PLANT SPECIES COMPLIANCE STATEMENT

Clanwilliam Housing Development and WWTW expansion on a portion of remainder of Erf 279, Clanwilliam

Prepared by: Nicolaas Hanekom
Pri.Sci.Nat (Ecology) 004415
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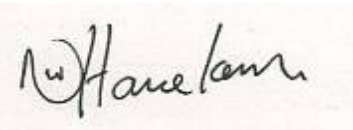
OCTOBER 2026

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I **Nicolaas Willem Hanekom**, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.



Nicolaas Hanekom
Pri.Sci.Nat (Ecology) 004415 **20 October 2026**
Signature of the Specialist: Date:

Enviro-EAP (Pty) Ltd
Name of company (if applicable):

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1. INTRODUCTION

Cederberg Municipality for the Clanwilliam Housing Development in two areas and WWTW expansion on a portion of remainder of Erf 279, Clanwilliam to develop:

Area 1: CLANWILLIAM HOUSING IRDP PROJECT

- 126 Single Residential Zone 1 erven - Average erf size: ±208m²
- 692 Single Residential Zone 2 erven - Average erf size: ±150m²
- 13 Open Space Zone 1 erven
- 5 Community Zone II (church) erven
- 1 Community Zone I (crèche) erven
- 1 Community Zone I (school) erf
- 1 Community Zone I (community center) erf
- 1 Community Zone III (clinic) erf
- 3 Local Business Zone II erven
- 2 Authority & Utility Zone erf
- Transport Zone II erven

With a total development footprint of ±29.3883 ha

Area 2: CLANWILLIAM HOUSING UISP PROJECT
- 459 Single Residential Zone II erven - Average erf size: ±120m²
- 4 Open Space Zone I erven
- 2 Community Zone II (church) erven
- 2 Community Zone I (crèche) erven
- 1 Local Business Zone II erven
- Transport Zone II erven

With a total development footprint of ±19.7680ha

Expansion of the WWTW footprint by approximately 0.5ha to expand the WWTW infrastructure to treat less than 2000 cubic meters of effluent per day.

With a total Development footprint of ±49.6ha

Water Services
The existing water reticulation system of the Cederville reservoir water distribution zone has insufficient capacity to accommodate the proposed development.

Network upgrade
- Item 1 – 190m x 200mm diameter; replace existing 160mm pipe
- Item 2 – 90m x 160m diameter; replace existing 75mm pipe
- Item 3 – 285m x 160mm diameter internal water pipes
- Item 4 – 550mm x 160mm diameter internal water pipes
- CCIW2.1 – 220m x 315mm new supply pipe
- CCIW2.2 – 320m x 315mm; replace existing 75mm pipe
- CCIW2.3 – 260m x 315mm; replace existing 75mm pipe
- CCIW2.6 – 190m x 110mm new supply pipe

Reservoir
- CCIW.B1: 3 000 kL additional storage capacity for Cederville reservoir site
- CCIW.B12: 90 m x 315 mm Ø New feeder pipe to Cederville no. 2 reservoir
- CCIW.B16: 90 m x 315 mm Ø link pipe between Cederville no. 1 & 2 reservoirs
- CCIW.B17: 5 m x 160 mm Ø inter-connection pipe between 2x bulk pipes

Sewer Services
- CCIS6.1 – 380 m x 450 mm Ø Upgrade existing 150 mm Ø outfall sewer
- CCIS6.2 – 950 m x 200 mm Ø Upgrade existing 160 mm Ø outfall sewer
- CCIS6.3 – 475 m x 525 mm Ø Upgrade existing 150 mm Ø bulk sewer

- CCIS2.2 – 370 m x 200 mm Ø Upgrade existing 150 mm Ø outfall sewer
- CCIS2.3 – Upgrade capacity of Milner Street PS to 55 L/s
- CCIS2.4 – 780 m x 315 mm Ø Upgrade existing 200 mm Ø rising main
- CCIS4.1 – 260 m x 200 mm Ø New outfall sewer
- CCIS4.2 – 270 m x 250 mm Ø New outfall sewer
- CCIS4.3 – 350 m x 200 mm Ø New outfall sewer
- CCIS4.4 – New 20 L/s Future PS Cl2
- CCIS4.5 – 1 005 m x 160 mm Ø New rising main

