#### 4. DESCRIPTION OF PUBLIC PARTICIPATION PROCESS

#### 4.1 Advertising of the project

#### 4.1.1 Press advertising

A block advert (150mm x 95mm), according to the Environmental Impact Assessment Regulations, 2014, was placed in the Witbank News, on Friday, 5 February 2016. A copy of the advert is provided in Appendix 3.

#### 4.1.2 On-site advertising

Notices according to the Environmental Impact Assessment Regulations, 2014, were placed at the following locations:

- Onsite at the Pine Ridge Pump Station (A1; Photo 4.1 and Figure 4.1-Point A);
- Onsite at the Klipspruit Sewage Works (A3; Photo 4.2 and Figure 4.1-Point G);
- Adjacent to both gravel access roads to Leeuwpoort Smallholdings (A1; Photos 4.3 and 4.4; Figure 4.1).
- At the Pine Ridge Supermarket (A3; Photo 4.5 and Figure 4.1);
- On the noticeboard at the eMalahleni (Witbank) Public Library (A3; Photo 4.6 and Figure 4.1).

A copy of the notice was also loaded onto the company website: www.cleanstreamsa.co.za.

These notices were displayed from Friday, 5 February 2016, for the duration of the scoping phase. A copy of the notice is provided in Appendix 3.

#### 4.1.3 Informing I&APs via the internet

Interested and affected parties were also informed via the above-mentioned adverts and notices that a copy of the following documentation could be downloaded from the Clean Stream Environmental Services website (<a href="https://www.cleanstreamsa.co.za">www.cleanstreamsa.co.za</a>) from Friday, 5 February 2016:

- Copy of the notice;
- ♦ Background Information Document (Appendix 4).

This information was available on the website for the duration of the scoping phase. A copy of the webpage printouts is provided in Appendix 3.



Photo 4.1: On-site notice at the Pine Ridge Pump Station (Point A)



Photo 4.2: On-site notice at the Klipspruit Sewage Treatment Works (Point G)



Smallholdings



Photos 4.3 and 4.4: Notices placed adjacent to the main access roads to the Leeuwpoort



**Photo 4.5: Pine Ridge Supermarket** 



Photo 4.6: Witbank Public Library notice board



Figure 4.1: Location of notices

#### 4.1.4 Feedback from advertising process

Only four persons registered as interested and affected parties in terms of the advertising process (site and newspaper advertising) within the 30 day registration period provided as indicated in Table 4.1.

Table 4.1: Registration of I&APs in terms of the advertising process

Name	Date	Property	Refer to Section
L Steyn	16 February 2016	Leeuwpoort Portion 94	4.4.1
M Mampuru	4 March 2016	Leeuwpoort Portion 84	4.2.4
E Harmse	15 February 2016	Leeuwpoort Portion 55	4.4.3
S Stevens	10 March 2016	Leeuwpoort Portion 97	4.4.4

In addition, a CV was received from Mr. Talana on 14 February 2016 requesting employment.

#### 4.1.5 Public meeting

As indicated in Section 4.1.4, only four interested and affected parties registered in terms of the above-mentioned advertising process. A public meeting was therefore not required as part of the scoping phase of this project.

#### 4.2 Directly affected landowners/users

Figure 4.2 provides an indication of the affected landowners/users in relation to the proposed route.

In order to determine the registered owners of the various properties, a Deeds Search was conducted via the WinDeed system of the Deeds Office of South Africa. The Deeds Search Template provides information pertaining to land ownership, size and land value of each of the properties.

As indicated in Table 4.2 and Figure 4.2, the majority of the site belongs to private landowners, with 4 portions belonging to Government. An official letter and Background Information Document (BID) were forwarded (by email, fax, hand delivered) to the identified landowners informing them of the proposed project.

Table 4.2 provides an indication of directly affected landowners and comments received to date.

#### 4.2.1 National Government of RSA (L1, K2, H4; Figure 4.2)

An e-mail (dated: 16 February 2016; Appendix 7) was received from the National Department of Public Works (Mr. G. Masuku) on behalf of the National Government of RSA. Mr. Masuku indicated the following:

"I herewith confirm the receipt of your notice and kindly provide us with the proposed drawings of the pipe line servitude. Further be informed the eMalahleni Local Authority will have to pay the market-related compensation to the State as per an approved valuation report. Lastly this department would also like to conduct the site inspection where the pipe line servitude envisage to be constructed."

Clean Stream Environmental Services replied (dated: 16 February 2016; Appendix 7) as follows:

"I hereby acknowledge your e-mail and comment. Please note that the proposed project is still at an early stage. Detailed drawings of the pipe line route have not been drafted. The layout plan as included in the Background Information Document is all that is available at this stage.

The eMalahleni Local Municipality will be responsible for negotiations regarding the servitude.

I recommend that a site visit is scheduled later in the year once more information regarding the exact route is available."

The above-mentioned comments have been noted and will be addressed during the EIA phase of the project.

**Table 4.2: Directly affected landowners who received BIDs** 

BULK SERVICES				
Portion (Figure 4.2)	Ref. on Figure 4.2	Owner	Informed of project	Comment received
		L	eeuwpoort 283 JS	
RE	L2	Sarovic Investments cc (R. Sarovic, S. Cholich)	Background Information Document (BID) and official letter e-mailed on 12 February 2016 (Appendix 5).	No
1	Grey	Siyanqoba (VIPCON Pty Ltd) (S. Pohl)	BID and official letter e-mailed on 12 February 2016 (Appendix 5).	No
1	Grey	Wandima Environmental Services (Siyanqoba EIA consultants - G. Mwase)	BID e-mailed (15 February 2016; Appendix 5)	No
7	L1	National Government of RSA - National Department of Public Works (G. Masuku)	BID and official letter e-mailed on 15 February 2016 (Appendix 5).	Yes. See Section 4.2.1
48	L9	Sylvia Monroe Natlhong (S. Mkwanazi; maiden name is Natlhong)	BID and official letter hand delivered on 5 February 2016 (Appendix 5).	Yes. See Section 4.2.2
49, 57, 113	L6	Manala Mgibe CPA (V. Tlou and A. Mnyageni)	Hand delivered to A. Mnyageni on 5 February 2016. Telephonic discussion on 5 February 2016 with V. Tlou. BID and official letter e-mailed on 15 February 2016 (Appendix 5).	No
54	L10	Johanna SD Ellis (R. Ellis)	BID and official letter placed in gate on 5 February 2016 (Appendix 5). Telephonic discussion on 16 February 2016.	Yes. See Section 4.2.3
84	L14	Louw Family Trust (M. Mampuru)	E-mail forwarded 4 March 2016. Official letter e-mailed on 15 March 2016 (Appendix 5).	Yes. See Section 4.2.4
95	L4	Willem Pieter Wallis (P. Wallis)	BID and official letter hand delivered on 5 February 2016 (Appendix 5).	Yes. See Section 4.2.5
108	L5	Amanda Suzette Minnaar	BID and official letter e-mailed on 15 February 2016 (Appendix 5).	No
110	L3	Khensani Aaron Khumalo (P. Khumalo)	BID and official letter hand delivered to Mrs. Khumalo on 5 February 2016 (Appendix 5). Telephonic discussion with Mr. Khumalo on 16 February 2016.	Yes. See Section 4.2.6
112	L7	Susi-Martina Moritz	BID and official letter placed in gate on 5 February 2016 (Appendix 5).	Yes. See Section 4.2.7

			BULK SERVICES	
Portion (Figure 4.2)	Ref. on Figure 4.2	Owner	Informed of project	Comment received
116	L8	Mpho Petrus Mothoa	No contact details. BID and official letter placed in gate on 5 February 2016 (Appendix 5).	No
	•		Klippoort 277 JS	
RE, 6	K2	National Government of RSA - National Department of Public Works (G. Masuku)	BID and official letter e-mailed on 15 February 2016 (Appendix 5).	Yes. See Section 4.2.1
10	K1	Ansa Nel	No contact details. According to adjacent landowners, the owner does not reside on the property.	No
		Har	tbeestspruit 281 JS	
RE, 3, 14	H4	National Government of RSA - National Department of Public Works (G. Masuku)	BID and official letter e-mailed on 15 February 2016 (Appendix 5).	Yes. See Section 4.2.1
17	H3	Sarovic Investments cc (R. Sarovic, S. Cholich)	BID and official letter e-mailed on 12 February 2016 (Appendix 5).	No
30	H1	Josua Francois Botha Kleynhans (B. Kleynhans)	Telephonic discussion on 16 February 2016. BID and official letter e-mailed on 16 February 2016 (Appendix 5).	Yes. See Section 4.2.8
32	H2	Gert Ignatius van Rooyen (G. van Rooyen)	BID and official letter hand delivered on 5 February 2016 (Appendix 5).	Yes. See Section 4.2.9
	1		poitgedacht 300 JS	
1	N1	Catherina Botha	No contact details. Landowner not residing on property.	No

Page 45 Clean Stream Environmental Services

#### **4.2.2 S.M Natlhong (L9; Figure 4.2)**

An e-mail and completed comment sheet (dated: 29 February 2016; Appendix 7) was received from Mrs. S. Makwanazi (maiden name Natlhong) indicating the following:

Currently we doing the following on the plot:

- Cattle farming (cows & goats);
- Free range chickens;
- Selling wood from trees on the plot;
- Household vegetables;
- Planting mealies

#### Future plans for plot:

- Vegetable farming;
- Building of 2 houses on plot for the children (east & west);
- Another borehole (west);
- Pigery;
- Feedlot cows;
- Sheet.
- I, Sylvia Mkwanazi (previous surname Natlhong) further to my 1st page comments reserve all rights to comment and Object at a later stage.

This project will affect my land, grazing and the value thereof. It will also impact on the value of my property and its future Plans stipulated on the 1st page.

I will further object as the process unfolds.

The above-mentioned comments have been noted and will be addressed during the EIA phase of the project.

