soil will cause erosion and dust pollution. Due to the already extensive disturbance within the study area by human activity, large bare soil areas are visible and can create opportunity for extensive erosion on site.	**Medium**	• The project should be planned to ensure that only specific areas are cleared as the project progress to ensure that large areas are not exposed over long periods; • Before the removal of vegetation takes place, the area to be cleared must be clearly marked; • Strip topsoil at start of works and store in stockpiles no more than 1.5 m high in designated storage areas. The topsoil should contain the natural	**Low**

		grass component as the seeds may help with the re-vegetation of the site during rehabilitation; • As many of the large indigenous tree specimens must be retained on the alignment during construction. The trees to be retained must be marked and may not be disturbed during the construction activities; • Environmental damage caused by trenches may be kept to a minimum by forward planning and thereby reducing the actual time interval that trenches are kept open and may kill some mammals; • The contractor must ensure that no fauna species are trapped, hunted or killed during the construction phase.	
Possible spreading of invaders into the natural surrounding areas.	**Low**	No plants, not indigenous to the area, or exotic plant species should be introduced into the rehabilitation of the proposed pipeline.	**None**
Uncontrolled fires may cause damage and loss to vegetation and fauna in the area.	**Low**	If fires are required for cooking and heating purposes, these fires will only be permitted in designated areas on site.	**None**
Geology & Soils			
Soil erosion due to drainage systems – During the construction phase temporary measures should be implemented to manage storm water and water flow on the application site. If the storm water and water flow is not regulated and managed on site it could cause significant erosion of soil, as well as the pollution and siltation of the river running to the west of the pipeline.	**Medium**	• Only the identified areas should be cleared of vegetation. This should be done in stages as construction works progress along the pipeline; • Implement temporary storm water management measures that will help to reduce the speed of the water. Sandbags can be placed between the pipeline and the river to assist with the prevention of water pollution, erosion and siltation; • If excavations or foundations fill up with storm water, these areas should immediately be drained and measures to prevent further water from entering the excavations should be implemented.	**Low**
If not planned and managed correctly topsoil will be lost.	**Medium**	• A shake down area at the exits of the construction site should be established where the excessive soil on the tires of the construction vehicles can be brushed off and kept aside for later use during rehabilitation works; • The areas where topsoil will not be removed and which will be conserved during the construction phase should be marked with barrier tape to ensure that vehicles do not move across these areas, and construction activities does not damage the in-situ topsoil • The removed topsoil should be	**Low**

		stored separately from all stockpiled materials and subsoil, according to the stockpiling methods as described below. The stockpiled topsoil should be used for rehabilitation and landscaping purposes after construction has been completed; • The installation of services could leave soils exposed and susceptible to erosion. Soils should be stored adjacent to the excavated trenches that are excavated to install services, and this should be filled up with the in-situ material as the services are installed. All stones and rocks bigger than 80 mm should be removed from the top layer of soil and these disturbed areas should be re-vegetated immediately after works in a specific area are completed to prevent erosion; • Excavations on site must be kept to minimum and done only one section at a time. Excavated soils must be stockpiled directly on the demarcated area on site.	
Excavation is not kept dry.	**Medium**	Construction works and bulk earth works which involve the construction of excavations must be proposed for the dryer season,	**Low**
Incorrect construction could increase the possibility of doline and sinkhole formation due to the underlying dolomitic conditions of the area.	**High**	Due to the underlying dolomitic conditions it is important that the following be adhered to: • Damming and ponding of water should be prevented; • The standard precautionary measures for developing on dolomite should be adhered to. The wet services engineer must ensure that very strict precautionary measures and design and construction practices are implemented during any construction and/ or earth works on site; • Structures should adhere to the NHBRC standards and norms; • Threes should not be planted in close proximity to water bearing services. This will prevent the roots to penetrate the wet services which could cause water leakage; • All wet services should be regular inspected to prevent leaking pipes.	**Low**
Climate			
Construction during the rainy season can cause delays and damage to the environment.	**Low**	• It is recommended that the construction phase be scheduled for the winter months especially activities such as the installation of services, foundations,	**None**

		excavations and road construction; • It is also recommended that the precautionary measures be taken in order to prevent the extensive loss of soil during rainstorms. Large exposed areas should adequately be protected against erosion by matting or cladding; • Measures should be implemented during the rainy season to channel storm water away from open excavations and foundations.	
Construction during the dry and windy season could cause excessive dust pollution during construction works.	**Low**	Regular and effective damping down working areas (especially during the dry and windy periods) must be carried out to avoid dust pollution that will have a negative impact on the surrounding environment. When necessary, these working areas should be damped down at least twice a day.	**None**
Hydrology & groundwater			
Excavated materials that are stockpiled in wrong areas can interfere with the natural drainage.	**Medium**	An area must be allocated for stockpiling of topsoil before any construction take place on the application site. The stockpiles must be situated away from any water source or drainage channel. A sediment fence or barrier must be constructed around the stockpile, to prevent soil from washing away by rain or any water.	**Low**
Cultural and Archaeology			
Occurrence of cultural historical assets on the proposed development site.	**None**	If archeological sites are exposed during construction work, it should immediately be reported to a museum, preferably on at which an archaeologist are available so that an investigation and evaluation of the site can be made.	**None**
Localized Vibration			
The noise created by earthmoving machinery will result in the greatest increase in ambient levels. This will be short term, being generated only during the day.	**Medium**	All construction activities must be restricted during normal working hours from 8:00 in the morning to no later than 18:00 in the afternoons. No construction may take place on Sundays and public holidays.	**Low**
Air pollution			
Nuisance to neighbours in terms of dust generation due to construction during the dry and windy season.	**Low**	The application site must be damped at a regular basis with water (more or less 3 to 4 times on a dry day). A water tanker should be used, if possible.	**Low**
Roads and Traffic			
Heavy vehicle traffic increase could disrupt the surrounding landowners' daily routines.	**Low**	Heavy vehicles must be instructed to only use the main roads during off-peak hours.	**Low**
Restrictions of access to surrounding properties and the study area during construction phases.	**Medium**	• To minimize the impacts or risks, heavy construction vehicles should avoid using the local road network during peak traffic times. • These vehicles should use only specific roads and strictly keep within the speed limits and abide to all traffic laws. No speeding or reckless driving should be allowed. Access to the site for construction vehicles should be planned to	**Low**

		minimize the impact on the surrounding network; and • Warning signs should be erected on the roads that these vehicles will use, at big crossings/ access roads and on the site if needed.	
Damage to roads.	**Medium**	Specific roads must be allocated for the use by construction vehicles.	**Low**
Safety and Security			
During the construction phase safety and security problems (especially for the surrounding residents) are likely to occur.	**Medium**	Construction must be completed in as short time as possible. No construction worker or relative may reside on the application site during the construction phase. All construction workers must leave the site at the end of a day's work. A security guard should be appointed on site to prevent any security problems.	**Low**
Construction activities could cause danger to children and animals of the surrounding residents.	**Low**	• Although regarded as a normal practice, it is important to erect proper signs indicating the operation of heavy vehicles in the vicinity of dangerous crossings and access roads or erven with in the development site, if necessary; • It is also important to indicate all areas where excavations took place/ are taking place and warning signs that clearly indicate areas with excavations must be placed immediately adjacent to excavations; • A barrier should be established around dangerous excavation areas; • With the exception of appointed security personnel, no other worker, friend or relatives will be allowed to sleep on the construction site (weekends included), in the public open space or on adjacent properties; and • No worker should be allowed to enter adjacent private properties without written consent of the legal owners to the contractor.	**None**
Disruption of Services			
Services to surrounding properties can be temporarily disrupted during the installation of the pipeline.	**Low**	Surrounding properties should be informed of disruption of services at least 48 hours in advance.	**Low**
Visual Impact			
Dumping of builder's rubble on neighbouring properties.	**Medium**	A specific location for building rubble must be allocated on site, to concentrate and collect the building rubble and cart it to a certified landfill site. The allocated area must be out of sight of neighbouring properties to have a less visual impact.	**Low**
Stockpile areas for construction materials.	**Medium**	An area on the site must be allocated for the stockpiling of construction materials. The area must be situated on the application site, and must be situated to have a minimal visual impact on the neighbouring area.	**Low**
Veld fires may cause damage to infrastructure, vegetation and	**Low**	A specific area on site must be allocated, which will have the least	**Low**

neighbouring properties.		impact on the environment on the environment and surrounding landowners, for fires of construction workers. This allocated area must be far from any structures and no fires may be lit except in the designated location.	
The construction vehicles, the site camp and other construction related facilities will have a negative visual impact during the construction phase.	**Medium**	Before any construction commence on site, an area on site must be demarcated for a site camp.	**Low**
Waste Management			
Site office, camp and associated waste (visual, air and soil pollution)	**Medium**	• Temporary waste storage points on site shall be determined. These storage points shall be accessible by waste removal trucks; • These points should not be located in areas highly visible from the properties of the surrounding landowners/ tenants/ in areas where the wind direction will carry bad odours across the properties of adjacent tenants or landowners; • The site camp and the rest of the study area should appear neat at all times; • Waste materials should be removed from the site on a regular basis, to a registered dumping site; and • The site camp should not be located in a highly visual area on the study area, or a screen or barrier should be erected as not have a negative impact on the sense of place.	**Low**
Disposal of building waste & liquids	**Medium**	• All the waste generated by the proposed developments must be dumped at a preselected area on site to be carted to a register landfill site; • THESE AREAS SHALL BE PREDETERMINED AND LOCATED IN AREAS THAT ARE ALREADY DISTURBED.; • Small lightweight waste items should be contained in skips with lids to prevent wind littering; • All waste must be removed to a recognized waste disposal site/ landfill site on a weekly basis. No waste materials may be disposed of on or adjacent to the site; • The storage of solid waste on site, until such time that it may be disposed of, must be in the manner acceptable to the local authority; and • Keep records of waste reuse, recycling and disposal for future reference.	**Low**
OPERATIONAL PHASE			
Beneficial Impacts			

Social & Economic Environment			
Increase in surrounding property values	**High**	The availability of sanitation services will increase the property values of areas such as Raslouw x 15.	**High**
Adverse Impacts			
Hydrology			
Leaking pipes could cause ground water pollution risks.	**Low**	Pipes should be inspected on a regular basis.	**None**
Fauna and Flora			
Invasive and exotic plant species growing within the servitude of the proposed sewer line.	**High**	Any post-development re-vegetation or landscaping exercise should use species indigenous to South Africa. As far as possible indigenous plants naturally growing along the alternative alignment but would be otherwise destroyed during the construction should be used for re-vegetation/ landscaping purposes.	**Low**

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

Ecological Red Listed Species Assessment (Appendix G1)
Wetland Delineation Assessment (Appendix G2)

3. IMPACTS THAT MAY RESULT FROM THE DECOMISSIONING AND CLOSURE PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Alternative 1 (Proposal)

Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:
Geology & Soils			
Soil erosion, siltation and gully formation.	**Low**	Demolition works must be kept to a minimum on site and only be done one section at a time to prevent excessive open soil areas that could lead to soil erosion, siltation and excessive compaction.	**Low**
If not planned and managed correctly, topsoil will be lost.	**Low**	▪ A shake down area at the exit of the site should be established where the excessive soil on the tires of vehicles can be brushed off and kept aside for later use during rehabilitation works; ▪ The site should be planned before any decommissioning activities take place on site. The areas where soil will be compacted, heavy vehicle movement (on site construction routes), site camp, material storage areas and stockpiling areas should be marked out and the topsoil should be removed; ▪ The areas where topsoil will not be removed and that will be conserved should be marked	**Low**

		with barrier tape to ensure vehicles do not move across these areas and decommissioning activities do not damage the in situ topsoil; ▪ The removed topsoil should be stored separately from all stockpiled materials and subsoil, according to the stockpiling methods as described below. The stockpiled topsoil should be used for rehabilitation purposes after decommissioning has been completed; and ▪ Rehabilitation works must be done immediately after the involved works in an area is completed to prevent erosion.	
Water seepage at shallow depth could cause instability of soil or water pollution.	**Medium**	Geotechnical and civil engineers must supply mitigation measures and guidelines to prevent problems.	**Low**
Hydrology & Groundwater			
Vehicle maintenance.	**Medium**	Vehicle maintenance may not be done on the application site. Whenever a vehicle needs maintenance it must be taken to a certified workshop for the maintenance.	**None**
Excavated materials that are stockpiled in the wrong areas can interfere with the natural drainage.	**Medium**	An area must be allocated for stockpiling of topsoil before any demolishing of buildings take place on the site and must be situated from any water source or drainage channels. A sediment fence or barrier must be constructed around the stockpile to prevent soil from washing away by rain or any water.	**Low**
Surface water flows will be altered during the decommissioning phase.	**Low**	Due to the demolishing that will take place (there will be trenches, topsoil and subsoil mounds in and around the area), the topography of the site will temporarily be altered.	**Low**
Climate			
Demolition works during the rainy season can cause unnecessary delays and damage to the environment, especially damage to existing roads in the area.	**Low**	Should decommissioning take place in the wetter months, frequent rain could cause very wet conditions, which makes it extremely difficult to do the necessary rehabilitation works of disturbed areas. Wet soils are vulnerable to compaction. Wet conditions often causes delays and the draining of water away from the works (in the case of high water tables) into the water bodies of the adjacent properties, could (if not planned and managed correctly) have an impact on the water quality of these water bodies.	**Low**
Demolition works during the dry and windy season.	**Low**	Regular and effective damping down of working areas (especially during the dry and windy periods) must be carried out to avoid dust pollution that will have a negative impact on the surrounding environment. When necessary, these working areas should be damped down at least twice daily.	**None**
Fauna & Flora			

Uncontrolled fires may cause damage or loss to vegetation and fauna in the area.	**Medium**	If fires are required for cooking and heating purposes, these fires will only be permitted in designated areas on the site. The fire area should be an exposed area (no natural veld grass should be in close proximity of the fire area). Workers should only be allowed to smoke in the fire area and fires should preferably be prevented while strong winds are blowing.	**None**
Uncontrolled activities and access to sensitive areas in the vicinity.	**Medium**	▪ Dumping of building rubble and other waste on these areas is strictly prohibited; and ▪ No vehicles must be allowed to move in or across the sensitive areas. This leaves visible scars and destroys habitat.	**Low**
Visual Impact			
Dumping of builder's rubble on neighbouring properties.	**Medium**	A specific location for building rubble must be allocated on site, to concentrate and collect the building rubble and cart it to a certified landfill site. The allocated area must be out of sight of neighbouring properties to have a less visual impact.	**None**
Localised Vibrations			
Noise pollution.	**Medium**	The activities related with the decommissioning phase will generate noise. Therefore, it must be restricted during working hours.	**Low**
Roads & Traffic			
Heavy vehicle traffic increase could disrupt the surrounding landowners' daily routines.	**Medium**	Heavy vehicles must be instructed to only use the main roads during off-peak hours.	**Low**
Restrictions of access to surrounding properties.	**Low**	▪ To minimize this impacts or risks, heavy vehicles (trucks, bull dowsers, etc.) should avoid using the local road network during peak traffic times; ▪ These vehicles should use only specific roads and strictly keep within the speed limits and abide to all traffic laws. No speeding or reckless driving should be allowed. Access to the site for heavy vehicles should be planned to minimize the impact on the surrounding network; and ▪ Warning signs should be erected on the roads that these vehicles will use, at big crossings/access roads and on the site if needed.	**None**
Damage to roads.	**Medium**	Specific roads must be allocated for the use by heavy vehicles and photos must be taken prior to decommissioning in order to determine if any damage has been done.	**None**
Safety & Security			
During the decommissioning phase safety and security problems (especially for the surrounding residents) are likely to occur.	**Low**	Demolition works must be completed in as short time as possible. No worker or relative may reside on the site. All workers must leave the site at the end of a day's work. A security guard should be appointed on site to prevent any security problems.	**Low**

Decommissioning activities could cause danger to children and animals of the surrounding residents.	**Medium**	▪ Although regarded as a normal practice, it is important to erect proper signs indicating the operations of heavy vehicles in the vicinity of dangerous crossings and access roads or even on the site if necessary; ▪ It is also important to indicate all areas where excavations took place/are taking place and warning signs that clearly indicate areas with excavations must be placed immediately adjacent to excavations; ▪ A barrier should be established around dangerous excavation areas; ▪ With the exception of the appointed security personnel, no other workers, friend or relatives will be allowed to sleep on the site (weekends included), in the public open space or on adjacent properties; and ▪ No workers should be allowed to enter adjacent private properties without written consent of the legal owners to the contractor.	**Low**
Waste Management			
Site office, camp and associated waste (visual, air and soil pollution)	**Medium**	▪ Temporary waste storage points on site shall be determined. These storage points shall be accessible by waste removal trucks; ▪ These points should not be located in areas highly visible from the properties of the surrounding land-owners/tenants/in areas where the wind direction will carry bad odours across the properties of adjacent tenants or landowners; ▪ The site camp and the rest of the area should appear neat at all times; ▪ Waste materials should be removed from the site on a regular basis, to a registered dumping site; and ▪ The site camp should not be located in a highly visual area on the site, or a screen or barrier should be erected as not have a negative impact on the sense of place.	**Low**
Disposal of building waste & liquids.	**Medium**	▪ All waste generated must be dumped at a pre-selected area on site to be carted to a registered landfill site. THESE AREAS SHALL BE PREDETERMINED; ▪ Small lightweight waste items should be contained in skips with lids to prevent wind littering; ▪ All waste must be removed to a recognized waste disposal site on a weekly basis. No waste materials may be disposed of on or adjacent to the site; ▪ The storage of solid waste on site, until such time that it may	**Low**

		be disposed of, must be in the manner acceptable to the Local Authority; and ▪ Keep records of waste reuse, recycling and disposal for future reference.	

Alternative 2

Potential impacts:	Significance rating of impacts:	Proposed mitigation:	Significance rating of impacts after mitigation:
Geology & Soils			
Soil erosion, siltation and gully formation.	**Low**	Demolition works must be kept to a minimum on site and only be done one section at a time to prevent excessive open soil areas that could lead to soil erosion, siltation and excessive compaction.	**Low**
If not planned and managed correctly, topsoil will be lost.	**Low**	▪ A shake down area at the exit of the site should be established where the excessive soil on the tires of vehicles can be brushed off and kept aside for later use during rehabilitation works; ▪ The site should be planned before any decommissioning activities take place on site. The areas where soil will be compacted, heavy vehicle movement (on site construction routes), site camp, material storage areas and stockpiling areas should be marked out and the topsoil should be removed; ▪ The areas where topsoil will not be removed and that will be conserved should be marked with barrier tape to ensure vehicles do not move across these areas and decommissioning activities do not damage the in situ topsoil; ▪ The removed topsoil should be stored separately from all stockpiled materials and subsoil, according to the stockpiling methods as described below. The stockpiled topsoil should be used for rehabilitation purposes after decommissioning has been completed; and ▪ Rehabilitation works must be done immediately after the involved works in an area is completed to prevent erosion.	**Low**
Water seepage at shallow depth could cause instability of soil or water pollution.	**Medium**	Geotechnical and civil engineers must supply mitigation measures and guidelines to prevent problems.	**Low**
Hydrology & Groundwater			
Vehicle maintenance.	**Medium**	Vehicle maintenance may not be done on the application site. Whenever a vehicle needs maintenance it must be taken to a certified workshop for the maintenance.	**None**
Excavated materials that are	**Medium**	An area must be allocated for	**Low**

stockpiled in the wrong areas can interfere with the natural drainage.		stockpiling of topsoil before any demolishing of buildings take place on the site and must be situated from any water source or drainage channels. A sediment fence or barrier must be constructed around the stockpile to prevent soil from washing away by rain or any water.	
Surface water flows will be altered during the decommissioning phase.	**Low**	Due to the demolishing that will take place (there will be trenches, topsoil and subsoil mounds in and around the area), the topography of the site will temporarily be altered.	**Low**
Climate			
Demolition works during the rainy season can cause unnecessary delays and damage to the environment, especially damage to existing roads in the area.	**Low**	Should decommissioning take place in the wetter months, frequent rain could cause very wet conditions, which makes it extremely difficult to do the necessary rehabilitation works of disturbed areas. Wet soils are vulnerable to compaction. Wet conditions often causes delays and the draining of water away from the works (in the case of high water tables) into the water bodies of the adjacent properties, could (if not planned and managed correctly) have an impact on the water quality of these water bodies.	**Low**
Demolition works during the dry and windy season.	**Low**	Regular and effective damping down of working areas (especially during the dry and windy periods) must be carried out to avoid dust pollution that will have a negative impact on the surrounding environment. When necessary, these working areas should be damped down at least twice daily.	**None**
Fauna & Flora			
Uncontrolled fires may cause damage or loss to vegetation and fauna in the area.	**Medium**	If fires are required for cooking and heating purposes, these fires will only be permitted in designated areas on the site. The fire area should be an exposed area (no natural veld grass should be in close proximity of the fire area). Workers should only be allowed to smoke in the fire area and fires should preferably be prevented while strong winds are blowing.	**None**
Uncontrolled activities and access to sensitive areas in the vicinity.	**Medium**	▪ Dumping of building rubble and other waste on these areas is strictly prohibited; and ▪ No vehicles must be allowed to move in or across the sensitive areas. This leaves visible scars and destroys habitat.	**Low**
Visual Impact			
Dumping of builder's rubble on neighbouring properties.	**Medium**	A specific location for building rubble must be allocated on site, to concentrate and collect the building rubble and cart it to a certified landfill site. The allocated area must be out of sight of neighbouring properties to have a less visual impact.	**None**
Localised Vibrations			
Noise pollution.	**Medium**	The activities related with the	**Low**

		decommissioning phase will generate noise. Therefore, it must be restricted during working hours.	
Roads & Traffic			
Heavy vehicle traffic increase could disrupt the surrounding landowners' daily routines.	**Medium**	Heavy vehicles must be instructed to only use the main roads during off-peak hours.	**Low**
Restrictions of access to surrounding properties.	**Low**	▪ To minimize this impacts or risks, heavy vehicles (trucks, bull dowsers, etc.) should avoid using the local road network during peak traffic times; ▪ These vehicles should use only specific roads and strictly keep within the speed limits and abide to all traffic laws. No speeding or reckless driving should be allowed. Access to the site for heavy vehicles should be planned to minimize the impact on the surrounding network; and ▪ Warning signs should be erected on the roads that these vehicles will use, at big crossings/access roads and on the site if needed.	**None**
Damage to roads.	**Medium**	Specific roads must be allocated for the use by heavy vehicles and photos must be taken prior to decommissioning in order to determine if any damage has been done.	**None**
Safety & Security			
During the decommissioning phase safety and security problems (especially for the surrounding residents) are likely to occur.	**Low**	Demolition works must be completed in as short time as possible. No worker or relative may reside on the site. All workers must leave the site at the end of a day's work. A security guard should be appointed on site to prevent any security problems.	**Low**
Decommissioning activities could cause danger to children and animals of the surrounding residents.	**Medium**	▪ Although regarded as a normal practice, it is important to erect proper signs indicating the operations of heavy vehicles in the vicinity of dangerous crossings and access roads or even on the site if necessary; ▪ It is also important to indicate all areas where excavations took place/are taking place and warning signs that clearly indicate areas with excavations must be placed immediately adjacent to excavations; ▪ A barrier should be established around dangerous excavation areas; ▪ With the exception of the appointed security personnel, no other workers, friend or relatives will be allowed to sleep on the site (weekends included), in the public open space or on adjacent properties; and ▪ No workers should be allowed to enter adjacent private properties without written consent of the legal owners to the contractor.	**Low**
Waste Management			

Site office, camp and associated waste (visual, air and soil pollution)	**Medium**	▪ Temporary waste storage points on site shall be determined. These storage points shall be accessible by waste removal trucks; ▪ These points should not be located in areas highly visible from the properties of the surrounding land-owners/tenants/in areas where the wind direction will carry bad odours across the properties of adjacent tenants or landowners; ▪ The site camp and the rest of the area should appear neat at all times; ▪ Waste materials should be removed from the site on a regular basis, to a registered dumping site; and ▪ The site camp should not be located in a highly visual area on the site, or a screen or barrier should be erected as not have a negative impact on the sense of place.	**Low**
Disposal of building waste & liquids.	**Medium**	▪ All waste generated must be dumped at a pre-selected area on site to be carted to a registered landfill site. THESE AREAS SHALL BE PREDETERMINED; ▪ Small lightweight waste items should be contained in skips with lids to prevent wind littering; ▪ All waste must be removed to a recognized waste disposal site on a weekly basis. No waste materials may be disposed of on or adjacent to the site; ▪ The storage of solid waste on site, until such time that it may be disposed of, must be in the manner acceptable to the Local Authority; and ▪ Keep records of waste reuse, recycling and disposal for future reference.	**Low**

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

N/A

4. CUMULATIVE IMPACTS

Describe potential impacts that, on their own may not be significant, but is significant when added to the impact of other activities or existing impacts in the environment. Substantiate response:

Should the proposed sewer pipeline be approved, the majority of cumulative impacts will be related to the construction phase.

- Noise pollution may upset residents in the area – to prevent this, construction activities may only take place during the daytime;
- Surface water flows will be altered during the construction phase of the proposed pipeline;
- The construction vehicles and facilities will have a negative impact on

the study area and surrounding views – this impact may be minimized by locating the site camp in an area with low visibility from surrounding developments and road networks;
- Dust pollution could cause nuisance to surrounding residents – dust can be effectively controlled through the wetting of exposed surfaces, especially in the winter months;
- During the construction phase some safety problems (especially for the surrounding residents) are likely to occur – in order to minimise this, site workers are not to be allowed to sleep on the construction site at night and provision for adequate security/ site supervision must be made during the day;
- Loss of flora and fauna and potential invasion of exotic plant species.

Subsequently, the above mentioned cumulative impacts can be mitigated if activities are correctly planned and measures are implemented to manage activities which could cause any negative cumulative impacts.

5. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposal and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative 1 (Proposal)

The major impacts that is likely to occur during the construction and operational phase:

- **Biodiversity**

  The environment will be temporarily affected by the moving of large construction vehicles and the excavations for the installation of the sewer pipeline. The river system might be impacted upon through erosion and sedimentation and the spreading of alien and invasive plant species. The preferred alignment runs to the east of the 1:100 year floodline of the river system (the river is situated to the west of the proposed sewer pipeline) for most parts.

- **Geology and Soils**

  Available information indicates that the application site is underlain by dolomite. There is some risk for sinkhole and doline formation on the application site. It is therefore very important that precautionary measures for the proposed pipeline on dolomite should be adhered to.

Valuable topsoil may also be lost during the construction process. The loss of topsoil can however be minimised through the storage of topsoil in designated stockpiles on site and the re-use thereof within the landscape component of the development.

- **The Social Environment**

  The public participation were done by means of a newspaper notice, site notices placed on prominent points on the application site, hand delivered notices to surrounding tenants and landowners and the distributing of notices to stakeholders such as the Local Authorities, Councillors by means of faxes and e-mails.

  Dangerous excavations can cause injury/ even death to people if proper precautions are not taken. Crime can also impact the surrounding community from the temporary workers. Social importance, new human activity in the area.

  Construction vehicles and equipment can be temporarily visually unpleasant for residents.

  The proposed sewer pipeline will contribute to the bulk services of Raslouw x 15 and other future developments in the area.

- **Economic Environment**

  Installation of the proposed sewer pipeline will create a significant number of employment opportunities for skilled and un-skilled workers.

- **Noise**

  The construction phase will cause noise pollution and disturb the receiving community, but can be mitigated with the limitation construction hours from 8:00 to 18:00 to cause minimal disturbance to the community.

- **Visual**

  Construction vehicles and equipment can be visually unpleasant for residents.

Alternative 2

The major impacts that is likely to occur during the construction and operational phase:

- **Biodiversity**

  The environment will be temporarily affected by the moving of large construction vehicles and the excavations for the installation of the sewer pipeline. The river system might be impacted upon through erosion and sedimentation and the spreading of alien and invasive plant species. This alternative alignment runs along the 1:100 year floodline for almost the entire pipeline.

- **Geology and Soils**

  Available information indicates that the application site is underlain by dolomite. There is some risk for sinkhole and doline formation on the application site. It is therefore very important that precautionary measures for the proposed pipeline on dolomite should be adhered to.

  Valuable topsoil may also be lost during the construction process. The loss of topsoil can however be minimised through the storage of topsoil in designated stockpiles on site and the re-use thereof within the landscape component of the development.

- **The Social Environment**

  The public participation were done by means of a newspaper notice, site notices placed on prominent points on the application site, hand delivered notices to surrounding tenants and landowners and the distributing of notices to stakeholders such as the Local Authorities, Councillors by means of faxes and e-mails.

  Dangerous excavations can cause injury/ even death to people if proper precautions are not taken. Crime can also impact the surrounding community from the temporary workers. Social importance, new human activity in the area.

  Construction vehicles and equipment can be temporarily visually unpleasant for residents.

  The proposed sewer pipeline will contribute to the bulk services of Raslouw x 15 and other future developments in the area.

- **Economic Environment**

Installation of the proposed sewer pipeline will create a significant number of employment opportunities for skilled and un-skilled workers.

- **Noise**

  The construction phase will cause noise pollution and disturb the receiving community, but can be mitigated with the limitation construction hours from 8:00 to 18:00 to cause minimal disturbance to the community.

- **Visual**

  Construction vehicles and equipment can be visually unpleasant for residents.

No-go (compulsory)

The no-go option entails that the development area stay in the current state and no sewer pipeline is installed.

If the no-go alternative is followed the proposed Raslouw x 15 development and other future developments will not have access to sanitation services.

The proposed development will have no significant impact on the Bio-physical environment, as the area is already disturbed and transformed.

6. IMPACT SUMMARY OF PREFERRED PROPOSAL

Identify preferred proposal

Alternative 1 (Proposal)

Having assessed the significance of impacts of the proposal and various alternatives, please provide an overall summary and reasons for selecting the preferred project proposal.

It is evident that based on the biophysical and sociological characteristics, the site is suitable for the proposed development of a sewer pipeline (only if the project is planned and managed in accordance with an approved Environmental Management Plan). The development will fit in with the surrounding area and create job opportunities during the constructional phase.

As already indicated, most of the construction related activities could be mitigated to an acceptable level. Furthermore no detrimental ecological impacts are anticipated; in fact the construction activities of the proposed pipeline can lead to an improvement of the ecological conditions on the site

as alien and invasive plant species will be eradicated and monitored.

The proposed development will create several job opportunities during the construction phase. No cultural/historically significant areas were identified within sewer pipeline servitude and thus no areas of historical or cultural value will be affected.

If managed correctly, the proposed project could have a significant positive impact on the social and economical environments. The proposed development could also have a positive impact on the ecological environment (especially through the re-vegetation of the servitude and the removal of exotic invaders and weeds from this area).

In the long term the impact of the proposed development will be more positive than negative for the Bio-physical, Social and Economic environments:

Biophysical

- The exotic invaders and weeds will be removed from the servitude on a continuous basis;
- The area where plants need to be removed will be kept to a minimum;
- The proposed alignment is outside of the 1:100 year floodline for most parts.

Social

- Noise and dust problems during the construction phase;
- Dangerous excavations can cause injury to people in the surrounding environment.

Economic

- Creation of job opportunities during the construction phase;
- Potential for urban densification which facilitates a smaller ecological footprint of urban development.

The mitigations and adaptive monitoring outlined in this Basic Assessment and the EMP with respect to potential adverse impacts should result in limited adverse impacts on local and regional, natural and socio-economic resources. Balanced with the overall beneficial positive economic and environmental impacts identified, the potential net adverse effects attributable to the proposed development do not constitute a threat to local and regional ecological resources and social systems. No "fatal flaws" or adverse impacts that cannot be mitigated are anticipated to be associated with the proposed residential development.

As a result of the above mentioned information, Bokamoso is of the opinion that the proposed pipeline (only if planned, implemented and managed correctly) will in the long term have a significant positive impact on the larger regional system to which it is linked.

It is therefore requested that the pipeline be allowed to proceed, so long as the mitigation measures contained in this report and in the Environmental Management Plan (Appendix H) are implemented, so as to achieve maximum advantage from beneficial impacts, and sufficient mitigation of adverse impacts.

7. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the Environmental Assessment Practitioner).	**YES X**	NO

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

As a result of the above mentioned information, Bokamoso request that the above development be approved as long as the following are followed:

- All recommendations as part of the attached Fauna and Flora Habitat Assessment as well as the Wetland Delineation (Refer to Appendix G) must be adhered to;
- The EMP attached must be adhered to at all times and the appointed ECO must ensure the developer comply with the EMP.