For the development of Area A the following upgrades are required:

- Master plan items CCIS6.2 & CCIS6.3 to reinforce the capacity of the existing gravity system
- between the proposed development and the Clanwilliam WWTP.
- Link services items CCIS4.1 & CCIS4.2 to connect the internal sewer network of the development area to future PS Cl2, and
- Future PS Cl2 (master plan item CCIS4.4) and rising main (master plan item CCIS4.5) to service the larger drainage area.
- A small portion of the development drains towards the existing Milner Street PS, which discharges into the Clanwilliam Gravity drainage areas. The bulk sewer downstream of the Milner Street PS is at capacity and should be upgraded (master plan items CCIS6.1 & CCIS6.3).
- The existing Milner Street PS drainage area has spare capacity to accommodate the erven within development area A which drains towards the Milner Street PS. In the sewer master plan for Clanwilliam upgrading of the Milner Street PS and accommodating rising main is however proposed (refer to master plan items CCIS2.3 & CCIS2.4), as well as upgrading of the main outfall sewer gravitating toward the Milner Street PS (refer to master plan item CCIS2.2). It can be considered to upgrade the PS, rising main and outfall sewer (master plan items CCIS2.2, CCIS2.3 & CCIS2.4) as part of the construction of the development as these items runs through the development area.

For the development of Area B the following upgrades are required:

- Link services items CCIS4.2 & CCIS4.3 to connect the internal sewer network of the development area to future PS Cl2, and
- Future PS Cl2 (master plan item CCIS4.4) and rising main (master plan item CCIS4.5) to service the larger drainage area.

Stormwater

An underground piped stormwater system will be provided to accommodate for the minor storm events (up to RI 1: 5 years). The major storm events will be accommodated within the street reserves. Stormwater run-off will be channelled to the existing Jan Dissels River flowing to the east of the proposed development using existing non-perennial river after it was detained and controlled released on an open space erf specifically created for stormwater control inside the development. Six other outlets on the eastern side will be constructed where stormwater pipe

outlets will release stormwater next to roads and infrastructure. The degraded wetland on the western side and north of the WWTW with its greater open space area will be used to collect the existing stormwater released from the development on the western edge and other generated stormwater on the development. Building rubble and litter, as well as alien invasive trees will be controlled and eradicated from this area.

The stormwater infrastructure, comprising 21 headwalls, four attenuation ponds and a piped connection within the central valley-bottom wetland system, and the refurbishment and expansion of the WWTW, with a new 1.5 Ml/day module and the upgraded works intended to treat at least 3.6 Ml/day at peak, were assessed. With mitigation, the construction impacts and the operational impacts of the stormwater system are of Low significance. Combined with the Wetland Rehabilitation and Management Plan (Delta Ecology, 2026), the stormwater design offers an opportunity to improve the central wetland, which currently receives untreated stormwater from the informal settlement and township.

Roads
Access to the proposed development will be provided from the existing Bloekom Avenue, south of the proposed development, Denne and Buitekant Street to the west and from Oranje, Protea and Viooltjie Streets to the north. The internal roads (main access road 16m wide and other internal roads 10m wide) will consist of surfaced streets.

1.1. Background & Competency

Nicolaas Hanekom is a registered Professional Natural Scientist in the ecological science field with the South African Council for Natural Scientific Professions (“SACNASP”), (Ecology field) and a qualified registered Environmental Assessment Practitioner (“EAP”) who holds a Masters Technologiae, Nature Conservation (“Vegetation Ecology and Biodiversity Assessment”) degree from the Cape Peninsula University of Technology (Refer to Appendix A, CV). Nicolaas Hanekom is suitably qualified SACNASP registered specialist.

1.2. Scope and Objectives

The protocol[1] provides the criteria for the reporting of requirements for the assessment and reporting of impacts on plant species for activities requiring environmental authorisation.