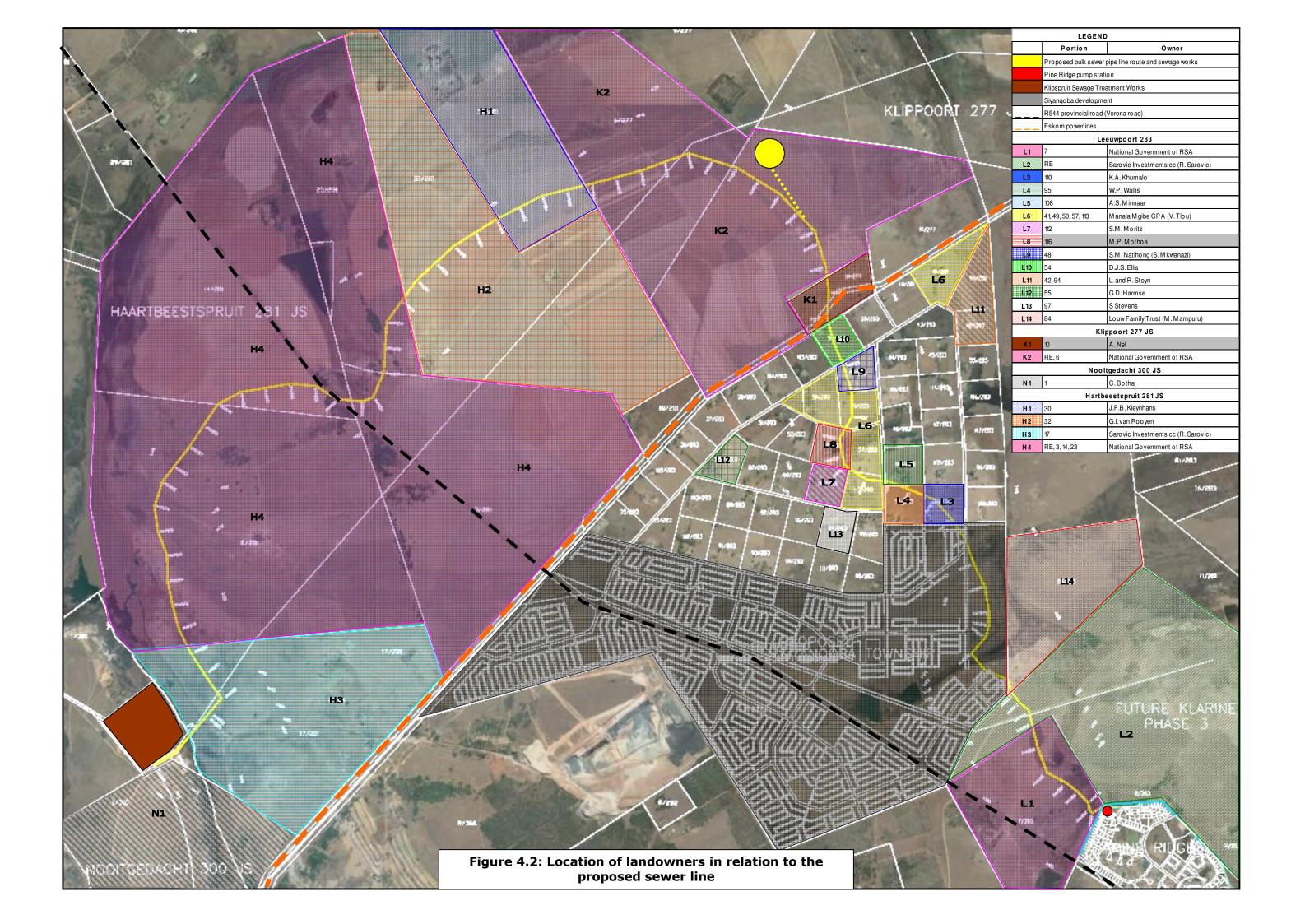
#### 4.2.3 J.S.D. Ellis (L10; Figure 4.2)

An e-mail (dated: 4 March 2016; Appendix 7) was received from Potgieter Beeken Attorneys, indicating that they are acting on behalf of Mrs. R. Ellis. A completed comment sheet (dated: 4 March 2016; Appendix 7) was attached, indicating the following:

Please take note that there is a big undergound hole on my property, about 30 m from my house.

Finalcial renumeration for servitude.

The above-mentioned issue will be investigated and addressed during the EIA phase of the project.



#### 4.2.4 Louw Family Trust (M. Mampuru; L14; Figure 4.2)

Ms. M. Mampuru (Leeuwpoort Portion 84) registered as an I&AP on behalf of the Louw Family Trust (see e-mail dated: 9 March 2016; Appendix 7). Subsequently, an e-mail (dated: 14 March 2016; Appendix 7) was received providing the following comments:

We would like to be registered as a concerned party for Ref: EIA 2016/2016, due to the fact that the pipeline will be crossing through the Louw property at Portion 84 Leeuwpoort.

The current water supply on the property, which is a water well, is in danger of being contaminated by sewer spillages, which will be disastrous to the family living on the farms, as well as the livestock, as this is the only water source available.

The family is already experiencing a problem with another water source that has been contaminated and affects the livestock on the farm. The stream is contaminated with sewerage spillage from the Klarinet development.

Please note that the maintenance will be problematic in future if handed over to the local municipality, case in point, Klarinet and Pineridge development which is currently contaminating the stream and the municipality has no solution.

In light of the abovementioned it will be appreciated that the matter be investigated and a workable and amicable solution be found.

The above-mentioned issues have been noted and will be addressed during the EIA phase of the project.

#### 4.2.5 P. Wallis (L4; Figure 4.2)

Mr. P. Wallis indicated the following per e-mail (dated: 18 March 2016; Appendix 7):

Thank you for the letter received ref EIA 2016/01. I take note of the fact that you want to carry out an environmental study on the route of the "proposed" project.

- I have been living on my property for 16 years, and can most probably contribute to some environmental issues. I have got the following questions/concerns regarding the implementation of the project.
- 1) How are they going to re-habitat the area where they going to install the pipe line ( $\pm$  200meters on my property)?
- -Surely the section, fences etc. will be damaged during this exercise, the working area will most probably stretch further and wider than the pipe line itself.
- -The section of my soil has been de-stoned and prepared to plant crops if necessary, is the re-habitation going to include de-stoning and planting of grass again ?
- 2) During the work period how are they going to keep my animals within my property with the fences down. Are they going to install a temporary fence?

- 3) During the execution of the trenching they will use dynamite (They are already doing it now with the housing development) as the soil is very shallow and then there is rock formations.
- -How are they going to prevent bewildering my animals? How are they going to prevent cracks and damaged to my and any other close by buildings and structures?
- 4) Am I liable for any compensation, how are they going to get access to any servitudes situated in my property, are they going to install access roads to these?

I know that many of these questions does not fall within your jurisdiction, although I would appreciate if you could forward these to the relevant developers.

I also do not know why this is called a "proposed" project as I have noticed that the materials (Piping) for the project has already been delivered to Pine-Ridge.

Thus it does not matter the outcome of your environmental study, the project will carry on, and the study by yourselves is just a formality which has to happen according to environmental law.

Clean Stream Environmental Services replied (e-mail dated: 23 March 2016; Appendix 7) as follows:

"Your concern that the pipes for the bulk sewer line have already been delivered (stockpiled at Pine Ridge) to site has reference. This issue was discussed with the project engineers who indicated that the pipes stockpiled at Pine Ridge are not for this project but form part of the Siyanqoba project."

The other comments will be addressed during the EIA phase of the project and feedback will then be provided.

#### 4.2.6 K.A. Khumalo (L3; Figure 4.2)

A completed comment sheet (dated: 29 February 2016; Appendix 7) was received from Mr. P. Khumalo. He objected to the proposed sewer line and indicated the following:

- I herewith submit my objection to the proposed routing of the proposed sewage pipeline through Leeuwpoort small holdings, into Klippoort & to the Klipspruit sewage works. The reasons are:
- 1) We rely solely on underground water for human consumption. The line is a permanent threat to water quality and our health.
- 2) There is extensive food production in this area (maize, poulty, beef, etc.). Water contamination will kill agricultural activities in this area and livelihoods of many.
- 3) The threat of water contamination will prevent future plans for development in agriculture.

The above-mentioned objection is noted. The concerns will be investigated and addressed during the EIA phase of the project.

#### 4.2.7 S. Moritz (L7; Figure 4.2)

A completed comment sheet (dated: 1 March 2016; Appendix 7) was received from Ms. Moritz. The following issues were raised:

- 1) Drinking water obtained from borehole about 100 110 m from boundary fence of property to planned line.
- 2) What is the maintenance plan of the sewer line, does/can leakage and contamination take place.
- 3) What's the plan to ensure that I have drinking water available as this is my constitutional right.
- 4) Our waterflow is from Haartebeestspruit and Klipspruit in the direction of Leeuwpoort Smallholdings. Any leaks, contamination into the water stream of the bulk sewer line will affect the water quality of our borehole. What plan is in place to avoid this?

The above-mentioned concerns are noted and will be investigated and addressed during the EIA phase of the project.

#### **4.2.8 J.F.B.** Kleynhans (H1; Figure 4.2)

A completed comment sheet (dated: 19 February 2016; Appendix 7) was received from Mr. Kleynhans enquiring about the following:

- 1. Will the pipe line be located underground?
- 2. What about damage to fences?
- 3. Who will be responsible for the rehabilitation of planted pastures?
- 4. Would it be possible to continue farming activities over the servitude?
- 5. Will there be a manhole on my property?
- 6. How will blockages be dealt with?

Mr. Kleynhans also contacted CSES telephonically, enquiring about the pipes stockpiled at Pine Ridge.

Clean Stream Environmental Services replied (e-mail dated: 23 March 2016; Appendix 7) as follows:

"Your concern that the pipes for the bulk sewer line have already been delivered (stockpiled at Pine Ridge) to site has reference. This issue was discussed with the project engineers who indicated that the pipes stockpiled at Pine Ridge are not for this project but form part of the Siyangoba project."

Other comments received will be addressed during the EIA phase of the project and feedback will then be provided.

