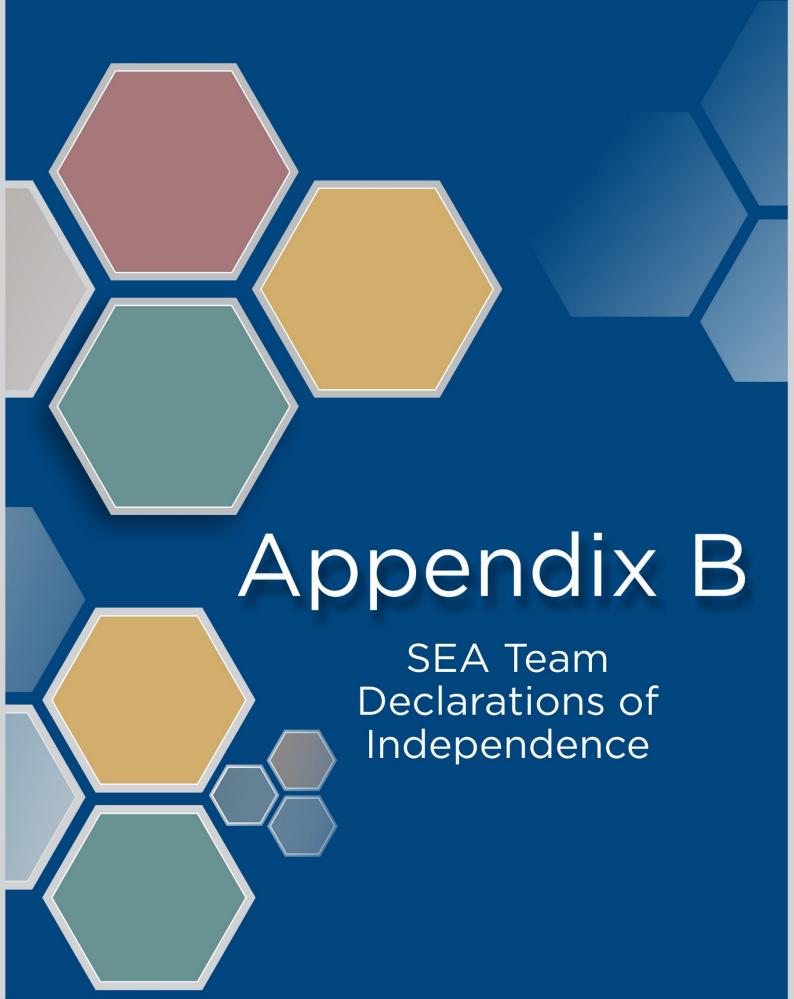
Strategic Environmental Assessment for the Development of a Phased Gas Pipeline Network in South Africa



SEA Team Declarations of Independence

Specialist and Affiliation	Project Role
Integrated Biodiversity and Ecology Assessment (Terrestrial and Aquatic Ecosystems, and Species)	
Luanita Snyman-Van der Walt, CSIR	Integrating Author
Dr. David Le Maitre; CSIR	Contributing Author
Dr. Graham von Maltitz; CSIR	Contributing Author
Simon Bundy; SDP Ecological and Environmental Services	Contributing Author
Alex Whitehead; SDP Ecological and Environmental Services	Contributing Author
Lizande Kellerman; CSIR	Contributing Author
Simon Todd; 3 Foxes Biodiversity Solutions	Contributing Author
Dr. Derek Berliner; Eco-Logic Consulting	Contributing Author
Dr. Lara Van Niekerk; CSIR	Contributing Author
Steven Weerts; CSIR	Contributing Author
Gary de Winnaar; GroundTruth	Contributing Author
Dr. Vere Ross-Gillespie; GroundTruth	Contributing Author
Albert Froneman; Chris Van Rooyen Consulting	Contributing Author
Chris van Rooyen; Chris Van Rooyen Consulting	Contributing Author
Kate MacEwan; Inkululeko Wildlife Services	Contributing Author
Seismicity Assessment	
Professor Raymond J Durrheim; University of the Witwatersrand Johannesburg	Integrating Author
Brassnavy Manzunzu; Council for Geoscience	Contributing Author
Settlement Planning, Disaster Management and related Social Impacts Report	
Surina Laurie, CSIR ¹	Integrating Author
Annick Walsdorff, CSIR	Integrating Author
Elsona van Huyssteen; CSIR	Contributing Author
Cheri Green; CSIR	Contributing Author
Dave McKelly; CSIR	Contributing Author
Tony Barbour; Tony Barbour Environmental Consulting and Research	Corresponding Author
Dr Hugo van Zyl; Independent Economic Researchers	Corresponding Author
Professor Doreen Atkinson; Nelson Mandela University	Contributing Author
Additional Issues (Agriculture, Defence, Civil Aviation, and Heritage)	
Annick Walsdorff, CSIR	Integrating Author
Rohaida Abed, CSIR	Integrating Author
Fahiema Daniels, SANBI	Contributing Author
Tsamaelo Malebu, SANBI	Contributing Author
Johann Lanz; Independent Consultant	Contributing Author
Gas Opportunities Analysis	
Rae Wolpe; Impact Economix	Contributing Author

 $^{^{\}rm 1}$ Note that this Integrating Author is no longer under the employ of the CSIR.