1 Published in Government Notice No. 1150. GOVERNMENT GAZETTE 43855 30 OCTOBER 2020.This gazette is also available free online at www.gpwonline.co.za

General Information
An applicant intending to undertake an activity identified in the Scope of this Protocol, on a site identified as being of "medium sensitivity" for plant species on the national web based environmental screening tool. According to the protocols, where Species of Conservation Concern ("SCC") are found on site or have been confirmed to be likely present, a **Plant Species Specialist Assessment** must be submitted in accordance with the requirements specified for "very high" and "high" sensitivity in this protocol. Similarly, where no SCC are found on site during the investigation or if the presence is confirmed to be unlikely, a **Plant Species Compliance Statement** must be submitted. Since there were no SCC found or likely to occur on site during the field survey, a **Plant Species Compliance Statement** was conducted**.**

1.3. Terms of Reference

The Plant Species Compliance Statement, must be prepared by a suitably qualified specialist in the field of Botanical Science or Ecological Science, on the site being submitted as the preferred development site and must verify:

- That the site is of "low" sensitivity for plant species; and
- Whether or not the proposed development will have any impact on the biodiversity feature.

2. BASELINE PROFILE DESCRIPTION OF BIODIVERSITY AND ECOSYSTEMS, INCLUDING A STATEMENT ON THE DURATION, DATE AND SEASON OF THE SITE INSPECTION AND THE RELEVANCE OF THE SEASON TO THE OUTCOME OF THE ASSESSMENT

The National Vegetation Map of South Africa (2018) identifies the natural vegetation occurring within the area as Citrusdal Vygieveld, with a Least Threatened ecosystem status. The proposed construction and housing on west site and expansion of WWTW will however be on transformed areas impacted by existing WWTW infrastructure and squatters and not impact on any indigenous vegetation. The eastern housing site will impact on indigenous vegetation, but the impact will be of medium significance and no Species of Conservation Concern was recorded at the time of the site surveys. The following plant species were recorded during three site visits: *Albuca flaccida, Albuca maxima, Babiana ecklonii, Brunsvigia bosmaniae, Chlorophytum triflorum, Conicosia pugioniformis, Cotyledon orbiculate, Dimorphotheca pluvialis, Euphorbia tuberculate, Felicia merxmeulleri, Ferraria divaricate, Lapeirousia jacquinii, Lyperia tristis, Manulea altissima, Massonia depressa, Osteospermum clandestinum, Oxalis ambigua, Galenia Africana, Oxalis pes-caprae, Trachyandra muricata, Satyrium sp, Roepera morgsana*. The following species was listed in the environmental screen tool report as being present on the site: *Sceletium expansum* (Plants grow on arid succulent fynbos on rocky sandstone slopes and this habitat is not present on site)*, Drosanthemum pulchellum* (the site is not part of the only three known locations)*, Aspalathus wurmbeana*(Extensive habitat loss to wheat and citrus cultivation resulted in only six severely fragmented subpopulations remaining

of which this site is not one of the six), *Ixia mollis* (This extremely localized (EOO 74 km²) habitat specialist is known from only five locations of which this site is not one of them), *Pauridia maximiliani* (has an extent of occurrence (EOO) of 16 km² and is known from three locations of which this site is not one of them), *Oxalis aurea* (EOO, AO0 <852 km², fewer than 10 locations remain in the Olifants River Valley of which this site is not one of them), *Oncosiphon intermedium* (A range-restricted species (EOO 213 km²), known from two subpopulations of which this site is not one of them), *Walleria gracilis* (A localized species (EOO 314 km²), known from five locations of which this site is not one of them) and *Oxalis dines (*this species habitat is restricted to Freshwater habitat and was not recorded on the development site), all with a medium sensitivity. The species listed in the screen tool report were not observed and recorded during the field surveys as indicated by the list of species recorded above. However, search and rescue for plant SCC must be conducted before construction commence.

No Threatened or Protected Species were recorded on site and unlikely that they will occur on site.

The following habitats were recorded and mapped.