#### **4.2.9 G.I.** van Rooyen (H2; Figure 4.2)

A Background Information Document was hand delivered to Mr. G. van Rooyen on 5 February 2016. Subsequently, a completed comment sheet (dated: 18 February 2016; Appendix 7) was received. The following was indicated:

- o I am doing maize and cattle farming on my property namely Hartebeestspruit 281 JS, Portion 32.
- Any compensation for the land where the sewer line will be installed?
- Can the farmer cross the sewer line with tractors and agricultural implements?
- o Is it possible to do cultivation across the sewer line, namely on Hartebeestspruit 281 JS, Portion 32?

Mr. Van Rooyen's concerns have been noted and will be investigated and addressed during the EIA phase of the project.

## 4.3 Identified local authorities/government departments and stakeholders

Table 4.3 provides an indication to which local authorities/government departments and stakeholders Background Information Documents (BIDs; Appendix 4) were forwarded in order to inform them of the proposed project and to obtain their issues of concern.

Table 4.3: Identified local authorities/government departments and stakeholders who received BIDs

AUTHORITY/ STAKEHOLDER	CONTACT PERSON	CORRESPONDENCE SENT	COMMENTS
Department of Agriculture, Forestry and Fisheries (DAFF)	F. Mashabela	BID e-mailed (12 February 2016; Appendix 6)	No
Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA) - Directorate: Land Use and Soil Management – Ermelo	J. Venter	BID e-mailed (12 February 2016; Appendix 6)	No
Department of Co-operative Governance and Traditional Affairs (COGTA)	M. Loock	BID e-mailed (12 February 2016; Appendix 6)	No
Department of Culture, Sports and Recreation	S. Singh	BID e-mailed (12 February 2016; Appendix 6)	No
Department of Mineral Resources	S. Mathavela	BID e-mailed (12 February 2016; Appendix 6)	No
Department of Public Works, Roads and Transport	B. Viljoen	BID e-mailed (12 February 2016; Appendix 6)	Yes. See Section 4.3.1
Department of Rural Development and Land Reform (Commission on Restitution of Land Rights)	N.D. Nkambule	Claim enquiry (15 February 2016; Appendix 6)	No
Department of Water and Sanitation (DWS)	A. Rambuda	BID e-mailed (12 February 2016; Appendix 6)	No
eMalahleni Local Municipality (Section Environmental and Waste Management)	E. Nkabinde	BID e-mailed (12 February 2016; Appendix 6)	No
eMalahleni Local Municipality (Section Town Planning)	M. Makgalemele	BID e-mailed (26 February 2016; Appendix 6)	No
eMalahleni Local Municipality (Section Town Planning)	T. Buthelezi	BID e-mailed (12 February 2016; Appendix 6)	No
Eskom Distribution (Land & Rights)	M. Moloko	BID e-mailed (12 February 2016; Appendix 6)	Yes. Response from T. Ludere. See Section 4.3.2
Eskom Transmission	E. Lennox, L. Motsisi, N. Maake	BID e-mailed (12 February 2016; Appendix 6)	No
Mpumalanga Tourism and Parks Agency	K. Narasoo	BID e-mailed (12 February 2016; Appendix 6)	Yes. See Section 4.3.3
Mpumalanga Wetland Forum	H. Marais	BID e-mailed (12 February 2016; Appendix 6)	No
Nkangala District Municipality	S. Links	BID e-mailed (12 February 2016; Appendix 6)	No
Sector 1 Kalbasfontein Kromdraai CPF (no CPF in the Leeuwpoort area - the Kalbasfontein Kromdraai CPF is	S. Botha	BID e-mailed (12 February 2016; Appendix 6)	No

Scoping Report: The installation of a bulk sewer line from Pine Ridge Pup Station to the Klipspruit Sewage Treatment Works, eMalahleni (CSES Ref. no: EIA2016/01)

AUTHORITY/ STAKEHOLDER	CONTACT PERSON	CORRESPONDENCE SENT	COMMENTS
closest to the study area)			
South African Heritage Resources Agency (SAHRA)	SAHRA website	BID loaded onto website (15 February 2016; Appendix 6)	No
Telkom	J. Smit	BID e-mailed (12 February 2016; Appendix 6)	Yes. Response from J. Stoop. See Section 4.3.4
Transvaalse Landbou Unie	D. du Plessis	BID e-mailed (12 February 2016; Appendix 6)	No
Ward Councillor (Ward 12)	T. Pookgoadi	BID e-mailed (12 February 2016; Appendix 6)	No
Wildlife and Environment Society of South Africa	L Betha	BID e-mailed (12 February 2016; Appendix 6)	No

#### 4.3.1 Department of Public Works, Roads and Transport

A completed comment sheet (dated: 15 February 2016; Appendix 6) was received from the Department of Public Works, Roads and Transport (Mr. B. Viljoen).

Mr. Viljoen indicated that a wayleave application must be submitted when crossing the R544, Verena Road.

#### 4.3.2 Eskom Distribution (Land & Rights)

A letter was received from Eskom Distribution (Land & Rights; T. Ludere) (dated: 22 February 2016; Ref: LD-INV/E/T/243/2016; Appendix 6) indicating that the proposed project affects the Old Douglas-Hertzog, Paxton-Paxton Rural and the Kumba Resources 22kV distribution lines.

Eskom Distribution will raise no objection to the proposed installation of a bulk sewer line provided that Eskom's rights and services are acknowledged and adhered to.

Eskom indicated that there is an 9 meter building and tree restriction on either side of the centre line of the 22 kV powerlines, which must be adhered to in all future development and/or construction. Eskom's rights are protected by Wayleave Agreements.

A number of other conditions were also specified by Eskom (see Appendix 7), which must be noted and adhered to by the applicant.

Eskom Distribution requested that Annexures D and E (Appendix 10) be completed by the applicant and returned to Eskom should the applicant accept the conditions.

#### 4.3.3 Mpumalanga Tourism and Parks Agency

The Mpumalanga Tourism and Parks Agency (Ms. K. Narasoo) acknowledged the project and requested a hard copy of the reports (e-mail dated: 15 February 2016; Appendix 6). CSES indicated (e-mail dated: 15 February 2016; Appendix 6) that a hard copy will be forwarded once complete.

#### 4.3.4 Telkom

A letter (dated: 15 February 2016; Appendix 6) was received from Telkom (J. Stoop) indicating that Telkom has an existing overhead network next to the R544, Verena Road. Telkom requested that all necessary precautions be

taken to safe guard their network. Further conditions are indicated in their letter attached in Appendix 6.

#### 4.4 Other interested and affected parties

The following surrounding landowners/users submitted comment:

Name	Property	Refer to Section
L Steyn	Leeuwpoort Portion 94	4.4.1
R Steyn	Leeuwpoort Portion 42	4.4.2
E Harmse	Leeuwpoort Portion 55	4.4.3
S Stevens	Leeuwpoort Portion 97	4.4.4
FB Mhlambi (Manala Mgibe CPA)	Leeuwpoort Portion 41	4.4.5

#### 4.4.1 E. Harmse (L12; Figure 4.2)

Mrs. E. Harmse (Leeuwpoort Portion 55) contacted CSES telephonically on 15 February 2016 requesting more information w.r.t. the proposed sewer line. Mrs. Harmse also enquired about the proposed Siyanqoba development. A Background Information Document was subsequently forwarded (dated: 15 February 2016, Appendix 3).

#### 4.4.2 L. Steyn (L11; Figure 4.2)

Mrs. L. Steyn (Leeuwpoort Portion 94) contacted CSES telephonically on 16 February 2016, requesting more information w.r.t. the proposed sewer line. Mrs. Steyn indicated that she was concerned about potential groundwater pollution as a result of sewage spills. A Background Information Document was forwared (dated: 15 February 2016, Appendix 3).

Subsequently, a letter (dated: 4 March 2016; Appendix 7) was received from Mrs. Steyn, indicating the following:

Herewith I strongly appose to the bulk sewer line. The reasons for my appose is as follows:

As a resident of Leeuwpoort for the last 19 years we had never had any problems with our water quality. What would happen to our water if this sewer line should block and overflow?

Our ground water will be polluted and affected by this pipe line. Our animals and even ourselves will get sick. We would not be able to use our bore holes. My bore hole is only 14m deep and is fed by a fountain.

At one point the sewer line crosses the wetland, if the sewer leaks into that wetland that also runs thru my property all my sheep would die because they graze there. Not even to speak about the bird and animal life around the wetland. We have jackal and reedbucks in our area that will be affected to.

No one could ever give us a guarantee that this pipe line will never block and overflow, as the existing pipeline regularly blocks and overflows and leaves a disgusting smell from Klarinet to Pine Ridge. I strongly suggest that the Emalahleni Municipality find another rout for this pipeline.

The above-mentioned objection and concerns are noted and will be addressed during the EIA phase of the project.

#### 4.4.3 R. Steyn (L11; Figure 4.2)

The following comment (letter dated: 4 March 2016; Appendix 7) was received from Mr. R. Steyn (Leeuwpoort Portion 42):

As per the document circulated, dated 5 February 2016, the below objection is submitted. As a resident of the Leeuwpoort area, I strongly object to the proposed bulk sewer line as per the reference number above.

The Leeuwpoort area residents, due to no municipal infrastructure and municipal water supply, are dependent upon borehole water. The area has been renowned for its excellent underground water quality and our water quality over the past 19 years has been stable and free from any contaminants, low TDS, low bacteria and used as potable water throughout.

Although the sewage line will not be running through our property, the risk of it contaminating/polluting our underground water source is massive.

Our aquifer is relatively shallow in the area and contains natural fountains. Our boreholes are equipped at a shallow depth of 14 meters and due to its paltriness, would be very susceptible to contamination by any outside sources. Any blockages/overflows could influence our water supply which is currently used for animal and human consumption.

The plot we own, has a natural wetland (vlei) to where water accumulates. The proposed sewer line will be crossing this wetland upstream and any environmental spillages/incidents will affect this area downstream to where our property is situated. This contamination of the wetland will influence livestock grazing in the areas with a risk of killing animals. The area also is a natural habitat for Jackal and Reedbuck, not to mention birdlife which could be affected.

One could argue that no blockages/overflowing of this line will occur, yet these issues have been experienced frequently from Klarinet to Pine Ridge with the sewer line running in the area and frequently the area smells and sewage water runs on surface in the residential area.