Make, Luan'ta Snyman - vd Wolf, as the appointed independent specialist(s) hereby declare that live:

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct:
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the
 potential of influencing the objectivity of any report, plan or document to be prepared by myself, or
 decisions based thereor;
- have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

(J

Name of company:

COUNCIL FOR SCIENTIFIC & INDUSTRIAL

RESEARCH

Professional Registration (incl number):

FR. Sci. NAT. ENVIRONMENTAL SCIENCE (400128/16)

Date: 04 MARCH 2019

Specialist Declaration

We. Dray III he Markey as the appointed independent specialist(s) hereby declare that I/w

- · act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct;
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- · have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the
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 decisions based thereor:
- have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company

CSIR

Professional Registration (incl number):

Date: /// December 2018

I/We, $\underline{Grahamven Ma/b. L_{2}}$, as the appointed independent specialist(s) hereby declare that liwe:

- act/ed as the independent specialist in this study;
- · regard the information contained in this report as it relates to my specialist input/study to be true and
- · have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- · have expertise in conducting this specialist study;
- . undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- have no, and will not engage in, conflicting interests in the proposed development; and
 realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company: 251/2

Professional Registration (incl number):
SACWASP 400031/05

Date: 30/10/2018

Specialist Declaration

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of

Signature of the specialist (s):

SDP Keological + KW. Services

Professional Registration (incl number): 4000 93 106

as the appointed independent specialist(s) hereby declare that

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon.
- have no, and will not engage in, conflicting interests in the proposed development; and realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company:

SOP Ecological and Environmental Services

Professional Registration (incl number):

SACNASP 400176/10

3/10/2018

Specialist Declaration

INM. LIZANDE KELLERMAN, as the appointed independent specialist(s) hereby declare that INMEX

- act/ed as the independent specialist in this study;
- · regard the information contained in this report as it relates to my specialist input/study to be true and
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- · have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- have no, and will not engage in, conflicting interests in the proposed development; and
- · realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company:

CSIR ENVIRONMENTAL MANAGEMENT SERVICES

Professional Registration (incl number):

SACNASP BOTANICAL SCIENCES (REG. NO. 400076/10)

04/03/2019

I, Dr Derek Berliner, as the appointed independent specialist(s) hereby declare that I/:

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and
- · have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development:
- have expertise in conducting this specialist study;
 undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or
- have no, and will not engage in, conflicting interests in the proposed development; and
- · realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company:

Reading as Eco-logic Consulting

Professional Registration (incl number):

The Southern African Institute of Ecologists and Environmental Scientists (6012065122086)

Date: 30 /10/2018

Specialist Declaration

I, _Dr Lara van Niekerk_, as the appointed independent specialist(s) hereby declare that I:

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct;
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- · have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company: CSIR

Professional Registration (incl number): Pr Sc Nat

Date: 20/02/2019

I, STEVEN WEERTS, as the appointed independent specialist(s) hereby declare that I:

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct;
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the
 potential of influencing the objectivity of any report, plan or document to be prepared by myself, or
 decisions based thereon.
- have no conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company

Professional Registration (incl number):

Date:

31/10/2018

Specialist Declaration

Gary de Wînnaar, and Vere Ross-Gillespie

, as the appointed independent specialist(s) hereby declare that

- · act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct;
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the
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 decisions based thereon:
- have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Gary de Winnaa

Vere Ross-Gillespi

Name of company: GroundTruth

Professional Registration (incl number):

400454/13 (Gary de Winnaar), and 115648/16 (Vere Ross-Gillespie)

Date: 30 October 2018

I/We, Albert Froneman and Chris van Rooyen, as the appointed independent specialist(s) hereby declare that

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
- . undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- have no, and will not engage in, conflicting interests in the proposed development; and
- · realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section

Signature of the specialist (s)

Name of company: Afrimage Photography t/a/ Chris van Rooyen Consulting

Professional Registration (incl number): Albert Froneman Pr. Sci. Nat. 400177/09

Date: 29 October 2018

Specialist Declaration

, as the appointed independent specialist(s) hereby declare that I/we:

- act/ed as the independent specialist in this study;
 regard the information contained in this report as it relates to my specialist input/study to be true and
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development:
- have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- have no, and will not engage in, conflicting interests in the proposed development; and
 realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section

Signature of the specialist (s):

Inkululeto Wildlife Services

Professional Registration (Incl number): 400123/05 Pr. Sci. Nat. Environmental Science Zoological Science

Date: 30 10 2018

I/We, Professor Raymond John DURRHEIM, as the appointed independent specialist(s) hereby declare that I/we:

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct;
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- · have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the
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 decisions based thereon.
- . have no, and will not engage in, conflicting interests in the proposed development; and
- · realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company: University of the Witwatersrand, Johannesburg

Professional Registration (incl number): n/a

Date: 31 October 2018

Specialist Declaration

I/We, Brassnavy Manzunzu, as the appointed independent specialist(s) hereby declare that I/we:

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;

 have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- · have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company: Council for Geoscience

Professional Registration (incl number): SACNASP (400107/13)

Date: 31/10/2018

Sunna Laun'e, as the appointed independent specialist(s) hereby declare that

- act/ed as the independent specialist in this study;
- regard the Information contained in this report as it relates to my specialist input/study to be true and correct;
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- · have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the
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- . have no, and will not engage in, conflicting interests in the proposed development; and
- · realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Slaurie

Name of company:

CSIR

Professional Registration (incl number):

Pr. Sc: Nat Environmental Science [400033/15]

4 103 12019

Specialist Declaration

I, _Elsona van Huyssteen_, as the appointed independent specialist(s) hereby declare that I:

- act/ed as the independent specialist in this study:
- regard the information contained in this report as it relates to my specialist input/study to be true and
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or
- have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company: CSIR

Professional Registration (incl number): A/890 Pr Pln (SA)

Date: 22/02/2019

_, as the appointed independent specialist(s) hereby declare that

- · act/ed as the independent specialist in this study;
- · regard the information contained in this report as it relates to my specialist input/study to be true and correct:
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
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- have no, and will not engage in, conflicting interests in the proposed development; and
 realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

AGrean

Name of company:

CSIR

Professional Registration (Incl number):

Pr. Pln A/2012/2014 SACPLAN

Date: 5/03/2018

Specialist Declaration

- act/ed as the independent specialist in this study;
- · regard the information contained in this report as it relates to my specialist input/study to be true and
- . have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- have no, and will not engage in, conflicting interests in the proposed development; and
- · realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company: CSIR

Professional Registration (Incl number): PGP 1288

4 MARCH 2019.

I/We, Tony Barbour as the appointed independent specialist(s) hereby declare that I/we:

- · act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and
- · have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
 undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Subarban

Name of company:

Tony Barbour Environmental Consulting and Research

Professional Registration (incl number):

Date: 25 February 2019

Specialist Declaration

I/We, _Hugo van Zyl_, as the appointed independent specialist(s) hereby declare that I/we:

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and
- · have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
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- · have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company:

Independent Economic Researchers

Professional Registration (incl number): N/A

Date: 04/03/2019

I, Doreen Atkinson, as the appointed independent specialist(s) hereby declare that I/we:

- · act/ed as the independent specialist in this study;
- . regard the information contained in this report as it relates to my specialist input/study to be true and
- · have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development,

 have expertise in conducting this specialist study;
 undertake to disclose all material information in my possession that reasonably has or may have the
- potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company: Heartland Karoo Institute co

DAHLINSON

Professional Registration (incl number):

Doreen Atkinson: Research Associate, Nelson Mandela University, Port Elizabeth, Staff number 217840

Date: 1 November 2018

Specialist Declaration

AWalsdorff as the appointed independent specialist(s) hereby declare that I:

- act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct;
- . have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
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- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company: CSIR

Professional Registration (incl number):

Date: 05/03/2019

- R Abed as the appointed independent specialist(s) hereby declare that I:
- · act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct;
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- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Abed

Name of company: CSIR

Professional Registration (incl number):

Date: 05/03/2019

Specialist Declaration

Tahilma Daniel

, as the appointed independent specialist(s) hereby declare that I/we:

- · act/ed as the independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct;
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
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- have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s

Name of company:

Sanbi

Professional Registration (incl number):

Date:

7-03-2019

IWe, ISAMAEUT INACES, as the appointed independent specialist(s) hereby declare that I/we:

- act/ed as the Independent specialist in this study;
- regard the information contained in this report as it relates to my specialist input/study to be true and
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
- undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company: South AFRICHM MATJONAL BIODIDERSITY

Professional Registration (incl number):

Date: 03 April 2019

Specialist Declaration

I/We, Johann Lanz, as the appointed independent specialist(s) hereby declare that I/we:

- act/ed as the independent specialist in this study:
- regard the information contained in this report as it relates to my specialist input/study to be true and
- have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;
- have expertise in conducting this specialist study;
 undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing the objectivity of any report, plan or document to be prepared by myself, or
- have no, and will not engage in, conflicting interests in the proposed development; and
- · realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act

Signature of the specialist (s):

Name of company: Johann Lanz - Soil Scientist (sole proprietor)

Professional Registration (incl number): SACNASP Professional Natural Scientist 400268/12

Date: 04 March 2019

I/We, Rae Wolpe, as the appointed independent specialist(s) hereby declare that I/we:

- act/ed as the independent specialist in this study;
 regard the information contained in this report as it relates to my specialist input/study to be true and
- · have performed this work in an objective manner, even if this results in views and findings that are not favourable to the proposed development;

 have expertise in conducting this specialist study:
 undertake to disclose all material information in my possession that reasonably has or may have the
- potential of influencing the objectivity of any report, plan or document to be prepared by myself, or decisions based thereon;
- have no, and will not engage in, conflicting interests in the proposed development; and
- realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist (s):

Name of company: Impact Economix reg. as Wolpe Strategic Economic Consulting

Professional Registration (incl number): N/A

Date: 30 October 2018