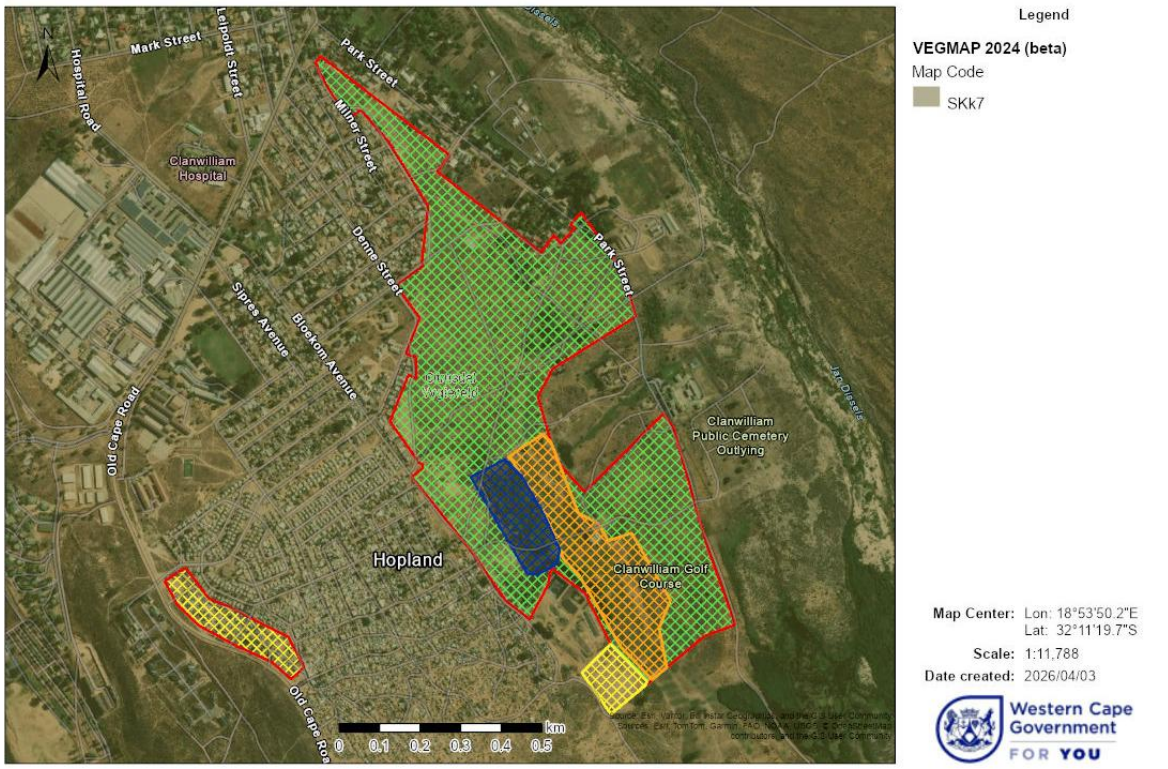


Figure 1: Habitat Map. Green - Citrusdal Vygie Veld, Blue – wetlands degraded to be rehabilitated, Orange – Golf course, Yellow - squatters and infrastructure.

Citrusdal Vygie Veld Habitat (Green on map)

The Citrusdal Vygie Veld habitat on site is a habitat characterized by succulent-rich shrublands (vygies/mesembs) on sandy and rocky soils. The habitat consists of an area with low to moderate slopes. The vegetation structure consists of shrubs with open space areas in between covered by annual plants. The plant species recorded on site further confirm Citrusdal Vygieveld based on site floristics, structure and soils present recorded on site and it is confirmed that Citrusdal Vygieveld vegetation is the representative vegetation type on site and correctly mapped in the National Vegetation Map: NVM 2024. Latest update of the map of the National Vegetation Map Project and follows version VEGMAP 2018.

Photograph 1: Habitat condition of mapped cirtusdal vygieveld.

Wetlands (degraded to be rehabilitated) (Blue on map)

The two wetlands on site consist of degraded wetlands that is covered with alien invasive plants, waste and rubble. It is dominated by *Phragmites australis* and *Typha capensis*, with arum lilies (*Zantedeschia aethiopica*) and the NEM:BA Category 1b invasive species Port Jackson (Acacia saligna). The rehabilitation and removal of alien invasive plants will improve animal species' habitat on site. Both mapped wetlands are in low lying areas and consist of sand deposits covered by vegetation.