8. ENVIRONMENTAL MANAGEMENT PLAN (EMP)

If the EAP answers yes to Point 7 above then an EMP is to be attached to this report as an Appendix

EMP attached	**YES X**

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

It is required that if more than one item is enclosed that a table of contents is included in the appendix

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Route position information

Appendix E: Public participation information

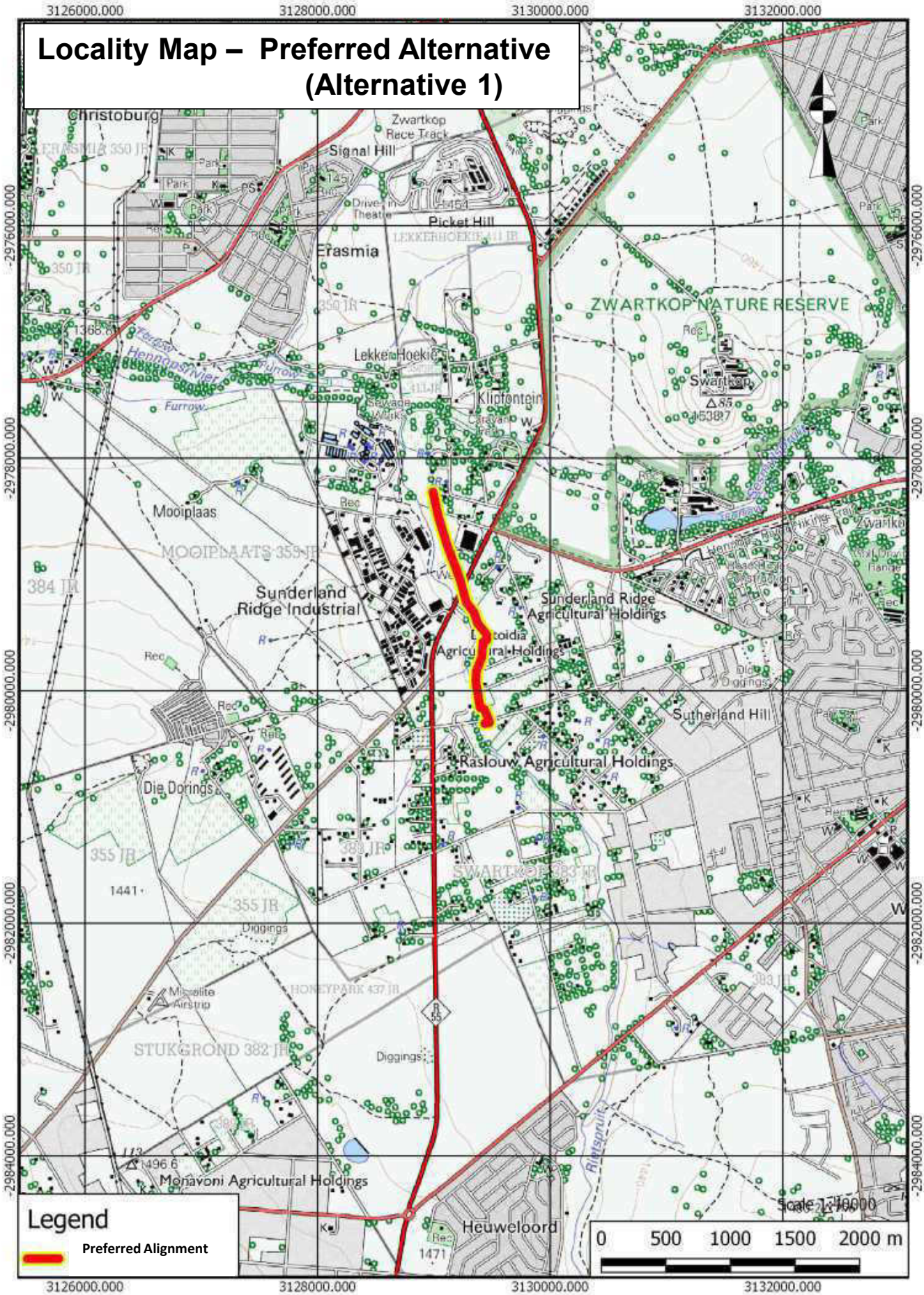
Appendix F: Water use license(s), SAHRA information, service letters from municipalities, water supply information

Appendix G: Specialist reports

Appendix H: EMP

Appendix I: Other information

Site plan(s)


Locality Map – Preferred Alternative (Alternative 1)
3126000.000
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3130000.000
3132000.000
2976000.000
2978000.000
2980000.000
2982000.000
2984000.000
Christoburg
Zwartkop Race Track
Signal Hill
Drive-in Theatre
Picket Hill
Erasmia
ZWARTKOP NATURE RESERVE
Lekker Hoekie
Swartkop
Kliptontein
Mooiplaas
Sunderland Ridge Industrial
Sunderland Ridge Agricultural Holdings
Sutherland Hill
Raslouw Agricultural Holdings
Die Dorings
Diggings
Mirabelite Airstrip
Monavoni Agricultural Holdings
Heuweloord
Legend
Preferred Alignment
Scale 1:40000
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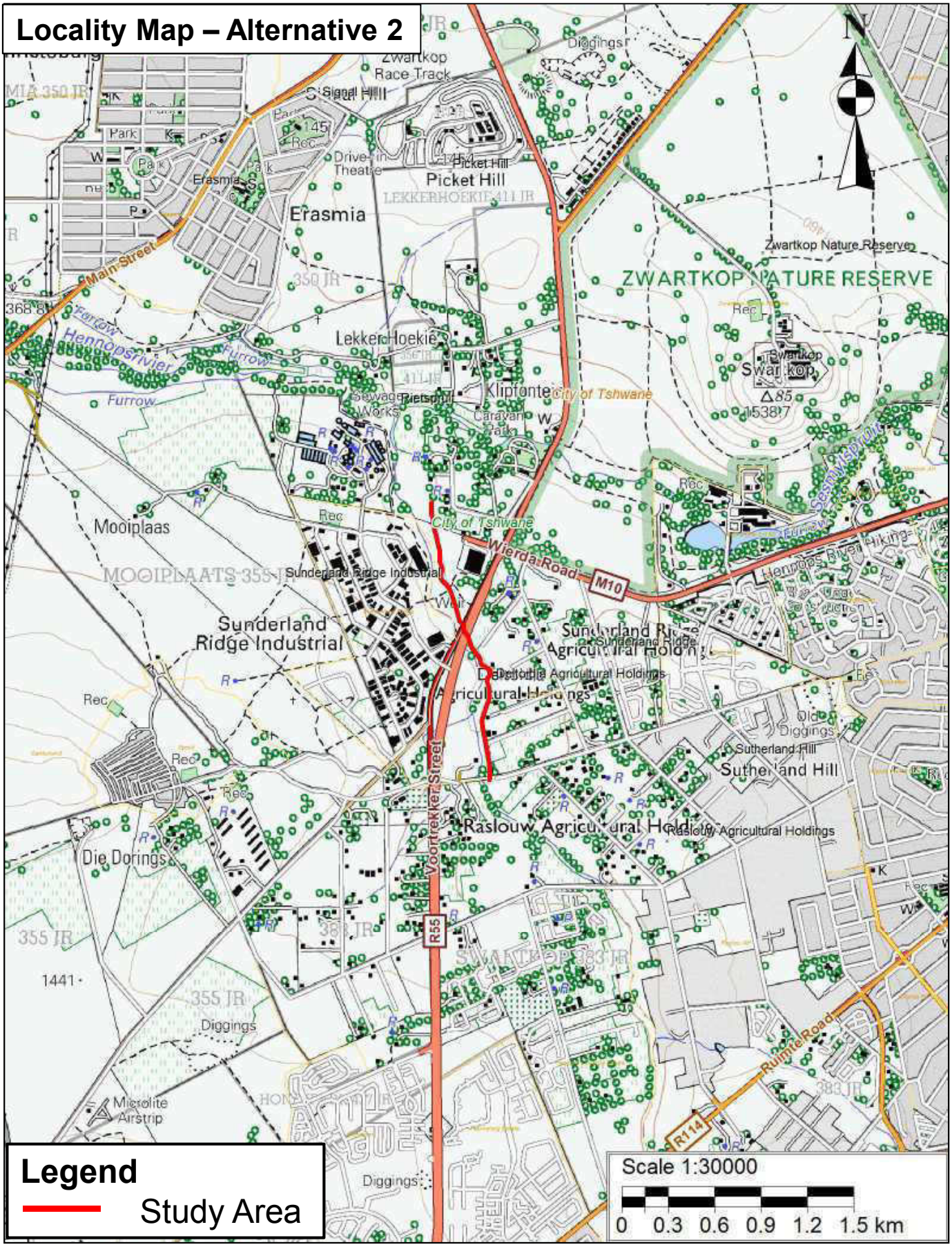
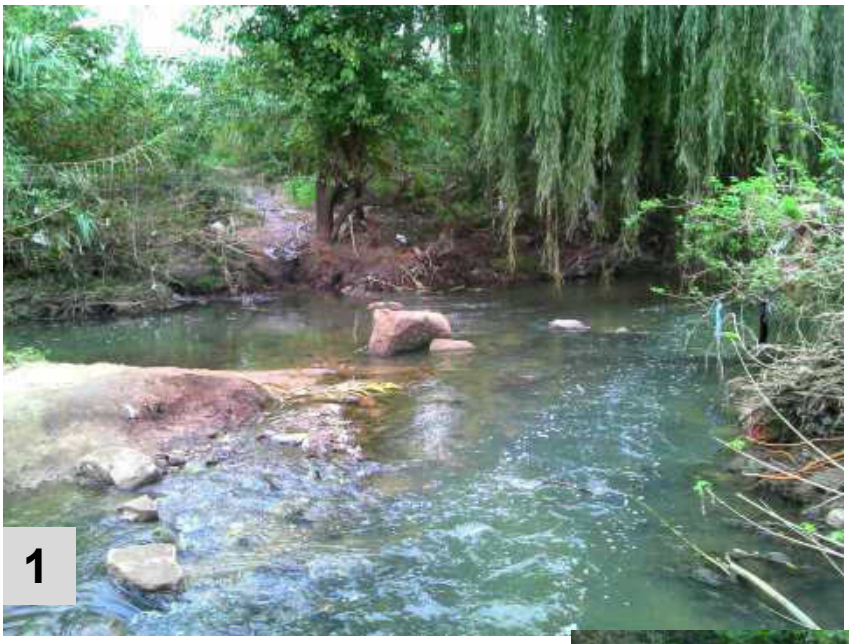
Locality Map – Alternative 2



Photographs


N
5
4
3
2
6
1
Image © 2014 DigitalGlobe
Google earth



1

2

3


4


5


6

Facility Illustration(s)

RASLOUW X15


PEG 1


CHAIN 450


PEG 3


PEG 1


ERF 54


PEG 6


PEG 5


PEG 7


CHAIN 700


CHAIN 100


ERF 412


PEG 8


CHAIN 900


PEG 9


PEG 12

NOTES AND SPECIFICATIONS

GENERAL

1. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
2. ALL DIMENSIONS ARE IN MILLIMETRES. (UNLESS OTHERWISE SPECIFIED).
3. DO NOT SCALE FROM THESE DRAWINGS.
4. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
5. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COT DETAIL DRAWINGS.
6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD DRAWINGS.(IF APPLICABLE).
7. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
8. THE SIGNATURE OR INITIALS ON THIS DRAWING, OF ANY DIRECTOR OF THE PUBLIC WORKS AND INFRASTRUCTURE DEVELOPMENT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
9. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE PUBLIC WORKS AND INFRASTRUCTURE DEVELOPMENT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
10. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
11. ALL SEWER TO BE MIN 160 DIA uPVC CLASS 400 TO SANS 1601

SANITATION

- NEW MANHOLE
- NEW CCTV INSPECTION
- EXIST. LINE INSPECTED BY CCTV
- NEW SEWER LINE
- EXISTING SEWER LINE
- HOUSE CONNECTION
- SUBURB BOUNDARY
- EXISTING MANHOLE

LEGEND

WATER

- NEW HYDRANT
- NEW PIPE
- NEW VALVE
- NEW END CAP
- EXISTING PIPE CAPPED
- EXISTING NETWORK PIPE
- EXISTING HYDRANT
- EXISTING VALVE
- REDUNDANT PIPE
- SUBURB BOUNDARY

COORDINATE LIST WG 29							
Number	Length	Y (START)	X (START)	Y (END)	X (END)	START STATION (m)	END STATION (m)
L1	1.961	88999.00	2860310.10	88998.34	2860308.25	0.000	1.961
L2	35.373	88998.34	2860308.25	88963.30	2860303.38	1.961	37.334
L3	5.511	88963.30	2860303.38	88961.70	2860298.11	37.334	42.845
L4	107.378	88961.70	2860298.11	89002.74	2860198.88	42.845	150.223
L5	34.799	89002.74	2860198.88	89035.47	2860187.06	150.223	185.022
L6	203.312	89035.47	2860187.06	89071.25	2859986.92	185.022	388.334
L7	79.785	89071.25	2859986.92	89067.32	2859907.23	388.334	468.119
L8	119.433	89067.32	2859907.23	89024.25	2859795.83	468.119	587.552
L9	56.520	89024.25	2859795.83	89021.02	2859739.41	587.552	644.072
L10	58.109	89021.02	2859739.41	89017.71	2859681.39	644.072	702.182
L11	33.761	89017.71	2859681.39	88987.55	2859666.21	702.182	735.943
L12	38.949	88987.55	2859666.21	88985.33	2859627.32	735.943	774.891
L13	114.647	88985.33	2859627.32	89059.03	2859539.50	774.891	889.539
L14	93.351	89059.03	2859539.50	89089.34	2859451.21	889.539	982.890
L15	95.073	89089.34	2859451.21	89148.51	2859376.80	982.890	1077.963
L16	172.350	89148.51	2859376.80	89194.69	2859210.75	1077.963	1250.313
L17	145.409	89194.69	2859210.75	89246.38	2859074.84	1250.313	1395.722
L18	154.592	89246.38	2859074.84	89302.06	2858930.62	1395.722	1550.314
L19	217.899	89302.06	2858930.62	89367.66	2858722.83	1550.314	1768.213
L20	200.928	89367.66	2858722.83	89412.44	2858526.96	1768.213	1969.141

CITY OF TSHWANE
PO BOX 1022
PRETORIA
0001

CITY OF TSHWANE
PUBLIC WORKS AND INFRASTRUCTURE DEVELOPMENT
WATER AND SANITATION
MR L L MAKIBINYANE
STRATEGIC EXECUTIVE DIRECTOR
MR FI SHERRIF
EXECUTIVE DIRECTOR

SIGNATURE Prof. Reg. No DATE

AMENDMENTS

NR	DATE	APPROVED	DESCRIPTION	PAR

WATER AND SANITATION

FOR INTERNAL APPROVAL - RECEIVED SIGN WHEN APPLICABLE

DIRECTOR:INFRASTRUCTURE PROVISION
NAME Prof. Reg. No SIGNATURE DATE

DIRECTOR: WATER DISTRIBUTION
NAME Prof. Reg. No SIGNATURE DATE

DIRECTOR: BULK WATER SERVICES
NAME Prof. Reg. No SIGNATURE DATE

DIRECTOR: WATER & SANITATION: PLANNING & REGULATION
NAME Prof. Reg. No SIGNATURE DATE

DIRECTOR: WASTE WATER COLLECTION
NAME Prof. Reg. No SIGNATURE DATE

DIRECTOR: WASTE WATER TREATMENT
NAME Prof. Reg. No SIGNATURE DATE

28°13'18.46"E
25°45'44.44"S
INNOVISI CONSULTING (PTY) LTD
www.innovisi.co.za
1 Marais St Tel: 012 346 6542
Bailey's Muckleneuk Fax: 086 671 9731
Pretoria 0181 e-mail: admin@innovisi.co.za

I, C W JOUBERT Prof Reg Nr 900008
HEREBY CERTIFY THAT THE SERVICES WILL\ HAVE BEEN INSTALLED ACCORDING TO CLAUSE A OF THE ABOVE NOTES AND TO THE DRAWING

CONSULTANT DRAWING NUMBER 8292-100-01-A SIGNATURE REVISION C

DESIGNED
NAME: C W JOUBERT Prof Reg No: 9800008
SIGNATURE: DATE: 2014-05-06

DRAWN
NAME: C W JOUBERT
SIGNATURE: DATE: 2014-05-06

CHECKED
NAME: C W JOUBERT Prof Reg No: 900008
SIGNATURE: DATE: 2014-05-06

INFORMATION OFFICE CHECKED
NAME:
SIGNATURE: DATE:

DESIGN OFFICE APPROVAL
NAME: Prof Reg No:
SIGNATURE: DATE:

CONTRACT No. 8292
PROJECT No. 8292
SHEET No. 1 OF 1
PAPER SIZE A0
SCALE 1:3000
DATE: 2014-05-06

LOCATION OF PROJECT
RASLOUW X15

DESCRIPTION OF PROJECT:
GENERAL SEWER
HORIZONTAL ALIGNMENT

WBS No. __-_____-__-_____-__-__

COT DRAWING NUMBER _-_____-_____-__-_____-__-__ REVISION C

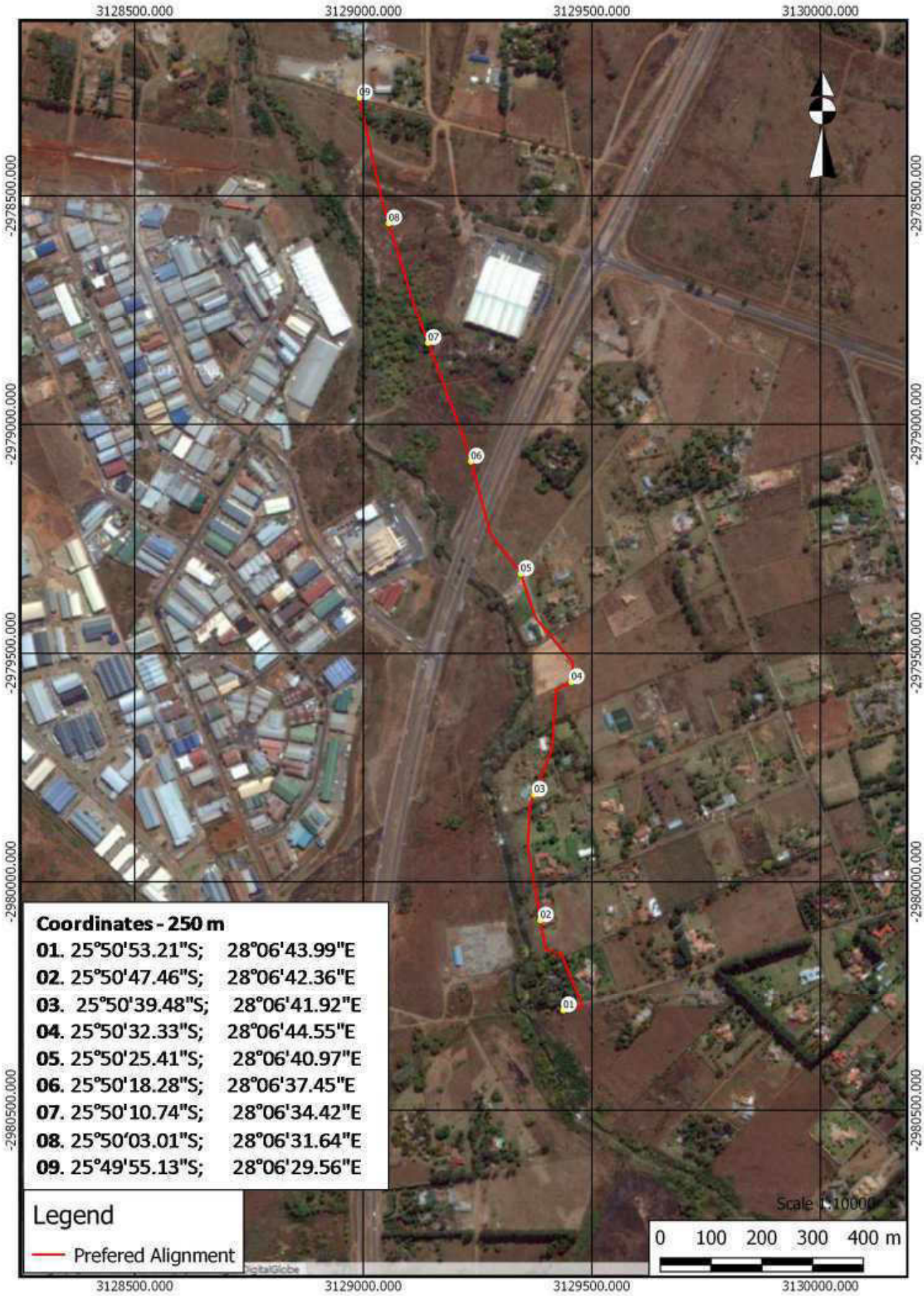
PROJECT STATUS

● CONCEPT DRAWING ○ TENDER DRAWING ○ APPROVED CONSTRUCTION DRAWING ○ AS BUILT DRAWING

PROJECT ENGINEER of COT:
NAME SIGNATURE
Prof Reg No. DATE

INSPECTOR OF WORKS of COT:
NAME SIGNATURE DATE

Route Position Information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09
08
07
06
05
04
03
02
01
Coordinates - 250 m
01. 25°50'53.21"S; 28°06'43.99"E
02. 25°50'47.46"S; 28°06'42.36"E
03. 25°50'39.48"S; 28°06'41.92"E
04. 25°50'32.33"S; 28°06'44.55"E
05. 25°50'25.41"S; 28°06'40.97"E
06. 25°50'18.28"S; 28°06'37.45"E
07. 25°50'10.74"S; 28°06'34.42"E
08. 25°50'03.01"S; 28°06'31.64"E
09. 25°49'55.13"S; 28°06'29.56"E
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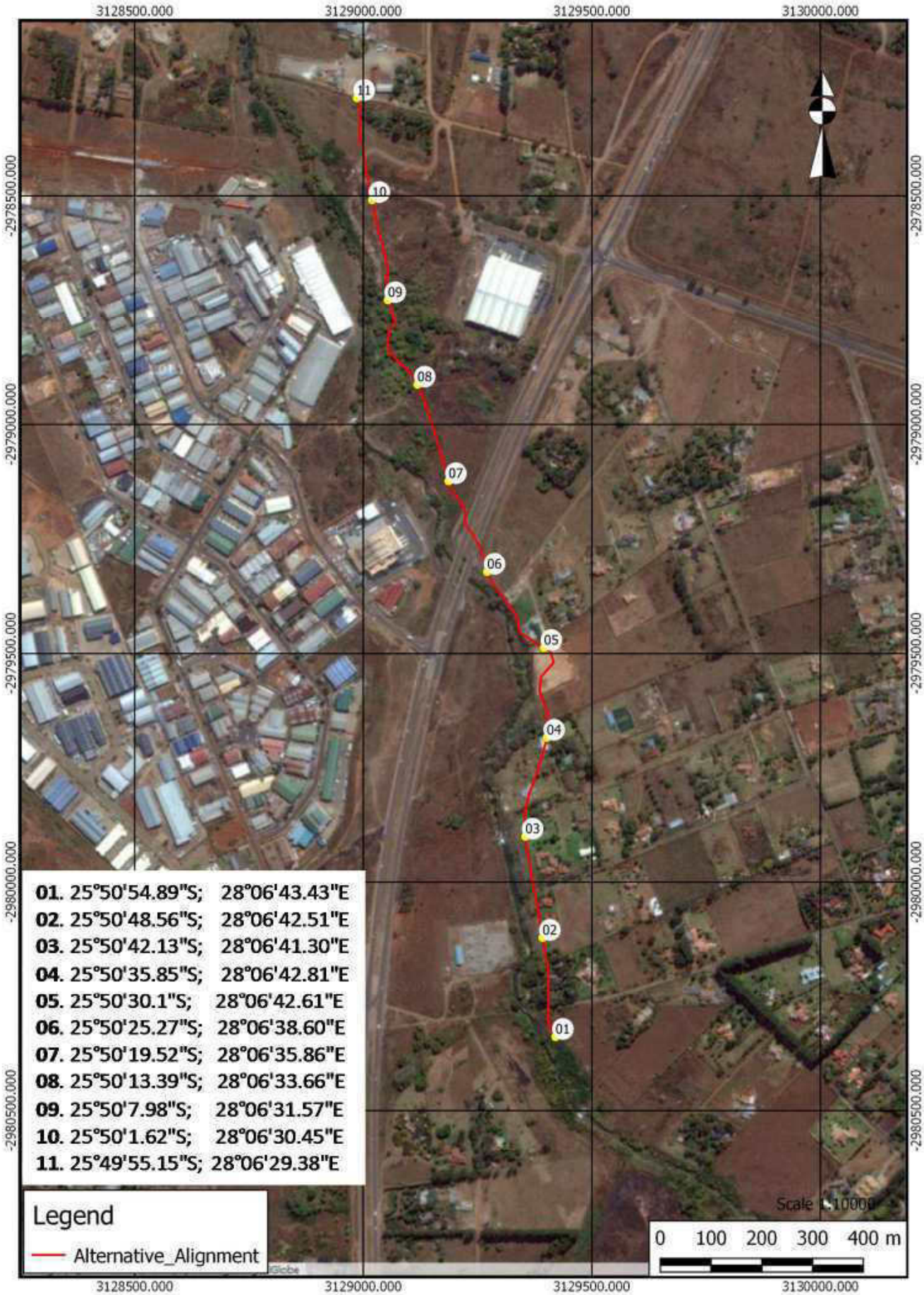
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03
02
01
01. 25°50'54.89"S; 28°06'43.43"E
02. 25°50'48.56"S; 28°06'42.51"E
03. 25°50'42.13"S; 28°06'41.30"E
04. 25°50'35.85"S; 28°06'42.81"E
05. 25°50'30.1"S; 28°06'42.61"E
06. 25°50'25.27"S; 28°06'38.60"E
07. 25°50'19.52"S; 28°06'35.86"E
08. 25°50'13.39"S; 28°06'33.66"E
09. 25°50'7.98"S; 28°06'31.57"E
10. 25°50'1.62"S; 28°06'30.45"E
11. 25°49'55.15"S; 28°06'29.38"E
Legend
Alternative_Alignment
Scale 1:10000
0 100 200 300 400 m

Public Participation Information

Proof of Site Notice

NOTICE OF BASIC ASSESSMENT PROCESS

Notice is given of an application for a **Basic Assessment Process** that was submitted to the Gauteng Department of Agriculture and Rural Development, in terms of Regulation No. R543 published in the Government Notice No. 33306 of 18 June 2010 of the National Environment Management Act, 1998 (Act No. 107 of 1998) governing **Basic Assessment Procedures (Listing Notice: 1 and 3 – Government Notice R544 & R546)** for the following activity:

Reference No: Gaut: 002/13-14/E0287

Project Name: Raslouw X15 (external sewer line)

Property Description: The following farms/properties will be affected: Holding 1 and 4 of Raslouw Agricultural Holdings; Portion 124, 166, 164, 163, 607, 606, 446, 412 and 168 of the Farm Zwartkop 356 JR; and Portion 462 of the Farm Mooiplaats 355 JR

Proposed Zoning Information: The installation of an external sewer pipeline for Raslouw X15

Listing Activities Applied for:

GNR 544 (Listing Notice 1), 18 June 2010	Activity 9
GNR 544 (Listing Notice 1), 18 June 2010	Activity 11
GNR 544 (Listing Notice 1), 18 June 2010	Activity 18
GNR 544 (Listing Notice 1), 18 June 2010	Activity 37
GNR 544 (Listing Notice 1), 18 June 2010	Activity 40
GNR 546 (Listing Notice 3), 18 June 2010	Activity 16
GNR 546 (Listing Notice 3), 18 June 2010	Activity 24

Proponent Name: Purple Roof Developers (Pty) Ltd

Location: The proposed sewer line will be in a south-north alignment where in the south it originates from Poole Avenue and traverses the R55 (double lane road). Between the endpoint in the north and the R55 crossing, Sunderland Ridge is located to the west of the proposed sewer line.

Date of Notice: 27 February – 11 April 2014

Queries regarding this matter should be referred to:

Bokamoso Landscape Architects and Environmental Consultants CC
Public Participation registration and inquiries: **Juanita De Beer**
Project Inquiries: **Mary-Lee van Zyl**
P.O. Box 11375
Maroelana 0161
www.bokamoso.biz
Tel: (012) 346 3810
Fax: (086) 570 5659
E-mail: lizelleg@mweb.co.za

In order to ensure that you are identified as an Interested and/or Affected Party (I&AP) please submit your name, contact information and interest in the matter, in writing, to the contact person given above **within 40 days of this Notice.**

Written Notices Issued to Those Persons Detailed in 1(b) to 1(f) above

LEBOMBO GARDEN BUILDING
36 LEBOMBO ROAD
ASHLEA GARDENS
0081

P.O. BOX 11375
MAROELANA
0161

Tel: (012) 346 3810
Fax: 086 570 5659
E-mail: lizelleg@mweb.co.za
Website: www.bokamoso.biz

Bokamoso ENVIRONMENTAL

Dear Landowner **10 December 2013**

Basic Assessment Process in terms of the National Evironmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2010 for the Raslouw X15 in the City of Tshwane Metropolitan Municipality area of Gauteng

The following Farms/Properties will be affected:
Holding 1 and 4 of Raslouw Agricultural Holdings; Portion 124, 166, 164, 163, 607, 606, 446, 412 and 186 of the Farm Zwartkop 356 JR; and Portion 462 of the Farm Mooiplaats 355 JR Portion 462.

We hereby confirm that Purple Roof Developers (Pty) Ltd, appointed Bokamoso Landscape Architects and Environmental Consultants CC, to undertake a Basic Assessment Process in terms of the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment (EIA) Regulations, 2010 for the External reticulation of Service for Sewage of Raslouw X15 as listed above.

In terms of the 2010 amended NEMA EIA Regulations, the applicant, if not the land-owner, must notify the land-owner and tenants of a proposed development planned on a property occupied by the land-owner/tenant. In the case of this application the property occupied by you (as the land-owner/ tenant) forms part of the land-parcel earmarked for the above-mentioned project.

This notification therefore represents the formal notification of land-owners and/or tenants of the proposed construction of Raslouw X15 in and around the Raslouw Agricultural Holdings, Farm Zwartkop 356 JR and Farm Mooiplaats 355 JR. This notification letter will be submitted as part of the formal application to be submitted to the Gauteng Department of Agriculture and Rural Development (GDARD).

This notification also affords you the opportunity to register (at an early stage) as an Interested and Affected Party (I&AP) in the Basic Assessment Process. In order to register you are requested to fill in your full details on the form supplied below and to fax or e-mail your details to Juanita de Beer (public participation co-ordinator of Bokamoso) for the inclusion of your details onto our public participation database.

Once you are registered as an interested and affected party, we will keep you informed of the progress with the application and we will make all correspondence, documents and other information regarding the application available to you throughout the application process.

Registration as Interested and Affected Party	
Farm Name:	
Erf /Portion Number:	
Street Address:	
Landowner:	Name & Surname: Email address: Telephone: Cell phone: Fax Number: Postal Address:
Tenant Details: (if applicable)	Name & Surname: Email address: Telephone: Cell phone: Fax Number: Postal Address:

Sincerely,

pp Gregory.

Lizelle Gregory
Bokamoso Landscape Architects and Environmental Consultants cc

RASLOUW X15 (EXTERNAL SEWER LINE)

Locality Map

NOTICE OF BASIC ASSESSMENT PROCESS

Notice is given of an application for a **Basic Assessment Process** that was submitted to the Gauteng Department of Agriculture and Rural Development, in terms of Regulation No. R543 published in the Government Notice No. 33306 of 18 June 2010 of the National Environment Management Act, 1998 (Act No. 107 of 1998) governing **Basic Assessment Procedures (Notice 1 and 3 – Government Notice R544 & R546)** for the following activity:

Reference No: Gaut: 002/13-14/E0287
Project Name: Raslouw X15 (external sewer line)

Property Description: The following farms/properties will be affected: Holding 1 and 4 of Raslouw Agricultural Holdings; Portion 124, 166, 164, 163, 607, 606, 446, 412 and 168 of the Farm Zwartkop 356 JR; and Portion 462 of the Farm Mooiplaats 355 JR

Proposed Zoning Information: The installation of an external sewer pipeline for Raslouw X15.

Proponent Name: Purple Roof Developers (Pty) Ltd

Listing Activities Applied: GNR 544 (Listing Notice 1), 18 June 2010 – Activity 9, 11, 18, 37 & 40 and GNR 546 (Listing Notice 3), 18 June 2010 – Activity 16 & 24.

Location: The proposed sewer line will be in a south-north alignment where in the south it originates from Poole avenue and traverses the R55 (double lane road). Between the endpoint in the north and the R55 crossing, Sunderland Ridge is located to the west of the proposed sewer line.

Date of Notice: 27 February – 11 April 2014

Queries regarding this matter should be referred to:

Bokamoso Landscape Architects and Environmental Consultants CC
Public Participation registration and inquiries: **Juanita De Beer**
Project inquiries: **Mary-Lee van Zyl**
P.O. Box 11375
Maroelana 0161
www.bokamoso.biz
Tel: (012) 346 3810
Fax: (086) 570 5659
E-mail: lizelleg@mweb.co.za

In order to ensure that you are identified as an Interested and/or Affected Party I&AP) please submit your name, contact information and interest in the matter, in writing, to the contact person given above **within 40 days of this Notice.**

LEBOMBO GARDEN BUILDING
36 LEBOMBO ROAD
ASHLEA GARDENS
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P.O. BOX 11375
MAROELANA
0161

Tel. (012) 346 3810
Fax: 086 570 5659
E-mail: lizelleg@mweb.co.za
Website: www.bokamoso.biz

Bokamoso ENVIRONMENTAL

Dear Landowner/Tenant **27 February 2014**

You are hereby informed that Bokamoso Environmental Consultants were appointed (as EAP) by Purple Roof Developers (Pty) Ltd to conduct the Basic Assessment Process in terms of the amended 2010 NEMA EIA Regulations for the proposed Holding 1 and 4 of Raslouw Agricultural Holding; Portion 124, 166, 164, 163, 607, 606, 446, 412 and 168 of the Farm Zwartkop 356 JR; and Portion 462 of the Farm Mooiplaats 355 JR

The proposed Land-uses for the study area are as follows:
The installation of an external sewer pipeline for Raslouw X15

In terms of Regulation No. R543 published in the Government Notice No. 33306 of 18 June 2010 of the National Environment Management Act, 1998 (Act No. 107 of 1998) governing Basic Assessment Procedures (Notice 1 and 3 – Governing Notice R544 & R546) of the 2010 amended NEMA Regulations, the EAP must inform all landowners and tenants within 100m from the study area of the proposed development.

Bokamoso already supplied you (landowner/Tenant) of the property within 100m with Notification Letter and request that you supply the contact details of any tenants or other interested and affected parties that reside or work on the property to Bokamoso. Bokamoso will then also supply these parties with the necessary Notification Letters.

Alternatively, you are also welcome to distribute copies of your Notification to these parties. We will however require proof that you supplied the Notices to the Tenants, Landowners, Workers etc. Another option is to act as representative on behalf of these parties.

Please confirm (via email/Fax) that you received the Landowners/Tenant Notification and this Letter. Also indicate in this Confirmation Letter whether you have tenants on your property and you're preferred method of tenant/worker notification.

Regards

JdBeer

.....
Lizelle Gregory/Juanita De Beer

Companies and Intellectual Property Commission
a member of the dti group

CIPC Company Report

windeed
information is our business

SEARCH DETAILS

Date requested	2013/12/09 09:26
Reference	-

COMPANY SUMMARY

Name	GOUWRAS
Status	DEREGISTRATION FINAL
Registration number	1999/038992/23
Registration date	1999/07/07

MEMBER SUMMARY

Name	ID Number	Type	Status
VAN ROOYEN, EL-MARIE	5809030089089	MEMBER	ACTIVE
VAN ROOYEN, JAN ANDRIAAN	5908145146089	MEMBER	ACTIVE
MARITZ, PIETER JOHANNES	4503275017084	MEMBER	RESIGNED

ACCOUNTING OFFICER SUMMARY

VOLSCHENK EN KIE

COMPANY INFORMATION

Enterprise name	GOUWRAS	Status	DEREGISTRATION FINAL
Registration number	1999/038992/23	Enterprise type	CLOSE CORPORATION
Tax number	9046103645	Business start date	1999/07/07
Short name	-	Registration date	1999/07/07
Translated name	-	Financial year end	2
Old reg. number	99389/9223/23	Fin effective date	1999/07/07
Conv. company No	-	CK date received	-
Region	GAUTENG	CK date	-
Country	-	Date of type	-
Country of origin	-		
Issued shares	-		
Issued capital	-		
Authorized shares	-		
Authorized capital	-		
SIC code	8		
Industry	FINANCIAL INTERMEDIATION, INSURANCE, REAL ESTATE AND BUSINESS SERVICES		
Registered address	LONE CREEK PLACE 42, GAERIE GLEN, UITBREIDING 11, 0043		
Postal address	POSBUS 52276, WIERDA PARK, 0149		

MEMBER(S) (3)

VAN ROOYEN, EL-MARIE

Initials	E	Status	ACTIVE
ID/Passport number	5809030089089	Type	MEMBER

Date of birth	1958/09/03	Appointment date	2000/02/18
Profession	-	Resignation date	-
Country of residence	-	Member size (%)	50
Residential address	POOLE LAAN 4, RASLOUW, 0149	Member contribution (R)	50.00
Postal address	POSBUS 56190, WIERDAPARK, 0149		

VAN ROOYEN, JAN ANDRIAAN

Initials	JA	Status	ACTIVE
ID/Passport number	5908145146089	Type	MEMBER
Date of birth	1959/08/14	Appointment date	2000/02/18
Profession	-	Resignation date	-
Country of residence	-	Member size (%)	50
Residential address	POOLE LAAN 4, RASLOUW, 0149	Member contribution (R)	50.00
Postal address	POSBUS 56190, WIERDAPARK, 0149		

MARITZ, PIETER JOHANNES

Initials	PJ	Status	RESIGNED
ID/Passport number	4503275017084	Type	MEMBER
Date of birth	1945/03/27	Appointment date	1999/07/07
Profession	-	Resignation date	-
Country of residence	-	Member size (%)	100
Residential address	LONE CREEK PLACE 42, FAERIE GLEN, UITBREIDING 11, 0043	Member contribution (R)	100.00
Postal address	POSBUS 52276, WIERDA PARK, 0149		

REPRESENTATIVE TRUSTEE(S) (NONE)

INTER VIVOS TRUST(S) (NONE)

TESTAMENTARY TRUST(S) (NONE)

OTHER TRUSTEE(S) (NONE)

ACCOUNTING OFFICER(S) (1)

VOLSCHENK EN KIE

Profession code	PROFESSIONAL ACCOUNTANTS (SA)	Status	CURRENT
Profession number	-	Type	ACC
Reg. entry date	1999/07/07	Start date	1999/07/07
Expiry date	-	End date	-
Reference number	5687	CM31 completed	1999/07/07
Fine letter	-	CM31 received	1999/07/07
Physical address	-		
Postal address	POSBUS 11584, HATFIELD, 0028		

CAPITAL INFORMATION

No capital information to display.