I stronly suggest that the Emalahleni Municipality finds another route for this pipeline that would not be a risk to residents or livestock in the area.

The above-mentioned objection and concerns are noted and will be addressed during the EIA phase of the project.

#### 4.4.4 S. Stevens (L13; Figure 4.2)

Ms. S. Stevens (Leeuwpoort Portion 97) contacted CSES telephonically on 10 March 2016. She wanted to know if the sewer line will have a direct impact on her property. A Background Information Document was subsequently forwarded (e-mail dated: 10 March 2016; Appendix 3).

#### 4.4.5 F.B. Mhlambi (Manala Mgibe CPA) (L6; Figure 4.2)

A comment sheet (dated: 14 March 2016; Appendix 7) was received from Mr. FB Mhlambi (Leeuwpoort Portion 41). Mr. Mhlambi forms part of the Manala Mgcibe CPA. The following was indicated:

The proposed bulk sewer line from Pine Ridge Pump Station to Klipspruit Sewage Treatment Works has a negative effect on the basis that we are residing down on the valley. This pipeline can burst and contaminate our 100% clear water that is derived from the borehole. We therefore suggest that you find an alternative way and we request that you make a written undertaking that will protect us from the unforseen circumstances.

The above-mentioned concerns will be investigated and addressed during the EIA phase of the project.

## 4.5 Department of Agriculture, Rural Development, Land and Environmental Affairs

The project was registered with the Department of Agriculture, Rural Development, Land and Environmental Affairs on 19 April 2016 (see cover letter and application dated: 19 April 2016; Appendix 1).

Clean Stream Environmental Services requested a date for a meeting and site visit.

#### 4.6 Additional correspondence with I&APs

During the scoping phase, it came to our attention that there was some confustion regarding the Environmental Impact Assessment being conducted by CSES and a Basic Assessment that was conducted by Wandima Environmental Servics. Both these projects entail the installation of bulk sewer lines in the Pine Ridge/Leeuwpoort Smallholdings/Siyanqoba area.

In view of this, a letter (dated: 22 April 2016; Appendix 7) was compiled and forwarded (email dated: 22 April 2016; Appendix 7) to identified I&AP's (see Section 4.7).

An email from Ms. S. Moritz (dated: 22 April 2016; Appendix 7) was subsequently received indicating the following: 'Many thanks for the feedback it has cleared some grey areas'.

#### 4.7 List of Interested and Affected Parties

From the above public participation process, the following list of Interested and Affected Parties was compiled:

INTERESTED AND AFFECTED PARTY LIST		
Organisation	Name	
Government Departments		
Department of Agriculture, Forestry and Fisheries	F Mashabela	
Department of Agriculture, Rural Development, Land and Environmental Affairs	The Director	
Department of Agriculture, Rural Development, Land and Environmental Affairs - Directorate: Land Use and Soil Management – Ermelo	J Venter	

INTERESTED AND AFFECTED PARTY LIST			
Organisation	Name		
Department of Co-Operative Governance and Traditional Affairs	M Loock		
Department of Culture, Sports and Recreation	S Singh		
Department of Mineral Resources	S Mathavela		
Department of Public Works, Roads and Transport	B Viljoen		
Department of Rural Development and Land Reform	ND Nkambule		
Department of Water and Sanitation – Bronkhorstspruit	A Rambuda		
Other Organisations			
Eskom Distribution	T Ludere		
Eskom Transmission	E Lennox N Maake L Motsisi		
Mpumalanga Tourism and Parks Agency	K Narasoo		
Mpumalanga Wetland Forum - Inventory	H Marais		
South African Heritage Resources Agency	Website		
Telkom	J Stoop		
Transvaalse Landbou Unie	D du Plessis		
Wildlife and Environment Society of South Africa	L Betha		
Local Municipality and Municipal Councillo	or		
Councillor (Ward 12)	T Pookgoadi		
eMalahleni Local Municipality	E Nkabinde M Makgalemele T Buthelezi		
Nkangala District Municipality	S Links		
Sector 1 Kalbasfontein Kromdraai CPF	S Botha		
Directly affected landowners			
RE Leeuwpoort, Ptn 17 Hartbeestspruit - Sarovic Investments cc	R Sarovic, S Cholich		
Ptn 1 Leeuwpoort - Siyanqoba development; VIPCON Pty Ltd	S Pohl		
Wandima Environmental Services (Siyanqoba development EIA consultants)	G Mwase		
Ptn 7 Leeuwpoort, Re and Ptn 6 Klippoort, RE and Ptns 3 and 14 hartbeestspruit - National Government of RSA (National Department of Public Works)	G Masuku		
Ptn 48 Leeuwpoort - Sylvia Monroe Natlhong	S Mkwanazi		
Ptns 49, 57, 113 Leeuwpoort - Manala Mgibe CPA	V Tlou		
Ptn 54 Leeuwpoort - Johanna SD Ellis	R Ellis		
Ptn 54 Leeuwpoort - Johanna SD Ellis Ptn 84 Leeuwpoort - Louw Family Trust	R Ellis M Mampuru		

Scoping Report: The installation of a bulk sewer line from Pine Ridge Pup Station to the Klipspruit Sewage Treatment Works, eMalahleni (CSES Ref. no: EIA2016/01)

INTERESTED AND AFFECTED PARTY LIST			
Organisation	Name		
Ptn 110 Leeuwpoort - Khensai Aaron Khumalo	K Khumalo		
Ptn 112 Leeuwpoort - Susi-Martina Moritz	S Moritz		
Ptn 116 Leeuwpoort - Mpho Petrus Mothoa	No contact details		
Ptn 10 Klippoort - Ansa Nel	No contact details		
Ptn 30 Hartbeestspruit - Josua FB Kleynhans	B Kleynhans		
Ptn 32 Hartbeestspruit - Gert I van Rooyen	G van Rooyen		
Other			
Surrounding landowner (Ptn 55 Leeuwpoort)	E Harmse		
Surrounding landowner/user and community leader	A Mnyageni		
Surrounding landowner (Ptn 97 Leeuwpoort)	S Stevens		
Surrounding landowner (Ptn 94 Leeuwpoort)	L Steyn		
Surrounding landowner (Ptn 42 Leeuwpoort)	R Steyn		
Surrounding landowners (Ptn 41 Leeuwpoort) - Manala Mgibe CPA	FB Mhlambi		

#### 5. DESCRIPTION OF ALTERNATIVES IDENTIFIED

#### 5.1 Introduction

According to the information provided, the regional sewer network extending from the Klarinet residential areas towards the Klipspruit Sewage Treatment Works needs to be upgraded in order to cater for the Klarinet Phase 2 development as well as other developments in the area.

Currently, sewage generated by the existing Klarinet developments and Pine Ridge is collected at the northern corner of Klarinet x6 via an existing 400mm diameter outfall sewer. It is then gravitated to Pine Ridge and pumped from Pine Ridge Pump Station to Klipspruit Sewage Treatment Works (STW) through an existing 315mm diameter pumping main.

The 315 mm diameter pumping main is insufficient for the current and future sewage flows in the area. In addition, the Pine Ridge Pump Station is not in good working order, resulting in sewage flowing into the adjacent Blesbokspruit.

This section provides an indication of alternatives that will be investigated as part of the Environmental Impact Assessment (EIA) phase of the project in terms of the upgrading of the sewer network. Further details will be provided in the Environmental Impact Assessment Report (EIAR).

#### 5.2 Upgrading of regional sewer network

The following alternatives have been identified in terms of the upgrading of the regional sewer network:

- Alternative 1: New outfall sewer from the existing Pine Ridge Pump Station to the Klipspruit Sewage Treatment Works (Figure 5.1);
- Alternative 2: New outfall sewer and new sewer treatment works (Figure 5.1);
- Alternative 3: Upgrade of Pine Ridge Pump Station, existing sewer line and pumping main at existing Klipspruit Sewage Treatment Works (Figure 5.1);
- Alternative 4: No project option.

The above-mentioned alternatives will be investigated as part of the Environmental Impact Assessment (EIA) phase of the project and the findings provided in the Environmental Impact Assessment Report (EIAR).

#### 5.3 Bulk sewer alternatives

As indicated above, the sewage generated by the new developments will largely collect at Pine Ridge and will then either require pumping or gravitating to the Klipspruit STW.

In terms of the above-mentioned alternatives (Section 5.2), the following bulk sewer alternatives were identified:

- Alternative 1: Gravity sewer from Pine Ridge to Klipspruit;
- Alternative 2: Gravity sewer from Pine Ridge to a new Regional STW north of Pine Ridge;
- Alternative 3: Connecting to the Siyanqoba approved sewer line pumping raw sewage from Pine Ridge to Klipspruit STW;
- Alternative 4: A combination of any of the above-mentioned;
- Alternative 5: No project option.

#### Alternative 1: Gravity sewer from Pine Ridge to Klipspruit STW

Klipspruit STW is located approximately 3km north of KwaGuqa and has a design capacity of 10Ml/day. It is currently operating beyond its design capacity.

Alternative 1 requires the installation of a 15km long, 825mm to 1350mm ND gravity sewer from Pine Ridge to Klipspruit STW. Klipspruit STW must also be upgraded to accommodate an additional flow of 20Ml/day.

This alternative is preferred due to its ability to eliminate pumping of raw sewerage. It is also in line with the ELM's proposed plan of supplying the industrial areas with treated effluent and in turn releasing the freshwater to industries for domestic use.

## Alternative 2: Gravity sewer from Pine Ridge to a new Regional STW north of Pine Ridge

Alternative 2 requires the installation of a 6.5km long, 700mm ND gravity sewer from Pine Ridge to the new sewer treatment works. A new 20MI/day Sewer Treatment Works must be constructed to treat effluent from the Klarinet Phase 2 Project site as well as other proposed developments.

This is the second preferred alternative. However, it requires raw sewerage to be pumped from Ferrobank to the proposed new STW. Pumping of raw sewerage is not favoured by ELM due to lack of operation and maintenance (O&M) on their current pump stations.

## Alternative 3: Connecting to the Siyanqoba approved sewer line pumping raw sewerage from Pine Ridge to Klipspruit STW

A bulk sewer line from Pine Ridge to Klipspruit STW was recently approved for the Siyanqoba residential development (Figure 5.1). This sewer line would entail the pumping of raw sewerage from Pine Ridge to the Klipspruit STW.