Photograph 2: Habitat condition of mapped wetland.

Golf course (orange on map)
Fair way and greens covered by moved grass in low lying flat area.

Photograph 3: Habitat condition of golf course.

Squatters and infrastructure. Yellow on map

Historic Citrusdal Vygie Veld habitat totally cleared and impacted by infrastructure and squatters.

Photograph 4: Habitat condition of squatter area.

3. A DESCRIPTION OF THE METHODOLOGY USED TO UNDERTAKE THE SITE SURVEY AND PREPARE THE COMPLIANCE STATEMENT, INCLUDING EQUIPMENT AND MODELLING USED WHERE RELEVANT

A literature review and desktop analysis were undertaken prior to the field investigation, utilizing various sources including the South African National Biodiversity Institute ("SANBI") data and other relevant sources. Recent and historical aerial imagery of the site was reviewed in order to identify points for investigation during the field survey. Utilising the above information, a field investigation was undertaken whereby:

- Sites of geomorphological or topographic variance were identified and subjected to an evaluation of species present within transects established across the selected site.
- Species were identified and collated.
- Additional random sample points were selected from other sites surrounding the proposed impacted areas for comparative purposes.

The assessments entailed both a literature review of the region, as well as on site evaluations, during which specific primary data will be collected and evaluated. In addition, the identification of key ecological features was undertaken allowing for the interpretation of the prevailing habitat form and associated processes.

All data collected in the field and during the literature review was evaluated and interpreted in order to provide an understanding of the nature of the prevailing environment at a landscape and habitat level. In addition, specific evaluation of data relating to habitat form and structure was undertaken, aiding in the identification of bio-physical anomalies within the prevailing environment. Such variance may be considered to be indicative of differing habitat forms,

which under consideration, may be of higher order ecological value in relation of the prevailing environment.

The study area was surveyed on foot, and all indigenous species growing in the greater study area were noted. Various transects were conducted to cover the area. Particular attention was paid to potential fauna and flora Species of Conservation Concern that could have been present. Various photographs were taken.