HISTORY

Effective Date	Change Type
1999/07/07	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (NO INFORMATION TO DISPLAY)
2000/02/18	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (ADD RECORD SURNAME/INSTIT : = VAN ROOYEN FIRST NAMES : = JAN ANDRIAAN STATUS : = ACTIVE)
2000/02/18	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (ADD RECORD SURNAME/INSTIT : = VAN ROOYEN FIRST NAMES : = EL-MARIE STATUS : = ACTIVE)
2000/02/18	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (CHANGE RECORD SURNAME/INSTIT : = MARITZ FIRST NAMES : = PIETER JOHANNES STATUS : = RESIGNED)

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SEARCH DETAILS

Date requested	2013/12/09 08:48
Reference	-

COMPANY SUMMARY

Name	SIGNATURE PROPERTY 4
Status	IN BUSINESS
Registration number	2005/029725/07
Registration date	2005/08/23

DIRECTOR SUMMARY

Name	ID Number	Type	Status
VOLSCHENK, FRANCOIS	6910195008085	DIRECTOR	ACTIVE
BESTER, GABRIEL JACOBUS	6901315030083	DIRECTOR	RESIGNED
FOURIE, DANIEL JAKOBUS	6203225171085	DIRECTOR	RESIGNED
KRUGER, CASPER JAN HENDRIK	7011045222080	DIRECTOR	RESIGNED
VAN DER MERWE, ANTON MEYER	7009245220086	DIRECTOR	RESIGNED
MASSYNS INCORPORATED	-	SECRETARY (COMPANIES AND CCS)	RESIGNED
NFG ASSOCIATES INCORPORATED	-	SECRETARY (COMPANIES AND CCS)	RESIGNED

AUDITOR SUMMARY

NEVILLE HARRIS ASSOCIATES
BEZUIDENHOUT OUDITEURE

COMPANY INFORMATION

Enterprise name	SIGNATURE PROPERTY 4	**Status**	IN BUSINESS
Registration number	2005/029725/07	**Enterprise type**	PRIVATE COMPANY
Tax number	9976611146	**Business start date**	2005/08/23
Short name	-	**Registration date**	2005/08/23
Translated name	-	**Financial year end**	2
Old reg. number	//07	**Fin effective date**	2005/08/23
Conv. company No	-	**CK date received**	-
Region	GAUTENG	**CK date**	-
Country	-	**Date of type**	2005/08/23
Country of origin	-		
Issued shares	1 000		
Issued capital	1 000.00		
Authorized shares	1 000		
Authorized capital	1 000.00		
SIC code	62		
Industry	UNKNOWN		

Registered address	LEONITWA, 371 ZWAVELPOORT, LYNNWOOD ROAD EAST, PRETORIA, 0036
Postal address	PO BOX 2194, ZWAVELPOORT, 0036

DIRECTOR(S) (5)

VOLSCHENK, FRANCOIS

Initials	-	Status	ACTIVE
ID/Passport number	6910195008085	Type	DIRECTOR
Date of birth	1969/10/19	Appointment date	2007/07/12
Profession	BUSINESSMAN	Resignation date	-
Country of residence	SOUTH AFRICA	Member size (%)	0
Residential address	88 GLENDOWER ROAD, WOODHILL, 0076	Member contribution (R)	0.00
Postal address	PO BOX 66529, WOODHILL, 0076		

BESTER, GABRIEL JACOBUS

Initials	-	Status	RESIGNED
ID/Passport number	6901315030083	Type	DIRECTOR
Date of birth	1969/01/31	Appointment date	2006/06/28
Profession	BUSINESSPERSON	Resignation date	-
Country of residence	SOUTH AFRICA	Member size (%)	0
Residential address	1055 HENRI STREET, ELDORAIGNE, CENTURION, 0157	Member contribution (R)	0.00
Postal address	P O BOX 11809, CENTURION, 0046		

FOURIE, DANIEL JAKOBUS

Initials	-	Status	RESIGNED
ID/Passport number	6203225171085	Type	DIRECTOR
Date of birth	1962/03/22	Appointment date	2006/06/28
Profession	BUSINESSPERSON	Resignation date	-
Country of residence	SOUTH AFRICA	Member size (%)	0
Residential address	1055 HENRI STREET, ELDORAIGNE, CENTURION, 0157	Member contribution (R)	0.00
Postal address	P O BOX 11809, CENTURION, 0046		

KRUGER, CASPER JAN HENDRIK

Initials	C J H	Status	RESIGNED
ID/Passport number	7011045222080	Type	DIRECTOR
Date of birth	1970/11/04	Appointment date	2005/08/23
Profession	BUSINESSMAN	Resignation date	-
Country of residence	SOUTH AFRICA	Member size (%)	0
Residential address	29 WINSTONWEG, ELDORAIGNE, 0157	Member contribution (R)	0.00
Postal address	PO BOX 11809, CENTURION, 0046		

VAN DER MERWE, ANTON MEYER

Initials	-	Status	RESIGNED
ID/Passport number	7009245220086	Type	DIRECTOR
Date of birth	1970/09/24	Appointment date	2006/06/28
Profession	BUSINESSPERSON	Resignation date	-

Country of residence	SOUTH AFRICA	**Member size (%)**	0
Residential address	1055 HENRI STREET, ELDORAIGNE, CENTURION, 0157	**Member contribution (R)**	0.00
Postal address	P O BOX 11809, CENTURION, 0046		

SECRETARY COMPANIES AND CC(S) (2)

MASSYNS INCORPORATED

Registration number	-	**Status**	RESIGNED
Appointment date	2006/06/28	**Type**	SECRETARY (COMPANIES AND CCS)
Resignation date	-	**Member size (%)**	0
Country of residence	SOUTH AFRICA	**Member contribution (R)**	0.00
Residential address	324 BUITE STREET, NIEUW MUCKLENEUK, PRETORIA, 0181		
Postal address	P O BOX 1855, BROOKLYN SQUARE, 0075		

NFG ASSOCIATES INCORPORATED

Registration number	-	**Status**	RESIGNED
Appointment date	2006/07/24	**Type**	SECRETARY (COMPANIES AND CCS)
Resignation date	-	**Member size (%)**	0
Country of residence	SOUTH AFRICA	**Member contribution (R)**	0.00
Residential address	1055 HENRI STREET, ELDORAIGNE, CENTURION, 0157		
Postal address	P O BOX 11809, CENTURION, 0042		

COMPANY SECRETARY NATURAL PERSON(S) (NONE)

BOTH DIRECTOR / OFFICER(S) (NONE)

ALTERNATIVE DIRECTOR(S) (NONE)

OFFICER(S) (NONE)

LOCAL MANAGER(S) (NONE)

TRUST(S) (NONE)

AUDITOR(S) (2)

NEVILLE HARRIS ASSOCIATES

Profession code	CHARTERED ACCOUNTS	**Status**	CURRENT
Profession number	958220	**Type**	AUDITOR
Reg. entry date	2008/07/30	**Start date**	2007/10/12
Expiry date	-	**End date**	-
Reference number	-	**CM31 completed**	2008/07/30
Fine letter	-	**CM31 received**	2008/07/30
Physical address	-		
Postal address	PO BOX 2194, ZWAVELPOORT, 0036		

BEZUIDENHOUT OUDITEURE

Profession code	CHARTERED ACCOUNTS	**Status**	RESIGN
Profession number	901443	**Type**	AUDITOR
Reg. entry date	-	**Start date**	-
Expiry date	-	**End date**	2007/10/12
Reference number	-	**CM31 completed**	-
Fine letter	-	**CM31 received**	-
Physical address	767 VERENA STREET, FAERIE GLEN, 0043		
Postal address	P O BOX 11190, MAROELANA, 0161		

CAPITAL INFORMATION

Type	No of Shares	Parri Value	Capital Amount (R)	Capital Premium
AUTHORIZED ORDINARY	1 000	0	1.00	0
ISSUED ORDINARY	1 000	0	1.00	0

HISTORY

Effective Date	Change Type
2006/06/28	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=BESTER FULL FORENAMES=GABRIEL JACOBUS ID NO=6901315030083 STATUS :ACTIVENATURE OF CHANGE=APPOINTED)
2006/06/28	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=FOURIE FULL FORENAMES=DANIEL JAKOBUS ID NO=6203225171085 STATUS :ACTIVENATURE OF CHANGE=APPOINTED)
2006/06/28	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=VAN DER MERWE FULL FORENAMES=ANTON MEYER ID NO=7009245220086 STATUS :ACTIVENATURE OF CHANGE=APPOINTED)
2006/06/28	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=MASSYNS INCORPORATED FULL FORENAMES= REGISTRATION NO=200202769021 NATIONALITY=SOUTH AFRICA RSA RESIDENT=0 DATE OF APPOINTMENT=28 JUNE 2006 PROFESSION= DESIGNATION=SECRETARY (COMPANIES AND CC'S) RESIDENTIAL ADDRESS 324 BUITE STREET NIEUW MUCKLENEUK PRETORIA 0181 BUSINESS ADDRESS 324 BUITE STREET NIEUW MUCKLENEUK PRETORIA 0181 POSTAL ADDRESS P O BOX 1855 BROOKLYN SQUARE 0075 NATURE OF CHANGE=APPOINTMENT STATUS :ACTIVE)
2006/07/24	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=NGF ASSOCIATES INCORPORATED FULL FORENAMES= REGISTRATION NO=200600728121 NATIONALITY=SOUTH AFRICA RSA RESIDENT=0 DATE OF APPOINTMENT=24 JULY 2006 PROFESSION= DESIGNATION=SECRETARY (COMPANIES AND CC'S) RESIDENTIAL ADDRESS 1055 HENRI STREET ELDORAIGNE CENTURION 0157 BUSINESS ADDRESS 1055 HENRI STREET ELDORAIGNE CENTURION 0157 POSTAL ADDRESS P O BOX 11809 CENTURION 0042 NATURE OF CHANGE=APPOINTMENT STATUS :ACTIVE)
2006/07/24	AUDITOR/ACC OFFICER CHANGE (MASSYNS INCORPORATED STATUS : REMOVE)
2006/07/25	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=NFG ASSOCIATES INCORPORATED FULL FORENAMES= REGISTRATION NO=200600728121 NATIONALITY=SOUTH AFRICA RSA RESIDENT=0 DATE OF APPOINTMENT=24 JULY 2006 PROFESSION= DESIGNATION=SECRETARY (COMPANIES AND CC'S) RESIDENTIAL ADDRESS 1055 HENRI STREET ELDORAIGNE CENTURION 0157 BUSINESS ADDRESS 1055 HENRI STREET ELDORAIGNE CENTURION 0157 POSTAL ADDRESS P O BOX 11809 CENTURION 0042 NATURE OF CHANGE=APPOINTMENT STATUS :ACTIVE)

2007/07/12	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=VOLSCHENK FULL FORENAMES=FRANCOIS ID NO=6910195008085 STATUS :ACTIVENATURE OF CHANGE=APPOINTED)
2007/07/12	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=FOURIE FULL FORENAMES=DANIEL JAKOBUS ID NO=6203225171085 STATUS :RESIGNEDNATURE OF CHANGE=DIRECTOR RESIGNED)
2007/07/12	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=VAN DER MERWE FULL FORENAMES=ANTON MEYER ID NO=7009245220086 STATUS :RESIGNEDNATURE OF CHANGE=DIRECTOR RESIGNED)
2007/07/12	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=KRUGER FULL FORENAMES=CASPER JAN HENDRIK ID NO=7011045222080 STATUS :ACTIVENATURE OF CHANGE=NO CHANGE)
2007/07/12	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=BESTER FULL FORENAMES=GABRIEL JACOBUS ID NO=6901315030083 STATUS :RESIGNEDNATURE OF CHANGE=DIRECTOR RESIGNED)

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Date requested	2013/12/09 09:14
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COMPANY SUMMARY

Name	UNDERWEAR CITY
Status	IN BUSINESS
Registration number	1998/064404/23
Registration date	1998/11/09

MEMBER SUMMARY

Name	ID Number	Type	Status
KAZI, MOHAMED YUSUF RAHEMTOOLA	6212085210081	MEMBER	ACTIVE
CASSIM, ISMAIL	6402135215087	MEMBER	RESIGNED
KAZI, ABDUL HACK	7002145154083	MEMBER	RESIGNED
NABEE, WAHEEDA BIBI	7707180042080	MEMBER	RESIGNED

ACCOUNTING OFFICER SUMMARY

S RAVAT ACCOUNTING
MAHOMED ESSA SACOOR

COMPANY INFORMATION

Enterprise name	UNDERWEAR CITY	**Status**	IN BUSINESS
Registration number	1998/064404/23	**Enterprise type**	CLOSE CORPORATION
Tax number	9254222202	**Business start date**	1998/11/09
Short name	-	**Registration date**	1998/11/09
Translated name	-	**Financial year end**	2
Old reg. number	98644/0423/23	**Fin effective date**	1998/11/09
Conv. company No	-	**CK date received**	-
Region	KWAZULU-NATAL	**CK date**	-
Country	-	**Date of type**	1998/11/09
Country of origin	-		
Issued shares	-		
Issued capital	-		
Authorized shares	-		
Authorized capital	-		
SIC code	6		
Industry	WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES, MOTOR CYCLES AND PERSONAL AND HOUSEHOLD GOODS; HOTELS AND RESTAURANTS		
Registered address	8 PRETORIUS STREET, PRETORIA, 0001		
Postal address	P O BOX 13718, LAUDIUM, 0037		

MEMBER(S) (4)

KAZI, MOHAMED YUSUF RAHEMTOOLA

Initials	MYR	Status	ACTIVE
ID/Passport number	6212085210081	Type	MEMBER
Date of birth	-	Appointment date	2007/02/23
Profession	-	Resignation date	-
Country of residence	-	Member size (%)	100
Residential address	29 WESSELS ROAD, LYNWOOD MANOR, 0157	Member contribution (R)	100.00
Postal address	POSTNET SUITE 57, PRIVATE BAG X 10020, MEADOWDALE, 1614		

CASSIM, ISMAIL

Initials	I	Status	RESIGNED
ID/Passport number	6402135215087	Type	MEMBER
Date of birth	1964/02/13	Appointment date	2002/08/20
Profession	-	Resignation date	2007/02/23
Country of residence	-	Member size (%)	0
Residential address	24 MAURALA CIRCLE, TRENANCE PARK, VERULAM, 0000	Member contribution (R)	0.00
Postal address	P O BOX 37126, OVERPORT, 4067		

KAZI, ABDUL HACK

Initials	AH	Status	RESIGNED
ID/Passport number	7002145154083	Type	MEMBER
Date of birth	1970/02/14	Appointment date	2002/08/20
Profession	-	Resignation date	2007/02/23
Country of residence	-	Member size (%)	0
Residential address	10 GUILDFORD AVENUE, SYDENHAM, 4091	Member contribution (R)	0.00
Postal address	P O BOX 37126, OVERPORT, 4067		

NABEE, WAHEEDA BIBI

Initials	WB	Status	RESIGNED
ID/Passport number	7707180042080	Type	MEMBER
Date of birth	1977/07/18	Appointment date	2002/08/20
Profession	-	Resignation date	2007/02/23
Country of residence	-	Member size (%)	0
Residential address	10 GUILDFORD AVENUE, SYDENHAM, 4091	Member contribution (R)	0.00
Postal address	P O BOX 37126, OVERPORT, 4067		

REPRESENTATIVE TRUSTEE(S) (NONE)

INTER VIVOS TRUST(S) (NONE)

TESTAMENTARY TRUST(S) (NONE)

OTHER TRUSTEE(S) (NONE)

ACCOUNTING OFFICER(S) (2)

ACCOUNTING OFFICER(S) (2)

S RAVAT ACCOUNTING

Profession code	THE CHARTERED INSTITUTE OF MANAGEMENT ACCOUNTANTS	**Status**	CURRENT
Profession number	8985	**Type**	ACC
Reg. entry date	-	**Start date**	1998/09/11
Expiry date	-	**End date**	-
Reference number	-	**CM31 completed**	-
Fine letter	-	**CM31 received**	-
Physical address	-		
Postal address	P O BOX 13718, LAUDIUM, 0037		

MAHOMED ESSA SACOOR

Profession code	PROFESSIONAL ACCOUNTANTS (SA)	**Status**	NAME CHANGE
Profession number	-	**Type**	ACC
Reg. entry date	1998/09/11	**Start date**	1998/09/11
Expiry date	-	**End date**	2007/02/23
Reference number	4078	**CM31 completed**	1998/09/11
Fine letter	-	**CM31 received**	1998/09/11
Physical address	-		
Postal address	P O BOX 37126, OVERPORT, 4067		

CAPITAL INFORMATION

No capital information to display.

HISTORY

Effective Date	Change Type
1998/11/09	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (NO INFORMATION TO DISPLAY)
2002/08/20	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (ADD RECORD SURNAME/INSTIT : = KAZI FIRST NAMES : = ABDUL HACK STATUS : = ACTIVE)
2002/08/20	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (ADD RECORD SURNAME/INSTIT : = CASSIM FIRST NAMES : = ISMAIL STATUS : = ACTIVE)
2002/08/20	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (ADD RECORD SURNAME/INSTIT : = NABEE FIRST NAMES : = WAHEEDA BIBI STATUS : = ACTIVE)
2007/02/23	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (CHANGE RECORD SURNAME: = NABEE FIRST NAMES: = WAHEEDA BIBI STATUS: = RESIGNED)
2007/02/23	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (ADD RECORD SURNAME: = KAZI FIRST NAMES: = MOHAMED YUSUF RAHEMTOOLA STATUS: = ACTIVE)
2007/02/23	REGISTERED ADDRESS CHANGE (106A PRINCE EDWARD STREET DURBAN 4000)
2007/02/23	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (CHANGE RECORD SURNAME: = CASSIM FIRST NAMES: = ISMAIL STATUS: = RESIGNED)
2007/02/23	POSTAL ADDRESS CHANGE (P O BOX 37126 OVERPORT 4067)
2007/02/23	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (CHANGE RECORD SURNAME: = KAZI FIRST NAMES: = ABDUL HACK STATUS: = RESIGNED)
2007/02/23	AUDITOR/ACC OFFICER CHANGE (ADD RECORD NAME: = S RAVAT ACCOUNTING STATUS: = CURRENT)
2007/02/23	AUDITOR/ACC OFFICER CHANGE (CHANGE RECORD NAME: = S RAVAT ACCOUNTING STATUS: = NAME CHANGE)
2013/01/13	UNKNOWN (ANNUAL RETURN NON COMPLIANCE - IN PROCESS OF DEREGISTRATION LAST PAYMENT FOR AR YEAR/MONTH IS 2009/11.)

2013/01/13	UNKNOWN (ANNUAL RETURN NON COMPLIANCE - IN PROCESS OF DEREGISTRATION LAST PAYMENT FOR AR YEAR/MONTH IS 2009/11.)
2013/03/14	UNKNOWN (NO INFORMATION TO DISPLAY)
2013/03/14	UNKNOWN (NO INFORMATION TO DISPLAY)

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SEARCH DETAILS

Date requested	2013/12/09 09:10
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COMPANY SUMMARY

Name	PYRAMID INVESTMENTS (EIGHT)
Status	DEREGISTRATION FINAL
Registration number	2001/017974/07
Registration date	2001/08/03

DIRECTOR SUMMARY

Name	ID Number	Type	Status
ISMAIL, VALLY AMIR FAIZEL	6110085156058	DIRECTOR	ACTIVE
ISMAIL, VALLY MOHAMED SHIRAZ	6110085151083	DIRECTOR	ACTIVE
ISMAIL, VALLY ZUNAID	6907025263088	DIRECTOR	ACTIVE
VALLY, JUBIDAT	4008030132020	DIRECTOR	ACTIVE
VALLY, REEDWONE	6501015273080	DIRECTOR	ACTIVE
KHAN, ENVER	5403195129052	DIRECTOR	RESIGNED

AUDITOR SUMMARY

YUNUS ISMAIL AND COMPANY

COMPANY INFORMATION

Enterprise name	PYRAMID INVESTMENTS (EIGHT)	**Status**	DEREGISTRATION FINAL
Registration number	2001/017974/07	**Enterprise type**	PRIVATE COMPANY
Tax number	9131305147	**Business start date**	2001/08/03
Short name	-	**Registration date**	2001/08/03
Translated name	-	**Financial year end**	2
Old reg. number	//07	**Fin effective date**	2001/08/03
Conv. company No	-	**CK date received**	-
Region	GAUTENG	**CK date**	-
Country	-	**Date of type**	2001/08/03
Country of origin	-		
Issued shares	100		
Issued capital	100.00		
Authorized shares	1 000		
Authorized capital	1 000.00		
SIC code	81		
Industry	FINANCIAL INTERMEDIATION, EXCEPT INSURANCE AND PENSION FUNDING		
Registered address	SUITE 30, JEWEL HEIGHTS, 13 AVENUE AND JEWEL STREET, LAUDIUM, 0037		
Postal address	P O BOX 14218, LAUDIUM, 0037		

DIRECTOR(S) (6)

ISMAIL, VALLY AMIR FAIZEL

Initials	VF	Status	ACTIVE
ID/Passport number	6110085156058	Type	DIRECTOR
Date of birth	1961/10/08	Appointment date	2003/04/01
Profession	BUSINESSMAN	Resignation date	-
Country of residence	SOUTH AFRICA	Member size (%)	0
Residential address	30 JEWEL HEIGHTS, JEWEL STREET, LAUDIUM, 0037	Member contribution (R)	0.00
Postal address	P O BOX 14218, LAUDIUM, 0037		

ISMAIL, VALLY MOHAMED SHIRAZ

Initials	VS	Status	ACTIVE
ID/Passport number	6110085151083	Type	DIRECTOR
Date of birth	1961/10/08	Appointment date	2003/04/01
Profession	BUSINESSMAN	Resignation date	-
Country of residence	SOUTH AFRICA	Member size (%)	0
Residential address	30 JEWEL HEIGHTS, JEWEL STREET, LAUDIUM, 0037	Member contribution (R)	0.00
Postal address	P O BOX 14218, LAUDIUM, 0037		

ISMAIL, VALLY ZUNAID

Initials	VZ	Status	ACTIVE
ID/Passport number	6907025263088	Type	DIRECTOR
Date of birth	1969/07/02	Appointment date	2003/04/01
Profession	DENTIST	Resignation date	-
Country of residence	SOUTH AFRICA	Member size (%)	0
Residential address	30 JEWEL HEIGHTS, JEWEL STREET, LAUDIUM, 0037	Member contribution (R)	0.00
Postal address	P O BOX 14218, LAUDIUM, 0037		

VALLY, JUBIDAT

Initials	J	Status	ACTIVE
ID/Passport number	4008030132020	Type	DIRECTOR
Date of birth	1940/08/01	Appointment date	2003/04/01
Profession	HOUSEWIFE	Resignation date	-
Country of residence	SOUTH AFRICA	Member size (%)	0
Residential address	30 JEWEL HEIGHTS, JEWEL STREET, LAUDIUM, 0037	Member contribution (R)	0.00
Postal address	P O BOX 14218, LAUDIUM, 0037		

VALLY, REEDWONE

Initials	R	Status	ACTIVE
ID/Passport number	6501015273080	Type	DIRECTOR
Date of birth	1965/01/01	Appointment date	2003/04/01
Profession	BUSINESSMAN	Resignation date	-
Country of residence	SOUTH AFRICA	Member size (%)	0
Residential address	30 JEWEL HEIGHTS, JEWEL STREET, LAUDIUM, 0037	Member contribution (R)	0.00
Postal address	P O BOX 14218, LAUDIUM,		

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KHAN, ENVER

Initials	E	**Status**	RESIGNED
ID/Passport number	5403195129052	**Type**	DIRECTOR
Date of birth	1954/03/19	**Appointment date**	2001/08/03
Profession	ACCOUNTANT	**Resignation date**	2003/04/01
Country of residence	SOUTH AFRICA	**Member size (%)**	0
Residential address	35 EIGHTH STREET, VREDEDORP, JOHANNESBURG, 2092	**Member contribution (R)**	0.00
Postal address	P O BOX 10172, JOHANNESBURG, 2092		

SECRETARY COMPANIES AND CC(S) (NONE)

COMPANY SECRETARY NATURAL PERSON(S) (NONE)

BOTH DIRECTOR / OFFICER(S) (NONE)

ALTERNATIVE DIRECTOR(S) (NONE)

OFFICER(S) (NONE)

LOCAL MANAGER(S) (NONE)

TRUST(S) (NONE)

AUDITOR(S) (1)

YUNUS ISMAIL AND COMPANY

Profession code	CHARTERED ACCOUNTS	**Status**	CURRENT
Profession number	920037E	**Type**	ACC
Reg. entry date	-	**Start date**	-
Expiry date	-	**End date**	-
Reference number	-	**CM31 completed**	-
Fine letter	-	**CM31 received**	-
Physical address	12 ROLINA STREET, RYNSOORD, BENONI, 1501		
Postal address	P O BOX 989, BRAKPAN, 1540		

CAPITAL INFORMATION

Type	No of Shares	Parri Value	Capital Amount (R)	Capital Premium
AUTHORIZED ORDINARY	1 000	0	1.00	0
ISSUED ORDINARY	100	0	1.00	0

HISTORY

Effective Date	Change Type
2003/04/01	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=VALLY FULL FORENAMES=JUBIDAT ID NO=4008030132020 STATUS :ACTIVENATURE OF CHANGE=RESIGNATION)
2003/04/01	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=ISMAIL FULL FORENAMES=VALLY AMIR FAIZEL ID NO=6110085156058 STATUS :ACTIVENATURE OF CHANGE=APPOINTMENT)
2003/04/01	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=VALLY FULL FORENAMES=REEDWONE ID NO=6501015273080 STATUS :ACTIVENATURE OF CHANGE=APPOINTMENT)

2003/04/01	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=ISMAIL FULL FORENAMES=VALLY MOHAMED SHIRAZ ID NO=6110085151083 STATUS :ACTIVENATURE OF CHANGE=APPOINTMENT)
2003/04/01	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=KHAN FULL FORENAMES=ENVER ID NO=5403195129052 STATUS :ACTIVENATURE OF CHANGE=RESIGNATION)
2003/04/01	DIRECTORS/MEMBER CHANGE/SECRETARY/TRUST/BOTH DIR AND OFFICE (SURNAME=ISMAIL FULL FORENAMES=VALLY ZUNAID ID NO=6907025263088 STATUS :ACTIVENATURE OF CHANGE=APPOITMENT)
2004/12/19	REGISTERED ADDRESS CHANGE (35-8TH STREET VREDEDORP 2093)
2004/12/19	POSTAL ADDRESS CHANGE (P O BOX 10172 JOHANNESBURG 2000)

Contact Information

Date Received: 2013/12/09 09:19

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information is our business

FOURIE, FRANCOIS LE ROUX

GENERAL INFORMATION

Date Requested	2013/12/09 09:19
Reference	-

PERSON INFORMATION

Surname	FOURIE
Forename(s)	FRANCOIS LE ROUX
Date of Birth	1950/06/20
ID Number(s)	5006205084082

CONTACT INFORMATION

Phone (home)	0126668849 (Last updated: 2008/06/10)
Phone (work)	0124286146 (Last updated: 2008/08/31)
Mobile Number	0836323886 (Last updated: 2009/10/28)
Residential Address	168 POOLE AV, RASLOUW AH, CENTURION, CENTURION, 0157 (Last updated: 2009/04/13)
Postal Address	P O BOX 21266, VALHALLA, 0137 (Last updated: 2009/01/01)

Contact Information

Date Received: 2013/12/09 09:13

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JANSE VAN RENSBURG, ANNA CHRISTINA

GENERAL INFORMATION

Date Requested	2013/12/09 09:13
Reference	-

PERSON INFORMATION

Surname	JANSE VAN RENSBURG
Forename(s)	ANNA CHRISTINA
Date of Birth	1972/03/01
ID Number(s)	7203010102088

CONTACT INFORMATION

Phone (home)	0124229649 (Last updated: 2009/04/26)
Phone (work)	0124229649 (Last updated: 2009/04/26)
Mobile Number	0824606449 (Last updated: 2009/06/03)
Residential Address	275 THEUNS VAN NIEKERK STREET, WIERDAPARK, 0157 (Last updated: 2009/01/01)
Postal Address	P O BOX 13646, CLUBVIEW, 0014 (Last updated: 2009/04/27)

DISCLAIMER

Contact Information

Date Received: 2013/12/09 09:17

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information is our business

TWALA, NOMUSA

GENERAL INFORMATION

Date Requested	2013/12/09 09:16
Reference	-

PERSON INFORMATION

Surname	TWALA
Forename(s)	NOMUSA
Date of Birth	1963/04/06
ID Number(s)	6304060423084

CONTACT INFORMATION

Phone (home)	0123342505 (Last updated: 2009/04/24)
Phone (work)	0123342505 (Last updated: 2008/07/26)
Mobile Number	0827487226 (Last updated: 2009/04/28)
Residential Address	21 E BLOCK, LYNDHURST ESTATE, LYNDHURST, 2192 (Last updated: 2009/03/14)
Postal Address	P O BOX 89206, HEUWELOORD, HEUWELOORD EXT 3, 0173 (Last updated: 2009/04/28)

DISCLAIMER

List of REGISTERED LETTERS
Lys van GEREGISTREERDE BRIEWE
(With an insurance option/met 'n versekeringsopsie)

Post Office

Full tracking and tracing/Volledige volg en spoor

Name and address of sender
Naam en adres van afsender Bopaneso PO Box 11375, Maroelana 0161
Rasiouw X 15

Toll free number
Tolvry nommer
0800 111 502

No	Name and address of addressee / Naam en adres van geadresseerde	Insured amount / Versekerde bedrag	Insurance fee / Versekeringsgeld	Postage / Posgeld	Service fee / Diensgeld	Affix Track and Trace customer copy / Plak Volg-en-Spoor-kliëntafskrif
1	Gouwrds P.O. Box 52276, Wierda Park, 0149					RD 885 057 075 ZA CUSTOMER COPY 301028R
2	Signature Property 4. P.O. Box 2194, Zwavelpoort, 0036					RD 885 058 990 ZA CUSTOMER COPY 301028R
3	Underwear City. P.O. Box 15718, Laudium, 0037					RD 885 059 006 ZA CUSTOMER COPY 301028R
4	Pyramid Investments (eight) P.O. Box 14218, Laudium, 0037					RD 885 059 010 ZA CUSTOMER COPY 301028R
5	Francois Le Roux Fourié P.O. Box 21266, Valhalla, 0137					RD 885 059 023 ZA CUSTOMER COPY 301028R
6	Anna Christina Janse van Rensburg P.O. Box 13646, Clubview 0014					RD 885 059 037 ZA CUSTOMER COPY 301028R
7	Namusa Twala P.O. Box 89206, Heuweloord, Heuweloord Ext 3, 0173					RD 885 059 045 ZA CUSTOMER COPY 301028R
8						
9						
10						
	Total / Totaal	R	R	R	R	

Number of letters posted / Getal briewe gepos 7

Signature of client / Handtekening van kliënt .....

Signature of accepting officer / Handtekening van aanneembeampte .....

Date stamp

Datumstempel

The value of the contents of these letters is as indicated and compensation is not payable for a letter received unconditionally. Compensation is limited to R100,00. No compensation is payable without documentary proof. Optional insurance of up to R2 000,00 is available and applies to domestic registered letters only.

Die waarde van die inhoud van hierdie briewe is soos aangedui en vergoeding sal nie betaal word vir 'n brief wat sonder voorbehoud ontvang word nie. Vergoeding is beperk tot R100,00. Geen vergoeding is sonder dokumentêre bewys betaalbaar nie. Opsionele versekering van tot R2 000,00 is beskikbaar en is slegs op binnelandse geregistreerde briewe van toepassing.

Proof of Newspaper Advertisement

REGSKENNISGEWINGS & TENDERS

SAKELISENSIES

4015

KWNEL-EMPIRE PTY LTD
KENNISGEWING
Lisensie-aansoek ingevolge die Wet op Petroleumprodukte, 1977 (Wet nr 120 van 1977).
Kennis geskied hiermee aan alle belanghebbende of geaffekteerde partye dat KWNEL-EMPIRE (EDMS) BPK, waarna hierna as "die aansoeker" verwys word, 'n aansoek om 'n GROOTHANDELSLISENSIE ingedien het, aansoeknommer D/2014/02/25/0003. Rooibosstraat 475 CENTURION. Die doel van die aansoek is om 'n lisensie aan "die aansoeker" toe te staan om groothandelspetroleumverkope te bedryf, soos in die aansoek uiteengesit is. Reëlings ter insae van die aansoekdokumentasie kan getref word deur die Kontroleur van Petroleumprodukte te kontak by: * Telefoon: 012 406 7788; of * Faks: 012 341 4228; of * E-pos: petroleum.controller@energy.gov.za. Enige besware teen die uitreiking van 'n lisensie ingevolge hierdie aansoek, wat duidelik bogenoemde aansoeknommer moet toon, moet die Kontroleur van Petroleumprodukte binne twintig (20) werksdae van die verskyning van hierdie kennisgewing bereik. Sodanige beswaar moet by die volgende straat- of posadres ingedien word: Straatadres: Die Kontroleur van Petroleumprodukte, Departement van Energie, Visagiestraat 192, Hoek van Paul Kruger- en Visagiestraat, PRETORIA 0001; Posadres: Die Kontroleur van Petroleumprodukte, Departement van Energie, Privaat sak X96, ARCADIA 0001.
KWNEL-EMPIRE FEB 28(KE)4015

PEARL STAR INVESTMENTS 369 BK
KENNISGEWING
Kennisgewing van 'n lisensie-aansoek ingevolge die Wet op Petroleumprodukte, 1977 (Wet nr 120 van 1977).
Kennis geskied hiermee aan alle belanghebbende of geaffekteerde partye dat PEARL STAR INVESTMENTS 369 BK, waarna hierna as "die aansoeker" verwys word, 'n aansoek om 'n GROOTHANDELSLISENSIE ingedien het, aansoeknommer H/2014/02/03/0001. Hoofstraat 17 ASKHAM Die doel van die aansoek is om 'n lisensie aan "die aansoeker" toe te staan om groothandelspetroleumverkope te bedryf, soos in die aansoek uiteengesit is. Reëlings ter insae van die aansoekdokumentasie kan getref word deur die Kontroleur van Petroleumprodukte te kontak by: * Telefoon: 012 406 7788; of * Faks: 012 341 4228; of
* E-pos: petroleum.controller@energy.gov.za. Enige besware teen die uitreiking van 'n lisensie ingevolge hierdie aansoek, wat duidelik bogenoemde aansoeknommer moet toon, moet die Kontroleur van Petroleumprodukte binne twintig (20) werksdae van die verskyning van hierdie kennisgewing bereik. Sodanige beswaar moet by die volgende straat- of posadres ingedien word: Straatadres: Die Kontroleur van Petroleumprodukte Departement van Energie Perm-gebou Phakamile Mabija-straat 65 KIMBERLEY 8300 Posadres: Die Kontroleur van Petroleumprodukte Departement van Energie Privaat sak X6093 KIMBERLEY 8301.
PEARL STAR FEB 28(P)4015

HOFBEVELE/ SEKWESTRASIES/ LIKWIDASIES

4005

FRITZ PIENAAR CYCLES PTY LTD
NOTICE
CASE NO: 59239/2013. IN THE NORTH GAUTENG HIGH COURT, PRETORIA (REPUBLIC OF SOUTH AFRICA). PRETORIA 24 JANUARY 2014 BEFORE THE HONOURABLE MR JUSTICE JW LOUW. In the matter of: FRIKKIE SIEGRUHN PIENAAR Applicant And FRITZ PIENAAR CYCLES (PTY) LTD Reg No: 2003/031155/07 Respondent
Address: 17 Midas Avenue, Olympus, Pretoria
HAVING HEARD counsel for the applicant and having read the notice of motion and other documents filed of record IT IS ORDERED:
1. THAT the respondent be placed under provisional liquidation returnable on the 18th of March 2014; 2. THAT the respondent is called upon to show cause on or before the return date hereof, why this order should not be made final; 3. THAT this interim order be served upon the respondent at its registered address by way of sheriff; 4. THAT the this order be served upon the Master of the High Court and the South African Revenue Service by way of filing notice, by hand; 5. THAT this interim order be served upon the employees of the respondent, if any, by affixing a copy of this order against the principle door or gate of the premises of the respondent, at the respondent's registered address, by way of the sheriff; 6. THAT this order be published once in the Beeld newspaper and once in the Government Gazette, before the return date; 7. THAT the costs of this application be costs on the liquidation.
(SGD) BY THE COURT REGISTRAR/MX
Att: JI Van Niekerk; Address: 17 Midas Avenue, Olympus, Pretoria
F18 FEB 28(JIVN)4005

MARSDEN ROAD CONSTRUCTION CC
NOTICE
CASE NO: 68773/2013. IN THE HIGH COURT OF SOUTH AFRICA GAUTENG DIVISION, PRETORIA. PRETORIA 30 January 2014 BEFORE THE HONOURABLE MR JUSTICE ISMAIL. In the matter of: GAUTENG ASPHALT (PTY) LTD Reg No: 2002/005194/07 Applicant And MARSDEN ROAD CONSTRUCTION CC Reg No: 2010/143184/23 Respondent
Address: 13 Star Street, Fishers Hill, Germiston
HAVING HEARD counsel for the applicant and having read the notice of motion and other documents filed of record IT IS ORDERED:
1. THAT the abovementioned respondent close corporation be and is hereby placed under provisional winding-up order. 2. THAT a rule nisi be and is hereby issued calling upon all persons concerned to appear and show cause, if any, to this court at 10:00 on 25 March 2014 why the respondent close corporation should not be placed under final winding-up order. 3. THAT service of this rule nisi be effected upon the respondent dose corporation at its registered office and by publication forthwith once in each of the GOVERNMENT GAZETTE. 4. THAT the cost of this application be cost in the insolvent estate apart for any other cost of opposition which will be sought against the opposing party or person.
(SGD) BY THE COURT REGISTRAR/AN
Attorney: Eduard de Lange
Address: 1st Floor, Office Block E, Cnr Lois & Aramist Street, Menlyn Square, Pretoria
R0416 FEB 28(EDL)4005