As part of the EIA phase, the possibility of connecting to this approved bulk sewer line will be investigated.

#### Alternative 4: A combination of any of the above-mentioned

Depending on the findings of the EIA, it may be necessary to look at a combination of the above-mentioned.

#### Alternative 5: No project option

See Section 5.5 for further details.

The above-mentioned alternatives will be investigated as part of the Environmental Impact Assessment (EIA) phase of the project and the findings provided in the Environmental Impact Assessment Report (EIAR).

#### 5.4 Bulk sewer routes

### Alternative 1: Bulk sewer line route from Pine Ridge to Klipspruit STW

As indicated in Section 5.3, Alternative 1 requires the installation of a 15km long, 825mm to 1350mm ND gravity sewer from Pine Ridge to Klipspruit STW.

Figure 5.1 provides a schematic representation of the proposed route to be followed. The proposed route may have to be revised based on the findings of the specialist studies to be commissioned as part of the EIA phase of the development.

## Alternative 2: Bulk sewer line route from Pine Ridge to a new Regional STW north of Pine Ridge

As indicated in Section 5.3, Alternative 2 requires the installation of a 6.5km long, 700mm ND gravity sewer from Pine Ridge to the new 20Ml/day sewer treatment works.

Figure 5.1 provides a schematic representation of the proposed route to be followed as well as the proposed position of the new sewer treatment works. The proposed route could be revised based on the findings of the specialist studies to be commissioned as part of the EIA phase of the development.

## Alternative 3: Bulk sewer line route to connect to the Siyanqoba approved sewer line

As indicated in Section 5.3, a bulk sewer line from Pine Ridge to Klipspruit STW was recently approved for the Siyanqoba residential development. Figure 5.1 provides an indication of the approved sewer line route. As part of the EIA phase, the possibility of connecting to this approved bulk sewer line (including a possible connection point) will be investigated.

## Alternative 4: Alternative site for the proposed regional sewage treatment works

Depending on the findings of the EIA, it may be necessary to look at an alternative site for the proposed new regional sewage treatment works. This could also result in an alternative route to be identified.

#### Alternative 5: No project option

See Section 5.5 for further details.

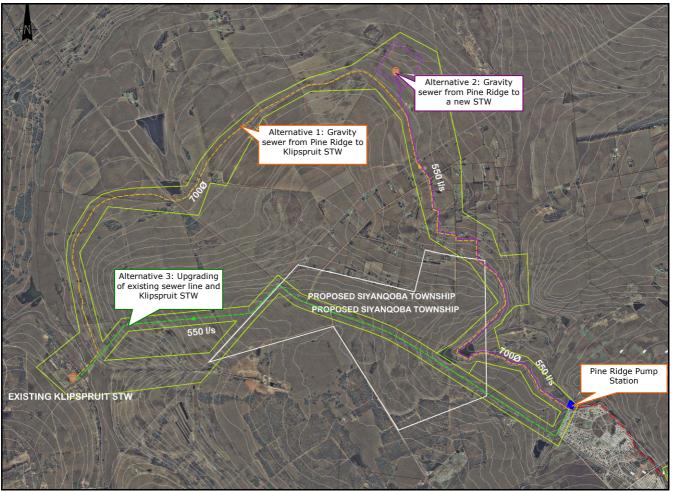


Figure 5.1: Proposed sewer alternatives

The above-mentioned alternatives will be investigated as part of the Environmental Impact Assessment (EIA) phase of the project and the findings provided in the Environmental Impact Assessment Report (EIAR).

#### 5.5 The 'No Project Option'

The 'no project option' is the alternative of not going ahead with the proposed installation of the bulk sewer system. The 'no project option' is only considered if it is found that the proposed installation of the bulk sewer system will have significant negative impacts on the environment, which cannot be mitigated or managed.

If the 'no project option' in terms of the proposed installation of the bulk sewer system was exercised, it would mean that new bulk sewer systems (including routes) would have to be investigated, the potential impacts on the environment determined, the interested and affected parties consulted.

If the 'No project option' was to be implemented, it could mean that the Klarinet Phase 2 development as well as other developments would not be able to take place until such time that approval in terms of the proposed upgrading can take place.

#### 6. DISCUSSION AND CONCLUSION

#### 6.1 Introduction

According to the information provided, the regional sewer network extending from the Klarinet residential areas towards the Klipspruit Sewage Treatment Works needs to be upgraded in order to cater for the Klarinet Phase 2 development as well as other developments in the area.

Currently, sewage generated by the existing Klarinet developments and Pine Ridge is collected at the northern corner of Klarinet x6 via an existing 400mm diameter outfall sewer. It is then gravitated to Pine Ridge and pumped from Pine Ridge Pump Station to Klipspruit Sewage Treatment Works (STW) through an existing 315mm diameter pumping main.

The 315 mm diameter pumping main is insufficient for the current and future sewage flows in the area. In addition, the Pine Ridge Pump Station is not in good working order, resulting in sewage flowing into the adjacent Blesbokspruit.

In order to address these problems, the eMalahleni Local Municipality intends to install a new bulk sewer line from the Pine Ridge Pump Station to the Klipspruit Sewage Treatment Works. Two alternatives were investigated as part of the scoping phase, namely:

- Alternative 1: new 15 km long gravity sewer line from the existing Pine Ridge Pump Station to the existing Klipspruit Sewage Treatment Works (Figure 2.1);
- Alternative 2: new 6.5 km long sewer line from the existing Pine Ridge Pump Station to a new regional sewage treatment works (Figure 2.2).

The first section of the route (Alternatives 1 and 2) stretching from the Pine Ridge Pump Station, through the Siyanqoba residential development to the Leeuwpoort Smallholdings, will be located within the residential infill development area and within the Urban Edge of the eMalahleni Local Municipality Local Spatial Development Framework (Figure 3.16).

The remainder of the route (Alternatives 1 and 2) and the proposed regional sewage treatment works site (Alternative 2) will be located outside of the Urban Edge, within the Leeuwpoort Smallholdings and agricultural land.

No residential development is indicated outside of the Urban Edge (Figure 3.16) according to the eMalahleni Local Municipality Local Spatial Development Framework (2015).

#### 6.2 Public participation

Section 4 should be consulted for a detailed description of the public participation process followed and the comments received.

The following landowners will be directly affected by the proposed route (Alternative 1 and Alternative 2):

Scoping Report: The installation of a bulk sewer line from Pine Ridge Pup Station to the Klipspruit Sewage Treatment Works, eMalahleni (CSES Ref. no: EIA2016/01)

Section of sewer line (Figure 2.1 & 2.2)	Property	Registered owner	Alternative
Point A to B	Remainder of Leeuwpoort 283 JS Portion 7 of Leeuwpoort 283 JS Portion 84 of Leeuwpoort 283 JS Portion 1 of Leeuwpoort 283 JS	Sarovic Investments cc National Government of RSA Louw Family Trust Siyanqoba residential development	Alternative 1 & Alternative 2
Point B to C	Portion 1 of Leeuwpoort 283 JS  Leeuwpoort Portion 110 Leeuwpoort Portion 95 Leeuwpoort Portion 108 Leeuwpoort Portions 57 and 113 Leeuwpoort Portion 112 Leeuwpoort Portion 116	Siyanqoba residential development K.A. Khumalo W.P. Wallis A.S. Minnaar Manala Mgibe CPA S.M. Moritz M.P. Mothoa	Alternative 1 & Alternative 2
Point C to D	Leeuwpoort Portion 48 Leeuwpoort Portion 49 Leeuwpoort Portion 54 Portion 10 of Klippoort 277 JS	S.M. Natlhong Manala Mgibe CPA D.J.S. Ellis A. Nel	Alternative 1 & Alternative 2
Proposed STW	Remainder of Klippoort 277 JS	National Government of RSA	Alternative 2
Point D to E	Portions 6 of Klippoort 277 JS Portion 30 of Hartbeestspruit 281 JS Portion 32 of Hartbeestspruit 281 JS Portions 3 and 23 of Hartbeestspruit 281 JS	National Government of RSA J.F.B. Kleynhans G.I. van Rooyen National Government of RSA	Alternative 1
Point E to F	Remainder and Portion 14 of Hartbeestspruit 281 JS Portion 17 of Hartbeestspruit 281 JS	National Government of RSA Sarovic Investments cc	Alternative 1
Point F to G	Portion 1 of Nooitgedacht 300 JS	C. Botha	Alternative 1

During the scoping phase, contact was made with the majority of the above-mentioned landowners as indicated in Section 4. However, C. Botha, A. Nel and M.P. Mothoa (see the above table) could not be contacted during the Scoping phase due to the lack of contact details. Another attempt will be made during the EIA phase to obtain the contact details of these landowners.

Section 4 of the scoping report provides the issues/concerns raised by the interested and affected parties during the public participation process followed. In essence, the main issues/concerns were:

- Impact on the residents of the Leeuwpoort Smallholdings;
- Impact on agricultural land;
- Impact on state-owned land;
- Impact on servitudes;
- Maintenance of sewer line during the operational phase.

#### **Impact on Leeuwpoort Smallholdings**

From the Scoping phase, it is evident that the biggest concern is with regards to the potential impact of the proposed sewer line (Alternatives 1 and 2) on the residents of the Leeuwpoort Smallholdings. A number of landowners objected to the proposed bulk sewer line.

Sections B to D of the route (Alternatives 1 and 2) will extend through the Leeuwpoort Smallholdings. The smallholdings are used for various purposes,

including country living, small businesses, small scale agriculture, workshops, etc.

The directly affected and surrounding landowners within the Leeuwpoort Smallholdings area raised the following main concerns:

- o Impact on property in terms of servitude (compensation required);
- o Impact on infrastructure (e.g. fences, structures, etc.);
- Impact of blasting and construction activities on people and animals;
- o Impact on current and future activities on their properties;
- Impact on property value.

#### Impact on agricultural lands

The central and western portions of the sewer line (Point D to Point F; Alternative 1) will extend through agricultural properties, which are used for cultivation and grazing purposes. The proposed regional sewage treatment works (Alternative 2) will also be located on cultivated land.