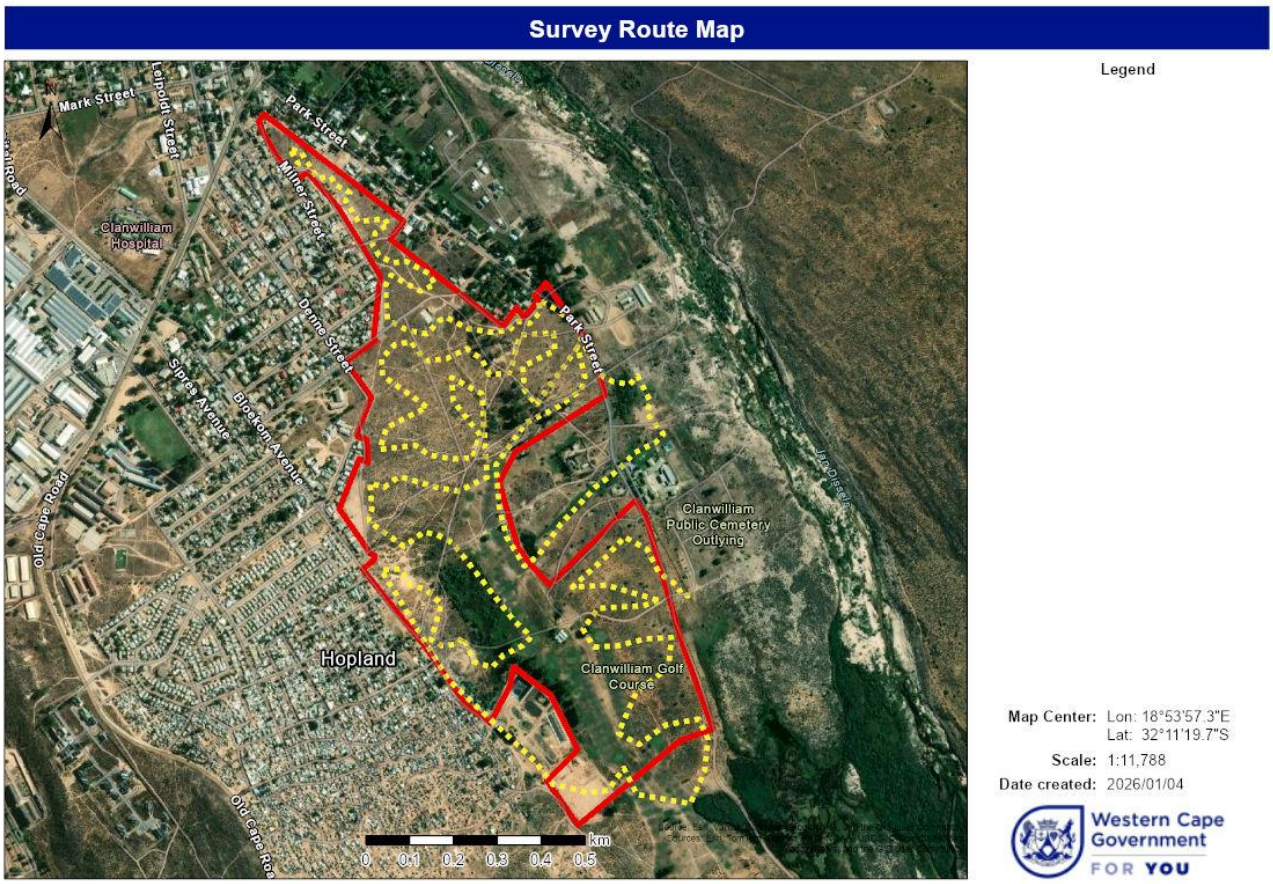


Figure 2: Survey Map

4. WHERE REQUIRED, PROPOSED IMPACT MANAGEMENT ACTIONS AND OUTCOMES OR ANY MONITORING REQUIREMENTS FOR INCLUSION IN THE EMPR

Clearly demarcate the entire development footprint prior to initial site clearance and prevent construction personnel from leaving the demarcated area.

5. A DESCRIPTION OF THE ASSUMPTIONS MADE AND ANY UNCERTAINTIES OR GAPS IN KNOWLEDGE OR DATA

The site visit was conducted on 6 October 2019 and 28 July 2023. The timing of the survey is regarded as optimal in terms of accurately assessing the flora of the site. The overall confidence in the completeness and accuracy of the botanical findings at this point in time is considered to be good. A follow-up survey is not considered essential for decision-making. The species listed in the Environmental Screen tool report as well as SCC could be identified without being in flower season.

6. THE MEAN DENSITY OF OBSERVATIONS/ NUMBER OF SAMPLES SITES PER UNIT AREA

Standard methods of evaluation were used. A hand-held Garmin ® GPSMap 64s was used to record 'sample' waypoints and the 'sample track'. At the 'sample waypoints' specific details of the surrounding vegetation and features of habitat were recorded, and photographs taken to support the general observations made on the site. No attempt was made to cover the whole property, but sampling was focused so as to obtain the best overall understanding of landscape and biodiversity conditions on the site.

Due to the size of the site, ecological disturbances, line transects covering different habitat units and area of special concern were conducted and plant species recorded.

7. ANY CONDITIONS TO WHICH THE COMPLIANCE STATEMENT IS SUBJECTED

The findings, results, observations, conclusions, and recommendations given in this report are based on the author's best scientific and professional knowledge as well as available information and knowledge of the area.

This report may not be altered or added to without the prior written consent of the author. This restraint also refers to electronic copies of this report which are supplied as sub portion of other reports, including main reports. Similarly, any recommendations, statements, or conclusions drawn from or based on this report must specifically refer to this report. If such comments form part of a main report for this investigation, the report must be included in its entirety as an appendix or separate section to the main report.

8. REFERENCES

CapeNature (2024). 2023 Western Cape Biodiversity Spatial Plan and Guidelines.

Mucina, L. and M. Rutherford. *Eds.* 2018 update. Vegetation map of South Africa, Lesotho, and Swaziland. *Strelitzia 19*. South African National Biodiversity Institute, Pretoria.