ONE VISION INVESTMENTS 233 PTY LTD/ JA MYBURGH
NOTICE
IN THE REGIONAL COURT FOR THE REGIONAL DIVISION OF PRETORIA. HELD AT PRETORIA CASE NO: 2359/2013 In the matter between: ONE VISION INVESTMENTS 233 (PTY) LTD Plaintiff and JACOBUS ABRAHAM MYBURGH Defendant
TO: JACOBUS ABRAHAM MYBURGH an adult businessman, formerly resident at 30 Crown Lane, Irene Farm Villages, Centurion, and whose full and further particulars are to the plaintiff unknown. TAKE NOTICE THAT by summons sued out of this court, you have been called upon to give notice, within 10 (ten) days after publication hereof, to the registrar of this court and to the Plaintiff's attorney of your intention to defend (if any) in an action wherein the Plaintiff claims: 1. An order that: 1.1. the defendant places the plaintiff in physical possession of the boat; 1.2. the defendant takes all steps necessary to register the boat into the name of the plaintiff, failing which the sheriff be directed and authorised to sign all such documents on behalf of the defendant. 2. In the alternative to 1 above, judgment against the defendant for: 2.1. payment of the amount of R150 000.00; 2.2. payment of interest on the amount of R150 000.00 at a rate of 15.5% from 6 April 2011 to date of final payment. 3. Costs of the suit. 4. Further and/or alternative relief. TAKE NOTICE FURTHER that if you fail to give such notice, judgment may be granted against you without further reference to you. DATED at PRETORIA on this the 25th day of FEBRUARY 2014.
SIM & BOTSI ATTORNEYS INC.
Attorneys for the Plaintiff
Tel: 011 880 4075
Email: lana@simattorneys.co.za
Ref: LVR/S431
C/o PAZAROPOULOS ATTORNEYS
21 Sudhof 472 Justice Mahomed Street
Muckleneuk Pretoria PO Box 244 Groenkloof
Tel: 012 770 3614 Fax: 086 244 0514
Email: pazaro_attorneys@webmail.co.za
S431 FEB 28(S)4005

HS&R Hack, Stupel & Ross ATTORNEYS

SCHOEMAN YT, W/VAN ZYL DD
NOTICE OF MOTION
IN THE HIGH COURT OF SOUTH AFRICA (GAUTENG DIVISION, PRETORIA) CASE NUMBER: 62497/13. YOLANDE THERESA SCHOEMAN ID: 761018 0025 081 1ST APPLICANT, WILHELM SCHOEMAN ID: 640918 5042 089 2ND APPLICANT, YOLANDE THERESA SCHOEMAN N.O. 3RD APPLICANT (IN HER CAPACITY AS MOTHER AND NATURAL GUARDIAN OF DAMIEN DYLAN VAN ZYL ID: 970102 5097 087) and DOMINIC DAMIEN VAN ZYL RESPONDENT TAKE NOTICE that application will be made on behalf of the above named Applicants on 21 MAY 2014 at 10:00 or a soon thereafter as Counsel may be heard, for an order in the following terms: 1. That the Respondent's parental rights and responsibilities in respect of the minor child, Damien Dylan van Zyl with identity number 970102 5091 087, be terminated in accordance with Section 28(1)(a) of the Children's Act 38 of 2005, (as amended); 2. That the First and Second Applicants be appointed as the sole guardians of the minor child, Damien Dylan van Zyl with identity number 970102 5091 087, to the exclusion of the Respondent, in accordance with Section 24 of the Children's Act 38 of 2005, (as amended); 3. That the First and Second Applicants share equal parental rights and responsibilities in respect of the minor child, Damien Dylan van Zyl with identity number 970102 5091 087, to the exclusion of the Respondent; 4. That the First and Second Applicants have the right to change the surname of the minor child, Damien Dylan van Zyl, with identity number 970102 5091 087, to their surname, without the permission of the Respondent; 5. That the Respondent be ordered to pay the costs, only in the event of the opposition; 6. Further and/or alternative relief. That the Respondent shall be given 30 (thirty) days within which to file a notice of intention to oppose, and a further 15 (fifteen) days to file an opposing affidavit, if any, failing which, the Applicants will be entitled to enrol the matter for hearing on the unopposed roll; TAKE FURTHER NOTICE that the accompanying affidavit of YOLANDE THERESA SCHOEMAN, together with the annexures hereto, will be used in support thereof. KINDLY PLACE THE MATTER ON THE ROLL FOR HEARING ACCORDINGLY. DATED AT PRETORIA ON THIS 17TH DAY OF FEBRUARY 2014
HACK STUPEL & ROSS ATTORNEYS
Attorneys for the Applicants
2nd Floor, Standard Bank Chambers
Church Square, PRETORIA
REF: AKVS01/AKVS/AVR
TEL: 012 325 4185 FAX: 086 231 0584
TO: THE REGISTRAR OF THE HIGH COURT PRETORIA
AKVS01 FEB 28(HS&R)4005

SPIRINI PTY LTD
NOTICE
In the High Court of South Africa. Gauteng Division, Pretoria. Case No: 68544/2013. Pretoria 31 January 2014. Before the Honourable Mr Justice JORDAAN. In the matter of: BE ACTIVE FINANCIAL SERVICES CC, REG: 2010/020289/23, Applicant And SPIRINI (PTY) LTD, Reg No: 2002/010726/07, Respondent
Address: 5 Lenchen Park, 2029 Lenchen Ave South, Zwartkop X4, Centurion.
HAVING HEARD counsel for the Applicant and having read the notice of motion and other documents filed of record:
IT IS ORDERED:
1. THAT the abovementioned respondent company be and is hereby placed under provisional winding-up order; 2. THAT a rule nisi be and is hereby issued calling upon all persons concerned to appear and show cause, if any, to this court at 10:00 on 24 March 2014 why the respondent company should not be placed under final winding-up order; 3. THAT a copy of this order be serve on the respondent at its registered office or main place of business. 4. THAT a copy of this order be published forthwith once in the Government Gazette and once in the Beeld newspaper.
BY THE COURT - REGISTRAR - EM
Attorney: WANNENBURG & VILJOEN ATT.
Address: 654 GREAT DANE STREET, PRETORIA
68544/2013 FEB 28(W)4005

PATRICK HARRY LOTS EN 4 ANDER // REGISTRATEUR VAN AKTES, PRETORIA
IN DIE HOOGGEREGSHOF VAN SUID AFRIKA GAUTENG AFDELING, PRETORIA, SAAK NR: 74535/2013. PATRICK HARRY LORENTZ, 1ste APPLIKANT, SIMON ANTONY LORENTZ, 2de APPLIKANT, VICTORIA MARY ENGELBRECHT, 3de APPLIKANT, TERESA KATE MATHER, 4de APPLIKANT, DAY BREAK PROPERTIES 124 (PTY) LIMITED, 5de APPLIKANT and REGISTRATEUR VAN AKTES, PRETORIA, RESPONDENT
HOFBEVEL
NA AANHOOR van die Advokaat vir die Applikante, en na oorweging van die aangeleentheid, word die volgende bevel gemaak: 1. 'n bevel nisi word uitgereik tot die effek dat enige persone wat van voornemens is om beswaar aan te teken teen hierdie bevel, dit mag doen deur 'n brief te rig aan die Griffier voor 14 Maart 2014, altenatieweklik om persoonlik of soos verteenwoording deur 'n Advokaat voor hierdie agbare hof te verskyn op 24 April 2014 om 10h00, waar sodanige persone beswaar kan maak teen die volgende bevel: 1.1 dat die beperkende titelvoorwaardes soos uiteengesit in paragrawe A(b) en A(c) in Akte van Transport Nr. T21754/86 wat betrekking het op die eiendom bekend as Resterende Gedeelte van Gedeelte 279 van die Plaas Zwartkop Nr. 356, registrasie afdeling JR, Gauteng Provinsie ('die eiendom'), welke voorwaarde soos volg lees, uit die titelakte verwyder word: 'A. ONDERHEWIG aan die volgende voorwaardes, naamlik: (b) Die eienaar van die gemelde Gedeelte 9 (n gedeelte van Gedeelte 3) van die Plaas Zwartkop (die eiendom gehou kragtens hierdie titelakte, synde 'n gedeelte te wees van daardie eiendom) is spesifiek geregtig op 'n halwe aandeel in die wins voortspruitend uit die verkoop van 'n dorp asook op die reg op water en 'n reg van weg op Gedeelte 8 ('n gedeelte van Gedeelte 3) van voormelde Plaas, Groot 577,7309 (VYF HONDERD SEWE-EN-SEWENTIG KOMA SEWE DRIE NUL NEGE HEKTAR), getransporteer by wyse van Akte van Transport Nr. 4387/1905, en spesifiek onderhewig aan soortgelyke regte ten gunste van die gemelde gedeelte gemerk Gedeelte 8 ('n gedeelte van Gedeelte 3) van die gemelde Plaas, al voormelde regte en verpligtinge soos meer volledig blyk uit Notariële Akte van Serwituut Nr: 139/1905-S, met dien verstande dat: (i) uit hoofde van 'n hofbevel van die Hooggeregshof van Suid Afrika (Transvaal Provinsiale Afdeling) gedateer 30 Junie 1977 (Saak Nr. M.319/77) die voorwaarde wat betrekking het op winste voortspruitend uit die verkoop van 'n dorp soos hierbo uiteengesit, geen regte verleen aan die geregistreerde eienaar van Gedeelte 279 van die Plaas, ten opsigte van die voormalige Gedeeltes 23 en 132 van die Plaas Zwartkop Nr. 356, registrasie afdeling JR, distrik Pretoria nie, welke eiendomme deel vorm van die gekonsolideerde eiendom wat bekend staan as Gedeelte 279 van die voormelde Plaas teenoor Grace Jeanette Melle op haar eiendom, synde die Resterende Gedeelte van Gedeelte 121 van voormelde Plaas wat deur haar gehou word onder Akte van Verdelingstransport Nr. 18504/1939 gedateer 20 Oktober 1939, en soos meer volledig blyk uit die hof bevel wat geliasseer is onder verwysings nommer BC 1107/79; en (ii) uit hoofde van Notariële Afstanddoening van Regte Nr. K.803/1981S gedateer 22 Januarie 1981, die reg om 'n gedeelte van die winste te ontvang, welke winste voortspruit van 'n dorp op die Resterende Gedeelte van Gedeelte 121 ('n gedeelte van Gedeelte 62) van die Plaas Zwartkop Nr. 356, registrasie afdeling JR Transvaal, gehou onder Akte van Transport Nr. 81504/39, word hiermee gekanselleer soos meer volledig blyk uit 'n afskrif van gemelde Notariële Akte wat aangeheg is aan Sertifikaat van Gekonsolideerde Titel 8173/74. (c) Die regte en servitute soos vervat in Notariële Akte van Serwituut Nr. 139/1905S, waarop die gemelde Gedeelte 9 ('n gedeelte van Gedeelte 3) van die Plaas Zwartkop, wat oorgedra is aan Henricus Lorentz onder Akte van Transport Nr. 4386/1905 op 5 Junie 1905 (waarvan die eiendom wat in terme van hierdie Titelakte gehou word 'n gedeelte is) geregtig en onderhewig is, is gewysig en verander deur Notariële Akte Nr. 495/22-S geregistreer op 26 Julie 1922, en deur Notariële Akte Nr. 846/49/-S, en deur Notariële Akte Nr. 847/449-S, beide gedateer 12 November 1949. 2. Enige persoon wat 'n reg mag hou wat geaffekteer mag word, is geregtig om beswaar te maak teen die toestaan van hierdie hofbevel, en mag so doen sonder om enige aanspreeklikheid vir kostes op te doen. Indien die beswaar aangeteken word by wyse van 'n geskrewe brief aan die Griffier, moet die beswaarmaker sy/haar volle name, identiteitsnommer en adres verskaf, asook 'n beskrywing van die eiendom of reg wat geaffekteer sou word indien die hofbevel toegestaan sou word. 3. Die hofbevel wat hiermee aangevra word, sal die volgende effek teweegbring: 3.1 Die Eerste tot Vierde Applikante, synde die geregistreerde eienaars van die eiendom, sal nie meer 'n halwe aandeel van die winste voortspruitend uit die voorgenome dorpsontwikkeling op die eiendom en/of die verkoop van erwe binne die beoogde dorp hoef af te staan aan die geregistreerde eienaars of enige van die eiendomme wat oorspronklik deel gevorm het van Gedeelte 8 ('n gedeelte van Gedeelte 3) van die Plaas Zwartkop Nr. 356, registrasie afdeling JR, Gauteng Provinsie, nie. 3.2 Die reg op water en 'n reg van weg oor die eiendom wat geskep is ten gunste van die oorspronklike Gedeelte 8 ('n gedeelte van Gedeelte 3) van die Plaas Zwartkop Nr. 356, registrasie afdeling JR, Gauteng Provinsie, en welke regte gevolglik ook vestig in al die onroerende eiendomme wat voorheen deel gevorm het van die gemelde Gedeelte 8 ('n gedeelte van Gedeelte 3) van die Plaas Zwartkop Nr. 356, registrasie afdeling JR, Gauteng Provinsie, sal gekanselleer word en geen van sodanige eiendomme of hul eienaars sal geregtig wees om die reg op water of die reg van weg op die eiendom uit te oefen nie. 4. Die stukke (dokumente) in hierdie aangeleentheid is gratis beskikbaar vir inspeksie by die kantore van die Applikante se prokureurs, Weavind & Weavind Ingelyf, Weavind Forum, Fehrsenstraat 573, New Muckleneuk, Pretoria. 5. Betekening van hierdie hof bevel moet geskied deur die publikasie daarvan in die Beeld Koerant in Afrikaans, in Engels in die Pretoria News, en ook in die Staatskoerant. 6. 'n Afskrif van die hofbevel in Engels in Afrikaans moet vertoon word op 'n prominente plek op die openbare kennisgewing bord geleë by die kantore van die Griffier, Noord Gauteng Hooggeregshof, hoek van Paul Kruger en Vermeulen Strate, Pretoria, vir 'n periode van 4 (vier) weke. 7 'n Afskrif van die hofbevel in Engels in Afrikaans moet vertoon word op 'n opvallende plek by die kantore van die Stadsraad van Centurion geleë op die hoek van Basden en Rabie Strate, Lyttelton Landbouhoewes, Centurion.
OP LAS - GRIFFIER
GEDATEER 20/02/2014
CL7326 FEB 28(W)4005

EGSKEIDING/ HUWELIKSKONTRAKTE/ MOSIES

4001

bregmans ATTORNEYS

SASPORTAS/SASPORTAS
NOTICE
IN THE HIGH COURT OF SOUTH AFRICA GAUTENG LOCAL DIVISION, JOHANNESBURG. CASE NO. 14/05875. In the EX-PARTE APPLICATION of: SASPORTAS. MICHAEL (Identity number 540425 5191 081) First Applicant And SASPORTAS, MICHAL (Identity Number 600402 0265 084) Second Applicant
KINDLY TAKE NOTICE that application will be made to the above Honourable Court on Tuesday the 15 APRIL 2014 at 9h30 or as soon thereafter as Counsel may be heard, for an Order in the following terms: 1. That the Applicants be and are hereby granted leave to change the matrimonial property system which presently applies to their marriage, from one out of community of property with the inclusion of the accrual system, to one out of community of property with the exclusion of the accrual system, In terms of section 21 (1) of the Matrimonial Property Act 88 of 1984. 2. That the Applicants be and are hereby authorised to enter into a notarial contract, a draft of which is marked annexure "ANC" to the First Applicant's affidavit, in terms of which the future matrimonial property system of the Applicants will be governed as from the date of registration of the said notarial contract in the Deeds Office, JOHANNESBURG. 3. That the aforesaid change in the parties' matrimonial regime shall not in any way prejudice the right of the creditors of their joint estate whose claims arose before registration of the aforesaid notarial contract. 4. That the Registrar of Deeds, Johannesburg, be and is hereby authorised to register the aforesaid notarial contract within three months of this order in terms of the provisions of sections 86 and 89(1)(b) of Act no. 47 of 1937, as amended. 5. That the costs of this application are to be paid by the Applicants alternatively by any unsuccessful party opposing the granting of this Order. 6. Further and/or alternative relief. KINDLY TAKE NOTICE that anyone who wishes to object to the proposed order to change the matrimonial property regime, or to make any representations in that regard, such person can do so by writing to the Registrar of the Court and sending a copy to the applicants' attorney, or by appearing in Court on the day of the hearing. KINDLY TAKE NOTICE FURTHER that the application and the contract which it is proposed to register are available for inspection at the office of the Registrar of the Court and at the office of the applicants' attorney, Bregmans Attorneys, Suite 314, Killarney Office Towers, 60 Riviera Road, Killarney, JOHANNESBURG (reference R Bregman, telephone number (011) 646-0335).
14/05875 FEB 28(BA)4001

ANELE NDLOVU AND ZENELE LEA NDLOVU
REGISTRATION OF NOTORIAL CONTRACT
Be please to take notice that on 19 March 2014 at 10h00 or so soon thereafter as the matter may be heard, application will be made on behalf of Anele Ndlovu and Zanele Lea Ndlovu born Nkhoza (the "Applicants") to the High Court of South Africa (Gauteng Local Division) for an order in the following terms: 1. The Applicants are granted leave in terms of section 21 of the Matrimonial Property Act, 1984 ("the Act") to change the matrimonial property system which applies to their marriage to out of community of property, by the execution and registration of a notarial contract, a draft whereof is attached to the Affidavit of Anele Ndlovu and is marked " AN3" and which contract, after registration thereof, will regulate their property system; 2. The Registrar of Deeds is authorised to register the notarial contract; 3. This Order will- 3.1 lapse if the notarial contract is not registered by the Registrar of Deeds within two months of the date of the granting of this Order; and 3.2 will not prejudice the rights of any creditor of the Applicants as at date of registration of the contract.
SCHINDLERS ATTORNEYS
Notaries & Conveyancers
2nd Floor, 3 Melrose Boulevard Melrose Arch
Johannesburg www.schindlers.co.za
Tel: +27 (11) 448-9600 Fax: +27 (11) 448-9620
Direct Fax: 086 609 7535
Direct Tel: +27 (11) 448- 9682
Docex 10 Hyde Park PO BOX 10909
Johannesburg, 2000
ANELE FEB 28(S)4001

DE JAGER/DE JAGER
SAAK NR: 3805/14. IN DIE SUID GAUTENG HOOGGEREGSHOF: JOHANNESBURG (REPUBLIEK VAN SUID-AFRIKA). In die ex parte aansoek van: EVAN LOU DE JAGER Eerste Applikant en LEIGH ANNE DE JAGER (voorheen Campbell) Tweede Applikant
KENNISGEWING VAN MOSIE VIR DIE KONDONASIE VAN DIE LAAT REGISTRASIE VAN HULLE HUWELIKSVOORWAARDE KONTRAK IN TERME VAN ARTIKEL 87 VAN DIE REGISTRASIE VAN AKTES WET 47 van 1937
GELIEWE KENNIS TE NEEM dat aansoek gedoen gaan word in die bovermelde Agbare Hof namens die Eerste en Tweede Applikante op die 31 ste Maart 2014 om 10h00 of so gou moontlik daarna as wat die Advokaat aangehoor kan word vir 'n Bevel in terme van die ondergenoemde:- 1. Kondonasie en magtiging vir die die laat registrasie van die Huweliksvoorwaarde Kontrak aangegaan en geteken tussen die Eerste en Tweede Applikante binne 3 maande vanaf datum van toestaan van hierdie Bevel in terme waarvan hulle toekomstige huweliksbedeling gereguleer gaan word in ooreenstemming met die terme en voorwaardes en kondisies soos uiteengesit in die Huweliksvoorwaarde Kontrak wat aangeheg is as aanhangsel "B" tot die Kennisgewing van Mosie; 2. Die hierdie Bevel nie enige regte van enige krediteure van die Applikante sal benadeel nie; 3. Verdere en/of alternatiewe verligting. GELIEWE VERDER KENNIS TE NEEM dat die aangeleentheid geplaas is op die Hofrol. Gedateer te Roodepoort op hierdie 11 de dag van Februarie 2014.
Dykes Van Heerden Ing
Applikante se Prokureurs
p/a Document Exchange, The Markade
h/v Kruis & President Strate, Johannesburg
Tel: 011 279 5000; Faks: 0865 412 822
Verw: B Steyn; Docex 24, Roodepoort
3805/14 FEB 21,28(DVH)4001

VERLORE DOKUMENTE

4040

BRAM FISCHERVILLE X2, ERF 5442
VERLORE TITELBEWYS
KRAGTENS ARTIKEL 38 VAN WET 47/1937
Hierby word kennis gegee dat kragtens die bepalings van artikel agt-en-dertig van die Registrasie van Aktes Wet, 1937, ek, die Registrateur van Aktes te JOHANNESBURG, voornemens is om 'n Akte van Transport uit te reik in plek van Akte van Transport T81274/2002 ten gunste van MOSHOESHOE BENETTE LETSOELA, ID NR: 570327 5738 08 0 en PATRICIA LETSOELA, ID NR: 640327 0349 08 7 ten aansien van sekere ERF 5442 BRAM FISCHERVILLE UITBREIDING 2, DORPSGEBIED, wat verlore geraak het of vernietig is. Alle persone wat teen die uitreiking van sodanige Akte beswaar het, word hierby versoek om dit skriftelik in te dien by die Registrateur van Aktes te JOHANNESBURG binne ses weke na die eerste Publikasie in die Staatskoerant
ERF 5442 FEB 21,28(SR)4040

van zyl le roux inc

ABSA BANK // ERF 1167 & ERF 1168 MORNING X122
LOST TITLE DEED
Notice is hereby given that under the provisions of Section 38 of the Deeds Registries Act, 1937, I, the REGISTRAR OF DEEDS OF PRETORIA, intend to issue a Deed of Transfer T 116561/2007 passed by: JACOBUS PETRUS FOURIE AND ABDUL BAAKI TAYOB in our capacities as Trustees in the Insolvent Estate of JULIEN PAUL GREGORY JANSEN, Id Nr 720906 5273 08 8, Unmarried, duly authorised under Certificate of Appointment Number T1792/2013 issued by the Master of the High Court of South Africa (North Gauteng High Court, Pretoria) at Pretoria on 16 October 2013 In respect of A Unit consisting of (a) Section No. 18 as shown and more fully described on Sectional Plan No SS 372/1996 in the scheme known as WOODBURN MANOR in respect of the land and building or buildings situate at ERF 1167 and ERF 1168 MORNINGSIDE EXTENSION 122 TOWNSHIP, LOCAL AUTHORITY CITY OF JOHANNESBURG, of which section the floor area, according to the said sectional plan is 96 (Ninety Six) square metres in extent and (b) An undivided share in the common property in the scheme apportioned to the said section in accordance with the participation quota as endorsed on the said sectional plan. HELD BY Deed of Transfer Number ST 122463/2007 Which has been lost or destroyed. All persons having objections to the issue of such Deed of Transfer are hereby required to lodge the same in writing with the Registrar of Deeds at Pretoria within 6 (SIX) weeks after the date of the first publication in the Gazette.
This done and executed at the Office of the Registrar of Deeds at Pretoria on
In my presence
REGISTRAR OF DEEDS
PRETORIA
MAT43642 FEB 28,MRT 7(VZ)4040

BVZ

CARLETONVILLE X8, ERF 3429
DESTROYED TITLE DEED
Notice is hereby given that under the provisions of section 38 of the Deed Registries Act, 1937, I the, Registrar of Deeds at Pretoria intend to issue a Certificate of Registered Title in Lieu of T77686/2007 dated 14 June 2007 passed by ADRIAAN JOHANNES SMITH and REINETTE SMITH in favour of ANTON SWANEPOEL and PETRONELLA SWANEPOEL in respect of certain ERF 3429 CARLETONVILLE EXTENSION 8 TOWNSHIP, REGISTRATION DIVISION IQ, THE PROVINCE OF GAUTENG which has been destroyed. All persons having objection to the issue of such Certificate are hereby required to lodge the same in writing with the Registrar of Deeds at Pretoria within six weeks after the date of the first publication in the Gazette. Dated at Pretoria this 3rd day of February 2014. In my presence - Registrar of Deeds
MAT37605 FEB 28,MRT 7(BVZ)4040

MacRobert Attorneys

CHARTWELL AH, HOLDING 108
LOST DEED
Notice is hereby given that under the provisions of section thirty-eight of the Deeds Registries Act, 1937, I the REGISTRAR OF DEEDS at PRETORIA intend to issue a Certificate of Registered Title in lieu of Deed of Transfer Number T129748/2007 dated 19 September 2007, registered in the name of THE AIMEON TRUST, Number IT11853/00 in respect of HOLDING NUMBER 108 CHARTWELL AGRICULTURAL HOLDINGS REGISTRATION DIVISION J.Q. PROVINCE OF GAUTENG, which have been lost or destroyed. All persons having objection to the issue of such certificate are hereby required to lodge the same in writing with the Registrar of Deeds at PRETORIA within six weeks after date of the first publication in the Gazette. Dated at PRETORIA on this 12th day of FEBRUARY 2014.
Registrar of Deeds at Pretoria
HOLDING 108 FEB 21,28(MR)4040

KEMPTON PARK UITBR., ERF 231
LOST DESTROYED TITLE DEED
Notice is hereby given that under supervision of Section 38 of the Deeds Registries Act, 1937, I the Registrar of Deeds at Pretoria intend to Issue a Certificate of Registered Title in lieu of Deed of Transfer No. T59612/2008 dated 27 June 2008 passed by UP ON POINT PROPERTIES 28 (PROPRIETARY) LIMITED, REGISTRATION NUMBER. 2001/029445/07 in favour of CLOSE PROPS 248 CC, REGISTRATION NUMBER: 2007/249777/23 in respect of certain ERF 231 KEMPTON PARK EXTENSION TOWNSHIP, REGISTRATION DIVISION I.R, PROVINCE GAUTENG, MEASURING 1301 (ONE THOUSAND THREE HUNDRED AND ONE) SQUARE METRES. All persons having objection to the issue of such Certificate are hereby required to lodge the same in writing with the Registrar of Deeds at Pretoria within six weeks after the date of first publication in the Gazette.
Dated at PRETORIA this 11th day of FEBRUARY 2014.
REGISTRAR OF DEEDS
ERF 231 FEB 28,MRT 07(V&P)4040

KLIPRIVIER, GED 8 VAN ERF 14
LOST TITLE DEED
(Form of publication in terms of Section 38 of the Deeds Registries Act 1937 (Act No. 47 of 1937))
NOTICE is hereby given that under the provisions of Section 38 of the Deeds Registries Act, 1937, I the Registrar of Deeds at Pretoria intend to issue a Certificate of Registered Title in lieu of Deed of Transfer No. T. 21551/2007 passed by the Town Council of Kliprivier in favour of GREYLING REYNARD JOHANNES CHRISTIAAN in respect of : CERTAIN: Portion 8 of Erf 14 Kliprivier Township SITUATE: In the Town of Kliprivier Registration Division I.Q, Kliprivier Region EXTENT: 1002 (One Thousand and Two) Square Metres HELD BY: Deeds of Transfer No. T. 21551/2007 Which has been lost or destroyed All persons having objection to the issue of such Certificate are hereby required to lodge the same in writing with the Registrar of Deeds of Pretoria within six weeks after the date of the first publication in the Government Gazette. SIGNED at PRETORIA on this 7 day of FEBRUARY 2014.
REGISTRAR OF DEED
ERF 14 FEB 28,MRT 1(S)4040

REFILWE X4, ERF 3440
VORM VIR PUBLIKASIE TEN OPSIGTE VAN VERLORE OF VERNIETIGDE TITELBEWYS KRAGTENS ARTIKEL 38 VAN DIE REGISTRASIE VAN AKTES WET 47 VAN 1937
Hierby word kennis gegee dat kragtens die bepalings van Artikel 38 van die Registrasie van Aktes Wet, 1937, ek, die Registrateur van Aktes te Pretoria, voornemens is om 'n sertifikaat van geregistreerde titel uit te reik in plaas van akte van transport No 109929/2000 ten gunste van, Wyle MPHO PETER SEBOTHOMA IDENTITEITSNOMMER: 740222 5456 087 ONGETROUD ten aansien van sekere Erf 3440 Refilwe Uitbreiding 4 Dorpsgebied, Registrasie Adeling J.R., Provinsie van Gauteng Groot: 231 (Twee honderd een en dertig) vierkante meter wat verlore geraak het of vernietig is. Alle persone wat teen die uitreiking van sodanige Sertifikaat beswaar het, word hierby versoek om dit skriftelik in te dien by Akte Kantoor te Pretoria binne 6 (ses) weke na die eerste publikasie in die Staatskoerant. Gedateer te Cullinan op hede die ..... dag van .... 2014.
Registrateur van Aktes
ERF 3440 FEB 28,MRT 7(FR)4040

OIS OMGEWINGSIMPAKSTUDIE

4045

ESKOM PIENAARSRIVIER KLIENTENETWERKSENTRUMPROJEK
KENNISGEWING VAN OMGEWINGSIMPAKSTUDIEPROSES
Aansoek vir goedkeuring kragtens die Wet op Nasionale Omgewingsbestuur 107 van 1998 soos gewysig en die 2010 Omgewingsimpakregulasies, word by die Departement van Omgewingsake (DEA) vir die volgende projek ingedien: Projeknaam: VOORGESTELDE ESKOM PIENAARSRIVIER KLIENTENETWERKSENTRUM-PROJEK
DEA Verw 14/12/16/3/3/1/1039
Projekapplikant: Eskom Holdings SOC Ltd (Limpopo Operating Unit)
Gelyste Aktiwiteite vir 'n Basiese Assesseringsproses: Kennisgewing R544 Aktiwiteit 23; Kennisgewing R546 Aktiwiteit 4 (Aktiwiteite sal bevestig word)
Projekbeskrywing: Die konstruksie van die Pienaarsrivier Kliëntenetwerksentrum wat inter alia sal bestaan uit 'n nuwe kantoorgebou, stoor, 26 afleweringsvoertuigmotorafdakke, 4 vragmotorstafdakke, 103 680 liter water tenk, chemiese rioolstelsel en die oprigting van 'n nuwe transformatorbergingsplint. Projekligging: Die voorgestelde bouterreine vir die Pienaarsrivier Kliëntenetwerksentrum is beide op die plaas Vaalboschbult 66 JR gedeelte 32 naby Pienaarsrivier in die Bela-Bela Plaaslike Munisipaliteit in die Limpopo Provinsie. Die finale eiendomsbeskrywings sal in die konsepverslag beskikbaar gestel word aan alle belanghebbende en/of geaffekteerde partye. Om uself te laat registreer as 'n belanghebbende en/of geaffekteerde party in die beoogde projek, verskaf asseblief binne 40 dae vanaf die datum van hierdie kennisgewing u kommentaar en volledige kontakbesonderhede aan die omgewingskonsultant: Texture (Ria Pretorius); Posbus 36593, MENLOPARK, Pretoria, 0102; Tel 082 568 6344 & Faks 086 675 4026; E-pos Adres: ria@peopletexture.co.za
14/12/16/3/3/1/1039 FEB 28(T)4045

Bokamoso

RASLOUW X15
NOTICE OF BASIC ASSESSMENT PROCESS
Notice is given of an application for a Basic Assessment Process that was submitted to the Gauteng Department of Agriculture and Rural Development, in terms of Regulation No. R543 published in the Government Notice No. 33306 of 18 June 2010 of the National Environment Management Act, 1998 (Act No. 107 of 1998) governing Basic Assessment Procedures (Listing Notice: 1 and 3 – Government Notice R544 & R546) for the following activity: Reference No: Gaut: 002/13-14/E0287. Project Name: Raslouw X15 (external sewer line). Property Description: The following farms/properties will be affected: Holding 1 and 4 of Raslouw Agricultural Holdings; Portion 124, 166, 164, 163, 607, 606, 446, 412 and 168 of the Farm Zwartkop 356 JR; and Portion 462 of the Farm Mooiplaats 355 JR. Proposed Zoning Information: The installation of an external sewer pipeline for Raslouw X15. Listing Activities Applied for: GNR 544 (Listing Notice 1), 18 June 2010 – Activi-ty 9, 11, 18, 37 & 40 and GNR 546 (Listing Notice 3), 18 June 2010 – Activity 16 & 24. Proponent Name: Purple Roof Developers (Pty) Ltd. Location: The proposed sewer line will be in a south-north alignment where in the south it originates from Poole Avenue and traverses the R55 (double lane road). Between the endpoint in the north and the R55 crossing, Sunderland Ridge is located to the west of the proposed sewer line. Date of Notice: 27 February – 11 April 2014. Queries regarding this matter should be referred to: Bokamoso Landscape Architects and Environmental Consultants CC, Public Participation registration and inquiries: Juanita De Beer, Project Inquiries: Mary-Lee van Zyl; P.O. Box 11375 Maroelana 0161; Tel: (012) 346 3810, Fax: (086) 570 5659; E-mail: lizelleg@mweb.co.za, www.bokamoso.biz. In order to ensure that you are identified as an Interested and/or Affected Party (I&AP) please submit your name, contact information and interest in the matter, in writing, to the contact person given above within 40 days of this Notice.
002/13-14/E0287 FEB 28(B)4045

I, the REGISTRAR OF DEEDS of PRETORIA, intend to issue a Deed of Transfer T 116561/2007 passed by: JACOBUS PETRUS FOURIE AND ABDUL BAAKI TAYOB in our capacities as Trustees in the Insolvent Estate of JULIEN PAUL GREGORY JANSEN, Id Nr 720906 5273 08 8, Unmarried, duly authorised under Certificate of Appointment Number T1792/2013 issued by the Master of the High Court of South Africa (North Gauteng High Court, Pretoria) at Pretoria on 16 October 2013 In respect of A Unit consisting of (a) Section No. 18 as shown and more fully described on Sectional Plan No SS 372/1996 in the scheme known as WOODBURN MANOR in respect of the land and building or buildings situate at ERF 1167 and ERF 1168 MORNINGSIDE EXTENSION 122 TOWNSHIP, LOCAL AUTHORITY CITY OF JOHANNESBURG, of which section the floor area, according to the said sectional plan is 96 (Ninety Six) square metres in extent and (b) An undivided share in the common property in the scheme apportioned to the said section in accordance with the participation quota as endorsed on the said sectional plan. HELD BY Deed of Transfer Number ST 122463/2007 Which has been lost or destroyed. All persons having objections to the issue of such Deed of Transfer are hereby required to lodge the same in writing with the Registrar of Deeds at Pretoria within 6 (SIX) weeks after the date of the first publication in the Gazette.
This done and executed at the Office of the Registrar of Deeds at Pretoria on
In my presence
REGISTRAR OF DEEDS
PRETORIA
MAT43642 FEB 28,MRT 7(VZ)4040

BVZ

CARLETONVILLE X8, ERF 3429
DESTROYED TITLE DEED

Notice is hereby given that under the provisions of section 38 of the Deed Registries Act, 1937, I the, Registrar of Deeds at Pretoria intend to issue a Certificate of Registered Title in Lieu of T77686/2007 dated 14 June 2007 passed by ADRIAAN JOHANNES SMITH and REINETTE SMITH in favour of ANTON SWANEPOEL and PETRONELLA SWANEPOEL in respect of certain ERF 3429 CARLETONVILLE EXTENSION 8 TOWNSHIP, REGISTRATION DIVISION IQ, THE PROVINCE OF GAUTENG which has been destroyed. All persons having objection to the issue of such Certificate are hereby required to lodge the same in writing with the Registrar of Deeds at Pretoria within six weeks after the date of the first publication in the Gazette.
Dated at Pretoria this 3rd day of February 2014.
In my presence - Registrar of Deeds
MAT37605 FEB 28,MRT 7(BVZ)4040

ria@peopletexture.co.za
14/12/16/3/3/1/1039 FEB 28(T)4045

Bokamoso
Environmental Consultants & Landscape Architects

RASLOUW X15
NOTICE OF BASIC ASSESSMENT PROCESS

Notice is given of an application for a Basic Assessment Process that was submitted to the Gauteng Department of Agriculture and Rural Development, in terms of Regulation No. R543 published in the Government Notice No. 33306 of 18 June 2010 of the National Environment Management Act, 1998 (Act No. 107 of 1998) governing Basic Assessment Procedures (Listing Notice: 1 and 3 – Government Notice R544 & R546) for the following activity: Reference No: Gaut: 002/13-14/E0287. Project Name: Raslouw X15 (external sewer line). Property Description: The following farms/properties will be affected: Holding 1 and 4 of Raslouw Agricultural Holdings; Portion 124, 166, 164, 163, 607, 606, 446, 412 and 168 of the Farm Zwartkop 356 JR; and Portion 462 of the Farm Mooiplaats 355 JR. Proposed Zoning Information: The installation of an external sewer pipeline for Raslouw X15. Listing Activities Applied for: GNR 544 (Listing Notice 1), 18 June 2010 – Activi-ty 9, 11, 18, 37 & 40 and GNR 546 (Listing Notice 3), 18 June 2010 – Activity 16 & 24. Proponent Name: Purple Roof Developers (Pty) Ltd. Location: The proposed sewer line will be in a south-north alignment where in the south it originates from Poole Avenue and traverses the R55 (double lane road). Between the endpoint in the north and the R55 crossing, Sunderland Ridge is located to the west of the proposed sewer line. Date of Notice: 27 February – 11 April 2014. Queries regarding this matter should be referred to: Bokamoso Landscape Architects and Environmental Consultants CC, Public Participation registration and inquiries: Juanita De Beer, Project Inquiries: Mary-Lee van Zyl; P.O. Box 11375 Maroelana 0161; Tel: (012) 346 3810, Fax: (086) 570 5659; E-mail: lizelleg@mweb.co.za, www.bokamoso.biz. In order to ensure that you are identified as an Interested and/or Affected Party (I&AP) please submit your name, contact information and interest in the matter, in writing, to the contact person given above within 40 days of this Notice.
002/13-14/E0287 FEB 28(B)4045

Communications to and from Persons Detailed in Point 2 and 3 above

Juanita

From: Juanita <user3@bokamoso.net>
Sent: 27 February 2014 04:37 PM
To: 'jgrobler@geoscience.org.za'; asalomon@sahra.org.za; 'maphata.ramphele@gauteng.gov.za'; 'justicem@dwaf.gov.za'; 'keetm@dwaf.gov.za'; 'SiwelaneL@dwa.gov.za'; tshifaror@dwa.gov.za; 'central@eskom.co.za'; 'paia@eskom.co.za'; 'SchmidK@nra.co.za'; kumen.govender@gauteng.gov.za; 'mmpshe@randwater.co.za'; nkoneigh@randwater.co.za; rudzanim@tshwane.gov.za; daniel.ramokane@transnet.net; loveous.tampane@transnet.net; casperm@tshwane.gov.za; marikekrugermuller@gmail.com; marikakm@tshwane.gov.za
Subject: Raslouw X15 - Public Participation
Attachments: Public Notice BA.pdf

Dear Interested and/or Affected Party Member,

Please refer to the attached Public Notice regarding the proposed Raslouw X15 Project.