The affected landowners enquired about the possible impact of the sewer line on their current and future agricultural activities as well as the location of the manholes.

#### **Impact on state-owned land**

A large section of the bulk sewer line (refer to above table for further details) and the proposed regional sewage treatment works (Point D to STW; Alternative 1) will be located on state-owned land.

The National Department of Public Works requested detailed plans of the sewer line route and requested to visit the route. Compensation (at market related value) in terms of the servitude would also be required.

#### **Impact on servitudes**

Telkom, Eskom and the Department of Public Works, Roads and Transport (R544) could be impacted in terms of the sewer line extending across their respective servitudes.

Wayleave applications would have to be submitted and the stipulated conditions adhered to.

#### Operational phase - maintenance of sewer line

The landowners in the area utilize boreholes (groundwater) for domestic and agricultural purposes as no municipal services are provided.

A major concern raised with regards to the sewer line and proposed sewage treatment works is the maintenance of the sewer line and associated infrastructure. According to the landowners, the existing sewage treatment works, pump stations and sewer lines are not maintained, leading to surface water pollution.

It is feared that the proposed infrastructure will also not be maintained, which could lead to surface water and groundwater pollution in the area. This could in turn, impact on the health of the residents and animals.

The issues/concerns raised by the interested and affected parties and recorded in Section 4 of the scoping report will be investigated during the EIA phase and feedback provided in the Environmental Impact Report.

#### 6.3 Potential environmental impacts identified

An indication of the environmental features present along the proposed route (Alternative 1 and Alternative 2) is provided in Section 3 of this report. In summary, the following will be impacted in terms of the proposed route (Alternative 1 and Alternative 2):

ALTERNATIVE 1			
ROUTE POINT (Figure 2.1 & Figure 2.2)	ENVIRONMENTAL FEATURE OF IMPACTED TO BE IMPACTED	STATUS OF LAND	
Point A to Point B	Natural vegetation and possible animal habitats  Two tributaries of the Blesbokspruit and possibly associated wetlands (near Point A and Point B)	Undeveloped land	
Point B to Point C	Tributary of Blesbokspruit and associated wetland at Point B and C	Land currently being developed (Siyanqoba residential development)  Developed area (Leeuwpoort Smallholdings)	
Point C to Point D	Tributary of Blesbokspruit and associated wetland at Point C	Developed area (Leeuwpoort Smallholdings)	
Point D to Point E	Tributary of Klipspruit and associated wetland (Point E)	Developed area (Leeuwpoort Smallholdings)	
Point F to Point F	Tributary of Klipspruit and associated wetland (Point E)	Will extend through agricultural land (cultivated).	
TOTAL E CO FORTE	Brugspruit and associated wetland (Point E to Point F)		
Point F to Point G	Brugspruit and associated wetland (Point F)	Vacant land	

In terms of Alternative 2, the proposed route is exactly the same as that of Point A to Point D of Alternative 1 and would thus impact on the same environmental features as indicated in the table above. The only difference is from Point D to the proposed new regional sewage treatment works where the proposed route and site would impact on agricultural land (cultivated land).

As indicated in the above-mentioned table, only the route between Point A and Point B will extend through undeveloped land where the environmental features have been impacted to a limited extent. **Natural vegetation and possible animal habitats are thus still present and would be impacted in terms of the installation of the proposed sewer line. The said area is also rocky providing potential habitats for both plants and animals.** 

Between Point B and Point C, land is currently being developed in terms of the Siyanqoba residential area resulting in impacts on the environmental features of the said area. Based on the current plan, Alternative 1 and Alternative 2 would only extend through a small section of this developing area. The potential impact on the Siyanqoba residential development will have to be quantified as part of the EIA phase of the project.

The environmental features of the Leeuwpoort Smallholding area (i.e. between Point B and D) have already been impacted in terms of the development of this area and associated activities. A number of smallholdings

will be impacted in terms of the proposed sewer line. The potential impact on the individual Leeuwpoort Smallholdings in terms of impact on infrastructure, boreholes, agricultural activities, etc. will have to be quantified as part of the EIA phase of the project. Mention was made of a large underground hole being present on one of the smallholdings.

Agricultural land (cultivated lands/grazing) is present from Point D to Point G where the proposed route will link to the Klipspruit Sewage Treatment Works. The environmental features of this route have thus already been impacted in terms of agricultural activities. According to the AGIS Comprehensive Map drafted by the Department of Agriculture, Forestry and Fisheries, the area is indicated as of High potential arable land that would be impacted upon. The proposed installation of the sewer line would thus impact on High potential arable land and agricultural activities currently taking place. The potential impact on the current and future agricultural activities taking place will have to be quantified as part of the EIA phase of the project. Concerns in this regard were recorded as part of the public participation process followed.

In terms of natural vegetation and animal habitat, the majority of the route falls within the category – Heavily Modified (Figure 3.11) according to the Mpumalanga Biodiversity Sector Plan (MBSP, 2013). Moderately Modified (Old Lands) and Other Natural Areas are also indicated to be present (Figure 3.11).

The area near the Blesbokspruit (Point A to Point C) is indicated as CBA Optimal (yellow; Figure 3.11). However, most of the 'CBA Optimal' area is currently being impacted/destroyed as a result of the new Siyanqoba residential development. The vegetation and animal habitats within this area are thus being impacted upon.

The area adjacent to the Brugspruit (Point F to G) is indicated as a CBA (Critical Biodiversity Area) Irreplaceable (red; Figure 3.11) but has been impacted in terms of agricultural activities (cultivated lands).

Even though the proposed sewer line route has been impacted upon, natural vegetation and animal habitats are still present in the area, especially adjacent to the Blesbokspruit (e.g. between Point A and B), Brugspruit, Klipspruit and their tributaries.

In view of the above-mentioned, a biodiversity study (vegetation/flora and fauna/animal life) will be undertaken during the EIA phase of the project in order to determine the status of the biodiversity (vegetation and animal life) along the proposed route.

The proposed sewer line will be located in close proximity to the Blesbokspruit, Brugspruit and Klipspruit and will also cross the following surface water environments:

- Tributary of the Blesbokspruit near Pine Ridge (Point B; Alternatives 1 and 2);
- Tributary of the Blesbokspruit in Leeuwpoort Smallholdings (Point C; Alternatives 1 and 2);
- Wetland/tributary of the Klipspruit (Point E; Alternative 1 only);
- o Brugspruit (Points F to G; Alternative 1 only).

The areas adjacent to the Blesbokspruit, Klipspruit, Brugspruit and their tributaries are indicated as Ecological Support Areas (ESAs): Wetlands in the Mpumalanga Biodiversity Sector Plan (MBSP, 2013).

In view of the importance of these surface water environments and their associated wetlands, both a wetland assessment and an aquatic assessment will be commissioned as part of the EIA phase in order to quantify the impact in terms of the installation of the proposed sewer line on these systems.

During the operational phase, additional effluent from the Klipspruit STW as a result of the new bulk sewer line could impact on the Brugspruit and/or Klipspruit, especially if the Klipspruit STW is not upgraded to accommodate the additional sewage. The potential impact on these surface water environments in terms of increased effluent from the Klipspruit STW as well as the current status of the Klipspruit STW will be investigated as part of the EIA phase.

Should Alternative 2 be implemented, a new sewage treatment works will be constructed as indicated. The proposed regional sewage treatment works will be located within cultivated land and not near any surface water environments. The proposed regional sewage treatment works should thus not have a direct impact on any surface water environments. However, effluent from the sewage treatment works could have an indirect impact on the Blesbokspruit in terms of water quality and quantity. The effluent could also impact on the surrounding agricultural land in terms of water logging and on nearby residents in terms of smell. These impacts would be investigated during the EIA phase.

As indicated in Section 3.13, it is currently not known if any sites of archaeological and cultural interest (including graves) are located along the proposed route (Alternatives 1 and 2) or at the regional sewage treatment works site (Alternative 2). The National Heritage Resources Act (Act 25 of 1999) requires that a Heritage Impact Assessment be conducted for the construction of a linear development exceeding 300 m in length. The presence of any sites of archaeological and cultural interest (including graves) will be determined through the Phase I Heritage Impact Assessment to be conducted as part of the EIA phase.

According to the palaeontological map supplied by the South African Heritage Resources Agency (SAHRA, 2014), the palaeontological sensitivity of the study area is deemed to range from very high (i.e. near the Klipspruit STW/Point F to G of Alternative 1) to moderate (i.e. most of Alternative 1 (Point A to F); entire Alternative 2 (Point A to STW). In view of this, a desktop study, field assessment and protocol for finds are required. *The required palaeontological study will be conducted as part of the EIA phase.* 

#### 6.4 Alternatives

As indicated in Section 5, various alternatives in terms of the project will be investigated in order to determine which alternative will have the least impact on the natural, social and economic environment.

According to the project engineers, the Pine Ridge Pump Station will be decommissioned as part of the proposed project, since the sewage will gravitate towards either the Klipspruit STW or a new regional sewage treatment works.

However, a new sewer pump line is currently being installed from the Pine Ridge Pump Station to the Klipspruit STW for the Siyanqoba residential development. Confirmation is thus required from the project engineers as to whether or not the Pine Ridge Pump Station will be decommissioned. If not, the eMalahleni Local Municipality must indicate whether this pump station has sufficient capacity for the additional sewage or whether it will be upgraded. A time line in this regard would also have to be provided. Surface water pollution could take place if the Pine Ridge Pump Station is not decommissioned and does not have sufficient capacity for the additional sewage.

In addition, more information is required regarding the Siyanqoba sewer system and its potential impact on this project or vice versa.

#### 6.5 Conclusion

Through the scoping phase, it is evident that various issues require further investigation before the proposed development can be approved. The project is thus to proceed to the Environmental Impact Assessment phase.

Section 7 of the scoping report provides an indication of the tasks to be completed and the specialist studies to be commissioned during the Environmental Impact Assessment (EIA) phase in order to address the above-mentioned.