APPENDIX A
SPECIALIST CV

CURRICULUM VITAE – NICOLAAS WILLEM HANEKOM

Profession: Environmental Scientist and Environmental Assessment Practitioner

Date of Birth: 01/02/1967

BIOGRAPHICAL SKETCH

Nicolaas Hanekom is a qualified Environmental Assessment Practitioner (”EAP”) who holds a Masters Technologiae, Nature Conservation (“Vegetation Ecology and Biodiversity Assessment”) degree from the Cape Peninsula University of Technology. Nicolaas is certified in terms of section 20(3)(a) of the Natural Scientific Professions Act, 2003 (Act 27 of 2003), as a Professional Natural Scientist Ecological Science (Pri.Sci.Nat); Aquatic Science & Conservation Science (Cand.Sci.Nat), Registration Number: 004415. He further qualified in Environmental Management Systems ISO 14001:2004, at the Centre for Environmental Management, North-West University, as well as Environmental Management Systems ISO 14001:2004 Audit: Internal Auditors Course to ISO 19011:2003 level, from the Centre for Environmental Management, North-West University qualifying him to execute audits to ISO/SANS environmental compliance and EMS standards.

He has also completed the suite of Greener Governance courses with certificates in;

- An Overview of Environmental Management at the Local Government Level, Centre for Environmental Management, North-West University;
- Greener Governance for Local Authorities, Centre for Environmental Management, North-West University;
- Tools for Integrated Environmental Management and Governance, Centre for Environmental Management, North-West University.

He further attended and obtained a certificate on Integrated Protected Area Planning at the Centre for Environmental Development, University of Kwa Zulu Natal and a certificate in Project Management (Theory and Practical), through CS Holdings. Nicolaas has lectured in two subjects at the Cape Peninsula University of Technology. He has 26 years of environmental planning experience, working for Free State and Western Cape departments of environmental affairs, where he reviewed and commented on development (EIA) applications, in the West Coast Region.

He has, as practising EAP been responsible for many environmental impact assessments and EIA applications, waste license and atmospheric emission license applications.

He has also been involved in the implementation of several environmental management systems. He has engaged successfully with various clients as set out below.

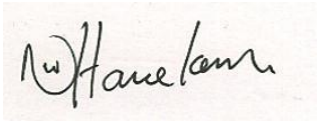
Areas of specialisation:	• Ecosystem (terrestrial and aquatic) monitoring and assessments • Design of monitoring programmes for ecosystems (terrestrial and aquatic) • Environmental Impact Assessments • River classification and environmental water requirements • Wetlands Delineation • River and Wetlands management • Water Use Authorization Applications • Water quality management • River Health Assessments
Countries of Work Experience:	South Africa (Northern Cape, Western Cape, Free State, Mpumalanga, Gauteng)
Employment Record	• Student at Bontebok National Park (1992) • Assistant Reserve Manager at Gariep Dam Nature Reserve, Free State (1993 - 1998) • Reserve Manager, Conservation Services Manager for Western Cape Nature Conservation Board (1998 - 2006) • External Lecturer at Cape Peninsula University of Technology (2003 - 2005) • Director: Environmental Management at Cape Lowlands Environmental Services (2006 – 2010) • Director, Environmental Management and lead Environmental Impact Assessment Practitioner at Eco Impact (Pty) Ltd (2010 – to August 2019) • Director, Environmental Management and lead Environmental Impact Assessment Practitioner at Enviro-EAP (Pty) Ltd (September 2019 – to date)
Professional membership, accreditations and courses	• South African Council for Natural Scientists Professions Pri.Sci.Nat (Ecological Science) • Riparian vegetation identification and health assessment. Internal Western Cape Nature Conservation short course presented by Dr C Boucher (Stellenbosch University) in 2000. • SASS5 Aquatic Biomonitoring Training Course. 2 to 5 September 2013. Ground Truth Water and Environmental Engineering consultancy in partnership with the Department of Water Affairs. • Workshop on “Section 21(c) and (i) Water Use Training: Understanding Watercourses and Managing Impacts to their Characteristics”. 10 May