Hope this finds you well.

Kind Regards/Vriendelike Groete

Juanita De Beer

Bokamoso

Landscape Architects &
Environmental Consultants cc.

T: (+27)12 346 3810 I F: (+27) 86 570 5659 I E: lizelleg@mweb.co.za I www.bokamoso.biz
36 Lebombo Street, Ashlea Gardens, Pretoria I P.O. Box 11375 Maroelana 0161

Juanita

From: Juanita <user3@bokamoso.net>
Sent: 26 June 2014 08:10 AM
To: 'JacobsCe@eskom.co.za'
Subject: RE: BAP Raslouw X15 (external sewer line)

Dear Carel Jacobs,

Thank you for your response, I have registered you as Interested and/or Affected Party Member for the proposed Raslouw X15 Project.

We will keep you updated regarding the process in the future.

Hope this finds you well.

Kind Regards

Juanita De Beer

Public Participation Consultant

Landscape Architects &
Environmental Consultants

T: (+27)12 346 3810 I F: (+27) 86 570 5659 I E: lizelleg@mweb.co.za I www.bokamoso.net
36 Lebombo Street, Ashlea Gardens, Pretoria I P.O. Box 11375 Maroelana 0161

From: Carel Jacobs [mailto:JacobsCe@eskom.co.za]
Sent: 25 June 2014 02:36 PM
To: lizelleg@mweb.co.za
Subject: BAP Raslouw X15 (external sewer line)

Hi

Herewith my contact details as an Interested party as owner of Poole ave 372

My Contact details :
C Jacobs
Poole ave 372
Raslouw

Tel : 0827841962

P.O.Box 2955
The Reeds
0158

e- mail : carel.jacobs@iafrica.com

regards

Carel Jacobs

From: Carel Iafrica [mailto:carel.jacobs@iafrica.com]
Sent: 25 June 2014 01:58 PM
To: Carel Jacobs
Subject: Notice

NOTICE OF BASI
PROC

Notice is given of an application for a **Basic Assess** Department of Agriculture and Rural Development, Government Notice No. 33306 of 18 June 2010 of the N 107 of 1998) governing **Basic Assessment Procedures (List** for the following activity:

Reference No: Gaut: 002/13-14/E0287

Project Name: Raslouw X15 (external sewer line)

Property Description: The following farms/properties will Holdings; Portion 124, 166, 164, 163, 607, 606, 446, 412 an the Farm Mooiplaats 355 JR

Proposed Zoning Information: The installation of an extern

Listing Activities Applied for:

GNR 544 (Listing Notice 1), 18 June 2010	Activity 9
GNR 544 (Listing Notice 1), 18 June 2010	Activity 11

Sent from my iPad

I'm part of the 49Million initiative.
http://www.49Million.co.za

Juanita

From: Juanita <user3@bokamoso.net>
Sent: 19 March 2014 01:19 PM
To: stikili1ketwa@yahoo.com
Subject: RE: PUBLIC NOTICE, RASLOUW SEWER LINES, REF NO. GAUT:002/13-14/E0287

Dear Lindelwa Ketwa & Mark Masih,

Thank you for your response, I have registered you as Interested and/or Affected Party Member for the proposed Raslouw X15 Project.

We will keep you updated regarding the process in the future.

Hope this finds you well.

Kind Regards/Vriendelike Groete
Juanita De Beer
Public Participation Consultant

Landscape Architects &
Environmental Consultants cc.

T: (+27)12 346 3810 I F: (+27) 86 570 5659 I E: lizelleg@mweb.co.za I www.bokamoso.biz
36 Lebombo Street, Ashlea Gardens, Pretoria I P.O. Box 11375 Maroelana 0161

-----Original Message-----
From: thandekile ketwa [mailto:stikili1ketwa@yahoo.com]
Sent: 19 March 2014 12:57 PM
To: lizelleg@mweb.co.za
Subject: RE: PUBLIC NOTICE, RASLOUW SEWER LINES, REF NO. GAUT:002/13-14/E0287

The reference no. GAUT :002/13-14/E0287

Regards

Lindelwa ketwa and Mark Masih
Stand 389
Silverwood
Centurion
Monavoni ext 6

On Wed, Mar 19, 2014 8:34 AM EET Bokamoso wrote:

>Dear Lindelwa Ketwa,
>
>Thank you for your response, please refer to the Project Name Project.
>
>Kind Regards/Vriendelike Groete
>Juanita De Beer
>Public Participation Consultant
>
>
>
>Landscape Architects &
>Environmental Consultants cc.
>
>T: (+27)12 346 3810 I F: (+27) 86 570 5659 I E: lizelleg@mweb.co.za
>I www.bokamoso.biz
>36 Lebombo Street, Ashlea Gardens, Pretoria I P.O. Box 11375 Maroelana
>0161
>
>Please consider the environment before printing this email
>
>
>
>
>
>-----Original Message-----
>From: thandekile ketwa [mailto:stikili1ketwa@yahoo.com]
>Sent: 19 March 2014 08:23 AM
>To: lizelleg@mweb.co.za
>Subject: PUBLIC NOTE BA/PUBLIC PARTICIPATION _sewer pipelines
>
>
>
>Dear Lizelle
>
>We have a stand no 389 in Monavoni ext 6, Silverwood Estate, Centurion .
>
>Kindly inform us , how and if we will be affected by this construction.
>
>Kind regards
>
>Lindelwa ketwa
>
>
>

Juanita

From: Juanita <user3@bokamoso.net>
Sent: 28 February 2014 10:59 AM
To: 'Corlizev@amka.co.za'; 'pauld@amka.co.za'
Subject: RE: Raslow Ext15 - interested and affected party

Dear Corlize van Wyk,

Thank you for your response, I have registered you as Interested and/or Affected Party Member for the proposed Raslouw X15 Project.

We will keep you updated regarding the process in the future.

Hope this finds you well.

Kind Regards/Vriendelike Groete

Juanita De Beer

Bokamoso

Landscape Architects &
Environmental Consultants cc.

T: (+27)12 346 3810 I F: (+27) 86 570 5659 I E: lizelleg@mweb.co.za I www.bokamoso.biz
36 Lebombo Street, Ashlea Gardens, Pretoria I P.O. Box 11375 Maroelana 0161

From: Corlize [mailto:Corlizev@amka.co.za]
Sent: 28 February 2014 10:20 AM
To: lizelleg@mweb.co.za
Cc: Paul Dallas
Subject: Raslow Ext15 - interested and affected party

Good morning.

I would like to register Amka Products (Pty) Ltd (portion 166) as an interested and affected party regarding the external sewer line.

We are in the process of declaring portion 165 & 166 a township and have service agreements with City of Tshwane regarding the sewerage, electricity supply, roads and stormwater & water and would like to make sure that these would not be affected in any way.

Please send all relevant information and developments to the following persons.

Paul Dallas
E-mail: pauld@amka.co.za
Tel: 012 674 0407

&

Corlize van Wyk
E-mail: corlizev@amka.co.za
Tel: 012 674 0407

Regards

Corlize van Wyk
Assistant to Paul Dallas
Amka Products
Tel: 012 - 674 0407
Fax2mail: 086 622 7973
E-mail: corlizev@amka.co.za

Minutes of Any Public and/or Stakeholders Meetings

(Not available)

Comments and Responses Report

COMMENT AND RESPONSE REPORT-
BASIC ASSESSMENT REPORT FOR THE PROPOSED RASLOUW X15 (EXTERNAL SEWER LINE)
Gaut: 002/13-14/E0287

Issue	Commentator	Response
I would like to register Amka Products (Pty) Ltd (portion 166) as an interested and affected party regarding the external sewer line. We are in the process of declaring portion 165 & 166 a township and have service agreements with City of Tshwane regarding the sewerage, electricity supply, roads and storm water & water and would like to make sure that these would not be affected in any way.	28 February 2014 Corlize van Wyk Corlizev@amka.co.za Paul Dallas pauld@amka.co.za	Thank you for your response, I have registered you as Interested and/or Affected Party Member for the proposed Raslouw X15 Project. We will keep you updated regarding the process in the future.
Thank you for your notification regarding this development. In terms of the National Heritage Resources Act, 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 prior to development it is incumbent on the developer to ensure that a Heritage Impact Assessment is done. This must include the archaeological component (Phase 1) and any other applicable heritage components. Appropriate (Phase 2) mitigation, which involves recording, sampling and dating sites that are to be destroyed, must be done as required. The quickest process to follow for the archaeological component is to contract an accredited specialist (see the web site of the Association of Southern African Professional Archaeologists www.asapa.org.za) to provide a Phase 1 Archaeological Impact Assessment Report. This must be done before any large development takes place. The Phase 1 Impact Assessment Report will identify the archaeological sites and assess their significance. It should also make recommendations (as indicated in section 38) about the	4 March 2014 Andrew Salomon **SAHRA** asalomon@sahra.org.za	Noted.

process to be followed. For example, there may need to be a mitigation 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. Where bedrock is to be affected, or where there are coastal sediments, or marine or river terraces and in potentially fossiliferous superficial deposits, 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 of exemption from a Palaeontologist 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. Please note that a nationwide fossil sensitivity map is now available on Sahris to assist with this. If the property is very small or disturbed and there is no significant site the heritage specialist may choose to send a letter to the heritage authority to indicate that there is no necessity for any further assessment. Any other heritage resources that may be impacted such as built structures over 60 years old, sites of cultural significance or viewscapes must also be assessed.		
We have a stand no 389 in Monavoni ext 6, Silverwood Estate, Centurion. Kindly inform us, how and if we will be affected by this construction.	19 March 2014 Lindelwa ketwa and Mark Masih stikili1ketwa@yahoo.com	From our data the Silverwood Estate is approximately 3km south of the proposed 2km sewer pipeline and in our opinion, we cannot foresee you being affected by the proposed sewer pipeline installation.
Herewith my contact details as an Interested party as owner of Poole ave 372 My Contact details : C Jacobs Poole ave 372	25 June 2014 Carel Jacobs carel.jacobs@iafrica.com	Thank you for your response, I have registered you as Interested and/or Affected Party Member for the proposed Raslouw X15 Project.

Raslouw Tel : 0827841962 P.O.Box 2955 The Reeds 0158 e- mail : carel.jacobs@iafrica.com		We will keep you updated regarding the process in the future.

Comments from I&Ap's on Basic Assessment (BA) Report

(Not Available)

Comments from I&Ap's on Amendments to the BA Report

(Not yet available)

Copy of the Register of I&AP's

Nr	Registered Parties	Contact details	Address
		Stakeholders	
1	Council Geo-Science	jgrobler@geoscience.org.za	
2	SAHRA Gauteng	asalomon@sahra.org.za	
		nndobochani@sahra.org.za	
3	PHRAG	maphata.ramphele@gauteng.gov.za	
4	DWA	justicem@dwaf.gov.za	
		keetm@dwaf.gov.za	
		siwelanel@dwa.gov.za	
		tshifaror@dwa.gov.za	
5	Eskom	central@eskom.co.za	
		paia@eskom.co.za	
6	SANRAL	schmidk@nra.co.za	
7	Gautrans	kumen.govender@gauteng.gov.za	
8	Randwater	mmpshe@randwater.co.za	
		nkoneigh@randwater.co.za	
9	City Of Tshwane	RudzaniM@tshwane.gov.za	
10	Spoornet	daniel.ramokone@transnet.net	
		loveous.tampane@transnet.net	
11	DA Roads	casperm@tshwane.gov.za	
12	**Ward Councillor**		
	Marike Kruger-Muller	marikekrugermuller@gmail.com	
		Interested and Affected Parties	
1	Corlize van Wyk	Corlizev@amka.co.za	
	Amka Products (Pty) Ltd	Tel: 012 674 0407	

2	Paul Dallas	pauld@amka.co.za	
	Amka Products (Pty) Ltd	Tel: 012 674 0407	
3	Lindelwa Ketwa and	stikili1iketwa@yahoo.com	
	Mark Masih		
4	Carel Jacobs	JacobsCe@eskom.co.za	
		Cell: 082 784 1962	

Comments from I&AP's on the Application (Not available)

Water Use Lisence(s), SAHRA Information, Service Letters from Municipalities & Water Supply Information (Not Available)

Raslouw X15 (external sewer line)

Our Ref: 9/2/258/0005

Enquiries: Andrew Salomon
Tel: 021 462 4502
Email: asalomon@sahra.org.za
CaseID: 4966

Date: Tuesday March 04, 2014

an agency of the Department of Arts and Culture

Letter

In terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999)

Attention: Purple Roof Developers (Pty) Ltd

The following farms/properties will be affected: Holding 1 and 4 of Raslouw Agricultural Holdings; Portion 124, 166, 164, 163, 607, 606, 446, 412 and 168 of the Farm Zwartkop 356 JR; and Portion 462 of the Farm Mooiplaats 355 JR

Thank you for your notification regarding this development.

In terms of the National Heritage Resources Act, 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 prior to development it is incumbent on the developer to ensure that a **Heritage Impact Assessment** is done. This must include the archaeological component (Phase 1) and any other applicable heritage components. Appropriate (Phase 2) mitigation, which involves recording, sampling and dating sites that are to be destroyed, must be done as required.

The quickest process to follow for the archaeological component is to contract an accredited specialist (see the web site of the Association of Southern African Professional Archaeologists www.asapa.org.za) to provide a Phase 1 Archaeological Impact Assessment Report. This must be done before any large development takes place.

The Phase 1 Impact Assessment Report will identify the archaeological sites and assess their significance. It should also make recommendations (as indicated in section 38) about the process to be followed. For example, there may need to be a mitigation 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.

Where bedrock is to be affected, or where there are coastal sediments, or marine or river terraces and in potentially fossiliferous superficial deposits, 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 of exemption from a Palaeontologist 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. Please note that a nationwide fossil sensitivity map is now available on SAHRIS to assist with this.

If the property is very small or disturbed and there is no significant site the heritage specialist may choose to

send a letter to the heritage authority to indicate that there is no necessity for any further assessment.

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 viewscapes must also be assessed.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Andrew Salomon
Heritage Officer: Archaeology
South African Heritage Resources Agency

Colette Scheermeyer
SAHRA Head Archaeologist
South African Heritage Resources Agency

ADMIN:
Direct URL to case: http://www.sahra.org.za/node/158075
(GDARD, Ref: Gaut: 002/13-14/E0287)

Specialist Reports

WETLAND/WATER COURSE IDENTIFICATION AND DELINEATION REPORT

REPORT

WETLAND / WATER COURSE IDENTIFICATION AND DELINEATION REPORT:

PROPOSED RASLOUW EXT. 15 SEWER LINE, GAUTENG PROVINCE

14th April, 2014

Compiled by:
J.H. van der Waals
(PhD Soil Science, Pr.Sci.Nat)
Member of:
Soil Science Society of South Africa (SSSSA)

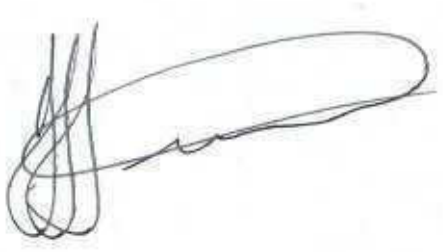
Accredited member of:
South African Soil Surveyors Organisation (SASSO)

Registered with:
The South African Council for Natural Scientific Professions
Registration number: 400106/08

Declaration

I, Johan Hilgard van der Waals, declare that I –

- I act as the independent 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 the specialist report relevant to this application, 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 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;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of Section 24F of the Act.



J.H. VAN DER WAALS
TERRA SOIL SCIENCE

TABLE OF CONTENTS

WETLAND / WATER COURSE IDENTIFICATION AND DELINEATION REPORT: PROPOSED RASLOUW EXT. 15 SEWER LINE, GAUTENG PROVINCE

1. INTRODUCTION

1.1 TERMS OF REFERENCE

Terra Soil Science was appointed by **Bokamoso** to identify and delineate the wetlands and water courses along the transect of the proposed Raslouw Ext. 15sewer line in the Gauteng Province.

1.2 PROBLEM STATEMENT

The proposed sewer line transect is situated in a dolomite dominated area. The soils that are derived from dolomite (and its associated chert) constitute a special case as stipulated in the wetland delineation guidelines (DWAF, 2005). The said guidelines do not provide any guidance in the delineation of wetlands in such landscapes. These landscapes pose a big challenge in the delineation of wetlands as there are distinct areas where wetland plants occur on red (apparently well-drained) soils. The standard wetland delineation approach is problematic as it focusses on the presence of wetlands rather than hydrological functioning of the landscape that feeds the wetlands.

1.3 AIM OF THIS REPORT

The aim of this report is to provide a perspective on the specific wetland conditions (soils, geology, landscape, topography) that occur on the site as well as provide recommendations regarding the management of these wetlands and summarise the impacts of a sewer line construction process. This will be done through the provision of a hydropedological perspective of the site and broader area to aid in the identification and management of water impacts through the elucidation of broad surface hydrology and hydropedology principles.

1.4 METHODOLOGY

1.4.1 Brief Background

The identification and delineation of wetlands rest on several parameters that include topographic, vegetation and soil indicators. Apart from the inherent flaws in the wetland delineation process, as discussed later in this report, the concept of wetland delineation implies an emphasis on the wetlands themselves and very little consideration of the processes driving the functioning and presence of the wetlands. One discipline that encompasses a number of tools to elucidate landscape hydrological processes is “hydropedology” (Lin, 2012). The crux of the understanding of hydropedology lies in the fact that pedology is the description and classification of soil on the basis of morphology that is the result of soil and landscape hydrological, physical and chemical processes. But, the soils of which the morphology are described, also take part in and intimately

influence the hydrology of the landscape. Soil is therefore both an indicator as well as a participator in the processes that require elucidation.

Wetlands are merely those areas in a landscape where the morphological indicators point to prolonged or intensive saturation near the surface to influence the distribution of wetland vegetation. Wetlands therefore form part of a larger hydrological entity that they cannot be separated from.

1.4.2 Proposed Methodology

In order to provide detailed pedohydrological information both detailed soil surveys and hydrological investigations are needed. In practice these intensive surveys are expensive and very seldom conducted. However, with the understanding of soil morphology, pedology and basic soil physics parameters as well as the collection and interpretation of existing soil survey information, assessments at different levels of detail and confidence can be conducted. In this sense four levels of investigation are proposed namely:

1. Level 1 Assessment: This level includes the collection and generation of all applicable remote sensing, topographic and land type parameters to provide a “desktop” product. This level of investigation rests on adequate experience in conducting such information collection and interpretation exercises and will provide a broad overview of dominant hydropedological parameters of a site. Within this context the presence, distribution and functioning of wetlands will be better understood than without such information.
2. Level 2 Assessment: This level of assessment will make use of the data generated during the Level 1 assessment and will include a reconnaissance soil and site survey to verify the information as well as elucidate many of the unknowns identified during the Level 1 assessment.
3. Level 3 Assessment: This level of assessment will build on the Level 1 and 2 assessments and will consist of a detailed soil survey with sampling and analysis of representative soils. The parameters to be analysed include soil physical, chemical and mineralogical parameters that elucidate and confirm the morphological parameters identified during the field survey.
4. Level 4 Assessment: This level of assessment will make use of the data generated during the previous three levels and will include the installation of adequate monitoring equipment and measurement of soil and landscape hydrological parameters for an adequate time period. The data generated can be used for the building of detailed hydrological models (in conjunction with groundwater and surface hydrologists) for the detailed water management on specific sites.

For most wetland delineation exercises a Level 2 or Level 3 assessment should be adequate.

1.4.3 Methodology Employed in this Investigation

The report was generated through:

1. The collection and presentation of baseline land type and topographic data for the site;
2. The thorough consideration of the statutory context of wetlands and the process of wetland delineation;
3. The identification of water related landscape parameters (conceptual and real) for the site for the generation of Level 1 hydropedology information;
4. Aerial photograph interpretation of the site to aid in the Level 1 hydropedology assessment;
5. Assessment of historical impacts and changes on the site through the accessing of various historical aerial photographs and topographic maps;
6. Reconnaissance soil and site survey in terms of soil properties as well as drainage feature properties to generate a Level 2 hydrology assessment; and
7. Presentation of the findings of the various components of the investigation.

2. SITE LOCALITY AND DESCRIPTION

2.1 SURVEY AREA BOUNDARY

The site lies between 25° 49' 54'' and 25° 50' 55'' south and 28° 06' 23'' and 28° 06' 49'' east immediately east of the light industrial area of Sunderland Ridge in the Gauteng Province (**Figure 1**).

2.2 GENERALISED GEOLOGY

The geology of the area surrounding and including the site consists predominantly of dolomite and chert with shale and quartzite also occurring in the general area.

2.3 LAND TYPE DATA

Land type data for the site was obtained from the Institute for Soil Climate and Water (ISCW) of the Agricultural Research Council (ARC). The land type data is presented at a scale of 1:250 000 and entails the division of land into land types, typical terrain cross sections for the land type and the presentation of dominant soil types for each of the identified terrain units (in the cross section). The soil data is classified according to the Binomial System (MacVicar et al., 1977). The soil data was interpreted and re-classified according to the Taxonomic System (Soil Classification Working Group, 1991).

The Raslouw area is situated in the **Ab2** land type (Land Type Survey Staff, 1972 - 2006) with **Figure 2** providing the land type distribution for the area. Below follows a brief description of the land type in terms of soils as well as expected hydromorphic indicators.

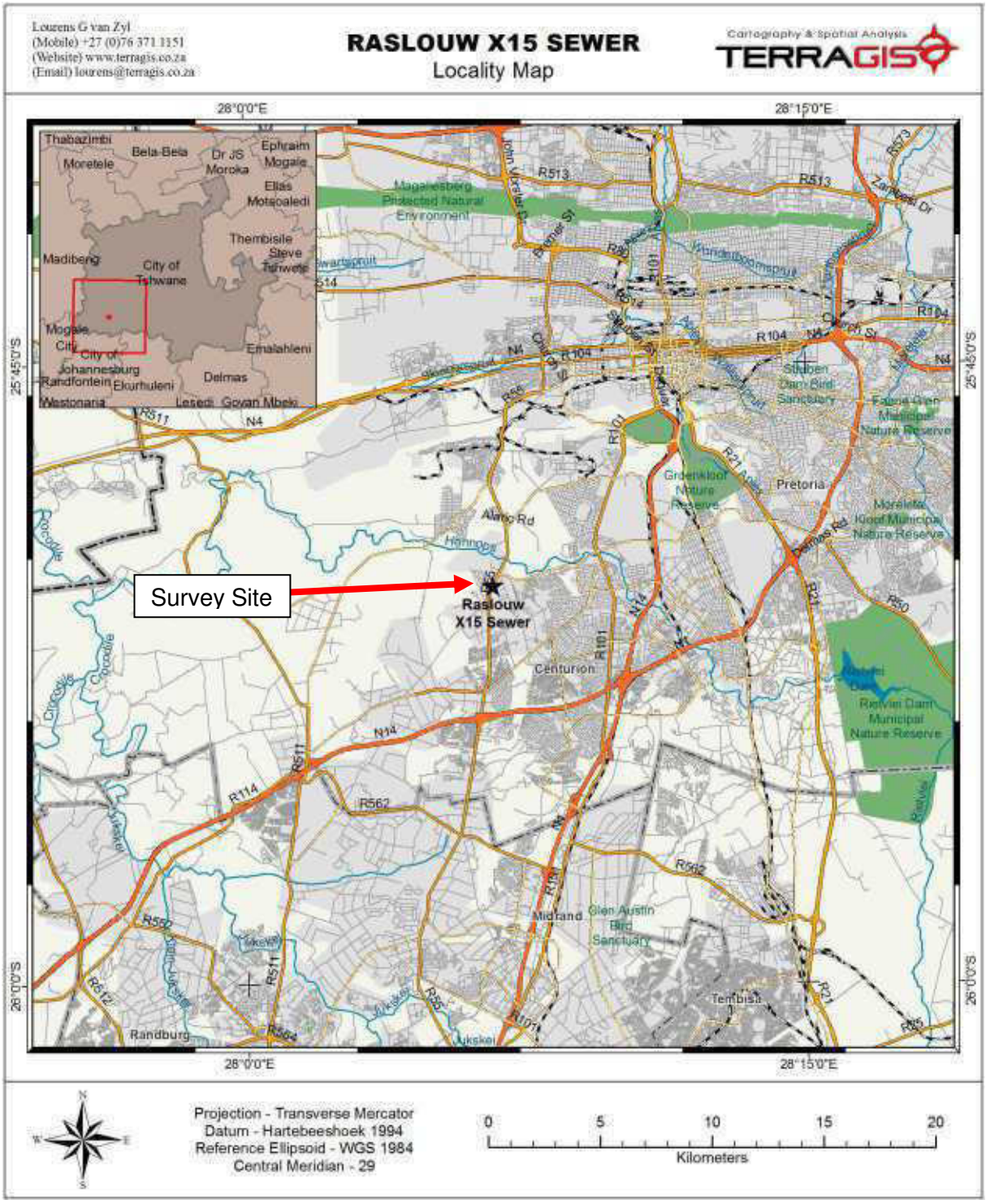


Figure 1 Locality of the survey site

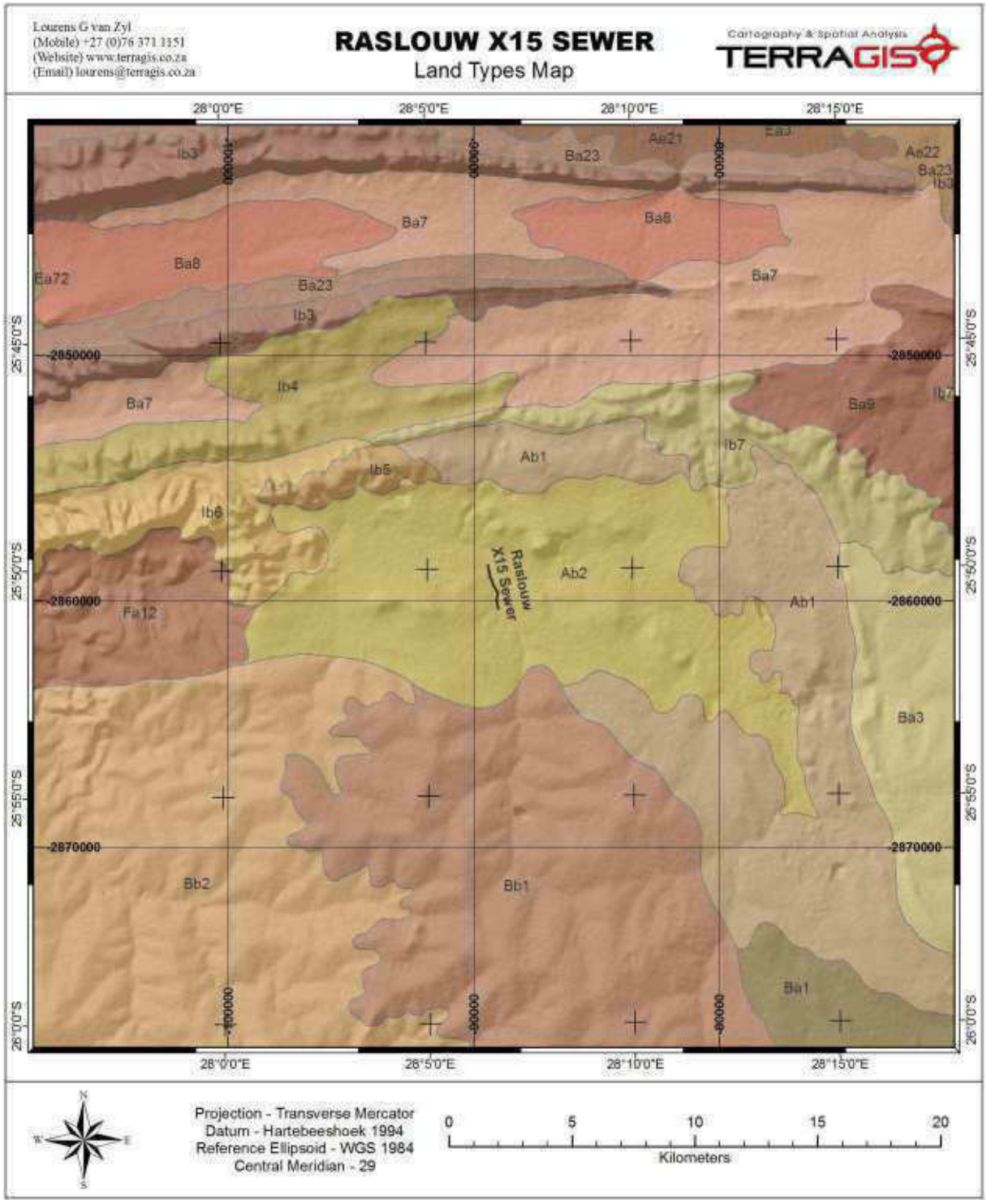


Figure 2 Land type map of the survey site

Land Type Ab2

Land Type – General: Ab land types denote areas with dominantly red well-drained dystrophic and mesotrophic soils.

Soils: From crest to valley bottom the dominant soil colour is red in profiles of varying depth. On crests red soils contain large proportions of chert rock and pebbles. In midslope and footslope positions either chert or dolomite occurs. The dolomite is often weather down to the soil surface but form deep (more than 2 m) tongues of weathering where pedologically old soils occur. The horizontal variation can be such that outcrops occur every 1 to 2 m with deep soils in between at the same frequency. Drainage lines are characterised by narrow bands of dark and brownish red structured soils on the bank with alluvial soils in the channel.

Indicators of Hydromorphy: In the bulk of the Ab2 landscape signs of wetness (hydromorphy) are not found even if plants indicate seasonal wetness. The mechanism is assumed to be the poising (buffering) of redox by Mn above the levels that would lead to the expression of Fe redox morphology (that is stipulated in the delineation guidelines). This aspect will be discussed in more detail in the report. Drainage channel soils exhibit limited expression of mottling and then usually associated with oxidised root channels in a clayey and structured matrix. These soils occur within the riparian zone.

2.4 TOPOGRAPHY

The topography of the site and stream channel is relatively flat to undulating. The contour data of the site, superimposed on a Google Earth image, is provided in **Figure 3**. From the contour data a digital elevation model (DEM) was generated for the survey area (**Figure 4**). From the contour data a slope map was generated (**Figure 6**) and from this data in turn a topographic wetness index (TWI) was calculated for the survey site (**Figure 7**). The TWI provides a very accurate indication of water flow paths and areas of water accumulation. This is a function of the topography of the site.

2.5 AERIAL PHOTOGRAPH INTERPRETATION

An aerial photograph interpretation exercise was conducted through the use of Google Earth images of the site. Historical images spanning the period from 2004 to 2012 were used for the purpose of identifying land use characteristics associated with the sewer line transect. In addition, the images were used to identify possible wetland areas that were investigated during the field survey (addressed in the next section). The land uses and characteristics associated with the drainage feature and proposed sewer line are indicated in **Figure 3**.