#### 7. Plan of Study for EIA

The aim of the environmental impact assessment phase will be as follows:

- To supplement information contained in the Scoping Report regarding the natural and social environments of the site to be affected by the proposed development;
- To assess the potential impacts of the proposed development on the environment;
- o To identify and recommend mitigation measures to minimize the potential impact of the development on the environment;
- To compile an Environmental Management Plan (EMP), which will include the recommended mitigation measures;
- To provide the Department of Agriculture, Rural Development, Land and Environmental Affairs with sufficient information to make an informed decision regarding the proposed development.

#### 7.1 Evaluation of the Scoping Report

The draft Scoping Report (dated: April 2016) will be submitted to the Department of Agriculture, Rural Development, Land and Environmental Affairs for evaluation purposes. A hard copy of the document will also be forwarded to the following authorities for evaluation (30-day period):

- · Department of Water and Sanitation;
- Mpumalanga Tourism and Parks Agency;
- eMalahleni Local Municipality.

An electronic copy of the draft Scoping Report will be made available during the above-mentioned period to the interested and affected parties and stakeholders consulted and/or registered as part of the scoping process (see Section 4 of this report).

The various departments, stakeholders and interested and affected parties will be requested to forward any comments on the report to the consultant within the 30 day period provided. A register will be kept of all comments received in terms of the evaluation of the report. These comments will then be included and addressed in a final Scoping Report.

A hard copy of the draft Scoping Report will be left at the eMalahleni (Witbank) Public Library. An electronic version will be made available on the company website (<a href="www.cleanstreamsa.co.za">www.cleanstreamsa.co.za</a>) and on cd (on request).

An advertisement in this regard will also be placed in the Witbank News in order to inform I&APs of availability of the draft Scoping Report for evaluation purposes.

The final Scoping Report (including the comments received) will be submitted to the Department of Agriculture, Rural Development, Land and Environmental Affairs for decision making.

The Environmental Impact Report will be compiled once the final Scoping Report has been approved by the Department of Agriculture, Rural Development, Land and Environmental Affairs.

#### 7.2 Additional public participation during EIA phase

As indicated in Section 6.1, landowners/users who did not provide comment (Table 4.2) or could not be traced during the scoping phase will again be contacted during the EIA phase in order to obtain their comments with regards to the said project.

#### 7.3 Specialist studies (aspects to be addressed by specialists)

Through the scoping phase, it is evident that various issues require further investigation before the proposed development can be approved.

The following specialist studies will thus be commissioned:

- Heritage Impact Assessment;
- o Palaeontological Impact Assessment;
- Vegetation and plant species assessment;
- o Faunal (animal life) assessment;
- Wetland assessment;
- Aquatic assessment.

#### 7.3.1 Heritage Impact Assessment

A Heritage Impact Assessment (as required in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999)) will be conducted in order to determine whether any sites of archaeological and/or cultural interest are located on or near the said site. Dr. Anton van Vollenhoven, an accredited archaeologist, will conduct the assessment.

The scope of work will entail the following:

- Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property.
- Study background information on the area to be developed.
- Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value.
- Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
- Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources by the proposed development.
- Review applicable legislative requirements.

Comments obtained through the EIA public participation process (Section 4 of this report) will be addressed as part of this study.

#### 7.3.2 Palaeontological Impact Assessment

A Palaeontological Impact Assessment (as required in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) will be conducted. Dr. Heidi Fourie, an accredited palaeontologist, will conduct the assessment.

The scope of work will entail the following:

 Document palaeontological resources in the area to be developed by utilizing geological maps, scientific literature, institutional fossil collections, satellite images, aerial maps and topographical maps;

- Provide an assessment of observed or inferred palaeontological heritage within the proposed development site;
- Make recommendations (if any) for protection, mitigation or monitoring of palaeontological resources identified.

Comments obtained through the EIA public participation process (Section 4 of this report) will be addressed as part of this study.

#### 7.3.3 Vegetation and plant species assessment

A vegetation and plant species assessment in order to determine the status of the vegetation along the proposed sewer routes will be undertaken by Ina Venter of Kyllinga Consulting.

The scope of work will include the following:

- Identification of plant communities/habitat types along the proposed routes;
- Compilation of species lists of the plant communities identified;
- Determining if the vegetation is primary or secondary and identifying disturbances;
- Compilation of a list of medicinal and invasive plant species;
- Searching for Red Data plant species and species of conservation importance;
- Determining the sensitivity and conservation importance of the vegetation;
- · Impact assessment and proposed mitigation measures;
- Ecological Management Plan.

Comments obtained through the EIA public participation process (Section 4 of this report) will also be incorporated as part of this study.

#### 7.3.4 Fauna (animal life) assessment

A fauna (animal life) assessment in order to determine the status of the fauna (animal life) along the proposed sewer routes will be undertaken by Ina Venter and her team of Kyllinga Consulting.

The scope of work will include the following:

- An avifaunal (bird) study;
- A mammal investigation (excluding trapping procedures);
- An overview of the herpetofauna (excluding detailed sampling methods);
- Verification of the occurrence or potential occurrence of threatened, nearthreatened, endemic of rare bird, mammal, herpetofauna or invertebrate taxa:
- A sensitivity and habitat map (including buffer zones if applicable)
- Recommendations and mitigation measures where applicable.

Comments obtained through the EIA public participation process (Section 4 of this report) will also be incorporated as part of this study.

#### 7.3.5 Wetland assessment

A wetland assessment to determine whether any wetlands occur along the proposed sewer routes and the importance thereof will be conducted by Ina Venter of Kyllinga Consulting.

The scope of work will include the following:

- Field delineation of the wetlands along the sewer routes according to the Department of Water Affairs (DWA) delineation guidelines;
- Desktop delineation of the wetlands within 500m of the sewer routes on aerial photographs;
- Present Ecological State (PES) and Ecological Importance and Sensitivity (EIS) assessments;
- Buffer zone recommendations;
- Impact assessment and proposed mitigation measures;
- Wetland management plan;
- Wetland rehabilitation plan.

Comments obtained through the EIA public participation process (Section 4 of this report) will also be incorporated as part of this study.

#### 7.3.6 Aquatic assessment

A specialist aquatic assessment will be undertaken in view of the proposed sewer line possibly crossing the Klipspruit and the release of effluent from the proposed new STW into the Blesbokspruit. This specialist aquatic assessment will be conducted by Dr. Pieter Kotze and his team from Clean Stream Biological Services (Pty) Ltd.

The scope of work will include the following:

- Baseline assessment of the present status of the aquatic fauna (fish and macroinvertebrates) and their relevant habitats of the lotic ecosystems (streams/rivers).
- An impact assessment to identify the potential impact of the proposed project on the aquatic fauna and its relevant habitats.
- Recommendations regarding possible mitigation strategies that may reduce or prevent the identified risks.

Comments obtained through the EIA public participation process (Section 4 of this report) will also be incorporated as part of this study.

#### 7.4 Method of assessing issues and alternatives

#### **7.4.1** Issues

Issues of concern will be identified by way of objections/concerns received, approvals granted (subject to certain conditions) and by consultation with various authorities and interested and affected parties as detailed in the preceding sections.

The identified 'environmental issues' will be defined as either:

- Definable issues e.g. air pollution
- > The cause of an impact e.g. impacts as a result of construction; operational or decommissioning phases.
- > A generally expressed concern e.g. social disruption of communities.

The relevant and important issues will be focused on.

Issues concerning the following project phases will also be identified:

- Construction phase
- Operational phase
- Decommissioning phase

#### 7.4.2 Impacts

Potential impacts that could take place during both the construction and the operational phases will be identified by overlaying the proposed layout plans on the environmental sensitivity map for the site.

#### **Evaluation of impacts**

The evaluation of impacts will be conducted in terms of the following criteria:

• **Nature of impact** e.g. impact on surface water; groundwater; natural vegetation; etc.

Extent of impact

Site	Effect limited to the site and its immediate surroundings
Local	Effect limited to within 3-5 km of the site
Regional	Effect will have an impact on a regional scale

Duration of impact

2 41 410 11 01 111 1 1 1 1 1 1 1 1 1 1 1	
Short	Effect lasts for a period 0 to 5 years
Medium	Effect continues for a period between 5 and 10 years
Long	Effect will cease after the operational life of the activity either because of natural process or by human intervention
Permanent	Where 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

• Intensity of impact

Low	The impact affects the environment in such a way that natural, cultural and social functions and processes are not affected	
Medium	Where the affected environment is altered but natural, cultural and social functions and processes continue albeit in a modified way	
High	Where natural, cultural or social functions or processes are altered to the extent that it will temporarily or permanently cease	

Probability

Improbable	Less than 33% chance of occurrence
Probable	Between 33 and 66% chance of occurrence
Highly	Greater than 66% chance of occurrence
probable	
Definite	Will occur regardless of any prevention measures

• Significance of impact

ı	Low	Where the impact will have a relatively small effect on the
ı		environment and will not have an influence on the
l		decision
I	Medium	Where the impact can have an influence on the
l		environment and the decision and should be mitigated
I	High	Where the impact definitely has an impact on the
ı		environment an the decision regardless of any possible
l		mitigation

#### Status

Positive	Impact will be beneficial to the environment
Negative	Impact will not be beneficial to the environment
Neutral	Positive and negative impact

#### Confidence

Low	It is uncertain whether the impact will occur
Medium	It is likely that the impact will occur
High	It is relatively certain that the impact will occur

It must be noted that many of the potential negative consequences can be mitigated successfully. It will however, be necessary to make a thorough assessment of all possible impacts in order to ensure that environmental considerations are taken into account, in a balanced way, as far as possible, supporting the aim of creating a healthy and pleasant environment.

#### 7.4.3 Alternatives

As indicated in Section 5, various alternatives in terms of the project will be investigated in order to determine which alternative will have the least impact on the natural, social and economic environment.

According to the project engineers, the Pine Ridge Pump Station will be decommissioned as part of the proposed project, since the sewage will gravitate towards either the Klipspruit STW or a new regional sewage treatment works.

However, a new sewer pump line is currently being installed from the Pine Ridge Pump Station to the Klipspruit STW for the Siyanqoba residential development. Confirmation is thus required from the project engineers as to whether or not the Pine Ridge Pump Station will be decommissioned. If not, the eMalahleni Local Municipality must indicate whether this pump station has sufficient capacity for the additional sewage or whether it will be upgraded. A time line in this regard would also have to be provided.