	2017. Presented by Dr Wietsche Roets of the Department of Water and Sanitation (Sub-Directorate: Instream Water Use).
Summary of experience	1992: South African National Parks. Student at Bontebok National Park with management and monitoring actions related to the Breede River. 1993 -1998: Free State Nature Conservation. Ecological management and monitoring actions related to the Gariep Dam, Orange and Caledon Rivers. 1998 -2006: CapeNature. Ecological management and monitoring actions related to the Berg River Estuary, Verlorenvlei, Lamberts bay's Jackalsvlei, Wadrift Soutpanne, Oliphant's River mouth, Rocherpan Nature Reserve, etc. Review and assessment of EIA applications, inclusive of Freshwater ecology. Did some site visits with Department of Water Affairs and Forestry (Hester Lyons) to confirm the presence of aquatic ecological features during EIA water use registration applications. 2006 to date: Cape Lowland Environmental Services, Eco Impact Legal Consultant and Enviro-EAP. Ecological (Freshwater and aquatic) Specialist input, assessment, monitoring and reports.
Publications and assessment reports	Just to name a few. Was involved in many Ecological Assessments, monitoring and inputs in EIA applications. • Elandskloof Farm 475 Citrusdal Biodiversity Baseline Survey. August 2010. This Biodiversity Assessment Covering Terrestrial and Aquatic Aspects to Inform Decisions Regarding The Proposed Elandskloof Weir Flood Damage Project On Farm 475, In The Citrusdal Area. • Cape Solar Energy Electricity Generation Facility. Farm 187/3 & 187/13 Kenhardt. Biodiversity And Ecological Baseline Survey. January 2011. (Included Terrestrial and aquatic ecological assessments and water use authorization applications) • Prieska Photvoltaic Power Generation Project. Prieska Commonage Northern Cape. Biodiversity And Ecological Baseline Survey. July 2011. (Included Terrestrial and aquatic ecological assessments and water use authorization applications) • Witteklip Erf 123 Extension, Vredenburg. Biodiversity Baseline Survey. Updated - October 2012 (Included Terrestrial and aquatic ecological assessments and water use authorization applications) • Baseline Biodiversity Survey And Wetland Delineation for ECCA Holdings: Cape Bentonite Mine on Erf 1412 Near Heidelberg. Prepared for: Shangoni Management Services Pry (Ltd). October 2014. • Freshwater Impact Assessment Laingsburg Flood Damage Repairs & Storm Water Infrastructure. 18 February 2016. • Ecological Assessment for Swartland Municipality - Upgrades To Voortrekker/Bokomo Road And Voortrekker/Rozenburg Road Intersections and Upgrade to the Diep River Bridge, Malmesbury on A Portion Of Erf 327, Malmesbury (Road) Erf 1530, Diep River Bridge

	Crossing, and Erf 1528, Property South of Diep River where Road Widening and Turning Circle Will Be Constructed. March 2016. (Freshwater Ecology Inputs and Water Use Registration) • Freshwater Impact Assessment. McGregor Bridge, Robertson Bridge and Willem Nels River Maintenance Management Plan. 24 June 2016. (Freshwater Ecology assessment and input as well as Water Use Registration) • Water Use Authorization Application Risk Matrix. Orange Grove Trust Vegetation Clearing and Agricultural Development on Portion 4 of Farm Glen Heatlie No 316, Worcester. 12 June 2017. (Freshwater ecological inputs in EIA process and Water Use Registration). • Water Use Authorization Application Risk Matrix Prepared For: Witzenberg Municipality Sand Mine Farm 1 Prince Alfred Hamlet. 28 March 2017. (Freshwater ecological inputs in EIA process and Water Use Registration). • Proposed Hartmanshoop Agri Vegetation Clearing Project and Irrigation on Erf 686, Laingsburg. 12 August 2017. (Freshwater ecological inputs in Water Use Registration). • County Fair: Hocraft Abattoir And Rendering Facility Waste Water Treatment Works “CF Hocraft WWTW” Mosselbank River Second Quarter 2018 Biomonitoring Report. June 2018. (Done quarterly biomonitoring for the last three years).

CERTIFICATION

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe my qualifications, my experience, and me.



Nicolaas Hanekom Pri Sci Nat (Ecology).
Registration number 004415