Figure 3 Contours of the site superimposed on a satellite image

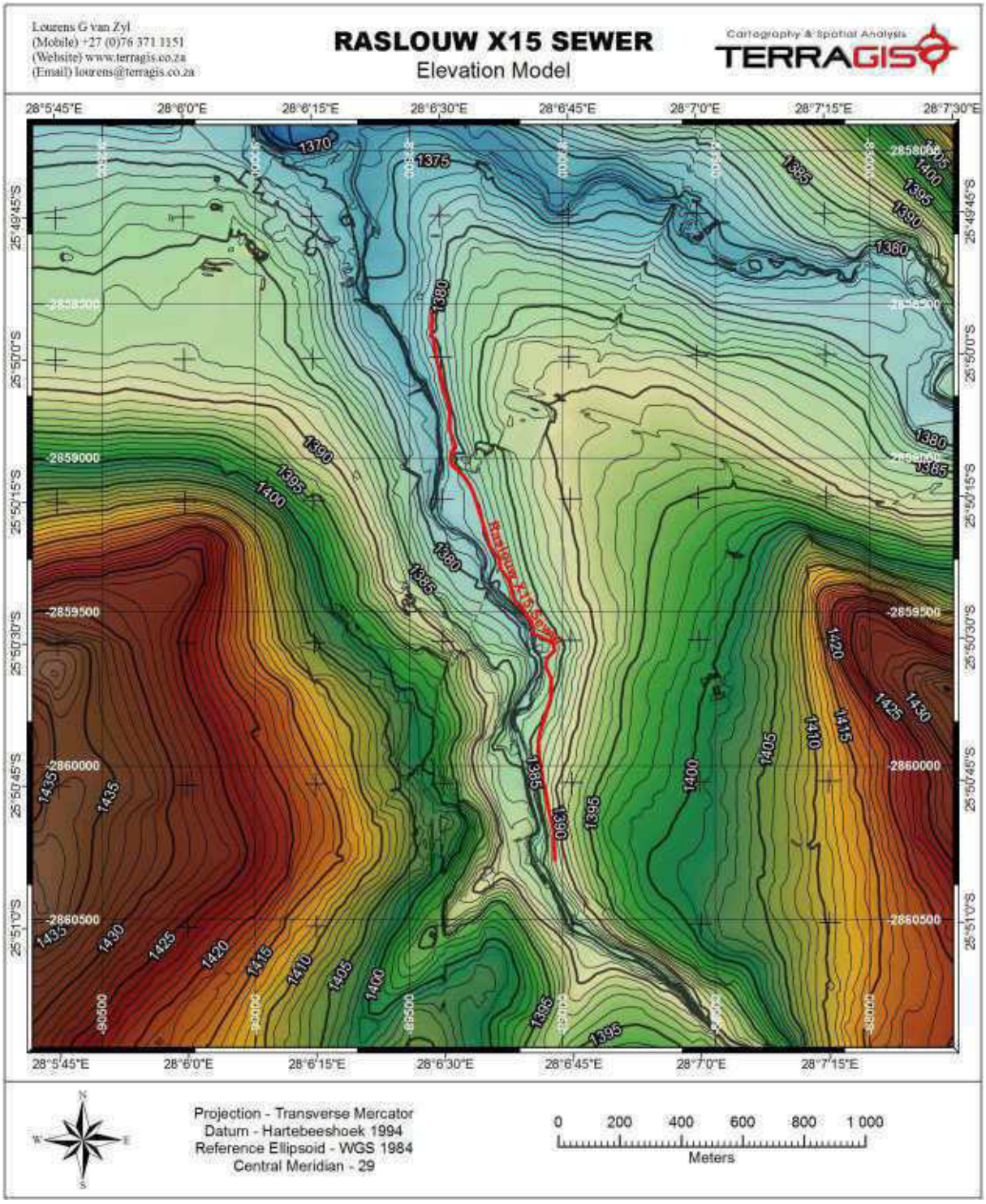


Figure 4 DEM of the area surrounding area and survey site

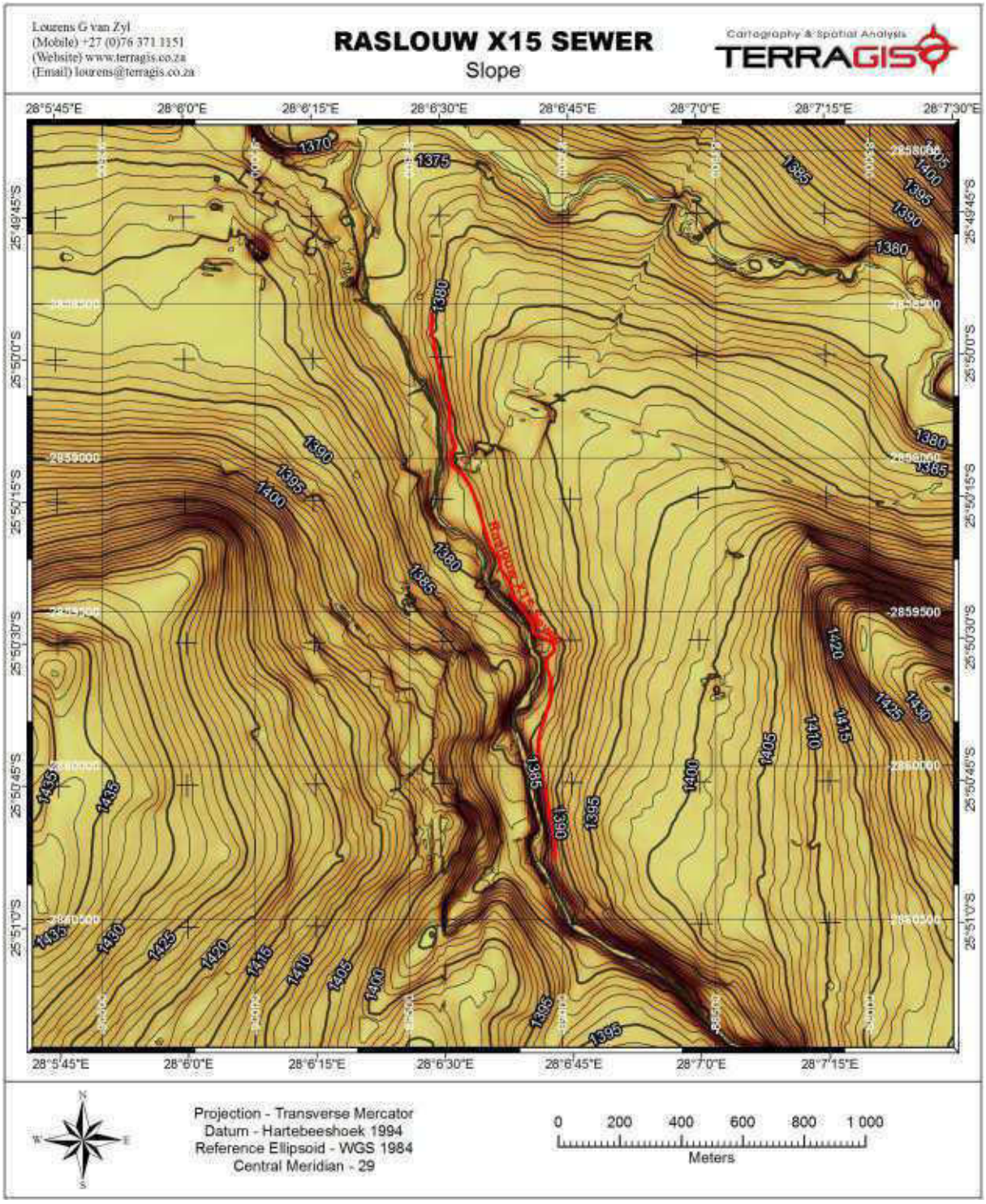


Figure 6 Slope map of the general area

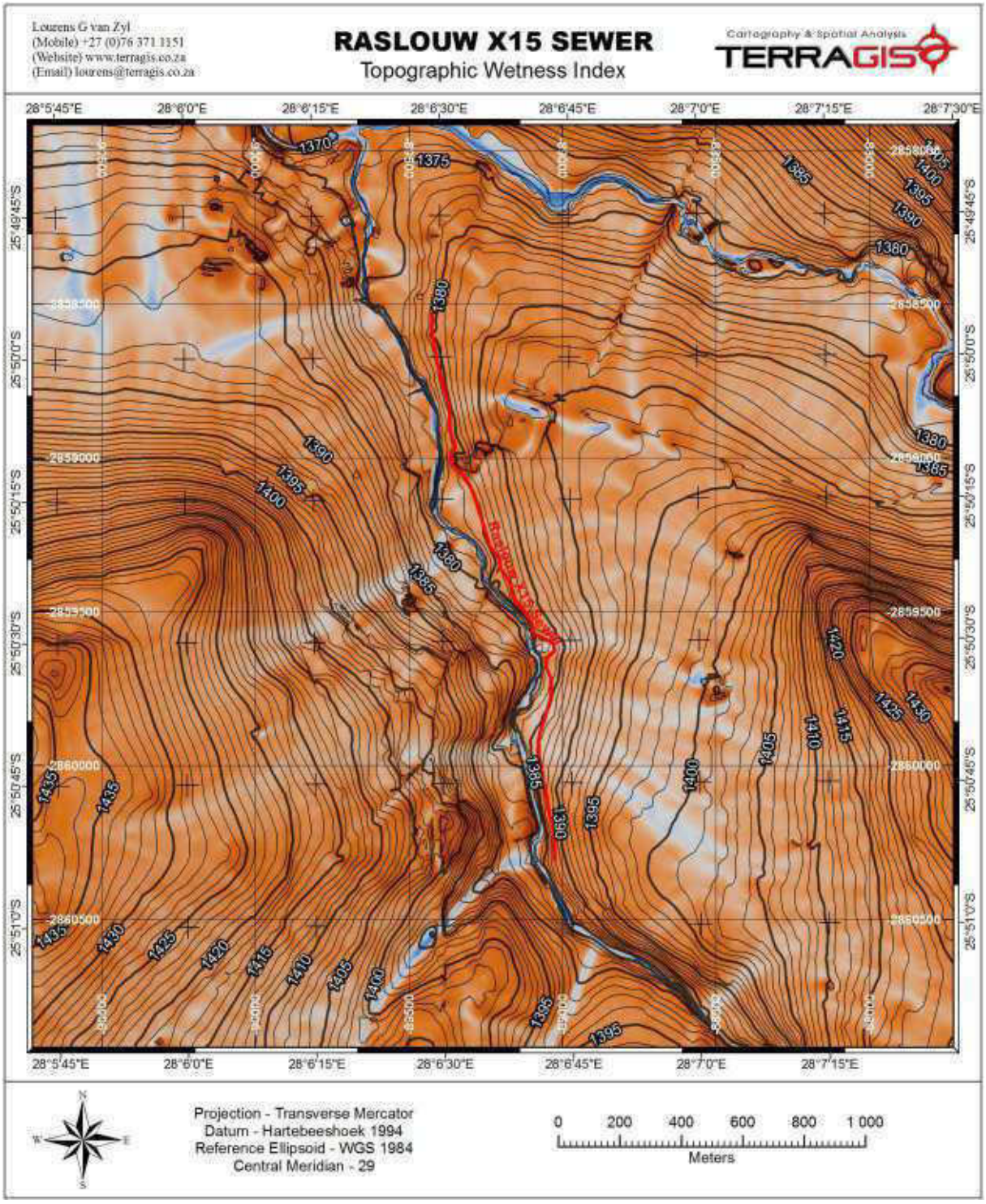


Figure 7 Topographic wetness index (TWI) for the survey site and surrounding area

3. WETLANDS: STATUTORY CONTEXT

3.1 WETLAND DEFINITION

Wetlands are defined, in terms of the National Water Act (Act no 36 of 1998) (NWA), as:

"Land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil."

3.2 WATERCOURSE DEFINITION

"Catchment" is defined, in terms of the National Water Act (Act no 36 of 1998) (NWA), as:

"…, in relation to a watercourse or watercourses or part of a watercourse, means the area from which any rainfall will drain into the watercourse or watercourses or part of a watercourse, through surface flow to a common point or common points;"

"Watercourse" is defined, in terms of the National Water Act (Act no 36 of 1998) (NWA), as:

> "*(a)* a river or spring;
> *(b)* a natural channel in which water flows regularly or intermittently;
> *(c)* a wetland, lake or dam into which, or from which, water flows; and
> *(d)* any collection of water which the Minister may, by notice in the *Gazette*, declare to be a water course,
> and a reference to a watercourse includes, where relevant, its bed and banks;"

3.3 THE WETLAND DELINEATION GUIDELINES

In 2005 the Department of Water Affairs and Forestry published a manual entitled "A practical field procedure for identification and delineation of wetland and riparian areas" (DWAF, 2005). The "…manual describes field indicators and methods for determining whether an area is a wetland or riparian area, and for finding its boundaries." The definition of a wetland in the guidelines is that of the NWA and it states that wetlands must have one or more of the following attributes:

- "**Wetland (hydromorphic) soils** that display characteristics resulting from prolonged saturation"
- "The presence, at least occasionally, of **water loving plants (hydrophytes)**"
- "A **high water table** that results in saturation at or near the surface, leading to anaerobic conditions developing in the top 50cm of the soil."

The guidelines further list four indicators to be used for the finding of the outer edge of a wetland. These are:

- Terrain Unit Indicator. The terrain unit indicator does not only identify valley bottom wetlands but also wetlands on steep and mild slopes in crest, midslope and footslope positions.
- Soil Form Indicator. A number of soil forms (as defined by MacVicar et al., 1991) are listed as indicative of permanent, seasonal and temporary wetland zones.
- Soil Wetness Indicator. Certain soil colours and mottles are indicated as colours of wet soils. The guidelines stipulate that this is the primary indicator for wetland soils. (Refer to the guidelines for a detailed description of the colour indicators.) In essence, the reduction and removal of Fe in the form of "bleaching" and the accumulation of Fe in the form of mottles are the two main criteria for the identification of soils that are periodically or permanently wet.
- Vegetation Indicator. This is a key component of the definition of a wetland in the NWA. It often happens though that vegetation is disturbed and the guidelines therefore place greater emphasis on the soil form and soil wetness indicators as these are more permanent whereas vegetation communities are dynamic and react rapidly to external factors such as climate and human activities.

The main emphasis of the guidelines is therefore the use soils (soil form and wetness) as the criteria for the delineation of wetlands. The applicability of these guidelines in the context of the survey site will be discussed in further detail later in the report.

Due to numerous problems with the delineation of wetlands there are a plethora of courses being presented to teach wetland practitioners and laymen the required techniques. Most of the courses and practitioners focus on ecological or vegetation characteristics of landscapes and soil characteristics are often interpreted incorrectly due to a lacking soil science background of these practitioners. As such this author regularly presents, in conjunction with a colleague (Prof. Cornie van Huysteen) from the University of the Free Sate, a course on the aspects related to soil classification and wetland delineation.

3.4 THE RESOURCE DIRECTED MEASURES FOR PROTECTION OF WATER RESOURCES.

The following are specific quotes from the "Resource Directed Measures for Protection of Water Resources. Volume 4: Wetland Ecosystems" as published by DWAF (1999).

From the Introduction:

"This set of documents on Resource Directed Measures (RDM) for protection of water resources, issued in September 1999 in Version 1.0, presents the procedures to be followed in undertaking **preliminary determinations of the class, Reserve and resource quality objectives for water resources**, as specified in sections 14 and 17 of the South African National Water Act (Act 36 of 1998).

The development of procedures to determine RDM was initiated by the Department of Water Affairs and Forestry in July 1997. Phase 3 of this project will end in March 2000. Additional refinement and development of the procedures, and development of the full water resource

classification system, will continue in Phase 4, until such time as the detailed procedures and full classification system are ready for publication in the Government Gazette.

It should be noted that until the final RDM procedures are published in the Gazette, and prescribed according to section 12 of the National Water Act, all determinations of RDM, whether at the rapid, the intermediate or the comprehensive level, will be considered to be preliminary determinations."

From Appendix W1 (Ecoregional Typing for Wetland Ecosystems)

Artificial modifiers are explained namely:
"Many wetlands are man-made, while others have been modified from a natural state to some degree by the activities of humans. Since the nature of these alterations often greatly influences the character of such habitats, the inclusion of modifying terms to accommodate human influence is important. In addition, many human modifications, such as dam walls and drainage ditches, are visible in aerial photographs and can be easily mapped. The following Artificial Modifiers are defined and can be used singly or in combination wherever they apply to wetlands:
Farmed: the soil surface has been physically altered for crop production, but hydrophytes will become reestablished if farming is discontinued
Artificial: substrates placed by humans, using either natural materials such as dredge spoils or synthetic materials such as concrete. Jetties and breakwaters are examples of Non-vegetated Artificial habitats
Excavated: habitat lies within an excavated basin or channel
Diked/Impounded: created or modified by an artificial barrier which obstructs the inflow or outflow of water
Partially Drained: the water level has been artificially lowered, usually by means of ditches, but the area is still classified as wetland because soil moisture is sufficient to support hydrophytes."

3.5 CHALLENGES REGARDING WETLAND DELINEATION IN DOLOMITE ENVIRONMENTS

In order to discuss the procedures followed and the results of the wetland identification exercise it is necessary at the outset to provide some theoretical background on soil forming processes, soil wetness indicators, water movement in soils and topographical sequences of soil forms (catena).

3.5.1 Pedogenesis

Pedogenesis is the process of soil formation. Soil formation is a function of five (5) factors namely (Jenny, 1941):

- Parent material;

- Climate;
- Topography;
- Living Organisms; and
- Time.

These factors interact to lead to a range of different soil forming processes that ultimately determine the specific soil formed in a specific location. Central to all soil forming processes is water and all the reactions (physical and chemical) associated with it. The physical processes include water movement onto, into, through and out of a soil unit. The movement can be vertically downwards, lateral or vertically upwards through capillary forces and evapotranspiration. The chemical processes are numerous and include dissolution, precipitation (of salts or other elements) and alteration through pH and reduction and oxidation (redox) changes. In many cases the reactions are promoted through the presence of organic material that is broken down through aerobic or anaerobic respiration by microorganisms. Both these processes alter the redox conditions of the soil and influence the oxidation state of elements such as Fe and Mn. Under reducing conditions Fe and Mn are reduced and become more mobile in the soil environment. Oxidizing conditions, in turn, lead to the precipitation of Fe and Mn and therefore lead to their immobilization. The dynamics of Fe and Mn in soil, their zones of depletion through mobilization and accumulation through precipitation, play an important role in the identification of the dominant water regime of a soil and could therefore be used to identify wetlands and wetland conditions.

3.5.2 Water Movement in the Soil Profile

In a specific soil profile, water can move upwards (through capillary movement), horizontally (owing to matric suction) and downwards under the influence of gravity.

The following needs to be highlighted in order to discuss water movement in soil:

- Capillary rise refers to the process where water rises from a deeper lying section of the soil profile to the soil surface or to a section closer to the soil surface. Soil pores can be regarded as miniature tubes. Water rises into these tubes owing to the adhesion (adsorption) of water molecules onto solid mineral surfaces and the surface tension of water.

  The height of the rise is inversely proportional to the radius of the soil pore and the density of the liquid (water). It is also directly proportional to the liquid's surface tension and the degree of its adhesive attraction. In a soil-water system the following simplified equation can be used to calculate this rise:

  $$\text{Height} = 0.15/\text{radius}$$

  Usually the eventual height of rise is greater in fine textured soil, but the rate of flow may be slower (Brady and Weil, 1999; Hillel, 1983).

- Matric potential or suction refers to the attraction of water to solid surfaces. Matric potential is operational in unsaturated soil above the water table while pressure potential refers to

water in saturated soil or below the water table. Matric potential is always expressed as a negative value and pressure potential as a positive value.

Matric potential influences soil moisture retention and soil water movement. Differences in the matric potential of adjoining zones of a soil results in the movement of water from the moist zone (high state of energy) to the dry zone (low state of energy) or from large pores to small pores.

The maximum amount of water that a soil profile can hold before leaching occurs is called the field capacity of the soil. At a point of water saturation, a soil exhibits an energy state of 0 $J.kg^{-1}$. Field capacity usually falls within a range of -15 to -30 $J.kg^{-1}$ with fine textured soils storing larger amounts of water (Brady and Weil, 1999; Hillel, 1983).

- Gravity acts on water in the soil profile in the same way as it acts on any other body; it attracts towards earth's centre. The gravitational potential of soil water can be expressed as:

  Gravitational potential = Gravity x Height

  Following heavy rainfall, gravity plays an important part in the removal of excess water from the upper horizons of the soil profile and recharging groundwater sources below.

  Excess water, or water subject to leaching, is the amount of water that falls between soil saturation (0 $J.kg^{-1}$) or oversaturation (> 0 $J.kg^{-1}$), in the case of heavy rainfall resulting in a pressure potential, and field capacity (-15 to -30 $J.kg^{-1}$). This amount of water differs according to soil type, structure and texture (Brady and Weil, 1999; Hillel, 1983).

- Under some conditions, at least part of the soil profile may be saturated with water, resulting in so-called saturated flow of water. The lower portions of poorly drained soils are often saturated, as are well-drained soils above stratified (layers differing in soil texture) or impermeable layers after rainfall.

  The quantity of water that flows through a saturated column of soil can be calculated using Darcy's law:

  $$Q = Ksat.A.\Delta P/L$$

  Where Q represents the quantity of water per unit time, Ksat is the saturated hydraulic conductivity, A is the cross sectional area of the column through which the water flows, ΔP is the hydrostatic pressure difference from the top to the bottom of the column, and L is the length of the column.

  Saturated flow of water does not only occur downwards, but also horizontally and upwards. Horizontal and upward flows are not quite as rapid as downward flow. The latter is aided by gravity (Brady and Weil, 1999; Hillel, 1983).

- Mostly, water movement in soil is ascribed to the unsaturated flow of water. This is a much more complex scenario than water flow under saturated conditions. Under unsaturated conditions only the fine micropores are filled with water whereas the macropores are filled

with air. The water content, and the force with which water molecules are held by soil surfaces, can also vary considerably. The latter makes it difficult to assess the rate and direction of water flow. The driving force behind unsaturated water flow is matric potential. Water movement will be from a moist to a drier zone (Brady and Weil, 1999; Hillel, 1983).

The following processes influence the amount of water to be leached from a soil profile:

- Infiltration is the process by which water enters the soil pores and becomes soil water. The rate at which water can enter the soil is termed infiltration tempo and is calculated as follows:

$$I = Q/A.t$$

Where I represents infiltration tempo ($m.s^{-1}$), Q is the volume quantity of infiltrating water (m^3), A is the area of the soil surface exposed to infiltration (m^2), and t is time (s).

If the soil is quite dry when exposed to water, the macropores will be open to conduct water into the soil profile. Soils that exhibit a high 2:1 clay content (swelling-shrinking clays) will exhibit a high rate of infiltration initially. However, as infiltration proceeds, the macropores will become saturated and cracks, caused by dried out 2:1 clay, will swell and close, thus leading to a decline in infiltration (Brady and Weil, 1999; Hillel, 1983).

- Percolation is the process by which water moves downward in the soil profile. Saturated and unsaturated water flow is involved in the process of percolation, while the rate of percolation is determined by the hydraulic conductivity of the soil.

During a rain storm, especially the down pouring of heavy rain, water movement near the soil surface mainly occurs in the form of saturated flow in response to gravity. A sharp boundary, referred to as the wetting front, usually appears between the wet soil and the underlying dry soil. At the wetting front, water is moving into the underlying soil in response to both matric and gravitational potential. During light rain, water movement at the soil surface may be ascribed to unsaturated flow (Brady and Weil, 1999; Hillel, 1983).

The fact that water percolates through the soil profile by unsaturated flow has certain ramifications when an abrupt change in soil texture occurs (Brady and Weil, 1999; Hillel, 1983). A layer of course sand, underlying a fine textured soil, will impede downward movement of water. The macropores of the coarse textured sand offer less attraction to the water molecules than the macropores of the fine textured soil. When the unsaturated wetting front reaches the coarse sand, the matric potential is lower in the sand than in the overlying material. Water always moves from a higher to a lower state of energy. The water can, therefore, not move into the coarse textured sand. Eventually, the downward moving water will accumulate above the sand layer and nearly saturate the fine textured soil. Once this occurs, the water will be held so loosely that gravitational forces will be able to drag the water into the sand layer (Brady and Weil, 1999; Hillel, 1983).

A coarse layer of sand in an otherwise fine textured soil profile will also inhibit the rise of water by capillary movement (Brady and Weil, 1999; Hillel, 1983).

Field observations and laboratory based analysis can aid in assessing the soil-water relations of an area. The South African soil classification system (Soil Classification Working Group, 1991.) comments on certain field observable characteristics that shed light on water movement in soil. The more important of these are:

- Soil horizons that show clear signs of leaching such as the E-horizon – an horizon where predominantly lateral water movement has led to the mobilisation and transport of sesquioxide minerals and the removal of clay material;
- Soil horizons that show clear signs of a fluctuating water table where Fe and Mn mottles, amongst other characteristics, indicate alternating conditions of reduction and oxidation (soft plinthic B-horizon);
- Soil horizons where grey colouration (Fe reduction and redox depletion), in an otherwise yellowish or reddish matrix, indicate saturated (or close to saturated) water flow for at least three months of the year (Unconsolidated/Unspecified material with signs of wetness);
- Soil horizons that are uniform in colouration and indicative of well-drained and aerated (oxidising) conditions (e.g. yellow brown apedal B-horizon).

3.5.3 Water Movement in the Landscape

Water movement in a landscape is a combination of the different flow paths in the soils and geological materials. The movement of water in these materials is dominantly subject to gravity and as such it will follow the path of least resistance towards the lowest point. In the landscape there are a number of factors determining the paths along which this water moves. **Figure 8** provides a simplified schematic representation of an idealised landscape (in "profile curvature"). The total precipitation (rainfall) on the landscape from the crest to the lowest part or valley bottom is taken as 100 %. Most geohydrologists agree that total recharge, the water that seeps into the underlying geological strata, is less than 4 % of total precipitation for most geological settings. Surface runoff varies considerably according to rainfall intensity and distribution, plant cover and soil characteristics but is taken as a realistic 6 % of total precipitation for our idealised landscape. The total for surface runoff and recharge is therefore calculated as 10 % of total precipitation. If evapotranspiration (from plants as well as the soil surface) is taken as a very high 30 % of total precipitation it leaves 60 % of the total that has to move through the soil and/or geological strata from higher lying to lower lying areas. In the event of an average rainfall of 750 mm per year it results in 450 mm per year having to move laterally through the soil and geological strata. In a landscape there is an accumulation of water down the slope as water from higher lying areas flow to lower lying areas.

To illustrate: If the assumption is made that the area of interest is 100 m wide it follows that the first 100 m from the crest downwards has 4 500 m^3 (or 4 500 000 litres) of water moving laterally through the soil (100 m X 100 m X 0.45 m) per rain season. The next section of 100 m down the slope has its own 4 500 m^3 of water as well as the added 4 500 m^3 from the upslope section to contend with, therefore 9 000 m^3. The next section has 13 500 m^3 to contend with and the following one 18 000 m^3. It is therefore clear that, the longer the slope, the larger the volume of water that will move laterally through the soil profile.

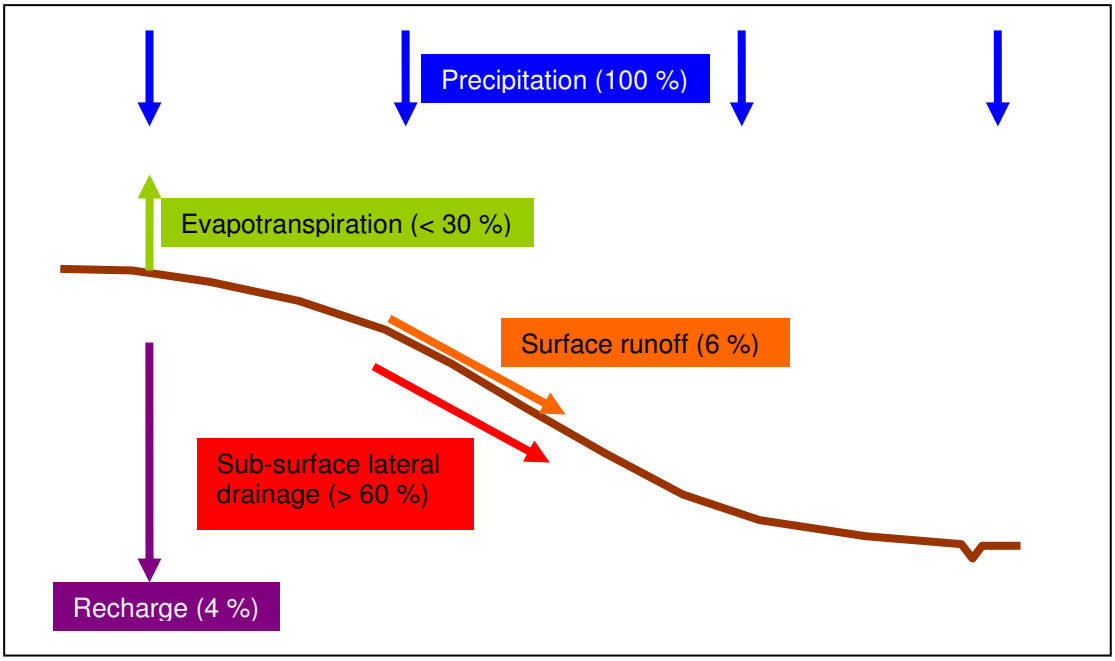


Figure 8 Idealised landscape with assumed quantities of water moving through the landscape expressed as a percentage of total precipitation (100 %).

Flow paths through soil and geological strata, referred to as “interflow” or “hillslope water”, are very varied and often complex due to difficulty in measurement and identification. The difficulty in identification stems more from the challenges related to the physical determination of these in soil profile pits, soil auger samples and core drilling samples for geological strata. The identification of the morphological signs of water movement in permeable materials or along planes of weakness (cracks and seams) is a well-established science and the expression is mostly referred to as “redox morphology”. In terms of the flow paths of water large variation exists but these can be grouped into a few simple categories. **Figure 9** provides a schematic representation of the different flow regimes that are usually encountered. The main types of water flow can be grouped as 1) recharge (vertically downwards) of groundwater; 2) lateral flow of water through the landscape along the hillslope (interflow or hillslope water); 3) return flow water that intercepts the soil/landscape surface; and 4) surface runoff. Significant variation exists with these flow paths and numerous combinations are often found. The main wetland types associated with the flow paths are: a) valley bottom wetlands (fed by groundwater, hillslope processes, surface runoff, and/or in-stream water); b) hillslope seepage wetlands (fed by interflow water and/or return flow water); and wetlands associated with surface runoff, ponding and surface ingress of water anywhere in the landscape.

Amongst other factors, the thickness of the soil profile at a specific point will influence the intensity of the physical and chemical reactions taking place in that soil. **Figure 10** illustrates the difference between a dominantly thick and a dominantly thin soil profile. If all factors are kept the same except for the soil profile thickness it can be assumed with confidence that the chemical and physical reactions associated with water in the landscape will be much more intense for the thin soil profile than for the thick soil profile. Stated differently: The volume of water moving through the soil per surface area of an imaginary plane perpendicular to the direction of water flow is much higher for the thin soil profile than for the thick soil profile. This aspect has a significant influence on the

expression of redox morphology in different landscapes of varying soil/geology/climate composition.

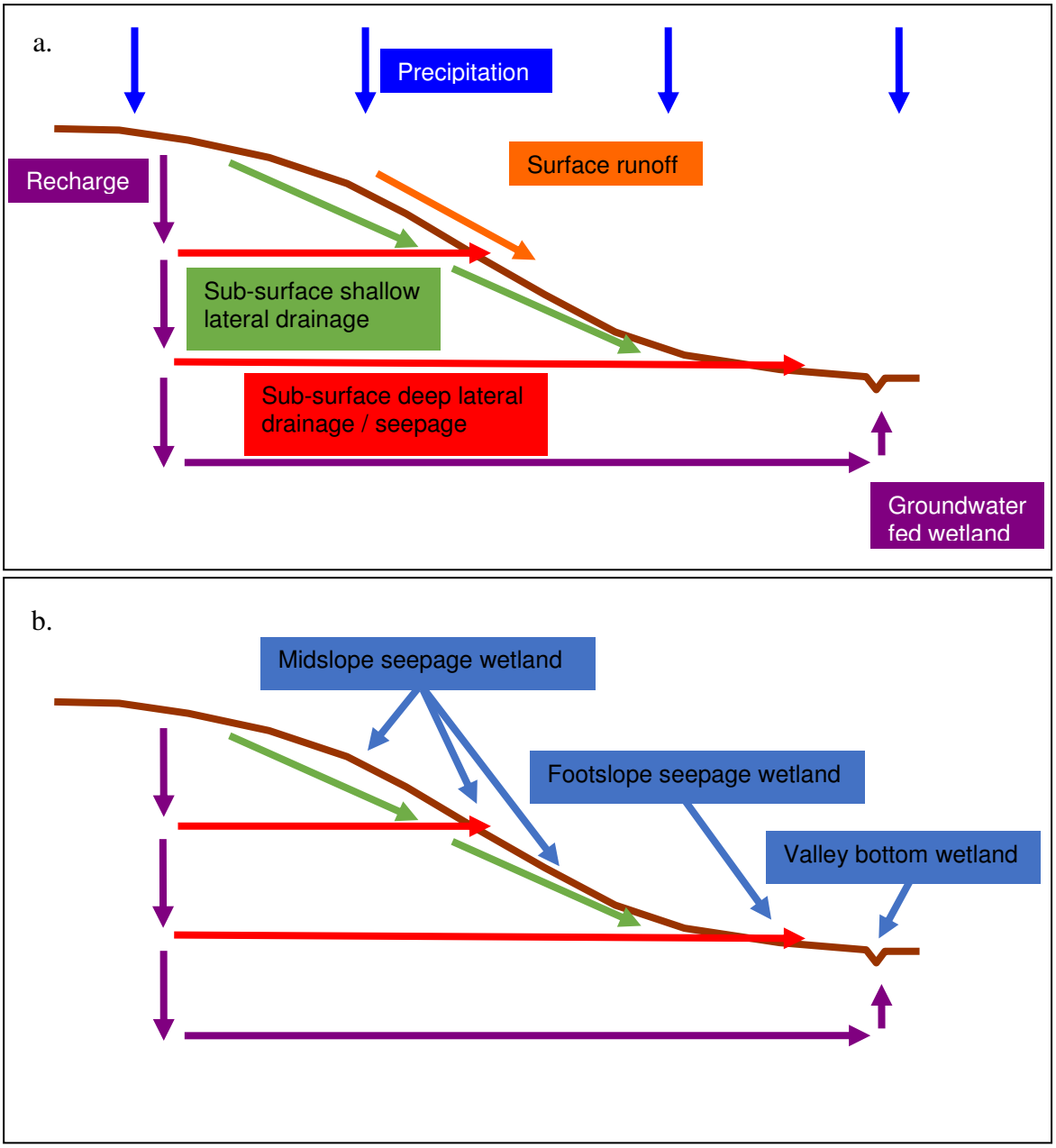


Figure 9 Different flow paths of water through a landscape (a) and typical wetland types associated with the water regime (b)

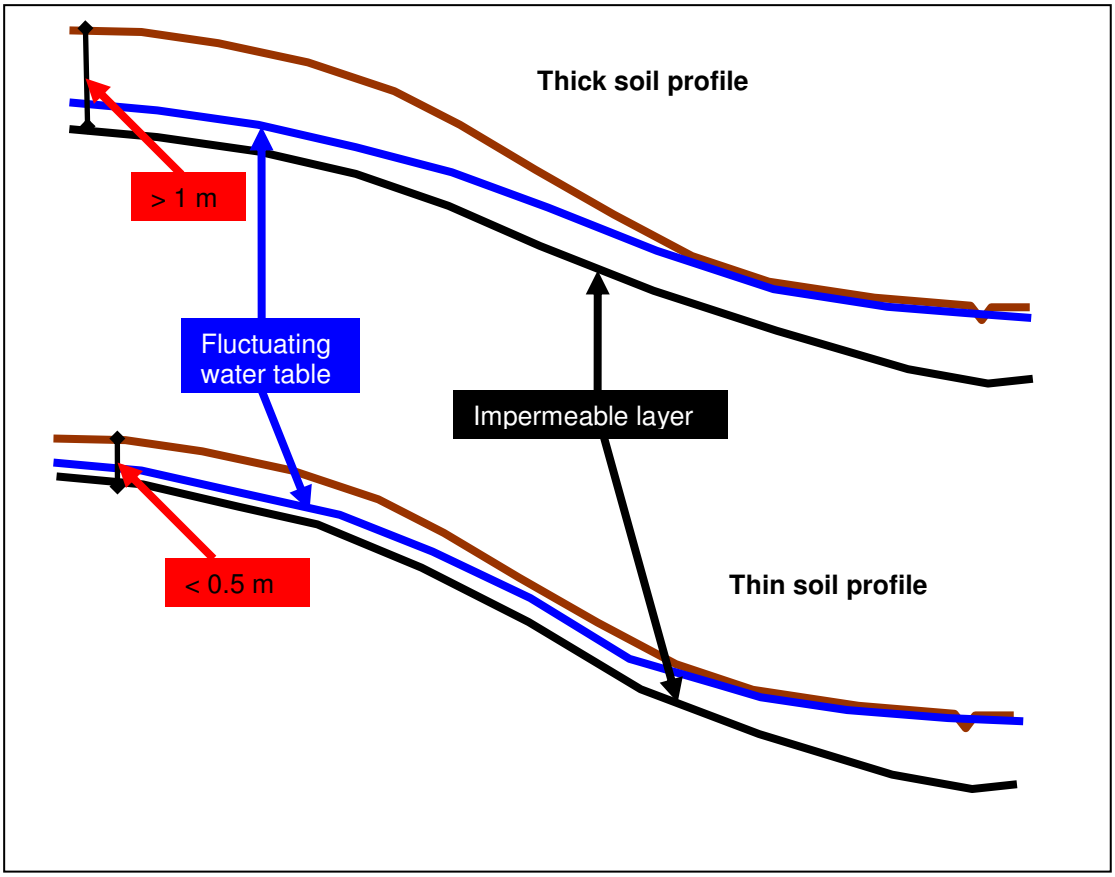


Figure 10 The difference in water flow between a dominantly thick and dominantly thin soil profile.

3.5.4 The Catena Concept

Here it is important to take note of the "catena" concept. This concept is one of a topographic sequence of soils in a homogenous geological setting where the water movement and presence in the soils determine the specific characteristics of the soils from the top to the bottom of the topography. **Figure 11** illustrates an idealised topographical sequence of soils in a catena for a quartz rich parent material. Soils at the top of the topographical sequence are typically red in colour (Hutton and Bainsvlei soil forms) and systematically grade to yellow further down the slope (Avalon soil form). As the volume of water that moves through the soil increases, typically in midslope areas, periodic saturated conditions are experienced and consequently Fe is reduced and removed in the laterally flowing water. In the event that the soils in the midslope positions are relatively sandy the resultant soil colour will be bleached or white due to the colour dominance of the sand quartz particles. The soils in these positions are typically of the Longlands and Kroonstad forms. Further down the slope there is an accumulation of clays and leaching products from higher lying soils and this leads to typical illuvial and clay rich horizons. Due to the regular presence of water the dominant conditions are anaerobic and reducing and the soils exhibit grey colours often with bright yellow and grey mottles (Katspruit soil form). In the event that there is a large depositional environment with prolonged saturation soils of the Champagne form may develop (typical peat land). Variations on this sequence (as is often found on the Mpumalanga Highveld) may include the presence of hard plinthic materials instead of soft plinthite with a consequent increase in the occurrence of bleached soil profiles. Extreme examples of such landscapes are discussed below.