In addition, more information is required regarding the Siyanqoba sewer system and its potential impact on this project or vice versa.

If necessary, additional alternatives will be identified by way of discussion with authorities, interested and affected parties and the client.

Alternatives will also be identified by overlaying the proposed layout plans on the environmental sensitivity map for the site (i.e. once the specialist studies have been conducted).

The 'No Project Option' will be included in the assessment. Not all alternatives will be investigated in the same degree of intensity – only the feasible ones. The EIA report will include a description of each alternative for the project as well as the advantages and disadvantages of each.

#### 7.5 Evaluation of the Environmental Impact Report (EIR)

A copy of the Draft Environmental Impact Report will be made available for evaluation purposes. A period of 30 days will be provided for the evaluation of the said report. The Final Environmental Impact Report (including the comments received) will then be submitted to the DARDLEA for final decision making.

### 7.6 Informing Interested and Affected Parties of the Record of Decision

On receipt of the Environmental Authorisation and Record of Decision (positive or negative decision), all identified interested and affected parties (see Section 4 of this report) will be informed by means of facsimile, e-mail or telephonically that the Environmental Authorisation and Record of Decision with regards to the project have been issued. Information w.r.t. the appeal procedure will also be provided.

An advertisement in this regard will also be placed in the Witbank News in order to inform I&APs of the decision.

A copy of the Environmental Authorisation and Record of Decision will be made available on the company website (<a href="www.cleanstreamsa.co.za">www.cleanstreamsa.co.za</a>).

#### **REFERENCES**

- AGIS Agriculture Potential Atlas. 2015.
   [www.agis.agric.za/agismap\_atlas]
- Council for Geoscience. 1: 250 000 Geological Series Map, 2528
   Pretoria.
- ❖ Lotter, M.C., Lechmere-Oertel, R. & Cadman, M. 2014. Mpumalanga Biodiversity Sector Plan Handbook. Mpumalanga Tourism & Parks Agency, Nelspruit.
- Mpumalanga Tourism and Parks Agency. 2013. Mpumalanga Biodiversity Sector Plan Map, 2013.
- Mucina, L. & Rutherford, M. C. (eds). 2006. The Vegetation of South Africa, Lesotho and Swaziland. Strelitzia 19. South African National Biodiversity Institute, Pretoria.
- Mucina, L., Rutherford, M.C. & Powrie, L.W. (eds). 2005. Vegetation Map of South Africa, Lesotho and Swaziland, 1: 1 000 000 scale sheet maps. South African National Biodiversity Institute, Pretoria.
- ❖ National Environmental Management Act 1998 (Act No. 107). Republic of South Africa, Cape Town.
- ❖ National Water Act, 1998 (Act No 36 of 1998). Republic of South Africa, Cape Town.
- **❖ South African Heritage Resources Information System (SAHRIS).** 2015. [www.sahra.org.za/sahris].



#### **APPENDIX 1:**

#### **APPLICATION FORM**

- Letter from Clean Stream Environmental Services (CSES) (dated: 19 April 2016;
   Ref: EIA 2016/01) regarding the submission of the application form.
- Copy of application form.



#### **APPENDIX 2:**

#### **CURRICULUM VITAE**

- Mrs. A. Erasmus Pr. Sci. Nat.
- Ms. R. Janse van Rensburg
- List of projects



#### **APPENDIX 3:**

#### **ADVERTISING OF THE PROJECT**

- A copy of the notice published in the Witbank News, 5 February 2016.
- A copy of the on-site notice.
- Printout of company website page <u>www.cleanstreamsa.co.za</u> New Projects Notices.
- ◆ Printout of company website page <u>www.cleanstreamsa.co.za</u> − New Projects − Background Information Documents.
- ◆ E-mail from Clean Stream Environmental Services (CSES) (dated: 15 February 2016) to Ms. E. Harmse.
- ♦ E-mail from CSES (dated: 16 February 2016) to Ms. L. Steyn.
- ♦ E-mail from CSES (dated: 4 March 2016) to Ms. M. Mampuru.
- E-mail from CSES (dated: 10 March 2016) to Ms. S. Stevens.



# APPENDIX 4: BACKGROUND INFORMATION DOCUMENT



#### **APPENDIX 5:**

## CORRESPONDENCE WITH THE DIRECTLY AFFECTED LANDOWNERS/USERS

- ♦ E-mail and letter from Clean Stream Environmental Services (CSES) (dated: 12 February 2016) to Sarovic Investments cc (S Cholich and R Sarovic).
- ♦ E-mail and letter from CSES (dated: 12 February 2016) to VIPCON Pty. Ltd. (Siyangoba residential development).
- ♦ E-mail and letter from CSES (dated: 15 February 2016) to Wandima Environmental Consultants.
- ◆ E-mail and letter from CSES (dated: 15 February 2016) to the National Department of Public Works (G. Masuku).
- ♦ Letter from CSES (dated: 5 February 2016) to S. Natlhong.
- ◆ E-mail and letter from CSES (dated: 15 February 2016) to Manala Mgibe CPA (V. Tlou)
- ♦ Letter from CSES (dated: 5 February 2016) to D.J.S. Ellis.
- ♦ E-mail and letter from CSES (dated: 15 March 2016) to M. Mampuru.
- ♦ Letter from CSES (dated: 5 February 2016) to W.P. Wallis.
- E-mail and letter from CSES (dated: 15 February 2016) to R. Minnaar.
- ♦ Letter from CSES (dated: 5 February 2016) to K.A. Khumalo.
- ♦ Letter from CSES (dated: 5 February 2016) to S.M. Moritz.
- ♦ Letter from CSES (dated: 5 February 2016) to M.P. Mothoa.
- ♦ Letter from CSES (dated: 5 February 2016) to G. van Rooyen.
- E-mail and letter from CSES (dated: 16 February 2016) to J.F.B. Kleynhans.



#### **APPENDIX 6:**

## CORRESPONDENCE WITH GOVERNMENT DEPARTMENTS AND OTHER STAKEHOLDERS

◆ E-mail from Clean Stream Environmental Services (CSES) (dated: 12 February 2016) to the following:

L Betha	Wildlife and Environment Society of South Africa
S Botha	Sector 1 CPF Kalbasfontein/Kromdraai
T Buthelezi	eMalahleni Local Municipality
B Viljoen	Department of Public Works, Roads and Transport
D du Plessis	Transvaal Landbou Unie
E Lennox	Eskom Transmission
S Links	Nkangala District Municipality
M Loock	Department of Co-operative Governance and Traditional Affairs
N Maake	Eskom Transmission
H Marais	Mpumalanga Wetland Forum
F Mashabela	Department of Agriculture, Forestry and Fisheries
S Mathavhela	Department of Mineral Resources
M Moloko	Eskom Mpumalanga Land and Rights
L Motsisi	Eskom Transmission
K Knarasoo	Mpumalanga Tourism and Parks Agency
E Nkabinde	eMalahleni Local Municipality
T Pookgoadi	Ward Councilor
A Rambuda	Department of Water and Sanitation
S Singh	Department of Culture, Sports and Recreation
J Smit	Telkom
J Venter	Department of Agriculture, Rural Development and Land
	Administration

- ◆ E-mail (dated: 15 February 2016) to the Department of Rural Development and Land Reform (Commission on Restitution of Land Rights) official: ND Nkambule.
- ♦ E-mail from CSES (dated: 26 February 2016) to M. Makgalemele (eMalahleni Local Municipality).
- ♦ Webpage printout (dated: 15 February 2016) from the South African Heritage Resources Information System.
- ◆ Completed comment sheet (dated: 15 February 2016) from B. Viljoen (Department of Public Works, Roads and Transport).
- ◆ Letter from Eskom Distribution (dated: 22 February 2016; Ref: LD-INV/E/TL/243/2016) to CSES.
- ♦ E-mail (dated: 15 February 2016) from K. Knarasoo (Mpumalanga Tourism and Parks Agency) to CSES.
- E-mail (dated: 15 February 2016) from CSES to K. Knarasoo.
- ♦ E-mail and letter (dated: 15 February 2016) from J. Stoop (Telkom) to CSES.



#### **APPENDIX 7:**

## COMMENTS RECEIVED FROM DIRECTLY AFFECTED AND ADJACENT LANDOWNERS/USERS

- ♦ E-mail (dated: 16 February 2016) from G. Masuku (National Department of Public Works) to CSES.
- ♦ E-mail (dated: 16 February 2016) from CSES to G. Masuku.
- ♦ E-mail and completed comment sheet (dated: 29 February 2016) from S. Mkwanazi to CSES.
- E-mail (dated: 4 March 2016) from M. Beeken (Potgieter-Beeken Attorneys) to CSES.
- Completed comment sheet (dated: 4 March 2016) from R. Ellis.
- E-mail (dated: 9 March 2016) from M. Mampuru to CSES.
- E-mail (dated: 14 March 2016) from M. Mapuru to CSES.
- ♦ E-mail (dated: 18 March 2016) from P. Wallis to CSES.
- ♦ E-mail (dated: 18 March 2016) from CSES to P. Wallis.
- ♦ E-mail (dated: 23 March 2016) from CSES to P. Wallis and B. Kleynhans.
- Completed comment sheet (dated: 29 February 2016) from P. Khumalo.
- Completed comment sheet (dated: 1 March 2016) from S. Moritz.
- Completed comment sheet (dated: 19 February 2016) from B. Kleynhans.
- Completed comment sheet (dated: 18 February 2016) from G. van Rooyen.
- Letter (dated: not dated) from L. Steyn.
- Completed comment sheet and letter (dated: 4 March 2016) from R. Steyn.
- ◆ Completed comment sheet (dated: 14 March 2016) from F.B. Mhlambi
- ♦ E-mail from CSES (dated: 22 April 2016) to stakeholders and government departments.
- E-mail from CSES (dated: 22 April 2016) to interested and affected parties.
- Letter (dated: 22 April 2016) from CSES to interested and affected parties.
- ♦ E-mail (dated: 22 April 2016) from S. Mortiz to CSES.