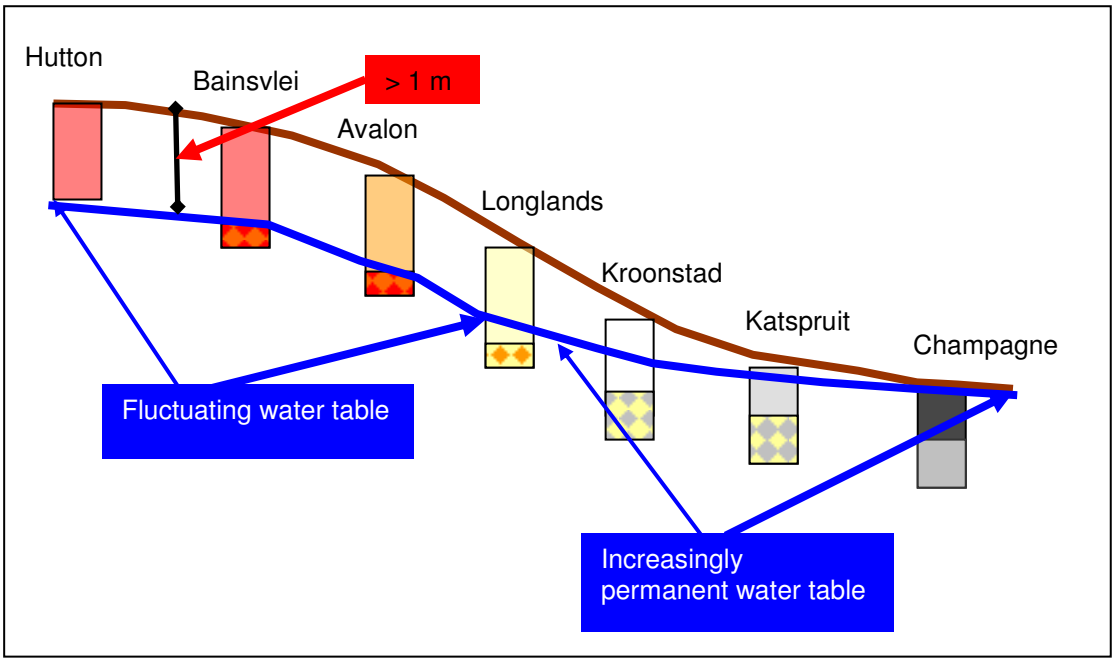


Figure 11 Idealised catena on a quartz rich parent material.

3.5.5 The Ab Land Types of Gauteng

The typical catena that forms in the **Ab** land types of Gauteng differ significantly from the idealised one discussed above. The main and obvious difference is the fact that all the soils the catena, except for those in the immediate drainage features, are red and structureless with varying degrees of rock (dolomite and/or chert) and pebble (predominantly quartz) occurrence (**Figure 12**). In the drainage features the soils are often reddish brown in colour with almost no visible signs of hydromorphism (morphological signs of wetness) with stratified alluvium in the channel itself.

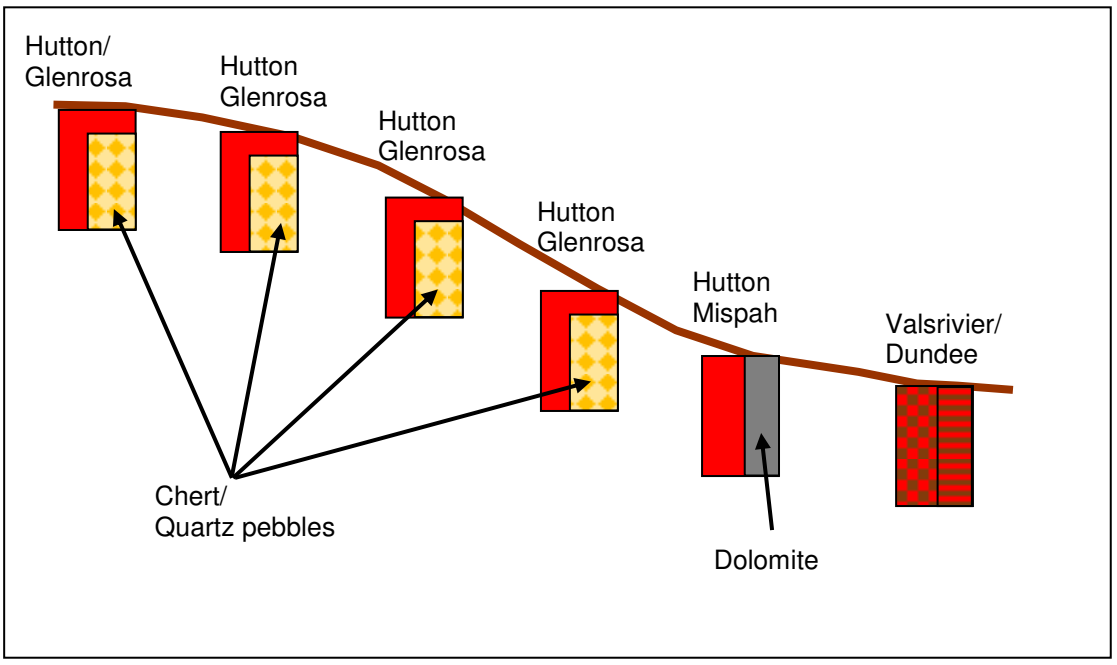


Figure 12 Conceptual catena in Ab land types of Gauteng

The lack of any significant expression of hydromorphism is ascribed to a combination of two factors namely: 1) the well-drained nature of the soil/rock profile and 2) the high Mn content of dolomite derived soils. The first factor leads to the near absence of any significant perched water tables as the dolomite rock and broken chert leads to the rapid percolation of water to deeper levels where hydromorphic features are limited to the occurrence of large quantities of Mn concretions and hard plinthic layers (manganocrete). The second factor relates to the redox poise (buffering) potential of the large quantities of Mn mineral particles in the soils. From unpublished data it is clear that Mn levels in dolomite derived soils can exceed 10 000 (mg/kg soil = ppm) occurring mainly in the form of a number of oxidised Mn minerals. These minerals can undergo solid state reduction as well as oxidation with the valency of Mn varying significantly during periods of water logging and drying. The solid state redox reactions are significant in that the oxidised Mn can oxidise reduce Mn in the same mineral particle. The implication is that Mn is not very soluble in these soils during periods of wetting and reduction, therefore not being leached out of the soils. The high Mn levels and solid state reduction and oxidation of the minerals also lead to the buffering of the redox (under conditions of reduction) to such a point that Fe reduction does not occur. Iron reduction is a prerequisite for the formation of redox morphology that is used in wetland delineation.

3.5.6 Implications for Wetland Delineation and Application of the Guidelines

The dominance of red soils in this landscape as well as the absence of signs of hydromorphism in the bulk of the soils leads to the identification of very small slivers of wetland along drainage features only. These are often associated with the riparian zone that is restricted to the channel and river banks only. Technically the areas outside of the drainage features do not qualify as wetlands. The challenge lies in the fact that some areas in depressions or on stream banks have vegetation communities that may indicate more prolonged periods of high water content. This aspect is the main contributor to problematic wetland delineation aspects of dolomite dominated landscapes.

At present there is no clear answer or approach to the solving of this challenge. Dedicated research is currently underway at the Department of Plant Production and Soil Science of the University of Pretoria (UP) to elucidate the contribution of Mn minerals in these soils to redox buffering. Reference to international norms will also not provide clarity as it is clear that in the USA only signs of Fe redox morphology are accepted for wetland delineation. This aspect poses a clear challenge for the specific South African conditions and should be elucidated in much more detail during urgent and relevant research.

4. SITE SURVEY RESULTS AND DISCUSSION

Access to the Rietspruit was severely constrained due to the extensive fence network that exists on the survey transect. The proposed sewer line runs mainly along contours about 5 m or more above the water level of the Rietspruit and between 15 and 130 m away from the channel (**Figure 3**). The transition from the terrestrial area outside of the drainage line into the drainage line is characterised by a steep slope, in most areas, as well as significant human impacts in the form of developments (residential, light commercial), roads and fences (**Figures 13** to **20**). The banks of the Rietspruit have been altered in many places due to different construction and earth moving activities. These activities are also evident on the Google Earth imagery (Figures **21** to **25**).

Figure 13 Fence and gabion structures on the banks of the Rietspruit at the R55 river crossing (eastern side)

Figure 14 Proximity of the fence and soil/land disturbances close to the banks of the Rietspruit at the R55 river crossing (eastern side). Note the rubble on the opposing bank.

Figure 15 Proximity of developments on the western side of the Rietspruit at the R55 river crossing as well as old tar road in foreground on the banks of the river (with large quantities of exotic riparian vegetation)

Figure 16 Human impacts (old storm water structures?) and erosion/sedimentation on the eastern banks of the Rietspruit at the end of Poole Avenue

Figure 17 Human impacts (pipeline manhole) and sedimentation on the eastern banks of the Rietspruit at the end of Poole Avenue

Figure 18 Significant sedimentation (of granitic origin from upstream of the survey site) within the drainage channel the Rietspruit near the end of Poole Avenue

Figure 19 Significant sedimentation (of granitic origin from upstream of the survey site) within the drainage channel the Rietspruit as well as stream bank alteration near the end of Poole Avenue

Figure 20 Significant sedimentation (of granitic origin from upstream of the survey site) within the drainage channel of the Rietspruit near the end of Poole Avenue

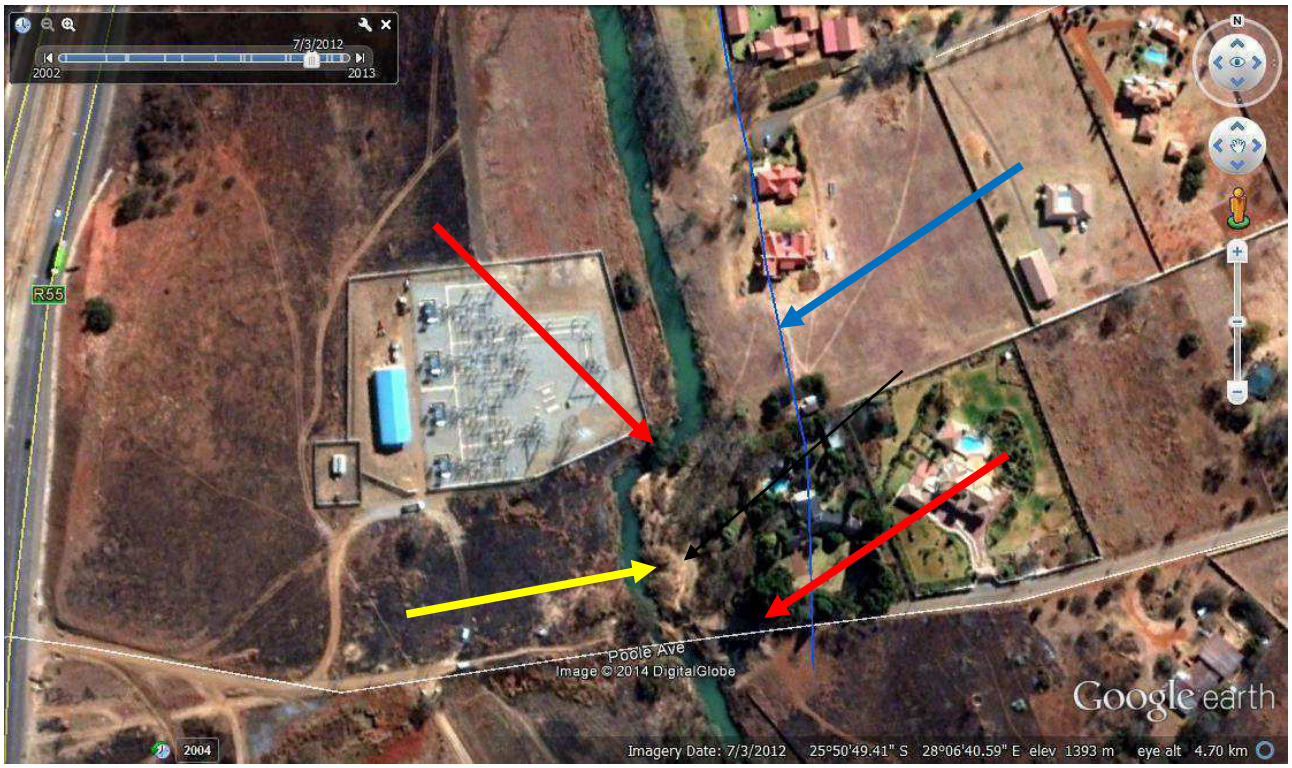


Figure 21 Sedimentation (yellow arrow) at the end of Poole avenue as well as encroachment of infrastructure on the Rietspruit (red arrows) (sewer line transect indicated in blue)

Figure 22 Sedimentation (yellow arrow) near the end of Deltoidia street as well as encroachment of human activities on the Rietspruit (red arrow) (sewer line transect indicated in blue)

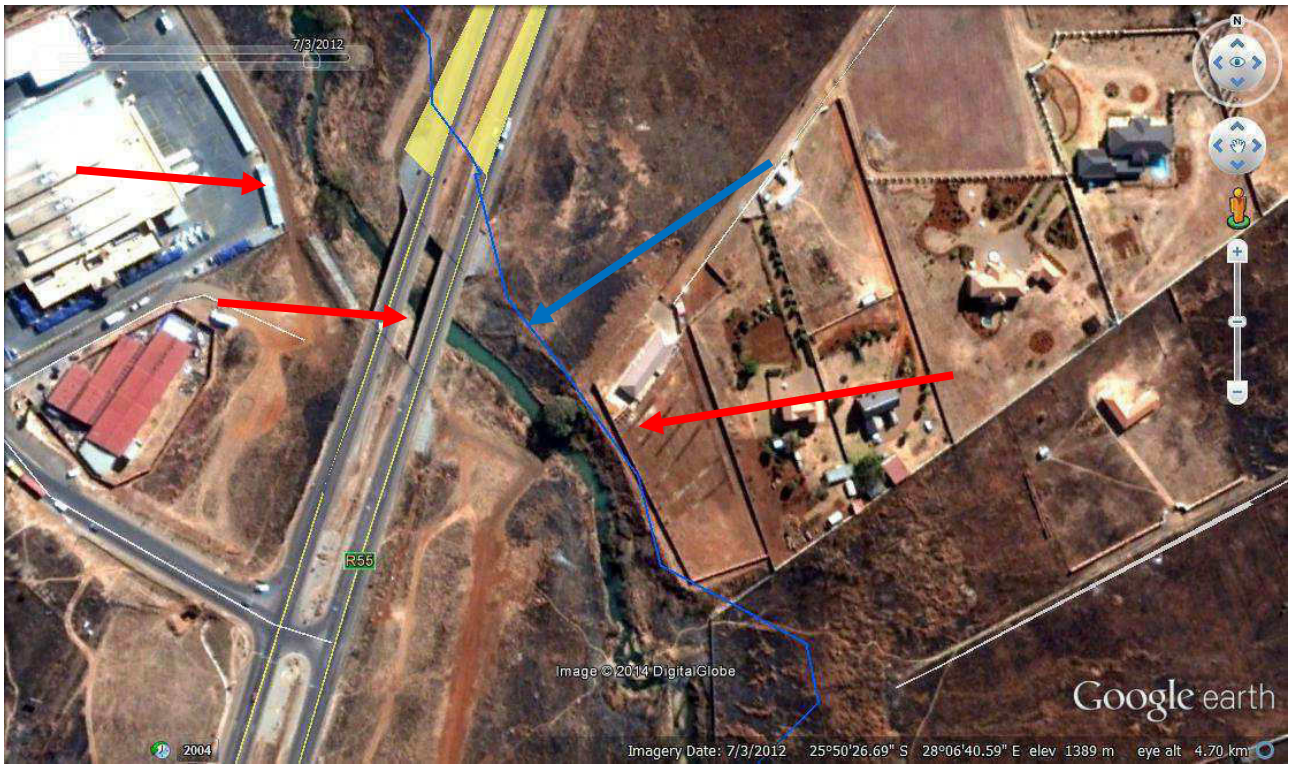


Figure 23 Encroachment of infrastructure and cut and fill activities on the Rietspruit (red arrows) (sewer line transect indicated in blue)

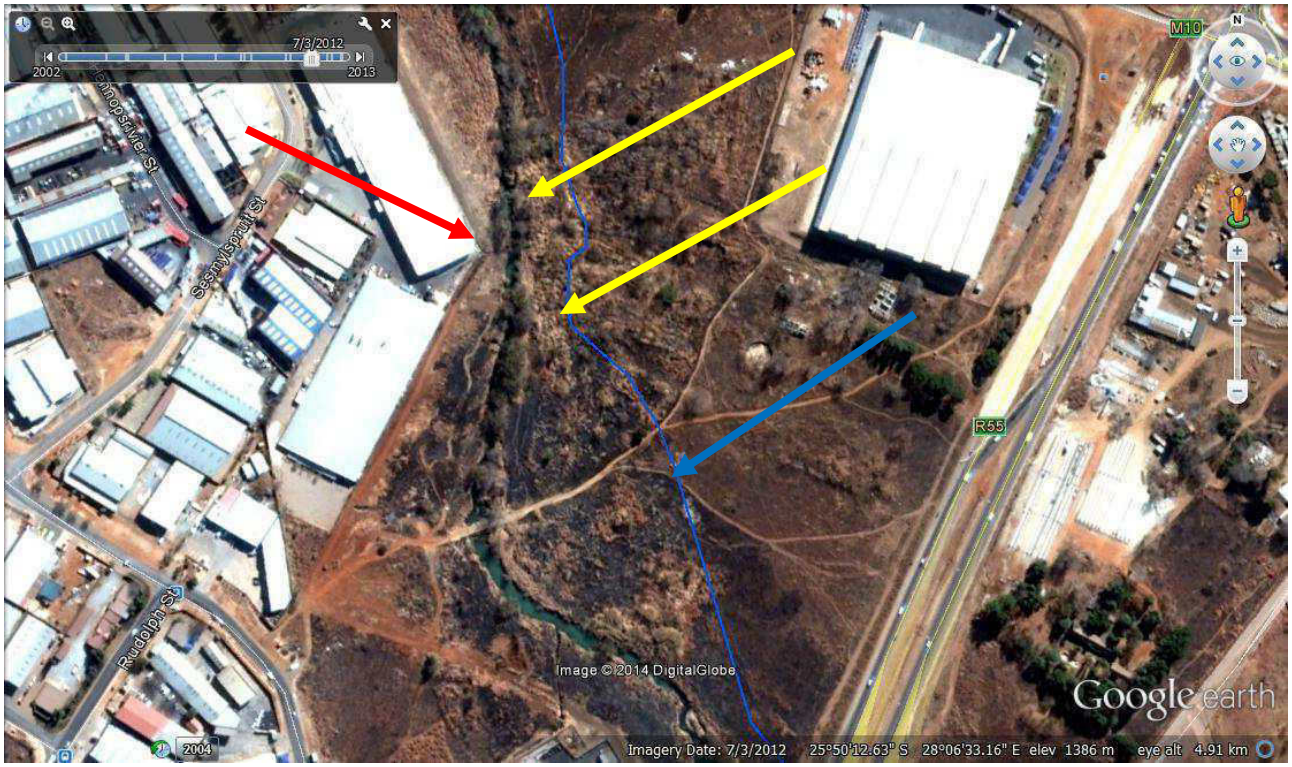


Figure 24 Encroachment of infrastructure on the Rietspruit (red arrow) as well as historical rubble dumping (yellow arrows) with sewer line transect indicated in blue

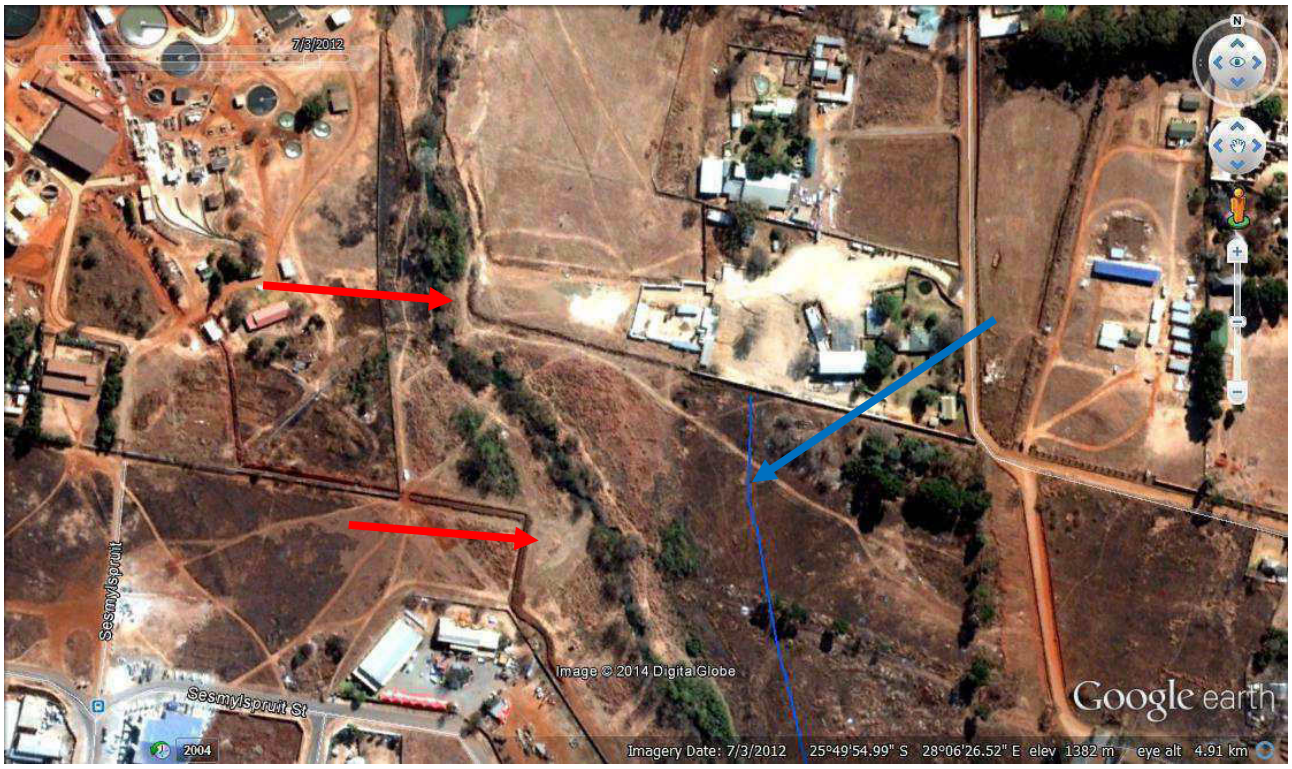


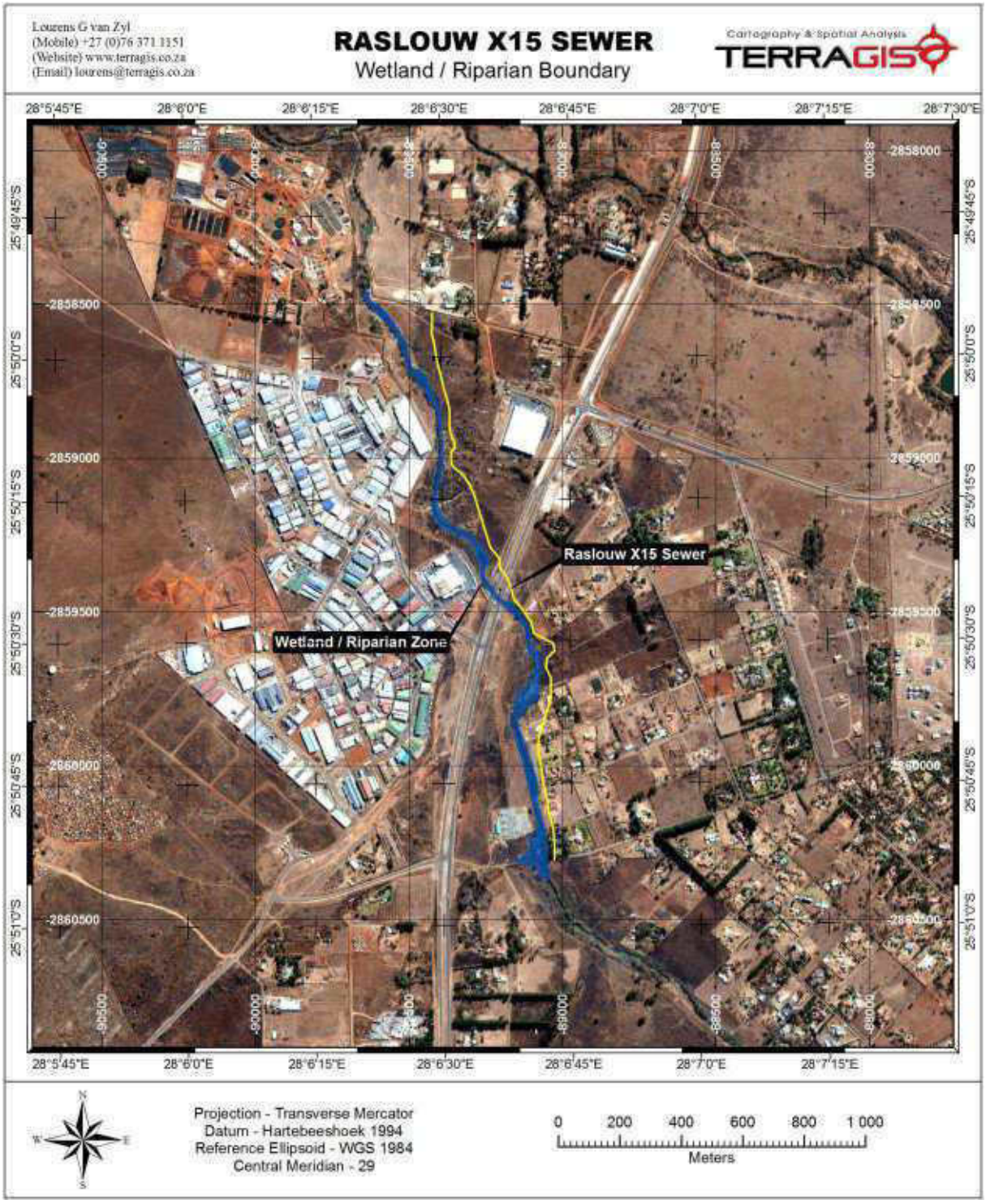
Figure 25 Encroachment of human structures on the Rietspruit (red arrows) with sewer line transect indicated in blue

The soils of the site are exclusively rocky Hutton (orthic A horizon / red apedal B horizon / unspecified material – usually hard or weathering rock) forms up to the immediate drainage channel. In depressions along the drainage channel of the Rietspruit as well as on the immediate banks structured soils of the Valsrivier (orthic A horizon / pedocutanic B horizon / unconsolidated material without signs of wetness) occur with the channel consisting of the soils of the Dundee (orthic A horizon / stratified alluvium) form. The materials that have been deposited in the drainage channel are predominantly of granitic origin (mainly coarse grained quartz particles with occasional primary minerals derive from granite). From an inspection of the material it appears that it has been transported in the stream 4 km and further south from the Halfway House Granite Dome (HHGD) area in Midrand. This aspect points to significant erosion and sediment generation on the HHGD.

5. PROPOSED DELINEATION

The proposed delineation of the wetland features associated with the Rietspruit drainage feature is presented in **Figure 26**. No other wetland features could be identified on the banks or along the sewer line transect – neither in terms of vegetation nor soil characteristics. The delineation result is based mainly on the riparian characteristics of the Rietspruit's associated vegetation. As indicated earlier the vegetation component consists of numerous exotic species (local and foreign) that have colonised the banks of the spruit. This phenomenon is due mainly due to the highly altered nature of the channel banks, edges and deposition zones.

A buffer is not included as the drainage feature has been impacted severely by human activities. The sewer line transect is outside of the delineated wetland/riparian zone for its entire length.



6. CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are drawn from the investigation:

1. The channel, banks and edges of the Rietspruit have been impacted severely by historical human impacts (artificial modifiers as listed in the RDM).

2. The soils on the edge of the drainage feature do not exhibit any signs of hydromorphism – mainly due to hydrological characteristics as well as the redox poising capacity of Mn minerals present in the soil.
3. The sewer line transect runs outside of the wetland/riparian zone for its entire length.
4. A wetland buffer is not proposed and included mainly due to the fact that there is no water ingress from the surrounding landscape into the Rietspruit other than through surface runoff and several man-made structures.
5. It is concluded that the construction of the sewer line, if conducted according to sound site management practices will not influence the status or nature of the Rietspruit in its current state.

The following recommendations are made:

1. Erosion control measures should be implemented during the construction of the sewer line in order to avoid additional sediment generation.
2. The construction footprint should be limited to the immediate zone of impact.
3. Soil restoration should be conducted in the form of re-vegetation of the impact footprint in order to minimise erosion and sediment generation post development.

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ECOLOGICAL RED LISTED SPECIES ASSESSMENT

Mobile: Sam - 072 437 1742
Mobile: Luke - 083 784 1997
Email: info@enviro-insight.co.za
Website: www.enviro-insight.co.za

Enviro INSIGHT
environmental impact assessments

 [1]

Ecological Red Listed Species Assessment

Rasslouw 15 Sewer Pipeline

by

Luke Verburgt
Samuel Laurence
Ben Orban

info@enviro-insight.co.za

[1] Intersect of drainage line within the study area

Mobile: Sam - 072 437 1742
Mobile: Luke - 083 784 1997
Email: info@enviro-insight.co.za
Website: www.enviro-insight.co.za

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Mobile: Sam - 072 437 1742
Mobile: Luke - 083 784 1997
Email: info@enviro-insight.co.za
Website: www.enviro-insight.co.za

1 INTRODUCTION

Enviro-Insight CC was commissioned by Bokamoso to perform a Red Data species biological assessment of the proposed Rasslouw 15 Sewage line. The proposed development is that of sewage pipeline infrastructure and should be compared against the GDARD (2012) Minimum Requirements for Biodiversity Assessments, which drives much of the approach for this study. Figure 1 illustrates the alignment of the proposed pipeline which is situated in Gauteng province on the Carletonville Dolomite Grassland (Mucina and Rutherford 2006). The recommendations arising from this study are to be used by the client (Bokamoso) in order to facilitate the development process in accordance with the relevant legislation.

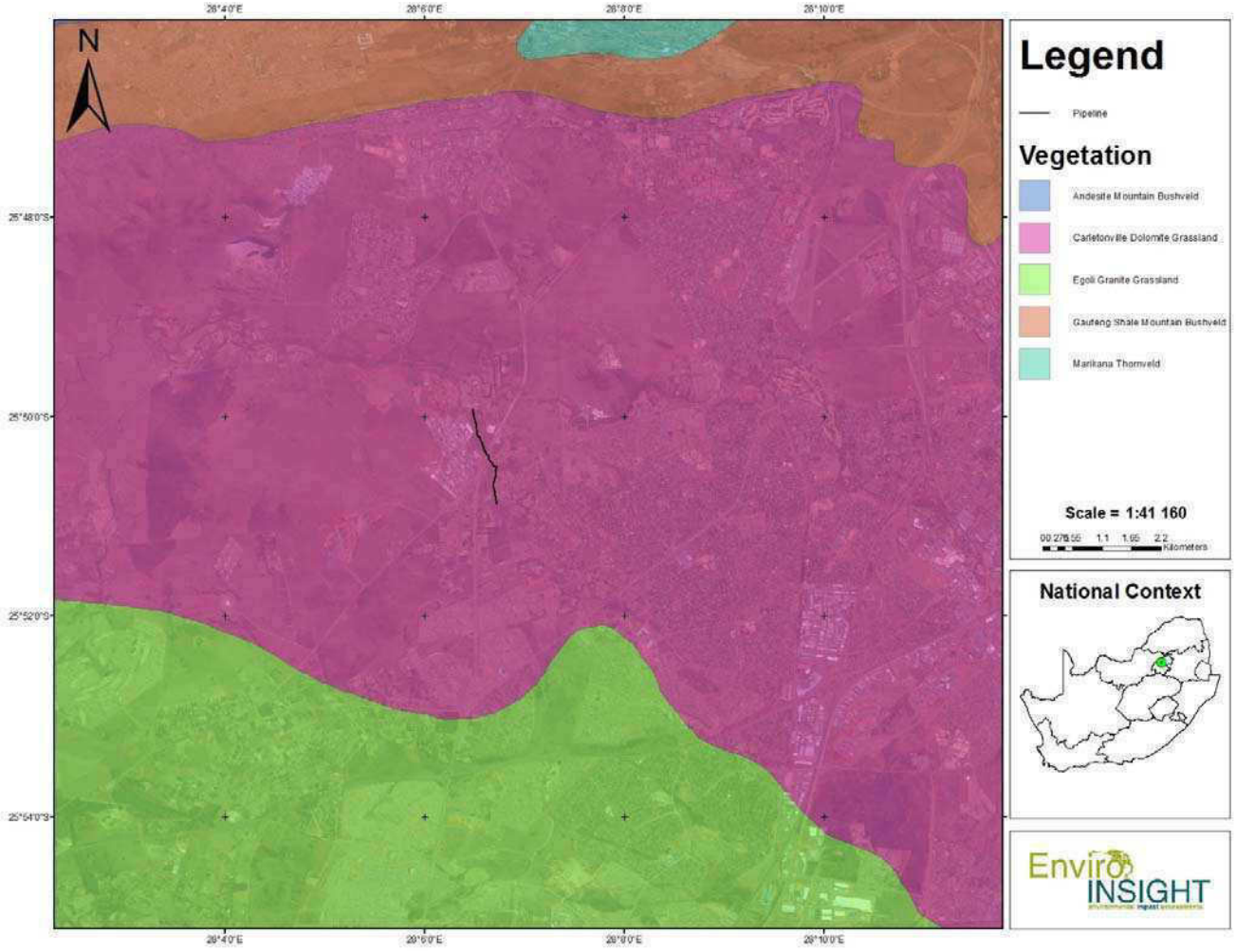

Figure 1: *The proposed sewage pipeline in relation to the regional vegetation types*

2 METHODS

2.1 FIELD SURVEY

A field survey was performed in April 2014 by a specialist ecologist where the faunal and botanical aspects of the study were assessed. During the field survey the proposed development site was covered on foot and by vehicle in order to obtain an understanding of the ecology. Numerous georeferenced photographs were taken and vegetation documentation was performed where the dominant plant species were recorded. The field survey focused upon the potential presence of Red Data species, especially species identified by GDARD (2012) which serve as sensitivity triggers.

2.2 DESKTOP SURVEY

2.2.1 Literature study

As mentioned above, much of the approach for this survey is based upon the GDARD (2012) Requirements for Biodiversity Assessments. The level of this study did not warrant intensive sampling but rather served to combine the aspects of the vegetation unit (Carletoneville Dolomite Grassland; Mucina and Rutherford 2006) with the Gauteng C-plan (V3.3) analysis and GDARD minimum requirements in order to formulate a series of study recommendations. Many of the potential avifaunal triggers were referenced by the Southern Africa Bird Atlas Project (SABAP 2) and Hockey *et al.* (2005). Mammal information was referenced by Skinner and Chimimba (2005).

2.2.2 GIS

The Gauteng Conservation plan (C-plan V3.3) was used to initially evaluate ecologically sensitive areas. In addition, the vegetation of South Africa shapefiles (Mucina and Rutherford 2006) provided spatial information of the regional vegetation types. Due to the proximity of tall building infrastructure the shuttle radar topography mission (SRTM) digital elevation model (DEM) could not be used to perform a basic water channel network and wetness index model. Rather, remote sensing imagery (courtesy Bing Maps via ArcGIS online) was used to accurately map the drainage channel adjacent to the proposed pipeline.

3 RESULTS

Figure 2 shows the specialist coverage of the study area as well as the Gauteng C-Plan (V3.3) delineation of conservation areas. From this figure it is clear that portions of the proposed sewage intersect with both "Ecological Support" and "Important areas" of the Gauteng C-Plan (V3.3). Wetland / drainage line habitats are a critical component of the Gauteng minimum requirements assessment and vital to the assessment of the presence of Red Data faunal and floral species. It is clear from Figure 3 that the proposed pipeline alignment intersects the 30 m buffer of the drainage line in several places. The georeferenced photographs shown in Figure 2 are presented as thumbnail images in Appendix 1 to provide a photographic

overview of the study area.

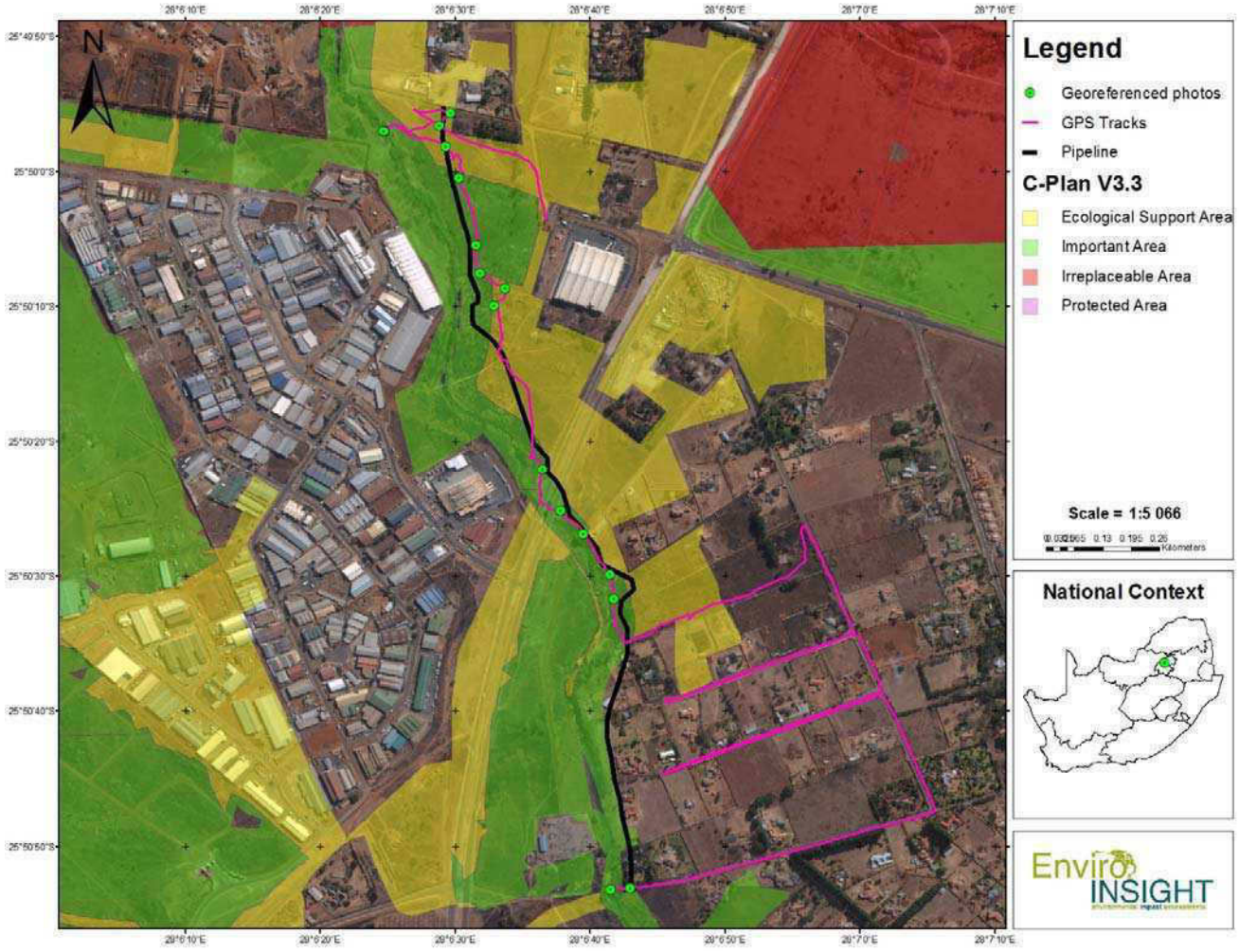

Figure 2: *Proposed Rasslouw 15 sewage line in relation to the Gauteng C-plan (V3.3). Specialist coverage and geo-referenced photographs are also indicated*

Additional forms of land use and impacts on the study area include existing roads, garden areas, security walls, security fencing, housing infrastructure and rock/ rubble dumping. These and additional impacts, such as from exotic plant species and existing infrastructure were also observed, some of which are shown in Table 1. Analysis of habitat types were discussed in contextual setting in regards to the potential or actual presence of Red Data species.

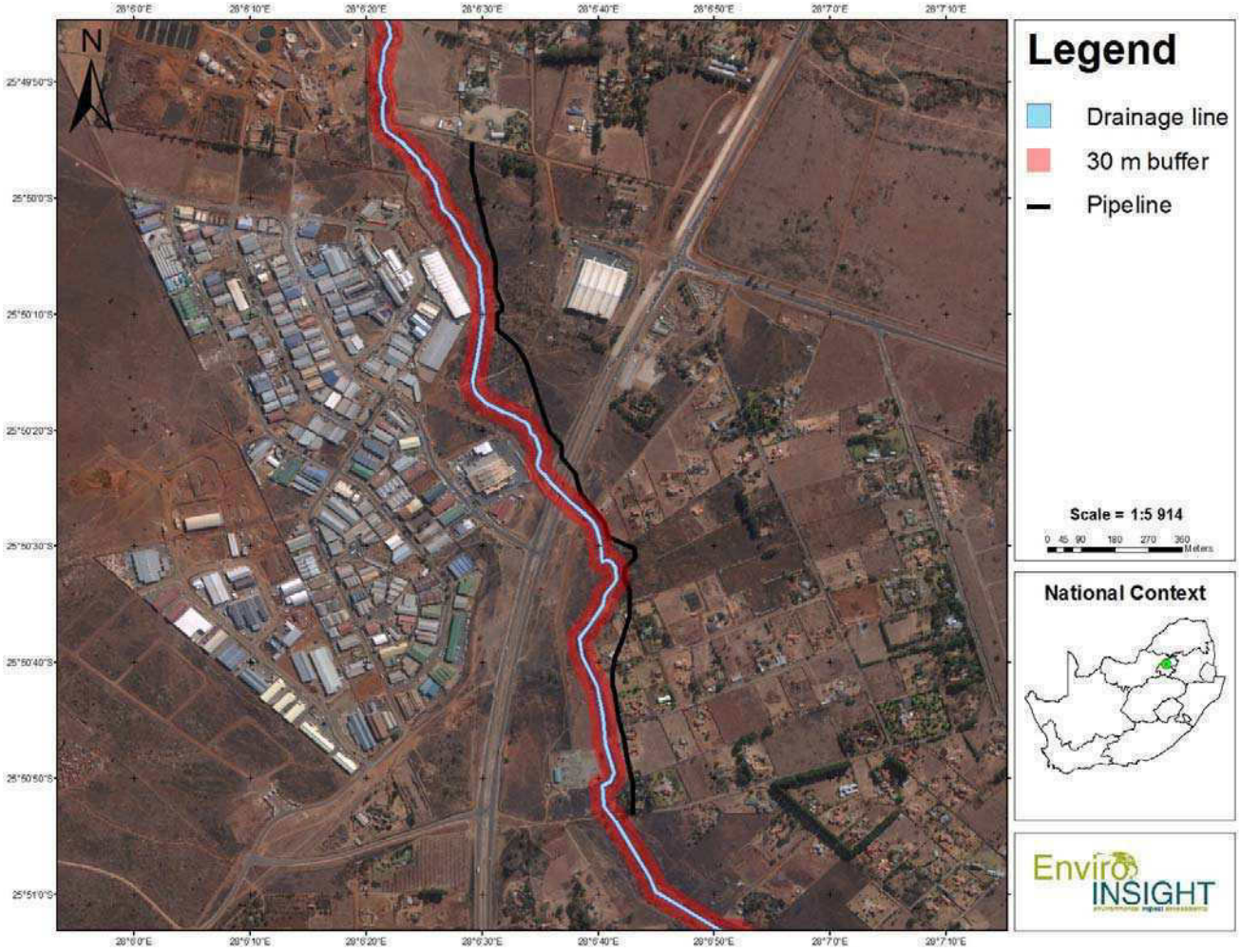

Figure 3: *Proposed Rasslouw 15 sewage line showing the relation to the drainage line and its 30 m buffer*

Table 1: *Examples of current impacts observed in the study area during the survey*

		
Security Fencing and Alien Plants	Current Housing	Rock Dumping
		
Future Development	Invasive River Associated Species	Historical Agriculture

3.1 HABITAT UNIT 1- TRANSFORMED

Much of the proposed pipeline is aligned with areas of almost total transformation. Urban development is evident periodically along the alignment (Figure 3), characterised by existing housing, rock dumps, boundary fences with high security walls (effectively blocking all terrestrial animal migration) and roads. In this habitat type, no Red Data species are present and none are expected due to severe habitat modification.

3.2 HABITAT UNIT 2 – WETLAND/ DRAINAGE LINE

This habitat is identified by the actual drainage line and the 30 m buffer surrounding it (Figure 3). Ground truthing showed that this habitat is already largely disturbed through current impacts and show low potential for Red Data species. Some of the drainage areas can be classified as being functional to semi-functional, depending on the condition of the riparian vegetation and water flow maintenance. Due to the high moisture regime present in this habitat unit *Phragmites australis* and *Populus canescens* formed significant stands as well as the trees *Searsia lancea, Searsia pyroides and Celtis africana*. Alien species such as *Eucalyptus sp.* are prevalent and contribute significantly to the disturbance. Red Data species were not recorded

during the survey and due to the high level of disturbance, none are expected.

3.3 HABITAT UNIT 2 – SEMI-NATURAL TERRESTRIAL VEGETATED AREAS

This habitat unit is characterized by the presence of wet-land E horizon soils with relative high clay content, indicating prolonged periods of moisture retention. Almost no trees are present in this habitat unit as they tend to be associated with the drainage line. However, a few tree species such as *Searsia lancea, Searsia pyroides, Celtis africana* and the alien invader shrubs *Melia azedarach*, *and Lantana camara* are present.

A typical, yet slightly low in species diversity, composition of grasses representing sour veld was present in this habitat. Grass species recorded were *Cympopogon excavatus, Cynodon dactylon, Brachiaria serrata, Hyparrhenia hirta, Diheteropogon amplectens, Digitaria eriantha*, *Eragrostis racemosa*, *Eragrostis gummiflua*, *Eragrostis curvula*, *Hyparrhenia hirta*, *Melinis repens*, *Setaria sphacelata*, *Schizachyrium sanguineum*, *Trichoneura grandiglumis* and *Themeda triandra*.

Tagetes minuta and *Zinnia peruviana* are forbs observed along the pipeline alignment that indicate environmental degradation. Other forbs encountered were *Fadogia homblei*, *Aloe* greatheadii var. *davyana*, *Hibiscus trionum*, *Lotononis* spp., *Helichrysum kraussi*, *Scadoxus puniceus*, *Commelina africana*, *Verbena bonariensis* (indicating high moisture regime present on the margins), *Nidorella hottentotta, Crabbea hirsuta*, *Chamaecrista mimosoides*, *Hypoxis rigidula* and *Sebaea grandis*.

4 DISCUSSION AND RECOMMENDATIONS

This section is driven by both the GDARD minimum requirements and the level of the study commissioned by the client (Basic Assessment). The section is also broken down into the various components of Fauna, Flora and Habitats.

4.1 FAUNA

According to GDARD's requirements for biodiversity assessments (GDARD 2012), no amphibian or reptile species assessments are required for the sensitivity analysis. However, when discussing the impacts on wetlands in the Province, an assessment of both reptiles and amphibians may be required (if deemed necessary). The recommendations regarding the habitats are addressed below.

Regarding species of conservation concern, three main trigger species were identified showing a relatively high probability of occurrence (based on habitat potential) along the proposed pipeline alignment. Habitat potential was very low for the possible avifauna trigger species African grass owl and African marsh harrier and their likelihood of occurrence in the area is therefore considered negligible. These two species are therefore omitted from the discussion below.

Giant Bull Frog *Pyxicephalus adspersus*

This Vulnerable (Du Preez & Carruthers 2009) frog is known to occur immediately adjacent to the study site (Yetman pers. comms) and is reported by Minter *et al.* (2004) to occur on the QDS 2528CC on which the proposed pipeline alignment resides. Although evaluation of the presence of this species is not a GDARD minimum requirement, the presence of wetland and potential foraging habitat on the site warrants mentioning in the study.

Water Rat *Dasymys incomtus*

The pipeline intersects a portion of drainage/wetland system (Figure 3). However, the habitat observed is considered to be sub-optimal habitat for water rat (due to the high levels of disturbance). The riparian vegetation edge is severely degraded and the species is not expected to show significant levels of colonisation within the area of influence of the pipeline.

Spotted-neck otter *Lutra maculicollis*

It was apparent that some potentially suitable migratory/dispersal habitat persists on site, especially in the form of the drainage line that is periodically intersected by the proposed pipeline. The drainage areas, in parts where characterised by flowing "river like" conditions. Although mostly sub-optimal for spotted-neck otters which prefer deep, clear pools which support large populations of fish, the drainage line could very well provide significant migratory habitat for the species and these areas should be buffered appropriately in accordance with legislation.

4.2 FLORA

Based on the vegetation analysis and the observations made during the survey it is evident that the area currently has moderate to very poor ecological functionality. Although no Red Data plant species were observed within the study area, the adjacent grassland and wetland habitats are marginally suited to orchids of the *Habenaria* genus. However, the high levels of degradation decrease the likelihood of Red Data orchids occurring within the influence of the proposed pipeline.

4.3 HABITAT AND GENERAL SUMMARY

For the study area as a whole, the proposed Rasslouw 15 pipeline alignment is unlikely to affect any Red Data floral species as none were observed and none are expected since the environment is severely degraded. From a faunal perspective, the degradation of the habitat has limited the potential for Red Data species to occur on a permanent basis and at best, the drainage line could be viewed as a potential migratory corridor for faunal species. This fact alone warrants buffering of the drainage line from development which is also in accordance with the relevant legislation. The existing impacts are represented by historic land-use (farmstead and buildings/camp for intensive livestock), very large areas of rubble discard (Northern section) and further factory related dumpings of dolomitic rock. This disturbance has also given rise to broad-scale and severe infestation by alien plant species. The drainage line/river in the Northern section is also severely degraded by litter, plastic,

tyres and glass, alluding to periodic human colonisation (informal) and waste dumping. Finally, the proposed pipeline alignment can be seen to intersect with several houses of an existing housing development (Figure 3). Re-aligning the pipeline out of the housing area will bring it closer to the drainage line and well within the drainage buffer where large-scale excavation can potentially cause siltation and additional pollution of the drainage line.

Since **wetlands** are present within the buffer of the drainage line trigger, the following recommendations are suggested:

- The large areas of important and ecological support areas as determined by the C-Plan V3.3 are to be identified as potential legislation barriers and submitted for evaluation (by the client), taking into account the high levels of degradation observed during the ground-truthing phase.
- Wetland areas are to be avoided through alteration of design, potentially using bridging of the pipeline to avoid excavation of wetland areas and/or downstream effects such as siltation.
- Due to the levels of current disturbance and the lack of habitat potential, detailed assessments need not be carried out for the Red Data trigger mammal species namely, spotted-neck otter and water rat.

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6 APPENDIX

Appendix 1: *Georeferenced photographs taken during the fieldwork survey (shown in Figure 2)*

			
0130	0132	0133	0134
			
0135	0136	0138	0140
			
0141	0142	0143	0146
			
0148			

Heritage Impact Assessment

PHASE 1 HERITAGE IMPACT ASSESSMENT FOR THE INSTALLATION OF THE PROPOSED EXTERNAL SEWER PIPELINE, RASLOUW X15, GAUTENG PROVINCE

	
Archaetnos Archaeologists and Heritage Consultants Dr A.C. van Vollenhoven Zurethe Collins PO Box 55 GROENKLOOF 0027 Mobile: 083 291 6104 E-mail: antonv@archaetnos.co.za	Leonie Marais-Botes Heritage Practitioner 868 Endeman Street Wonderboom South Pretoria 0084 Mobile: 082 576 6253 E-mail: leoniembotes@gmail.com
BA, BA (Hons), DTO, NDM, MA (Archaeology) [UP], MA (Culture History) [US], DPhil (Archaeology) [UP], Man Dip [TUT], DPhil (History)[US], L Akad [SA]	*BA (Cultural History and Archaeology) (UP), BA (Hons) Cultural History (UP), Post Grad Dip Museology (UP), Cert Conservation of Traditional Buildings (Univ of Canberra) Post Grad Dip: Heritage (Wits)*
Accredited member: SA Society for Cultural History (CH001) *Accredited member: ASAPA*	*Accredited member: SA Society for Cultural History (CH002)*

For:

Bokamoso Environmental
PO Box 11375
MAROELANA
0161

April 2014

DISCLAIMER:

Although all possible care is taken to identify/find all sites of cultural importance during the initial survey of the study area, the nature of archaeological and historical sites are as such that it is always possible that hidden or sub-surface sites could be overlooked during the study. Leonie Marais-Botes Heritage Practitioner/ Archaetnos Archaeologists and Heritage Consultants will not be held liable will not be held liable for such oversights or for the costs incurred as a result thereof.

ACKNOWLEDGEMENTS

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ABOUT THIS REPORT

The heritage report must reflect that consideration has been given to the history and heritage significance of the study area and that the proposed work is sensitive towards the heritage resources and does not alter or destroy the heritage significance of the study area.

The heritage report must refer to the heritage resources currently in the study area.

The opinion of an independent heritage consultant is required to evaluate if the proposed work generally follows a good approach that will ensure the conservation of the heritage resources.

The National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998) are the guideline documents for a report of this nature.

Leonie Marais-Botes Heritage Practitioner/Archaetnos Archaeologists and Heritage Consultants was appointed by Bokamoso Environmental to carry out a Phase 1 Heritage Impact Assessment (HIA) for the proposed new sewer line, Raslouw X15, Gauteng Province. The site investigation was conducted on 24 April 2014.

EXECUTIVE SUMMARY

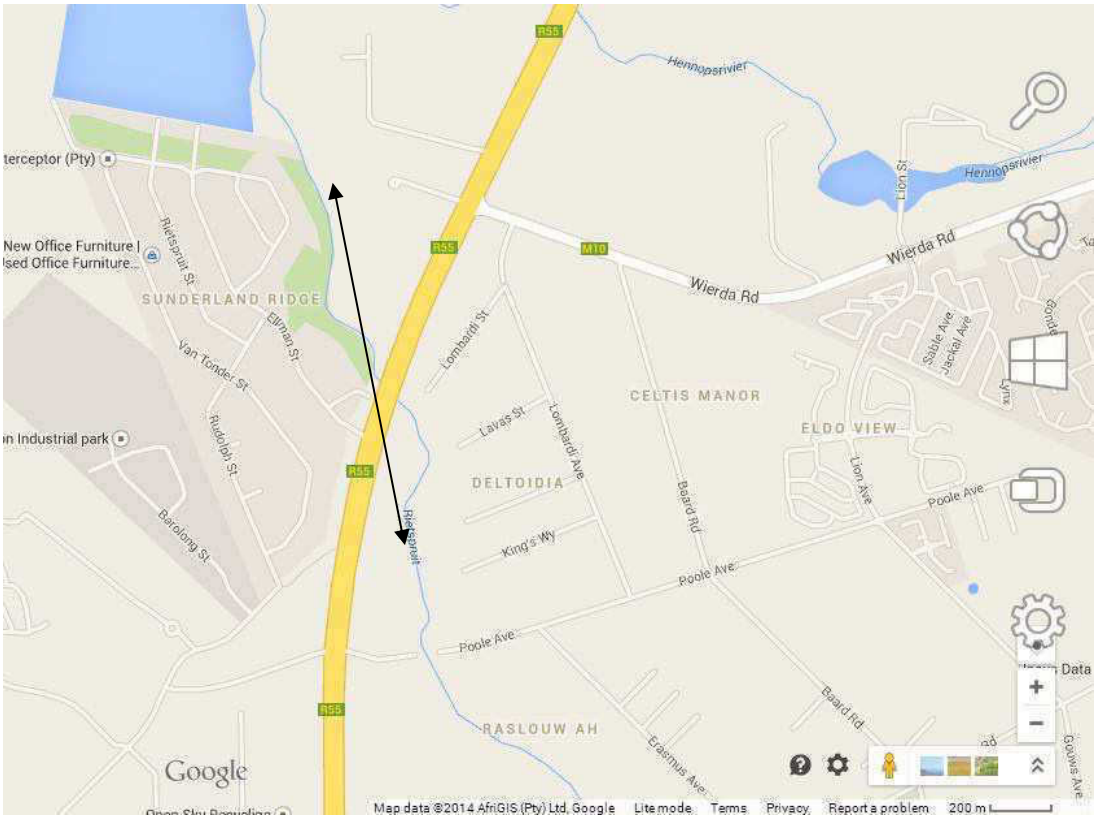
This project may impact on any types and ranges of heritage resources that are outlined in Section 3 of the National Heritage Resources Act (Act 25 of 1999). Consequent a Heritage Impact Assessment was commissioned by Bokamoso Environmental and conducted by Leonie Marais-Botes/Archaetnos Archaeologists and Heritage Consultants.

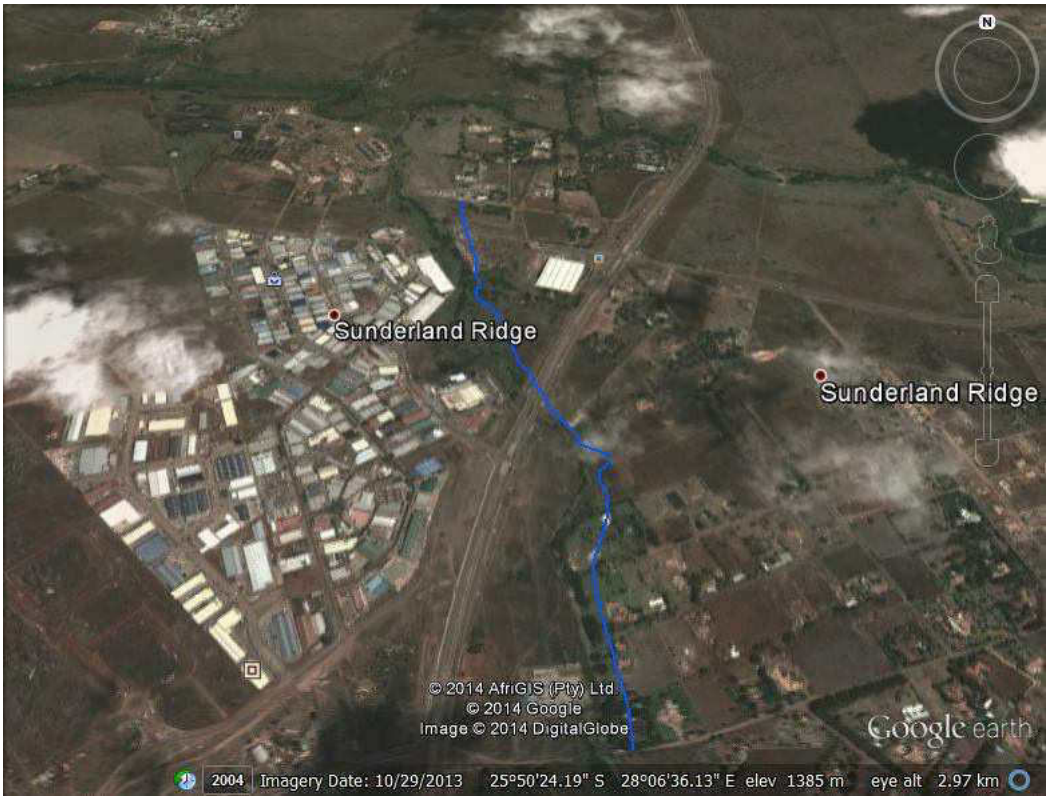
It is important to note that all graves and cemeteries are of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage Resources Act (Act 25 of 1999) whenever graves are 60 years and older. Other legislation with regard to graves includes those when graves are exhumed and relocated, namely the Ordinance on Exhumations (no 12 of 1980) and the Human Tissues Act (Act 65 of 1983 as amended).

1.1 INTRODUCTION

The proposed development entails the installation of a new external sewer pipeline.

1.2 LOCATION AND TRACK ROUTE




Sunderland Ridge
Sunderland Ridge
© 2014 AfriGIS (Pty) Ltd
© 2014 Google
Image © 2014 DigitalGlobe
Google earth
2004
Imagery Date: 10/29/2013
25°50'24.19" S 28°06'36.13" E elev 1385 m
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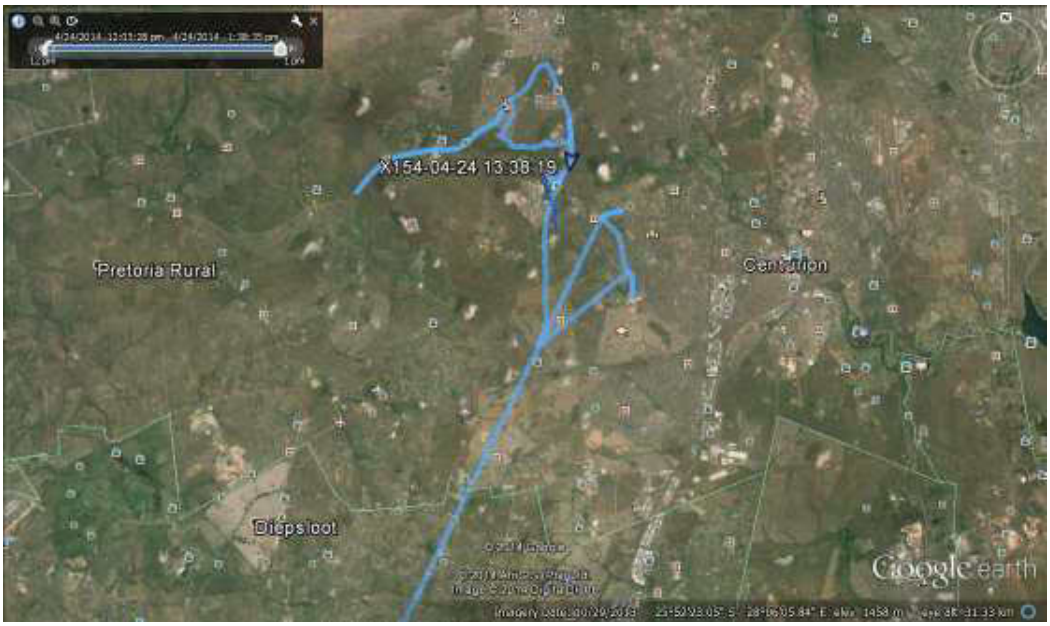
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1.3 METHOD

The objective of this Phase 1 Heritage Impact Assessment (HIA) was to gain an overall understanding of the heritage sensitivities of the area and indicate how they may be impacted on through development activities. The survey took place on 24 March 2014.

In order to establish heritage significance the following method was followed:

- Investigation of primary resources (archival information)
- Investigation of secondary resources (literature and maps)
- Physical evidence (site investigation)
- Determining Heritage Significance

1.4 BACKGROUND HISTORY OF THE GREATER STUDY AREA

The greater study area previously consisted mainly of agricultural holdings. Some areas of the greater study area can now be described as industrial (Sunderland Ridge). The site earmarked for development is not situated in an area with great historical significance.

1.5 PHOTOGRAPHIC RECORD OF SITE EARMARKED FOR DEVELOPMENT

1. S 25°49'33.0" E 025°06'51.7"

2. S25°49’22.6” E 028°06’42.5”

3. S 25°49’22.2” E 028°06’33.5”

4. S 25°49’23.0” E 028°06’24.9

5. S 25°49’23.8” E 028°05’50.7”

2. FINDINGS

2.1 PRE-COLONIAL HERITAGE SITES

Possibilities: Greater study area taken into account.

Stone Age

The Stone Age is the period in human history when stone material was mainly used to produce tools[1]. In South Africa the Stone Age can be divided in three periods[2];

- Early Stone Age 2 000 000 – 150 000 years ago
- Middle Stone Age 150 000 – 30 000 years ago
- Late Stone Age 40 000 years ago - +/- 1850 AD

Iron Age

The Iron Age is the period in human history when metal was mainly used to produce artefacts[3]. In South Africa the Iron Age can be divided in three periods;

- Early Iron Age 250-900 AD
- Middle Iron Age 900-1300 AD
- Late Iron Age 1300-1840 AD[4]

There are no pre-colonial heritage sites evident in the study area. This can be attributed to previous infra-structure development activities in the greater study area.

2.2 HISTORICAL PERIOD HERITAGE SITES

Possibilities: Greater study area taken into account.

- Pioneer sites (Voortrekker sites cc 1836-1850's)
- Anglo-Boer War (1899-1902) sites.
- Structures older than 60 years.
- Historical graves.

There are structures older than 60 years in the study area. See photographs 3 and 5 of the photographic record of the study area. Picture 3 depicts an old dwelling and picture 5 a workers house circa middle of the 20th century.

2.3 ORIGINAL LANDSCAPE

Infrastructure and other development have altered the original landscape in most of the greater study area.

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[1] P. J. Coertze & R.D. Coertze, Verklarende vakwoordeboek vir Antropologie en Argeologie.
[2] S.A. Korsman & A. Meyer, *Die Steentydperk en rotskuns* in J.S. Bergh (red) Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.
[3] P.J. Coertze & R.D. Coertze, Verklarende vakwoordeboek vir Antropologie en Argeologie.
[4] M.M. van der Ryst & A Meyer. *Die Ystertydperk* in J.S. Bergh (red) Geskidenisatlas van Suid-Afrika. Die vier noordelike provinsies and T.N Huffman, A Handbook to the Iron Age: The **Archaeology** of Pre-Colonial Farming Societies in Southern Africa.

2.4 INTANGIBLE HERITAGE

The intangible heritage of the greater study area can be found in the stories of past and present inhabitants.

3 CATEGORIES OF HERITAGE VALUE (ACT 25 OF 1999)

The National Heritage Resources Act (Act 25 of 1999) identifies the following categories of value under section 3(1) and (2) of the Act under the heading "National Estate":

"3 (1) For the purpose of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.

(2) Without limiting the generality of subsection (1), the national estate may include-
- (a) places, buildings, structures and equipment of cultural significance;
- (b) places which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and palaeontological sites;
- (g) graves and burial grounds, including-
  - (i) ancestral graves;
  - (ii) royal graves and graves of traditional leaders;
  - (iii) graves of victims of conflict;
  - (iv) graves of individuals designated by the Minister by notice in the Gazette
  - (v) historical graves and cemeteries; and
  - (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- (h) sites of significance relating to the history in South Africa;
- (i) movable objects, including-
  - (i) objects recovered from the soil or waters of South Africa including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
  - (ii) objects to which oral traditions are attached or which are associated with living heritage;
  - (iii) ethnographic art and objects;
  - (iv) military objects
  - (v) objects of decorative or fine art;
  - (vi) objects of scientific or technological interests; and
  - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section I (xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

(3) Without limiting the generality of the subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of-
- (a) It is importance in the community, or pattern of South Africa's history;
- (b) Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;

(c) Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
(d) Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural objects;
(e) Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
(f) Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
(g) Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
(h) Its strong or special association with the life and work of a person, group or organisation of importance in the history of South Africa; and
(i) Sites of significance relating to the history of slavery in South Africa."

3.1 HERITAGE VALUE OF WEIGHED AGAINST CULTURAL SIGNIFICANCE CATEGORIES

3.1.1 Spiritual value

During the site visit/field work no indication of any spiritual activity was observed on/near the proposed site. Thus no sites of spiritual value will be impacted on by the proposed project.

3.1.2 Scientific value

No sites of scientific value was observed on or near the site earmarked for development.

3.1.3 Historical value

No historical value associated with the proposed site could be found in primary and secondary sources.[5]

3.1.4 Aesthetic value

No heritage item with exceptional aesthetic (architectural) value was identified in the study area.

3.1.5 Social value

Social value is attributed to sites that are used by the community for recreation and formal and informal meetings regarding matters that are important to the community. These sites include parks, community halls, sport fields etc. Visually none of the above is evident in the study area.

[5] Standard Encyclopaedia of Southern Africa and the Transvaalse Argiefbewaarplek (TAB) database at the National Archives, Pretoria;
J.S. Bergh (red), Geskiedenisatlas van Suid-Afrika: Die Vier Noordelike Provinsies.

3.2 SPECIFIC CATEGORIES INVESTIGATED AS PER SECTION 3 (1) AND (2) OF THE NATIONAL HERITAGE LEGISLATION (ACT 25 OF 1999)

3.2.1 Does the site/s provide the context for a wider number of places, buildings, structures and equipment of cultural significance?

The study area does not provide context for a wider number of places, buildings, structures and equipment of cultural significance. The reason is the low density of heritage structures/sites in the study area, near or on the proposed site.

3.2.2 Does the site/s contain places to which oral traditions are attached or which are associated with living heritage?

Places to which oral traditions are attached or associated with living heritage are usually find in conjunction with traditional settlements and villages which still practises age old traditions. None of these are evident near or on the proposed site.

3.2.3 Does the site/s contain historical settlements?

No historical settlements are located on or near the proposed site.

3.2.4 Does the site/s contain landscapes and natural features of cultural significance?

Due to previous infra-structure development activities the original character of the landscape have been altered significantly in the study area.

3.2.5 Does the site/s contain geological sites of cultural importance?

Geological sites of cultural importance include meteorite sites (Tswaing Crater and Vredefort Dome), fossil sites (Karoo and Krugersdorp area), important mountain ranges or ridges (Magaliesburg, Drakensberg etc.). The proposed site is not located in an area known for sites of this importance.

3.2.6 Does the site/s contain a wide range of archaeological sites?

The proposed site does not contain any surface archaeological deposits, the reason being the large scale alteration of the original landscape.

The possibility of sub-surface findings always exists and should be taken into consideration in the Environmental Management Plan.

If sub-surface archaeological material is discovered work must stop and a heritage practitioner preferably an archaeologist contacted to assess the find and make recommendations.

3.2.7 Does the site/s contain any marked graves and burial grounds?

The site does not contain marked graves. The possibility of graves not visible to the human eye always exists and this should be taken into consideration in the Environmental Management Plan.

It is important to note that all graves and cemeteries are of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage Resources Act (Act 25 of 1999) whenever graves are 60 years and older. Other legislation with regard to graves includes those when graves are exhumed and relocated, namely the Ordinance on Exhumations (no 12 of 1980) and the Human Tissues Act (Act 65 of 1983 as amended).

If sub-surface graves are discovered work should stop and a professional preferably an archaeologist contacted to assess the age of the grave/graves and to advice on the way forward.

3.2.8 Does the site/s contain aspects that relate to the history of slavery?

This is not an area associated with the history of slavery like the Western Cape Province.

3.2.9 Can the place be considered as a place that is important to the community or in the pattern of South African history?

In primary and secondary sources the proposed site is not described as important to the community or in the pattern of South African history.[6]

3.2.10 Does the site/s embody the quality of a place possessing uncommon or rare endangered aspects of South Africa's natural and cultural heritage?

The proposed site does not possess uncommon, rare or endangered aspects of South Africa's natural and cultural heritage. These sites are usually regarded as Grade 1 or World Heritage Sites.

3.2.11 Does the site/s demonstrate the principal characteristics of South Africa's natural or cultural places?

The proposed site does not demonstrate the principal characteristics of South Africa's natural or cultural places. These characteristics are usually associated with aesthetic significance.

3.2.12 Does the site/s exhibit particular aesthetic characteristics valued by the community or cultural groups?

This part of the greater study area does not exhibit particular aesthetic characteristics valued by the community or cultural groups. The reason being the low density of heritage buildings and structures located in the greater study area.

3.2.13 Does the site/s contain elements, which are important in demonstrating a high degree of creative technical achievement?

The site does not contain elements which are important in demonstrating a high degree of creative technical achievement. Reason being none of the above evident on site.

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[6] Standard Encyclopaedia of Southern Africa and the Transvaalse Argiefbewaarplek (TAB) database at the National Archives, Pretoria.
J.S. Bergh (red), Geskiedenisatlas van Suid-Afrika. Die Vier Noordelike Provinsies.

3.2.14 Does the site/s have strong and special associations with particular communities and cultural groups for social, cultural and spiritual reasons?

The proposed site does not have a strong or special association with particular communities and cultural groups for social, cultural and spiritual reasons, the reason being that the particular site is located on mainly developed land and it is evident that the site is not utilised for social, cultural or spiritual reasons.

3.2.15 Does the site/s have a strong and special association with the life or work of a person, group or organisation?

The greater study area does not have a strong and special association with the life or work of a person, group or organisation.

4. OPPORTUNITIES, RESTRICTIONS, IMPACTS

- Because of the good summer rains grass is long and vegetation dense.
- If any of the structures older than 60 years are earmarked for demolition a demolition permit must be obtained from the Provincial Heritage Authority of Gauteng (PHRAG).
- There are no visible restrictions or negative impacts in terms of heritage associated with the site other than the structures older than 60 years. In terms of heritage this project can proceed.
- 3.2.6 and 3.2.7 must be taken into account in the Environmental Management Plan.

5. THE WAY FORWARD

- **Submit this report as a Section 38 application to the South African Heritage Resources Authority (SAHRA) for comment/approval.**